

List of citations, as of November 2017

1 Listing by cited work

- P. Exner, J. Tolar: *On S-transformation in the strong coupling theory*, Czech. J. Phys. **B19** (1969), 1480–1485.
1. H.-P.Zhang, J.Jing, G.-H.Yang, *Int.J.Theor.Phys.* **49** (2010), 2517
- M.Havlíček, P.Exner: *Note on the description of an unstable system*, Czech.J. Phys. **B23** (1973), 594–600.
1. M.V.Lokajíček, *Acta Phys.Austriaca* **40** (1974), 37
 2. M.I.Širokov, *Teor.mat.fiz.* **21** (1975), 347
- M.Havlíček, P.Exner: *Remarks on two-component equations for massive leptons*, Physica Scripta **9** (1974), 161–162.
1. J.F.Cornwell, *Phys.Scripta* **12** (1975), 183
- M.Havlíček, P.Exner: *Matrix canonical realizations of the Lie algebra $o(m, n)$, I. Basic formulae and classification*, Ann.Inst.H.Poincaré **A23** (1975), 335–347.
1. L.Hlavatý, S.Steinberg, K.B.Wolf, *J.Math.Anal.Appl.* **104** (1984), 246
 2. Č.Burdík, *J.Phys.* **A18** (1985), 3101
 3. Č.Burdík et al., *TMF* **124** (2000), 1048
 4. Č.Burdík, O.Navrátil, *Phys.At.Nucl.* **68** (2005), 1643
- M. Havlíček, P. Exner: *On the minimal canonical realization of the Lie algebra $O_{\mathbb{C}}(n)$* , Ann. Inst. H. Poincaré **A23** (1975), 313–333.
1. Č.Burdík, *J.Phys.* **A18** (1985), 3101
 2. Č.Burdík et al., *TMF* **124** (2000), 1048
- P.Exner, M.Havlíček, W.Lassner: *Canonical realizations of classical Lie algebras*, Czech.J.Phys. **B26** (1976), 1213–1228.
1. T.D.Paley, *J.Math.Phys.* **22** (1981), 2117
 2. T.Fulton, *J.Phys.* **A.18** (1985), 2863
 3. Č.Burdík, *J.Phys.* **A18** (1985), 3101
 4. J.Dittmann, *Ann.Inst.H.Poincaré* **A18** (1985), 2863
 5. K.B.Wolf, *Ann.Phys.* **172** (1986), 251
 6. Č.Burdík, *Czech.J.Phys.* **B36** (1986), 1235
 7. R.J.B.Fawcet, A.J.Bracken, *J.Math.Phys.* **29** (1988), 1521
 8. R.J.B.Fawcet, *J.Phys.* **A25** (1992), 1685
 9. E.V.Damaskinskii, P.P.Kulish, *J.Soviet Math.* **62** (1992), 2963
 10. R.B.Zhang, *J.Math.Phys.* **38** (1997), 3863
 11. B.A.Kuperschmidt, *J.Nonlin.Math.Phys.* **5** (1998), 245
 12. Č.Burdík et al., *TMF* **124** (2000), 1048
 13. S.T.Ali, M.Engliš, J.-P.Gazeau, *J.Phys.* **A37** (2004), 6067
 14. Č.Burdík, O.Navrátil, *Acta Polytechnica* **53** (2013), 399

- P.Exner: *Remark on the decay of a mixed state*, Czech.J.Phys. **B26** (1976), 976–982.
1. K.Urbanowski, *Acta Phys.Polonica* **B18** (1977), 411
 2. P.E.T.Jørgensen, *Tohoku Math.J.* **30** (1978), 277
 3. A.P.Grecos, in *Advances in Chemical Physics* (S.Rice, ed.) **36** (1988), 443
- P.Exner: *Remark on the energy spectrum of a decaying system*, Commun.Math. Phys. **50** (1976), 1–10.
1. K.Urbanowski, *Acta Phys.Polonica* **B18** (1977), 411
 2. A.P.Grecos, in *Advances in Chemical Physics* (S.Rice, ed.) **36** (1988), 443
 3. A.Gozdz, M.Debicki, M.Pietrow, *Int.J.Mod.Phys.* **E14** (2005), 477
- J.Blank, P.Exner: *Remarks on tensor products and their applications in quantum theory, II.Spectral properties*, Acta Univ.Carolinae, Math.Phys.**18** (1977), 3–35.
1. A.Peres, *Phys.Rev.Lett.* **77** (1996), 1413
 2. A.Peres, *Phys.Rev.* **A54** (1996), 1413
 3. A.Peres, *Phys.Scripta* **T76** (1998), 52
 4. Z.Z.Zhong, *Int.J.Quant.Inf.* **3** (2005), 395
 5. Z.Z.Zhong, *Int.J.Quant.Inf.* **3** (2005), 405
 6. X.S.Ma, A.M.Wang, X.D.Yang, F.Xu, *Eur.Phys.J.* **D37** (2006), 135
 7. X.S.Ma, A.M.Wang, *Physica* **A386** (2007), 590
 8. X.S.Ma, Y.Qiao, X.D.Liu, A.M.Wang, *Comm.Theor.Phys.* **60** (2013), 410
- P.Exner: *Unstable systems and repeated measurements, I.General considerations*, Czech.J.Phys. **B27** (1977), 117–126.
1. K.Urbanowski, *Acta Phys.Polonica* **B18** (1977), 411
- P.Exner: *Unstable systems and repeated measurements, II.Examples (exponential primary decay law, idealized spark chamber)*, Czech.J.Phys. **B27** (1977), 233–246.
1. K.Urbanowski, *Acta Phys.Polonica* **B18** (1977), 411
- P.Exner: *Unstable systems and repeated measurements, III.Example (homogeneous chamber), conjecture for the general case and discussion*, Czech.J.Phys. **B27** (1977), 361–372.
1. K.Urbanowski, *Acta Phys.Polonica* **B18** (1977), 411
- J.Dolejší, P.Exner: *Corrections to the exponential decay law: are they observable?*, Czech.J.Phys. **B27** (1977), 855–864.
1. E.B.Norman et al., *Phys.Rev.Lett.* **60** (1988), 226
 2. M.Šolc, *Chem.Listy* **84** (1990), 561
 3. E.B.Norman et al., *Phys.Lett.* **B357** (1995), 521
- P.Exner, M.Havlíček, W.Lassner: *Boson representations of classical Lie algebras*, Proc. of the International Conference on Operator Algebras, Ideals and Applications in Theoretical Physics (Leipzig 1977), Teubner Verlag; pp. 277–278.
1. Č.Burdík et al., *TMF* **124** (2000), 1048
- M. Havlíček, P. Exner: *Matrix canonical realizations of the Lie algebra $\mathfrak{o}(m, n)$, II. Casimir operators*, Czech. J. Phys. **B28** (1978), 949–962.
1. Č.Burdík, *J.Phys.* **A18** (1985), 3101
 2. Č.Burdík et al., *TMF* **124** (2000), 1048
- J. Blank, P. Exner, M. Havlíček: *Quantum–mechanical pseudo–Hamiltonians*, Czech. J. Phys. **B29** (1979), 1325–1341.
1. G.W.Johnson, *J.Math.Phys.* **25** (1984), 1323

- P.Exner: *Bounded-energy approximation to an unstable quantum system*, Rep.Math.Phys. **17** (1980), 275–285.
1. B.Milek et al., *Phys.Rev.* **A42** (1990), 3213
 2. J.P.Marchand, *Found.Phys.* **27** (1997), 215
- P.Exner, G.I.Kolerov: *Path-integral expression of dissipative dynamics*, Phys. Lett. **83A** (1981), 203–206.
1. H.Dekker, *Phys.Rep.* **80** (1981), 1
 2. G.W.Johnson, *J.Math.Phys.* **25** (1984), 1323
 3. A.S.Dutra, *Phys.Rev.* **A39** (1989), 5897
 4. A.S.Dutra, *J.Phys.* **A25** (1992), 4189
 5. V.E.Tarasov, *J.Phys.* **A37** (2004), 3421
- P. Exner, G.I. Kolerov: *Polygonal-path approximations on path spaces of quantum-mechanical systems*, Int. J. Theor. Phys. **21** (1982), 397–417.
1. C.Grosche, F.Steiner: *Handbook of Feynman path integrals*, Springer Tracts Mod.Phys., vol.145 (1998)
- P.Exner, G.I.Kolerov: *Uniform product formulae with application to the Feynman–Nelson integral for open systems*, Lett.Math.Phys. **6** (1982), 153–159.
1. J.C.Garrison, *Phys.Lett.* **A108** (1985), 129
 2. J.C.Garrison E.M.Wright, *J.Phys.* **A19** (1986), 3241
 3. G.W.Johnson, M.L.Lapidus: *The Feynman Integral and Feynman’s Operational Calculus*, Clarendon Press, Oxford 2000
- P.Exner: *Complex potentials and rigorous Feynman integrals*, Czech.J.Phys. **B32** (1982), 628–632.
1. J.C.Garrison, *Phys.Lett.* **A108** (1985), 129
 2. J.C.Garrison, *J.Phys.* **A19** (1986), 3241
 3. M.Razavy, *Hadronic J.* **10** (1987), 7
 4. S.Albeverio, R.Høegh-Krohn, S.Mazzucchi, *Mathematical Theory of Feynman Path Integrals*, 2nd ed., LNP 523, Springer 2008
- J.Blank, P.Exner, M.Havlíček, W.Lassner: *Boson–fermion representations of Lie superalgebras: an example of $osp(1, 2)$* , J.Math.Phys. **23** (1982), 350–353.
1. D.A.Leites, *J.Math.Sci.* **30** (1984), 2481
 2. G.J.Zeng, *Acta Math.Sci.* **12** (1992), 270
 3. A.Bracken et al., *J.Math.Phys.* **34** (1993), 1654
 4. M.Daumens, *J.Math.Phys.* **35** (1994), 986
 5. M.Daumens, *J.Math.Phys.* **35** (1994), 2505
 6. Y.Q.Chen, X.H.Liu, X.C.Song, *Comm.Theor.Phys.* **22** (1994), 123
 7. Č.Burdík et al., *TMF* **124** (2000), 1048
- P.Exner: *Complex-potential description of the damped harmonic oscillator*, J.Math. Phys. **24** (1983), 1129–1135.
1. A.Jannussis, *Lett.N.Cim.* **34** (1984), 571
 2. G.W.Johnson, *J.Math.Phys.* **25** (1984), 1323
 3. J.Rezende, *J.Math.Phys.* **25** (1984), 3264
 4. G.Yanouleas, *Physica* **A125** (1984), 549
 5. A.Jannussis, *Hadronic J.* **7** (1984), 1515
 6. M.Razavy, A. Pimpale, *Phys.Rep.* **168** (1988), 305
 7. S.Baskoutas et al., *N.Cim.* **108B** (1993), 953

8. V.Dodonov, *J.Korean Phys.Soc.* **26** (1993), 111
 9. S.Baskoutas, A.Jannussis, R.Mignani, *J.Phys.* **A27** (1994), 2189
 10. P.Angelopoulos et al., *N.Cim.* **B109** (1994), 1221
 11. T.Shimbori, T.Kobayashi, *J.Phys.* **A33** (2000), 7637
 12. E.Recami, V.S.Olkhovsky, S.P.Maydanyuk, *Int.J.Mod.Phys.* **A25** (2010), 1785
 13. V.S.Olkhovsky, S.P.Maydanyuk, E.Recami, *Phys.Part.Nucl.* **41** (2010), 508
 14. E.-M.Graefe, R.Schubert, *J.Phys.* **A45** (2012), 244033
 15. V.S.Olkhovsky, *Int.J.Philos.Theol.* **2** (2014), 33
 16. V.S.Olkhovsky, *J.Mass Comm.Journ.* **4** (2014), 1000222
 17. J.Viola, *Int.Eq.Oper.Theory* **85** (2016), 513
- P.Exner, I.Ülehla: *On the optical approximation in two-channel systems*, *J.Math. Phys.* **24** (1983), 1542–1547.
1. W.John et al., *Phys.Rev.Lett.* **67** (1991), 1949
 2. S.Baskoutas, *N.Cim.* **B107** (1992), 255
 3. R.Gawlista et al., *Phys.Rev.* **A46** (1992), 255
 4. M.Melgaard, *PhD thesis*, Aalborg University 1999
 5. J.Behrndt, H.Neidhardt, J.Rehberg, in *Operator Theory Adv.Appl.* (K.H.Forster et al., eds.) **175** (2007), 33
- P.Exner: *Representations of the Poincaré group associated with unstable particles*, *Phys.Rev.* **D28** (1983), 2621–2627.
1. R.Alicki, *J.Phys.* **A19** (1986), 3241
 2. M.Dine et al., *Nucl.Phys.* **B342** (1990), 381
 3. E.V.Stephanovich, *Int.J.Theor.Phys.* **35** (1996), 2539
 4. D.Cocolicchio, *Phys.Rev.* **D57** (1998), 7251
 5. D.Cocolicchio, M.Viggiano, *J.Phys.* **A34** (2001), 8517
 6. M.Shirokov, *Int.J.Theor.Phys.* **43** (2004), 1541
 7. M.I.Shirokov, *Concepts Phys.* **3** (2009), 193
 8. M.Shirokov, *Phys.Part.Nucl.Lett.* **6** (2009), 14
 9. M.I.Shirokov, *Concepts Phys.* **6** (2009), 543
 10. G.N.Fleming, *Stud.Hist.Phil.Sci.* **B42** (2011), 136
 11. M.Javed Khilji, *Phys.Essays* **24** (2011), 604
 12. K.Urbanowski, K.Raczyńska, *Phys.Lett.* **B731** (2014), 236
 13. K.Urbanowski, *Phys.Lett.* **B737** (2014), 346
 14. K.Urbanowski, *Advances in High Energy Physics* **2015** (2015), 461987
 15. F.Giacosa, *Acta Phys. Polonica* **B47** (2016), 2135
 16. K.Urbanowski, *Acta Phys. Polonica* **B48** (2017), 1411
 17. K.Urbanowski, *Acta Phys. Polonica* **B48** (2017), 1847
- P.Exner: *Unstable quantum systems and Feynman integrals* (in Russian), *Sov.J. Phys.Elem.Part. Atom.Nucl.* **15** (1984), 121–155.
1. A.D.Panov, *Izvestia AN: Ser.Fiz.* **59** (1995), 133
 2. A.L.Grimsmo, A.H.Vaskinn, P.K.Rekdal, B.-S.Skagerstam, *Phys.Rev.* **A87** (2013), 022101
- P. Exner: *Generalized Bargmann inequalities*, *Rep. Math. Phys.* **19** (1984), 249–255.
1. M.A.Andreata, V.V.Dodonov, *J.Phys.* **A36** (2003), 7113
- P. Exner: *Some simple conditions on bound states of Schrödinger operators in dimension $d \geq 3$* , *Czech. J. Phys.* **B34** (1984), 1019–1031.
1. M.A.Andreata, V.V.Dodonov, *J.Phys.* **A36** (2003), 7113

P.Exner: *Open Quantum Systems and Feynman Integrals*; Fundamental Theories of Physics, vol.6; *xix* + 356 p.; D.Reidel Publ.Co., Dordrecht 1985.

1. T.Erber, S.Putterman, *Nature* **318** (1985), 41
2. R.Mignani, *Hadronic J.* **8** (1985), 121
3. J.C.Garrison, E.M.Wright, *J.Phys.* **A19** (1986), 3241
4. G.W.Johnson, M.L.Lapidus, *Mem.Am.Math.Soc.* **62** (1986), 1
5. B.M.Shaharir, *Int.J.Theor.Phys.* **25** (1986), 1075
6. R.Jaroslowski, G.M.Obermair, *Z.Phys.* **B67** (1987), 243
7. K.Broderix, N.Heldt, H.Leschke, *Z.Phys.* **B68** (1987), 19
8. K.B.Sinha, *Proc.Ind.Acad.Sci: Chem.* **99** (1987), 3
9. J.Levitan, L.P.Horwitz, Y.Rephaeli, *Europhys.Lett.* **3** (1987), 781
10. V.J.Menon, *Pramana* **28** (1987), 335
11. K.S.Chang, G.W.Johnson, D.Skoug, *Proc.Am.Math.Soc.* **100** (1987), 761
12. G.W.Johnson, *Suppl.Ren.Circ.Mat.Palermo* **17** (1987), 249
13. A.Jannussis, R.Mignani, *Physica* **A152** (1988), 469
14. W.C.Schieve, L.P.Horwitz, J.Levitan, *Phys.Lett.* **A136** (1989), 264
15. S.Albeverio, K.Yasue, J.-C.Zambrini, *Ann.Inst.H.Poincaré: Phys.Théor.* **50** (1989), 259
16. K.Broderix, N.Heldt, H.Leschke, *Phys.Rev.* **B40** (1989), 7479
17. W.Potz, *J.Appl.Phys.* **66** (1989), 2458
18. J.Levitan, L.P.Horwitz, *Europhys.Lett.* **3** (1989), 761
19. I.E.Antoniou, B.Misra, *Nucl.Phys.B, Proc.Suppl.* **6** (1989), 240
20. H.Neidhardt, *Rep.Math.Phys.* **28** (1989), 39
21. M.J.Donald, *Proc.Roy.Soc.* **A427** (1990), 43
22. K.Broderix, N.Heldt, H.Leschke, *J.Phys.* **A23** (1990), 3945
23. G.Dattoli, A.Torre, R.Mignani, *Phys.Rev.* **A42** (1990), 1467
24. A.de Bivar-Weinholz, M.Lapidus, *Proc.Am.Math.Soc.* **110** (1990), 449
25. H.Neidhardt, *Math. Nachr.* **148** (1990), 229
26. T.Petrosky, S.Tasaki, I.Prigogine, *Physica* **A170** (1991), 306
27. L.P.Horwitz, J.Levitan, *Phys.Lett.* **A153** (1991), 413
28. K.Sluis, E.Gislason, *Phys.Rev.* **A43** (1991), 4581
29. H.Hasegawa, T.Petrosky, I.Prigogine, *Found.Phys.* **21** (1991), 263
30. A.Isar, W.Scheid, A.Sandulescu, *J.Math.Phys.* **32** (1991), 2128
31. M.Kanter, *Acta Appl.Math.* **23** (1991)
32. W.Domcke, *Phys.Rep.* **208** (1991), 97
33. M.J.Donald, *Found.Phys.* **22** (1992), 1111
34. A.Jannussis, R.Mignani, L.Skaltsas, *Physica* **A187** (1992), 575
35. A.Korzeniowski, J.L.Fry, D.E.Orr, *Phys.Rev.Lett.* **69** (1992), 893
36. A.Isar et al., *Roman.J.Phys.* **37** (1992), 749
37. A.Isar et al., *Roman.J.Phys.* **37** (1992), 845
38. B.Jefferies, *Bull.Austral.Math.Soc.* **45** (1992), 223
39. E.Prugovečki: *Quantum Geometry*, Kluwer, Dordrecht 1992
40. A.Isar et al., *J.Math.Phys.* **34** (1993), 413
41. I.E.Antoniou, I.Prigogine, *Physica* **A192** (1993), 443
42. I.E.Antoniou, S.Tasaki, *Int.J.Quant.Chem.* **46** (1993), 425
43. I.E.Antoniou et al., *J.Phys.* **A26** (1993), 3243
44. A.Isar, A.Sandulescu, W.Scheid, *J.Math.Phys.* **34** (1993), 3887
45. S.Albeverio, Z.Brzezniak, *J.Funct.Anal.* **113** (1993), 177
46. S.Baskoutas et al., *J.Phys.* **A26** (1993), 7137
47. S.Baskoutas et al., *N.Cim.* **B108** (1993), 953
48. C.P.Sun, *Physica Scr.* **48** (1993), 393
49. A.Isar, *Roman.J.Phys.* **38** (1993), 13
50. L.P.Horwitz, *J.Math.Phys.* **35** (1994), 2743

51. A.Isar, *Helv.Phys.Acta* **67** (1994), 436
52. M.S.Zhao, S.A.Rice, *J.Chem.Phys.* **98** (1994), 3444
53. J.-A.Yan, *Stoch.Proc.Appl.* **54** (1994), 215
54. J.Bogdanowicz, R.Pindor, R.Raczka, *Found.Phys.* **25** (1995), 833
55. M.Cunha, C.Drumond, P.Leukert, *Ann.Physik* **4** (1995), 53
56. L.P.Horwitz, *Found.Phys.* **25** (1995), 39
57. O.Rudolph, *Phys.Rev.* **D51** (1995), 1818
58. E.Eisenberg, L.P.Horwitz, *Phys.Rev.* **A52** (1995), 70
59. S.Albeverio, A.M.DeMonvel-Berthier, Z.Brzezniak, *Potential Anal.* **4** (1995), 469
60. W.Westerkamp, *PhD thesis*, Bielefeld 1995
61. H.Nakazato, M.Namiki, S.Pascazio, *Int.J.Mod.Phys.* **10** (1996), 247
62. J.G.Muga, G.W.We, R.F.Snider, *Ann.Phys.* **252** (1996), 336
63. M.Bocko, R.Onofrio, *Rev.Mod.Phys.* **68** (1996), 755
64. M.A.Castagnino, F.M.Gaioli, D.Sforza, *Gen.Rel.Grav.* **28** (1996), 1129
65. E.T.Shavgulidze, *Russ.Acad.Doklady* **348** (1996), 743
66. G.E.Rudin, M.Gadella, *Int.J.Quant.Chem.* **58** (1996), 441
67. J.G.Muga, G.W.We, R.F.Snider, *Europhys.Lett.* **35** (1996), 247
68. S.Albeverio, G.W.Johnson, Z.M.Ma, *Acta Appl.Math.* **42** (1996), 267
69. B.Bodmann, H.Lescheke, S.Warzel, in *Path Integrals*, (V.Yarunin et al., eds.), JINR Press 1996; p.95
70. F.M.Gaioli et al., *Int.J.Theor.Phys.* **36** (1997), 2167
71. M.Kanter, *J.Math.Phys.* **38** (1997), 5590
72. M.Gadella, *Lett.Math.Phys.* **41** (1997), 279
73. R.Willox, I.Antoniou, J.Levitan, *Phys.Lett.* **A226** (1997), 167
74. J.M.Rejcek et al., *Comp.Phys.Comm.* **105** (1997), 108
75. S.Pascazio, *Found.Phys.* **27** (1997), 1655
76. A.K.Motovilov, *Math.Nachr.* **187** (1997), 147
77. B.DeFacio, G.W.Johnson, M.L.Lapidus, *Acta Appl.Math.* **47** (1997), 155
78. F.H.Gaioli, E.T.Garcia-Alvarez, J.Guevara, *Int.J.Theor.Phys.* **36** (1997), 2167
79. C.Grosche, F.Steiner: *Handbook of Feynman Path Integrals*, Springer Tracts Mod.Phys., vol.145 (1998)
80. Z.Hradil, S.Nakazato, M.Namiki, *Phys.Lett.* **A239** (1998), 333
81. K.Urbanowski, *Int.J.Mod.Phys.* **A13** (1998), 965
82. I.E.Antoniou, M.Gadella, G.P.Pronko, *J.Math.Phys.* **39** (1998), 2459
83. S.Castagnino, G.Domenech, M.Levinas, *J.Math.Phys.* **39** (1998), 3522
84. S.Albeverio, Z.Brzezniak, Z.Haba, *Potential Anal.* **9** (1998), 65
85. S.Pascazio, L.S.Schulman, *Pramana* **51** (1998), 577
86. M.Gadella, R.DelaMadrid, *Int.J.Theor.Phys.* **38** (1999), 93
87. R.Mennicken, A.K.Motovilov, *Math.Nachr.* **201** (1999), 117
88. I.Antoniou, S.A.Shkarin, Z.Suchanecki, *J.Math.Phys.* **40** (1999), 4106
89. M.Castagnino, M.Gadella, F.Gaioli, *Int.J.Theor.Phys.* **38** (1999), 2823
90. O.Civitarese, M.Gadella, R.I.Betan, *Nucl.Phys.* **A660** (1999), 255
91. E.P.Zhidkov, *Mat.Model.* **11** (5) (1999), 37
92. D.G.Arbo, M.A.Castagnino, F.H.Gaioli, *Physica* **A277** (2000), 469
93. C.Pavon, *J.Math.Phys.* **41** (2000), 6060
94. G.W.Johnson, M.L.Lapidus: *The Feynman Integral and Feynman's Operational Calculus*, Clarendon Press, Oxford 2000
95. M.Gadella, R.Laura, *Int.J.Quant.Chem.* **81** (2001), 307
96. M.Castagnino, M.Gadella, R.I.Betan, R.Laura, *Phys.Lett.* **A282** (2001), 245
97. G.García-Calderon, V.Riquer, R.Romo, *J.Phys.* **A34** (2001), 4155
98. O.F.Bandtlow, P.V.Coveney, *J.Phys.* **A34** (2001), 4585
99. G.Wilk, Z.Wlodarczyk, *Phys.Lett.* **A290** (2001), 55

100. I.Antoniou, S.A.Shkarin, *Proc.Roy.Soc.Edinburgh* **131** (2001), 1245
101. I.Antoniou, S.A.Shkarin, *Proc.Roy.Soc.Edinburgh* **131** (2001), 1257
102. J.Kupsch, *Pramana* **59** (2002), 195
103. J.G.Muga, *Lect. Notes. Phys. Monogr.*, vol. 72, Springer 2002, p.29
104. I.E.Antoniou, R.Gadella, in *Irreversible Quantum Dynamics* (F.Benatti, R.Floresanini, eds.), *Lect. Notes Phys.*, vol.622 (2002), 245
105. H.C.Kaiser, H.Neidhardt, J.Rehberg, *Int.Eq.Oper.Theory* **45** (2003), 39
106. I.Antoniou et al., *Part.Nucl.Lett.* No.1 [116] (2003), 53
107. R.M.Cavalcanti, P.Giacconi, R.Soldati, *J.Phys.* **A36** (2003), 12065
108. I.Antoniou, M.Gadella, J.Mateo, *Int.J.Theor.Phys* **42** (2003), 2389
109. I.Antoniou, E.Karpov, G.Pronko, *Int.J.Theor.Phys* **42** (2003), 2403
110. Ch.Ferrari, *PhD thesis*, EPFL Lausanne 2003
111. Y.Y.Lobanov, E.P.Zhidkov, *Comp.Meth.Appl.Math.* **3** (2003), 560
112. M.Baró , H.C.Kaiser, H.Neidhardt, *J.Math.Phys.* **45** (2004), 21
113. V.E.Tarasov, *J.Phys.* **A37** (2004), 3421
114. J.G.Muga, J.P.Palao, B.Navaro, *Phys.Rep.* **395** (2004), 357
115. O.Civitarese, M.Gadella, *Phys.Rep.* **396** (2004),41
116. M.Miyamoto, *Phys.Rev.* **A70** (2004), 032108
117. N.G.Fazleev, J.L.Fry, J.M.Rejcek, *Magn.Reson.Solid.* **6** (2004), 37
118. M.Miyamoto, *Braz.J.Phys.* **35** (2005), 425
119. V.Cachia, *Bull. London Math.Soc.* **37** (2005), 621
120. A.Ratchov, F.Faure, F.W.J.Hekking, *Eur.J.Phys.* **B46** (2005), 519
121. C.Ferrari, H.Kovařík, *Rep.Math.Phys.* **56** (2005), 197
122. A. Lasenby, C.Doland, J.Pritchard, *Phys.Rev.* **D72**, (2005), 105014
123. M.Miyamoto, *Phys.Rev.* **A72** (2005), 063405
124. M.Baró, H.Neidhardt, J.Rehberg, *SIAM J.Math.Anal.* **37** (2005), 941
125. J.Gough, O.O.Obrezkov, O.G.Smolyanov, *Izvest.Math.* **69** (2005), 1081
126. M.Miyamoto, *Braz.J.Phys.* **35** (2005), 425
127. M.Baró: *One dimensional open Schrödinger-Poisson systems*, Cuviller, Göttingen 2005
128. G.García-Calderón, J.Villavicencio, *Phys.Rev.* **A73** (2006), 061115
129. M.Miyamoto, *J.Math.Phys.* **47** (2006), 082103
130. M.Miyamoto, *Open Syst.Inf.Dyn.* **13** (2006), 291
131. O.O.Obrezkov, *J.Math.Sci.* **150** (2006), 2550
132. G.García-Calderón, J.Villavicencio, *Phys.Rev.* **A73** (2006), 062115
133. G.García-Calderón, R.Romo, J.Villavicencio, *Phys.Rev.* **B76** (2007), 035340
134. S.Albeverio et al., *J.Math.Phys.* **48** (2007), 102109
135. W.Boos, *J.Math.Phys.* **48** (2007), 122106
136. J.Behrndt, M.M.Malamud, H.Neidhardt, *Math.Phys.Anal.Geom.* **10** (2007), 313
137. S.Albeverio, S.Mazucchi, in *Stochastic Analysis and Applications*, Proc. Abel Symp., vol.2 (2007), p.73
138. J.Behrndt, H.Neidhardt, J.Rehberg, in *Operator Theory: Adv.Appl.* **175** (2007), 33
139. J.G.Muga, in *Time in Quantum Mechanics*, Springer LNP, vol.734 (2008), p.31
140. F.Fröwis, G.Grübl, M.Penz, *J.Phys.* **A41** (2008), 405201
141. P.Facchi, S.Pascasio, *J.Phys.* **A41** (2008), 493001
142. S.Albeverio, R.Høegh-Krohn, S.Mazucchi, *Mathematical Theory of Feynman Path Integrals*, 2nd ed., LNP 523, Springer 2008
143. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A42** (2009), 035202
144. V.Dinu, A.Jensen, G.Nenciu, *J.Math.Phys.* **50** (2009), 013516
145. P.Facchi, M.Ligabò, *J.Math.Phys.* **51** (2010), 022103
146. A.Vogel, *PhD thesis*, TU Kaiserslautern 2010
147. V.Dinu, A.Jensen, G.Nenciu, *Rev.Math.Phys.* **23** (2011), 83
148. V.Dinu, A.Jensen, G.Nenciu, in *Mathematical Results in Quantum Physics*

- *Proceedings of QMath11*, World Scientific, Singapore 2011; p. 155
149. M.Gadella, G.P.Pronko, *Fortschr.Phys.* **59** (2011), 795
 150. C.N.Gagatsos, A.I.Karanikas, G.I.Kordas, *Open Syst.Inf.Dyn.* **18** (2011), 261
 151. S.Albeverio, R.-Z.Fan, F.Herzberg: *Hyperfinitesimal Dirichlet Forms and Stochastic Processes*, Lecture Notes of UMI, vol.10, 2011
 152. P.A.Jacquet, *Phys.Rev.* **A84** (2011), 062126
 153. O.Civitarese, M.Gadella, *Phys.Rev.* **C86** (2012), 024602
 154. S.Cordero, G.García-Calderón, *Phys.Rev.* **A86** (2012), 062116
 155. Y.Pavlyukh, A.Rubio, J.Berakdar, *Phys.Rev.* **B87** (2013), 205124
 156. O.Civitarese, M.Gadella, *Int.J.G geom.Meth.Mod.Phys.* **10** (2013), 1360009
 157. P.Zhang, B.You, L.-X.Cen, *Optics Lett.* **38** (2013), 3650
 158. O.Civitarese, M.Gadella, *Found.Phys.* **43** (2013), 1275
 159. O.Civitarese, M.Gadella, *Physica* **A404** (2014), 302
 160. T.Fuda, *Open Syst.Inf.Dyn.* **21** (2014), 1450010
 161. M.Gadella, *Found.Phys.* **45** (2015), 177
 162. H.Cornean, A.Jensen, G.Nenciu, *Commun. Math.Phys.* **334** (2015), 1189
 163. K.R. Titimbo Chaparro, *PhD thesis*, Universita degli Studi di Trieste 2015
 164. G.Torrieri, *Int.J.G geom.Meth.Mod.Phys.* **7** (2015), 1550075
 165. Ch.Arenz, R.Hillier, M.Fraas, D.Burgarth, *Phys.Rev.* **A92** (2015), 022102
 166. J.R.A.Torreão, *Biolog.Cybernetics* **109** (2015), 435
 167. S.Albeverio, S.Mazucchi, in *Stochastic Analysis: A Series of Lectures* (R.C.Dalang et al., eds.), Progress in Probability, vol. 68, Birkhäuser, Basel 2015; p. 1
 168. S.Albeverio, S.Mazucchi, *Rev.Math.Phys.* **28** (2016), 1650005
 169. O.Civitarese, M.Gadella, *Int.J.Mod.Phys.* **E25** (2016), 1650075
 170. M.Premarajne, M.I.Stockman, *Adv.Opt.Phot.* **9** (2017), 79
 171. D.Burgarth, P.Facchi, *Phys.Rev* **A96** (2017), 010103
 172. A.Sacchetti, in *Advances in Quantum Mechanics* (A.Michelangeli, G.Dell'Antonio, eds.), Springer INdAM Series, vol.18 (2017), p.283
 173. D.Krejčířík, N.Raymond, J.Royer, P.Siegl, *Israel J.Math.* **221** (2017), 779
 174. S.Albeverio, I.M.Karabash, *Operators and Matrices* **11** (2017), 1097
- J.Dittrich, P.Exner: *Tunneling through a singular potential barrier*, J. Math. Phys. **26** (1985), 2000–2008.
1. V.I.Inozemcev, D.V.Meščerjakov, *JINR Rapid Commun.* (1984: 4), 22
 2. P.Šeba, *Czech.J.Phys.* **B36** (1986), 455
 3. P.Šeba, *Czech.J.Phys.* **B36** (1986), 667
 4. V.B.Gostev et al., *Teor.mat.fiz.* **74** (1988), 161
 5. V.B.Gostev et al., *Vest.Mosk.fiz.ob.* **29** (1988), 9
 6. V.B.Gostev et al., *Izv.VUZ: fiz.* **32** (1989), 45
 7. V.B.Gostev et al., *Izv.VUZ: fiz.* **32** (1989), 85
 8. V.B.Gostev et al., *Vest.Mosk.fiz.ob.* **31** (1990), 75
 9. V.B.Gostev et al., *Teor.mat.fiz.* **88** (1991), 35
 10. V.B.Gostev et al., *Teor.mat.fiz.* **88** (1991), 699
 11. V.B.Gostev et al., *Izv.VUZ: fiz.* **34** (1991), 57
 12. V.B.Gostev et al., *Vest.Mosk.fiz.ob.* **33** (1992), 7
 13. F.A.Lunev, *Phys.Lett.* **B311** (1993), 273
 14. V.B.Gostev, *Vest.Mosk.Univ.: Fiz.Astr.* **35** (1994), 28
 15. Y.N.Obukhov, *Int.J.Theor.Phys.* **37** (1998), 1455
 16. D.Singleton, *Theor.Math.Phys.* **117** (1998), 1351
 17. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 18. M.Znojil, *Czech.J.Phys.* **51** (2001), 420

19. I.Tsutsui, T.Fülöp, T.Cheon, *J.Phys.* **A36** (2003), 275
 20. G.A.Kerimov, A.Ventura, *J.Math.Phys.* **47** (2006), 082108
 21. T.Fülöp, *SIGMA* **3** (2007), 107
 22. B.P.Kosyakov, E.Yu.Popova, M.A.Vronskii, *Phys.Lett.* **B744** (2015), 28
 23. Dong-Sheng Sun et al., *Mod.Phys.Lett.* **A30** (2015), 1550200
 24. M.Gorbatenko, V.Neznamov, E.Popov, I.Safronov, *J.Phys.: Conf.Ser* **678** (2016), 012036
 25. S.Del Campo et al, *J.Cosmology Astroparticle Phys.* **2016** (2016), 049
 26. B.P.Kosyakov, E.Yu.Popova, M.A.Vronskii, *Eur.Phys.J.* **A53** (2017), 82
 27. M.V.Gorbatenko, V.P.Neznamov, E.Yu.Popov, *Gravit.& Cosmology* **23** (2017), 245
- P.Exner, P.Šeba: *Quantum motion on two planes connected at one point*, *Lett. Math.Phys.* **12** (1986), 193–198.
1. W.Bulla, T.Trenkler, *J.Math.Phys.* **31** (1990), 1157
 2. I.Popov, *Physica Scr.* **47** (1993), 682
 3. W.Schulte, *PhD thesis*, TU Clausthal 1997
 4. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 5. V.Alonso, S.De Vincenzo, L.Gonzalez-Diaz, *Phys.Lett.* **A287** (2001), 23
 6. S.Albeverio, W.Karwowski, K.Yasuda, *Acta Appl.Math.* **71** (2002), 31
- P.Exner, P.Šeba: *Quantum motion on a halfline connected to a plane*, *J.Math. Phys.* **28** (1987), 386–391.
1. W.Bulla, T.Trenkler, *J.Math.Phys.* **31** (1990), 1157
 2. K.K.Wan, J.J.Powis, *Int.J.Theor.Phys.* **33** (1994), 553
 3. K.K.Wan, R.M.Fountain, *Found.Phys.* **26** (1996), 1165
 4. A.Kiselev, *J.Math.Anal.Appl.* **212** (1997), 263
 5. K.K.Wan, R.M.Fountain, *Int.J.Theor.Phys.* **38** (1998), 2153
 6. C.Trueman, K.K.Wan, *J.Math.Phys.* **41** (2000), 195
 7. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 8. V.Alonso, S.De Vincenzo, L.Gonzalez-Diaz, *Phys.Lett.* **A287** (2001), 23
 9. J.Brüning et al., in *Proceedings of Days of Diffraction 2001* (I.V.Andronov, ed.), Sankt Petersburg 2001, p.87
 10. J.Brüning et al., *J.Phys.* **A35** (2002), 4239
 11. J.Brüning, V.A.Geyler, *J.Math.Phys.* **44** (2003), 371
 12. J.Brüning, V.A.Geyler, *Doklady Math.* **67** (2003), 275
 13. P.Kurasov, M.Nowaczyk, *J.Phys.* **A38** (2005), 4901
 14. V.A.Margulis, M.A.Pyataev, *Phys.Rev.* **B72** (2005), 075312
 15. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 16. K.K.Wan, D.Menzies, *Int.J.Theor.Phys.* **48** (2009), 282
 17. A.I.Shafarevich, A.V.Tsvetkova, *Russ.J.Math.Phys.* **21** (2014), 509
 18. V.L.Chernyshev, A.A.Tolchennikov, A.I.Shafarevich, *Reg.Chaot.Dyn.* **21** (2016), 531
 19. A.V.Tsvetkova, *PhD thesis*, Moscow State University 2016
 20. R.Carlone, A.Posilicano, *Phys.Lett.* **A381** (1976), 1076
- J.Dittrich, P.Exner: *A non-relativistic model of two-particle decay, I. Galilean invariance*, *Czech. J.Phys.* **B27** (1987), 503–515.
1. P.Kurasov, N.Elander, B.Pavlov, *Int.J.Quant.Chem.* **46** (1993), 401
 2. Ch.King, *Commun.Math.Phys.* **165** (1994), 6881
- J.Dittrich, P.Exner: *A non-relativistic model of two-particle decay, II. Reduced resolvent*, *Czech. J.Phys.* **B37** (1987), 1028–1034.

1. P.Kurasov, N.Elander, B.Pavlov, *Int.J.Quant.Chem.* **46** (1993), 401
 2. Ch.King, *Commun.Math.Phys.* **165** (1994), 6881
- P.Exner, P.Šeba: *Mathematical models of quantum point–contact spectroscopy*, Czech.J.Phys. **B38** (1988), 1–11.
1. W.Bulla, T.Trenkler, *J.Math.Phys.* **31** (1990), 1157
 2. K.A.Makarov, an appendix to Russian translation of *S.Albeverio et al.: Solvable Models in Quantum Mechanics*, Mir, Moscow 1991
 3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 4. W.B.Huddell, R.J.Hughes, *J.Math.Anal.Appl.* **282** (2003), 512
 5. W.B.Huddell, R.J.Hughes, *J.Phys.* **A38** (2005), 4803
 6. R.Carlone, A.Posilicano, *Phys.Lett.* **A381** (1976), 1076
- P.Exner, P.Šeba: *Quantum-mechanical splitters: how one should understand them?* Phys.Lett. **128A** (1988), 493–496.
1. W.Bulla, T.Trenkler, *J.Math.Phys.* **31** (1990), 1157
 2. J.Avron, L.Sadun, *Ann.Phys.* **206** (1991), 440
 3. J.Gratus et al., *J.Phys.* **A27** (1994), 6881
 4. F.Gagel, K.Maschke, *Phys.Rev.* **B49** (1994), 17170
 5. I.Bengtsson, J.Hallin, *Mod.Phys.Lett.* **A9** (1994), 3245
 6. A.Gangopadhyaya et al., *J.Phys.* **A28** (1995), 5331
 7. T.Itoh, *Phys.Rev.* **B52** (1995), 1508
 8. M.DiVentra, F.Gagel, K.Maschke, *Phys.Rev.* **B55** (1997), 1353
 9. S.Weigert, I.Herger, *Europhys.Lett.* **42** (1998), 599
 10. V.Kostykin, R.Schrader, *J.Phys.* **A32** (1999), 595
 11. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 12. F.Barra, P.Gaspard, *Phys.Rev.* **E65** (2002), 016205
 13. T.Mikhailova et al., *Math.Nachr.* **235** (2002), 101
 14. K.Moulopoulos, N.Constantinou, *Phys.Lett.* **A302** (2002), 39
 15. A.G.M.Schmidt, B.K.Cheng, M.G.E.da Luz, *J. Phys.* **A36** (2003), L545
 16. B.Winn, *PhD thesis*, University of Bristol 2003
 17. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
 18. F.M.de Andrade, *PhD thesis*, Universidad Federal do Paraná 2009
 19. Z.Sobirov et al., *Phys.Rev.* **E81** (2010), 066602
 20. K.Nakamura et al., *Phys.Rev.* **E84** (2011), 026609
 21. T.Taniguchi, S.Sawada, *Phys.Rev.* **A84** (2011), 062707
 22. F.M.Andrade et al., *Phys.Rep.* **647** (2016), 1
- P.Exner, P.Šeba: *A new type of quantum interference transistor*, Phys.Lett.**129A** (1988), 477–480.
1. P.Sautet, *Chem.Phys.Lett.* **153** (1988), 511
 2. V.Adamjan, *Oper.Theory: Adv.Appl.* **59** (1992), 1
 3. S.Albeverio et al., in *Ideas and Methods in Quantum and Statistical Physics*, (S.Albeverio et al., eds.), Cambridge Univ. Press 1992; p.63
 4. L.H.Thylen, *U.S. Patent* 5367274 (1994)
 5. E.K.Heller, F.C.Jain, *J.Appl.Phys.* **87** (2000), 8080
 6. N.E.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 7. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 8. V.Pivovarchik, in *Recent Advances in Operator Theory*, Operator Theory: Adv.Appl. **124** (2000), 527

9. V.Pivovarchik, *SIAM J.Math.Anal.* **32** (2001), 81
 10. V.A.Geyler, I.Yu.Popov, *Physica* **E9** (2001), 531
 11. V.A.Geyler, I.Yu.Popov, *Tech.Phys.Lett.* **27** (2001), 444
 12. A.B.Mikhailova, B.S.Pavlov, in *Operator Methods in Ordinary and PDE* (S.Albeverio et al., eds.), *Operator Theory: Adv.Appl.* **132** (2002), 287
 13. B.Pavlov, K.Robert, *Contemporary Math.* **339** (2003), 141
 14. N.T.Bagraev, B.S.Pavlov, A.M.Yafasov, in *2003 Intl IEEE Conf. on Simulation of Semicond. Processes and Devices*, p.275
 15. N.T.Bagraev et al., *Phys.Rev.* **B71** (2005), 165308
 16. A.B.Mikhailova, B.S.Pavlov, L.V.Prokhorov, *Math.Nacht.* **280** (2007), 1376
 17. Y.Latushkin, V.Pivovarchik, *Int.Eq.Oper.Theory* **61** (2008), 365
 18. B.S.Pavlov, *Russ.J.Math.Phys.* **15** (2008), 364
 19. B.Pavlov, in *Characteristic Functions, Scattering Functions and Transfer Functions* (D.Alpay, V.Vinnikov, eds.), *Operator Theory: Adv.Appl.* **197** (2010), 281
- P.Exner, P.Šeba, P.Šťovíček : *Quantum interference on graphs controlled by an external electric field*, *J.Phys.* **A21** (1988), 4009–4019.
1. J.Tolar, *Springer LNP* **313** (1988), 268
 2. S.Washburn, *Rep.Progr.Phys.* **55** (1992), 1311
 3. S.Albeverio et al., in *Ideas and Methods in Quantum and Statistical Physics*, (S.Albeverio et al., eds.), Cambridge Univ. Press 1992; p.63
 4. V.Koshmanenko, in *Mathematical Results in Quantum Mechanics*, (M.Demuth et al., eds.), Birkhäuser, Basel 1994; p.347
 5. V.Kostykin, R.Schrader, *J.Phys.* **A32** (1999), 595
 6. L.H.Thylen, *U.S. Patent* 5367274 (1994)
 7. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 8. M.Harmer, A.Mikhailova, B.Pavlov, *Proc. CMA* **39** (2001), 118
 9. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 10. Y.Dabaghian, R.Blümel, *Phys.Rev.* **E68** (2003), 055201
 11. M.Harmer, *J.Phys.* **A38** (2005), 4875
 12. B.M.Brown, R.Weikard, *Proc.Roy.Soc.* **A461** (2005), 3231
 13. S.Currie, B.A.Watson, *Proc.Roy.Soc.Edinburgh* **139** (2009), 775
 14. S.Currie, B.A.Watson, *Complex Anal.Oper.Theory* **6** (2012), 729
 15. K.K.Sabirov, Z.A.Sobirov, D.Babajanov, D.U.Matrasulov, *Phys.Lett.* **A377** (2013), 860
 16. K.Sabirov, Z.Sabirov, D.Babajanov, D.Matrasulov, in *Low-Dimensional Functional Materials*, Springer 2013; p. 155
 17. S.Currie, *Operators and Matrices* **8** (2014), 467
 18. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
 19. D.U.Matrasulov, J.R.Yusupov, K.K.Sabirov, Z.A.Sobirov, *Nanosystems* **6** (2015), 173
 20. K.K.Sabirov et al., *Nanosystems* **6** (2015), 762
- J.Dittrich, P.Exner: *A non-relativistic model of two-particle decay, III.The pole approximation*, *Czech.J.Phys.* **B38** (1988), 591–610.
1. P.Kurasov, N.Elander, B.Pavlov, *Int.J.Quant.Chem.* **46** (1993), 401
 2. Ch.King, *Commun.Math.Phys.* **165** (1994), 6881
- P. Exner, P. Šeba: *A simple model of thin film point contact in two and three dimensions*, *Czech. J. Phys.* **B38** (1988), 1095–1110.
1. K.A.Makarov, an appendix to Russian translation of *S.Albeverio et al.: Solvable Models in Quantum Mechanics*, Mir, Moscow 1991
 2. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge

- University Press, Cambridge 2000
3. M.Marletta, G.Rozenblum, *J.Phys.* **A42** (2009), 125204
 4. M.V.Berry, *J.Phys.* **A42** (2009), 165208
 5. J.Behrndt, M.Langer, V.Lotoreichik, J.Rohleder, *Proc. Roy. Soc. Edinburgh* **A147** (2017), 815
- J.Dittrich, P.Exner: *A non-relativistic model of two-particle decay, IV.Relation to the scattering theory, spectral concentration and bound states*, Czech.J.Phys. **B39** (1989), 121–138.
1. P.Kurasov, N.Elander, B.Pavlov, *Int.J.Quant.Chem.* **46** (1993), 401
 2. Ch.King, *Commun.Math.Phys.* **165** (1994), 6881
- P.Exner, P.Šeba: *Free quantum motion on a branching graph*, Rep.Math.Phys. **28** (1989), 7–26.
1. J.E.Avron, *Rev.Mod.Phys.* **60** (1988), 873
 2. W.Bulla, T.Trenkler, *J.Math.Phys.* **31** (1990), 1157
 3. J.Avron, L.Sadun, *Ann.Phys.* **206** (1991), 440
 4. C.Lambert, D.Robinson, *Phys.Rev.* **B48** (1993), 10391
 5. Y.Avishai, J.–L.Pichard, K.A.Muttalib, *J.de Phys.I* **3** (1993), 2243
 6. J.Gratus et al., *J.Phys.* **A27** (1994), 6881
 7. A.Gangyopadhyaya et al., *J.Phys.* **A28** (1995), 5331
 8. K.Moulopoulos, S.Roche, *J.Phys.:Cond.Matt.* **7** (1995), 521
 9. J.Avron, in *Physique Quantique Mésooscopique* (Les Houches, Session LXI, F.Akkermans et al., eds.), Elsevier 1995; p. 741
 10. K.K.Wan, R.M.Fountain, *Found.Phys.* **26** (1996), 1165
 11. K.K.Wan, R.M.Fountain, *Int.J.Theor.Phys.* **38** (1998), 2153
 12. V.Kostykin, R.Schrader, *J.Phys.* **A32** (1999), 595
 13. T.Kottos, U.Smilansky, *Ann.Phys.* **274** (1999), 76
 14. S.P.Novikov, in *The Arnoldfest: Proc.Conf. in Honour of V.I.Arnold 60th Birthday* (E.Bierstone et al. eds.), Fields Inst.Commun, vol. 24 (1999)
 15. W.Axmann, P.Kuchment, L.Kunyanysky, *J.Lightwave Technol.* **17** (1999), 1996
 16. C.Trueaman, K.K.Wan, *J.Math.Phys.* **41** (2000), 195
 17. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 18. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 19. M.Harmer, *J.Phys.* **A33** (2000), 9193
 20. F.M.Dittes, *Phys.Rep.* **339** (2000), 216
 21. L.Kaplan, *Phys.Rev.* **E64** (2001), 036225
 22. V.Alonso, S.De Vincenzo, L.Gonzalez-Diaz, *Phys.Lett.* **A287** (2001), 23
 23. L.Kaplan, *Phys.Rev.* **E64** (2001), 036225
 24. J.Desbois, *Eur.J.Phys.* **B24** (2001), 261
 25. M.Harmer, A.Mikhailova, B.Pavlov, *Proc. CMA* **39** (2001), 118
 26. F.Barra, P.Gaspard, *Phys.Rev.* **E65** (2002), 016205
 27. P.Kurasov, F.Stenberg, *J.Phys.* **A35** (2002), 101
 28. T.Mikhailova et al., *Math.Nachr.* **235** (2002), 101
 29. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 30. K.Moulopoulos, N.Constantinou, *Phys.Lett.* **A302** (2002), 39
 31. J.Brüning, V.A.Geyler, *J.Math.Phys.* **44** (2003), 371
 32. T.Kottos, U.Smilansky, *J.Phys.* **A36** (2003), 3501
 33. V.Kostykin, R.Schrader, *Commun.Math.Phys.* **237** (2003), 161
 34. A.G.M.Schmidt, B.K.Cheng, M.G.E.da Luz, *J. Phys.* **A36** (2003), L545
 35. B.Winn, *PhD thesis*, University of Bristol 2003
 36. T.Kottos, H.Schanz, *Waves in Random Media* **14** (2004), S91
 37. P.Kuchment, *Waves in Random Media* **14** (2004), S107

38. A.G.M.Schmidt, M.G.E. da Luz, *Phys.Rev.* **A69** (2004), 052708
39. P.Kuchment, in *PDE and Inverse Problems*, (C.Conca et al., eds.), Contemp.Math., vol. 362, AMS 2004
40. M.Harmer, *J.Phys.* **A38** (2005), 4875
41. P.Kuchment, *J.Phys.* **A38** (2005), 4887
42. P.Kurasov, M.Nowaczyk, *J.Phys.* **A38** (2005), 4901
43. J.Boman, P.Kurasov, *Adv.Appl.Math.* **35** (2005), 58
44. K.Pankrashkin, *J.Phys.* **A38** (2005), 8979
45. K.Voo et al., *Phys.Rev.* **B73** (2006), 035307
46. B.Bellazzini, M.Mintshev, *J.Phys.* **A39** (2006), 11101
47. S.A.Fulling, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.161
48. Beng-Seong Ong, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.241
49. H.Schanz, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.269
50. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
51. B.Bellazzini, P.Mintchev, P.Sorba, *J.Phys.* **A40** (2007), 2485
52. S.Albeverio, C.Cacciapuoti, D.Finco, *J.Math.Phys.* **48** (2007), 032103
53. N.Crampe, C.A.S.Young, *J.Phys.* **A40** (2007), 5491
54. S.A.Fulling, L.Kaplan, J.H.Wilson, *Phys.Rev.* **A76** (2007), 012118
55. S.A.Fulling, P.Kuchment, J.H.Wilson, *J.Phys.* **A40** (2007), 14165
56. S.Cardanobile, D.Mugnolo, R.Nittka, *J.Phys.* **A41** (2008), 055102
57. Ch.Texier, *J.Phys.* **A41** (2008), 085207
58. M.Nowaczyk, *PhD thesis*, Lund University 2008
59. P.Kurasov, *J.Funct.Anal.* **254** (2008), 934
60. P.Kurasov, *Arkiv Math.* **46** (2008), 95
61. S.Avdonin, P.Kurasov, *Inv.Probl.Imag.* **2** (2008), 1
62. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
63. G.Berkolaiko, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.315
64. V.Kostykin, J.Potthoff, R.Schrader, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.423
65. B.Winn, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.491
66. B.Bellazzini et al, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.639
67. H.Hogreve, *Int.J.Quant.Chem.* **109** (2009), 1430
68. E.Ragoucy, *J.Phys.* **A42** (2009), 295205
69. F.M.de Andrade, *PhD thesis*, Universidad Federal do Paraná 2009
70. S.Endres, F.Steiner, *J.Phys.* **A43** (2010), 095204
71. P.Kurasov, *Math.Proc. Cambridge Phil.Soc.* **148** (2010), 331
72. Z.Sobirov et al., *Phys.Rev.* **E81** (2010), 066602
73. T.Cheon, O.Turek, *Phys.Lett.* **374** (2010), 4212
74. G.Berkolaiko, B.Winn, *Trans.Am.Math.Soc.* **362** (2010), 6261
75. S.Avdonin, P.Kurasov, M.Nowaczyk, *Inv.Probl.Imag.* **4** (2010), 579
76. C.Cacciapuoti, D.Finco, *Asympt.Anal.* **70** (2010), 199
77. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
78. Ch.Texier, *HDR thèse*, Université Paris Sud, 2010
79. K.Nakamura et al., *Phys.Rev.* **E84** (2011), 026609
80. S.Egger né Endres, *PhD thesis*, Universität Ulm 2011
81. S.Demirel, *PhD thesis*, Universität Stuttgart 2012
82. S.Albeverio, S.Kusuoka, *Ann.Probab.* **40** (2012), 2131
83. K.Mochizuki, I.Trooshin, in *Evolution Equations of Hyperbolic and Schrödinger Type*, Springer 2012; p. 227

84. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 85. K.K.Sabirov, Z.A.Sobirov, D.Babajanov, D.U.Matrasulov, *Phys.Lett.* **A377** (2013), 860
 86. N.Crampé, A.Trombettoni, *Nucl.Phys.* **B871** (2013), 526
 87. P.Kurasov, G.Malenová, S.Naboko, *J.Phys.* **A46** (2013), 275309
 88. K.Sabirov, Z.Sabirov, D.Babajanov, D.Matrasulov, in *Low-Dimensional Functional Materials*, Springer 2013; p. 155
 89. R.Lytel, M.G.Kuzyk, *J.Nonlin.Opt.Phys.Mat.* **22** (2013), 1350041
 90. Yu. Higuchi, N. Konno, I. Sato and E. Segawa, *Yokohama Math.J.* **59** (2013), 33-56
 91. I.Yu.Popov, A.N.Skorynina, I.V.Blinova, *J.Math.Phys.* **55** (2014), 033504
 92. P.Kurasov, S.Naboko, *J.Spect.Theory* **4** (2014), 211
 93. D.Mugnolo: *Semigroup Methods for Evolution Equations on Networks*, Springer 2014
 94. M.O.Kovaleva, I.Yu.Popov, in *Mathematical Results in Quantum Mechanics*, World Scientific, Singapore 2014; p. 275
 95. E.N.Ashurova, A.N.Kandagura, I.I.Karpenko, *Meth.Funct.Anal.Topol.* **20** (2014), 117
 96. K.Mochizuki, I.Trooshin, *J.Inv.Ill-Posed Probl.* **23** (2015), 23
 97. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
 98. D.U.Matrasulov, J.R.Yusupov, K.K.Sabirov, Z.A.Sobirov, *Nanosystems* **6** (2015), 173
 99. T.Machida, E.Segawa, *Quant.Inf.Proc.* (2015) **14** (2015), 1539
 100. R.Lytel, S.M.Mossman, R.G.Kuzyk, *J.Nonlin.Opt.Phys.Mat.* **24** (2015), 1550018
 101. E.N.Grishanov et al., *Nanosystems* **6** (2015), 637
 102. I.Yu.Popov, I.V.Blinova, A.I.Popov, *J.Phys.:Conf.Ser.* **661** (2015), 012024
 103. K.K.Sabirov et al., *Nanosystems* **6** (2015), 762
 104. E.Segawa, *Kokyuroku* **1956** (2015), 16
 105. F.M.Andrade et al., *Phys.Rep.* **647** (2016), 1
 106. M.O.Kovaleva, I.Yu.Popov, *Zs.Anal.Anw* **35** (2016), 383
 107. K.Mochizuki, I.Trooshin, in *New Trends in Analysis and Interdisciplinary Applications*, Springer 2017; p. 319
- P.Exner: *One more theorem on the short-time regeneration rate*, *J.Math.Phys.* **30** (1989), 2563–2564.
1. G.M.D’Ariano, *Phys.Rev.* **A43** (1991), 2550
 2. A.U.Schmidt, *J.Phys.* **A36** (2003), 1135
 3. A.U.Schmidt, in *Mathematical physics research on leading edge*, Nova Sci, Hauppauge, NY 2004; p.113
- P.Exner, P.Šeba: *Bound states in curved quantum waveguides*, *J.Math.Phys.* **30** (1989), 2574–2580.
1. H.U.Baranger, *Phys.Rev.* **B42** (1990), 11479
 2. Yu.A.Kuperin et al., *Ann.Phys.* **205** (1991), 330
 3. S.Matsutani, H.Tsuru, *J.Phys.Soc.Japan* **60** (1991), 3640
 4. Y.Avishai et al., *Phys.Rev.* **B44** (1991), 8028
 5. J.Goldstone, R.L.Jaffe, *Phys.Rev.* **B45** (1992), 14100
 6. S.Matsutani, *J.Phys.Soc.Japan* **61** (1992), 55
 7. J.P.Carini et al., *Phys.Rev.* **B46** (1992), 15538
 8. S.Washburn, *Rep.Progr.Phys.* **55** (1992), 1311
 9. K.F.Berggren, *Physica Scripta* **T42** (1992), 141
 10. Yu.A.Kuperin et al., *Mat.sbornik* **72** (1992), 221
 11. K.Vacek et al., *Phys.Rev.* **B47** (1993), 3695
 12. S.Matsutani, *Phys.Rev.* **A47** (1993), 686
 13. K.F.Berggren, *Phys.Rev.* **B47** (1993), 6390
 14. J.P.Carini et al., *Phys.Rev.* **B48** (1993), 4503
 15. I.F.Herbut, *J.Phys.: Cond.Matter* **5** (1993), L607

16. Z.-L.Ji, *J.Appl.Phys.* **73** (1993), 4468
17. H.Burgess, B.Jensen, *Phys.Rev.* **A48** (1993), 1861
18. H.-Q.Xu, *Phys.Rev.* **B47** (1993), 9357
19. J.Liu et al., *Phys.Rev.* **B47** (1993), 13039
20. G.-Z.Xu, Ping Jiang, *J.Phys.: Cond.Matt.* **6** (1994), 2059
21. L.Jiang et al., *J.Phys.: Cond.Matt.* **6** (1994), 5957
22. Z.A.Shao, W.Porod, C.S.Lent, *Phys.Rev.* **B49** (1994), 7453
23. S.Matsutani, *Progr.Theor.Phys.* **91** (1994), 1005
24. Ch.-K.Wang, K.-F.Berggren, Z.-L.Ji, *J.Appl.Phys.* **77** (1995), 2564
25. W.Renger, W.Bulla, *Lett.Math.Phys.* **35** (1995), 1
26. Ch.-K.Wang, *Semicond.Sci.Technol.* **10** (1995), 1131
27. I.J.Clark, A.J.Bracken, *J.Phys.* **A29** (1996), 339
28. O.Vakhnenko, *Phys.Lett.* **A211** (1996), 46
29. I.J.Clark, A.J.Bracken, *J.Phys.* **A29** (1996), 4527
30. K.Lin, R.L.Jaffe, *Phys.Rev.* **B54** (1996), 5750
31. L.Nedelec, *Commun.Part.Diff.Eq.* **22** (1997), 143
32. E.N.Bulgakov, A.F.Sadreev, *JETP Lett.* **66** (1997), 431
33. W.Bulla, F.Gesztesy, W.Renger, B.Simon, *Proc. AMS* **125** (1997), 1487
34. J.P.Carini et al., *Phys.Rev.* **B55** (1997), 9842
35. J.P.Carini et al., *Phys.Rev.* **B55** (1997), 9852
36. K.F.Berggren, C.K.Wang, *Int.J.Quant.Chem.* **63** (1997), 667
37. C.K.Wang, *Physica* **B229** (1997), 240
38. I.J.Clark, *Bull.Austral.Math.Soc.* **56** (1997), 525
39. K.Yoshitomi, *J.Diff.Eq.* **142** (1998), 123
40. E.Šimánek, *Phys.Rev.* **B57** (1998), 14634
41. E.Šimánek, *Phys.Lett.* **A250** (1998), 425
42. K.S.Na, L.E.Reichl, *J.Stat.Phys.* **92** (1998), 519
43. E.N.Bulgakov, A.F.Sadreev, *JETP* **87** (1998), 1058
44. S.J.Rey, J.T.Yee, *Nucl.Phys.* **B526** (1998), 229
45. I.J.Clark, *Appl.Math.Lett.* **12** (1999), 125
46. F.Kleespies, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.275
47. K.Yoshitomi, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.379
48. E.Šimánek, *Phys.Rev.* **B59** (1999), 10152
49. E.Šimánek, *Phys.Rev.* **B60** (1999), 4410
50. B.Y.Gu et al., *J.Appl.Phys.* **86** (1999), 1013
51. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999
52. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
53. F.Kleespies, P.Stollmann, *Rev.Math.Phys.* **12** (2000), 1345
54. Y.Nomura, *Kokyoroku* **1134** (2000), 117
55. K.A.Mitchell, *Phys.Rev.* **A63** (2001), 042112
56. S.N.Shevchenko, Y.A.Kolesnichenko, *JETP* **92** (2001), 811
57. E.N.Bulgakov, A.F.Sadreev, *Tech.Phys.* **46** (2001), 1281
58. A.N.Bogoliubov, A.L.Delitsyn, M.D.Malykh, *Vest.MGU:Fiz.Astr.* (2001), 65
59. A.L.Delitsyn, *Vest.MGU:Fiz.Astr.* (2001), 75
60. Ch.-K.Wang,Zh.-T.Jiang, *Chinese J.Semicond.* **22** (2001), 283
61. J.Dittrich, J.Kříž, *J.Phys.* **A35** (2002), L269
62. J.Dittrich, J.Kříž, *J.Math.Phys.* **43** (2002), 3892
63. E.Granot, *Phys.Rev.* **B65** (2002), 233101
64. S.N.Shevchenko, Y.A.Kolesnichenko, *Physica* **E14** (2002), 177

65. P.Kuchment, *Waves in Random Media* **12** (2002), R1
66. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B66** (2002), 035331
67. E.N.Bulgakov, A.F.Sadreev, *Phys.Rev.* **66** (2002), 075331
68. D.Krejčířík, *J.G geom.Phys.* **45** (2002), 202
69. A.V.Sobolev, J.Walthoe, *Proc.London Math. Soc.* **85** (2002), 717
70. J.Dittrich, J.Kříž, in *Mathematical Results in Quantum Mechanics*, (R.Weder et al., eds.), Contemporary Math., vol.307, AMS 2002; p.107
71. D.Csontos, H.Q.Xu, *J.Phys.:Cond.matt.* **14** (2002), 12513
72. L.Ramdas Ram-Mohan: *Finite Element and Boundary Element Applications in Quantum Mechanics*, Oxford Univ. Press 2002
73. D.Krejčířík, *J.G geom.Phys.* **45** (2003), 203
74. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
75. O.Post, *J.Diff.Eq.* **187** (2003), 23
76. B.Dwir, K.Leifer, E.Kapon, *Phys.Rev.* **B67** (2003), 075302
77. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
78. A.S.Goldhaber, R.Requist, *Phys.Rev.* **A68** (2003), 012109
79. M.W.J.Bromley, D.B.Esry, *Phys.Rev.* **A68** (2003), 043609
80. O.Post, *Math.Nachr.* **261** (2003), 141
81. D.Levin, *J.Phys.* **A37** (2004), L9
82. C.M.Linton, K.Ratcliffe, *J.Math.Phys.* **45** (2004), 1359
83. K.Krejčířík, R.Tiedra de Aldecoa, *J.Phys.* **A37** (2004), 5449
84. V.V.Grushin, *Math. Notes* **75** (2004), 331
85. C.Gorria et al., *Phys.Rev.* **B69** (2004), 134506
86. D.Gridin, A.T.I.Adamou, R.V.Craster, *Phys.Rev.* **B69** (2004), 155317
87. A.L.Delitsyn, *Diff.Eqs* **40** (2004), 207
88. M.Melgaard, *Few Body Problems* **35** (2004), 77
89. Shi-Xian Qu, M.R.Geller, *Phys.Rev.* **B70** (2004), 085414
90. S.Matsutani, *J.G geom.Symm.Phys.* **2** (2004), 18
91. I.Veselić, in *Spectral Theory of Schrödinger Operators*, (R.del Rio, C.Villegas-Blas, eds.), Contemporary Math., vol.340, AMS 2004; p.97
92. Y.Liu, B.Zeng, B.Yang, in *Microwave and Millimeter Wave Technology*, Proc. of the 4th ICMMT Conference (2004), 511
93. L.Mott, M.Encinosa, B.Etemadi, *Physica* **E25** (2005), 521
94. Yu.B.Gaidei et al., *New J.Phys.* **7** (2005), 52
95. O.Post, *J.Phys.* **A38** (2005), 4917
96. V.V.Grushin, *Math.Notes* **77** (2005), 606
97. M.Encinosa, L.Mott, B.Etemadi, *Phys.Scripta* **72** (2005), 13
98. B.Chenaud et al., *Diff.G geom.Appl.* **23** (2005), 95
99. M.Encinosa, *Physica* **E28** (2005), 209
100. V.M.Osadchii, V.Y.Prinz, *Phys.Rev.* **B72** (2005), 033313
101. T.Ekholm, H.Kovářík, *Comm. PDE* **30** (2005), 539
102. M.Koehler, M.W.J.Bromley, D.B.Esry, *Phys.Rev.* **A72** (2005), 023603
103. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
104. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
105. R.R.Gadyl'shin, *Teor.Mat.Fiz.* **145** (2005), 1678
106. R.Tiedra de Aldecoa, *PhD thesis*, Université de Genève 2005
107. Y.B.Gaidei et al., in *Nonlinear Waves: Classical and Quantum Aspects*, (F.K.H.Abdullaev, V.V.Konotop, eds), NATO Sci.Series II, vol. 153 (2005), 107
108. M.Encinosa, *Phys.Rev.* **A73** (2006), 012102
109. G.Buchendorfer, G.M.Graf, *Ann.H.Poincaré* **7** (2006), 303
110. E.R.Johnson, M.Levitin, E.Parnovski, *SIAM J.Math.Anal.* **37** (2006), 1465
111. G.Annino et al., *Phys.Rev.* **B73** (2006), 125308

112. M.Encinosa, M.Jack, *Physica Scripta* **73** (2006), 439
113. D.C.Mattis, T. Sjostrom, *Mod.Phys.Lett.* **B20** (2006), 501
114. D.Krejčířík, *J.Ineq.Appl.* **2006** (2006), 46409
115. M.Solomyak, *J.Phys.* **A39** (2006), 10477
116. D.N.Maksimov, A.N.Sadreev, *Phys.Rev.* **E74** (2006), 016201
117. L.N.Trefethen, C.Betcke, in *Recent Advances in Differential Equations*, (N.Chernov et al., eds.), Contemp.Math., vol. 412, AMS 2006, p.297
118. C.Lin, Z.Q.Lu, *Commun.PDE* **31** (2006), 1529
119. P.Freitas, D.Krejčířík, *Math.Phys.Anal.Geom.* **9** (2006), 335
120. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
121. S.Albeverio, C.Cacciapuoti, D.Finco, *J.Math.Phys.* **48** (2007), 032103
122. M.Encinosa, M.Jack, *J.Computer-Aided Mat.Design* **14** (2007), 65
123. M.Horvat, T.Prosen, *J.Phys.* **A40** (2007), 6349
124. V.V.Grushin, *Math. Notes* **81** (2007), 291
125. H.Kovařík, A.Sacchetti, *J.Phys.* **A40** (2007), 8371
126. M.Bhattacharya, *Optics Comm.* **279** (2007), 219
127. V.Atanasov, R.Dandoloff, *Phys.Lett.* **A371** (2007), 118
128. M.Jílek, *SIGMA* **3** (2007), 108
129. C.M.Linton, P.McIver, *Wave Motion* **45** (2007), 16
130. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
131. I.Veselić: *Existence and Regularity Properties of the Integrated Density of States of Random Schrödinger Operators*, LNP 1917, Springer 2008
132. T.Ekholm, H.Kovařík, D.Krejčířík, *Arch.Rat.Mech.Anal.* **188** (2008), 245
133. P.Freitas, D.Krejčířík, *Indiana Univ.Math.J.* **57** (2008), 343
134. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B77** (2008), 174405
135. A.Bruno-Alfonso, A.Latgé, *Phys.Rev.* **B77** (2008), 205303
136. V.V.Grushin, *Math.Notes* **83** (2008), 463
137. H.Kovařík, S.Vugalter, *J.Math.Anal.Appl.* **345** (2008), 566
138. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
139. D.Grieser, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.565
140. D.Krejčířík, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.617
141. H.Kovařík, D.Krejčířík, *Math.Nachr.* **281** (2008), 1159
142. L.Cardoulis, M.Cristofol, P.Gaitan, *J.Phys.:Conf.Ser.* **124** (2008), 012015
143. L.Cardoulis, M.Cristofol, P.Gaitan, *J. Inverse Ill-Posed Probl.* **16** (2008), 127
144. M.Levitin, M.Marletta, *Proc.Roy.Soc.Edinburg* **A138** (2008), 1043
145. D.Borisov, D.Krejčířík, *Integral Eq. Operator Theory* **62** (2008), 489
146. A.-I.Bonciocat, *PhD thesis*, Rheinischen Friedrich-Wilhelms-Universität Bonn 2008
147. M.Levitin, M.Marletta, *Proc.Roy.Soc.Edinburg* **A138** (2008), 1043
148. T.Sjostrom, D.C.Mattis, W.G.Yin, W.Ku, *J.Comp.Theor.Nanoscience* **6** (2009), 403
149. G.Annino, M.Cassettari, M.Martinelli, *IEEE Trans.Micr.Theory Tech.* **57** (2009), 775
150. L.A.Bunimovich, G.Dell Magno, *Commun.Math.Phys.* **288** (2009), 699
151. V.V.Grushin, *Math.Notes* **85** (2009), 661
152. D.Krejčířík, *ESAIM:COCV* **15** (2009), 555
153. M.Znojil, *Phys.Rev.* **D80** (2009), 105004
154. A.A.Gorbatsevich, M.N.Zhuravlev, *JETP Lett.* **90** (2009), 582
155. P.D.Hislop, O.Post, *Waves in Random and Complex Media* **19** (2009), 216
156. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
157. V.Rabinovich, M.Quino Cerdan, *Math.Meth.Appl.Sci.* **33** (2010), 527
158. H.Diamant, O.Agam, *Phys.Rev.Lett.* **104** (2010), 047801
159. H.Najar, S.Ben Hariz, M.Ben Salah, *Math.Phys.Anal.Geom.* **13** (2010), 19
160. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E81** (2010), 036606

161. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
162. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
163. P.Duclos, H.Hogreve, *J.Phys.* **A43** (2010), 474018
164. E.Sadurni, W.P.Schleich, *AIP Conf.Proc.* **1323** (2010), 283
165. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
166. Ch.Texier, *HDR thèse*, Université Paris Sud, 2010
167. D.Borisov, I.Veselić, *J.Stat.Phys.* **142** (2011), 58
168. S.A.Nazarov, *J.Math.Sci.* **172** (2011), 555
169. S.Nazarov, *Teor.Mat.Fiz.* **167** (2011), 606
170. H.Najar, O.Olendski, *J.Phys.* **A44** (2011), 305304
171. O.O.Vakhnenko, *J.Math.Phys.* **52** (2011), 073513
172. O.O.Vakhnenko, *Ukr.J.Phys.* **56** (2011), 669
173. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
174. P.Amore, M.Rodriguez, C.A.Terrero-Escalante, *J.Phys.* **A45** (2012), 105303
175. C.Förster, T.Weidl, *St.Petersburg Math.J.* **23** (2012), 179
176. L.Cardoulis, *Monogr.Mat.GdG* **37** (2012), 79
177. G.Kaoullas, E.R.Johnson, *J.Fluid.Mech.* **700** (2012), 283
178. A.L.Delitsyn, B.T.Nguyen, D.S.Grebenkov, *Eur.J.Phys.* **B85** (2012), 176
179. L.Cardoulis, M.Cristofol, *Int.J.Math.Math.Sci.* **2012** (2012), 651390
180. M.Willatzen, A.Pors, J.Gravesen, *J.Math.Phys.* **53** (2012), 083507
181. D.Reitz, A.Rauschenbeutel, *Optics Commun.* **285** (2012), 4705
182. M.Dauge, N.Raymond, *J.Math.Phys.* **53** (2012), 123529
183. S.Albeverio, S.Kusuoka, *Ann.Probab.* **40** (2012), 2131
184. Nguyen Thanh Binh, *PhD thesis*, École Polytechnique Palaiseau 2012
185. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
186. S.Bittner et al., *Phys.Rev.* **E87** (2013), 042912
187. D.Borisov, I.Veselić, *J.Funct.Anal.* **265** (2013), 2877
188. D.S.Grebenkov, B.T.Nguyen, *SIAM Review* **55** (2013), 601
189. S.A.Nazarov, *J.Math.Sci.* **196** (2014), 346
190. A.Markowsky, N.Schopohl, *Phys.Rev.* **A89** (2014), 013622
191. J.Stockhofe, P.Schmelcher, *Phys.Rev.* **A89** (2014), 033630
192. M.Belov, G.Krylov, *Phys.Scripta* **89** (2014), 075804
193. A.Del Campo, M.G.Boshier, A.Saxena, *Scientific Reports* **4** (2014), 5274
194. P.Freitas, P.Siegl, *Rev.Math.Phys.* **26** (2014), 1450018
195. A.F.Sadreev, A.S.Pilipchuk, *JETP Lett.* **100** (2014), 585
196. P.Nørtoft, J.Gravesen, M.Willatzen, *Comput.Meth.Appl.Mech.Eng.* **284** (2015), 1098
197. B.W.Shore et al., *New J.Phys.* **17** (2015), 013046
198. P.Uusitalo, *Ann.Acad.Sci.Fennicæ* **40** (2015), 329
199. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *J.Math.Phys.* **56** (2015), 021505
200. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
201. M.Dauge, Ourmières-Bonafos, N.Raymond, *Commun.Pure Appl.Anal.* **14** (2015), 1239
202. H.Najar, in *Applied Mathematics in Tunisia* (A.Jeribi, M.A.Hammami, A.Masmoudi, eds.), Springer Proc. in Math.& Stat., vol. 131 (2015), p. 101
203. D.Krejčířík, N.Raymond, M.Tušek, *J.Geom.Anal.* **25** (2015), 2546
204. H.Najar, M.Raissi, *Math.Meth.Appl.Sci.* **39** (2016), 92
205. Minjae Lee, *J.Phys.* **49** (2016), 085204
206. R.Novák, *Asympt.Anal.* **96** (2016), 251
207. E.Rivera-Mociños, E.Sadurní, *J.Phys.* **A49** (2016), 175302
208. A.R.Bikmetov, R.R.Gadylyshin, *Russ.J.Math.Phys.* **23** (2016), 1
209. R.Assel, M.Ben Salah, *Serdica Math.J.* **42** (2016), 43
210. P.Amore, F.M.Fernández, C.P.Hofmann, *Eur.J.Phys.* **B89** (2016), 163

211. J.K.Pedersen, D.V.Fedorov, A.S.Jensen, N.Y.Zinner, *J.Mod.Optics* **63** (2016), 1814
212. F.T.Brandt, J.A. Sánchez-Monroy, *Phys.Lett.* **A380** (2016), 3036
213. S.Jimbo, K.Kurata, *Indiana Univ.Math.J.* **65** (2016), 867
214. Ph.Briet, M.Gharsalli, *J.Phys.* **A49** (2016), 495202
215. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
216. F.Méhats, N.Raymond, *Ann.H.Poincaré* **18** (2017), 281
217. K.Pankrashkin, *J.Math.Anal.Appl.* **449** (2017), 907
218. J.A Sánchez Monroy, *PhD thesis*, Universidad de São Paulo 2017
219. I.Kh.Khusnullin, *Trudy IMM UrO RAN* **23** (201), 273
220. S.Fournais, L.Le Treust, N.Raymond, J.Van Schaftigen, *J.Math.Soc.Japan* **69** (2017), 1667
- P.Exner, P.Šeba, P.Šťovíček: *On existence of a bound state in an L-shaped waveguide*, Czech. J. Phys. **B39** (1989), 1181–1191.
1. J.Tolar, *Springer LNP* **313** (1988), 268
 2. J.Martorel, *Sol.St.Comm.* **78** (1991), 13
 3. H.Wu, *J.Appl.Phys.* **72** (1992), 151
 4. H.Wu, *Phys.Rev.* **B45** (1992), 1960
 5. J.Goldstone, R.L.Jaffe, *Phys.Rev.* **B45** (1992), 14100
 6. S.Washburn, *Rep.Progr.Phys.* **55** (1992), 1311
 7. H.Wu, D.W.L.Sprung, *Phys.Rev.* **B47** (1993), 1500
 8. K.Vacek et al., *Phys.Rev.* **B47** (1993), 3695
 9. C.M.Savage et al., in *Fundamentals of Quantum Optics III* (F.Ehlotzky, ed.), LNP, vol.420, p.60; Springer 1993
 10. H.Wu et al., *Phys.Lett.* **A183** (1993), 413
 11. H.Wu, D.Sprung, *J.Phys.* **A26** (1993), 798
 12. S.-Q.Yuan, B.-Y.Gu, *Zs.Phys.* **B47** (1993), 47
 13. M.Andrews, C.M.Savage, *Phys.Rev.* **A50** (1994), 4535
 14. H.Wu, D.Sprung, *Phys.Rev.* **A49** (1994), 4305
 15. W.Renger, W.Bulla, *Lett.Math.Phys.* **35** (1995), 1
 16. K.N.Pichugin, A.A.Sadreev, *JETP* **109** (1996), 546
 17. N.D.Whelan, *Phys.Rev.Lett.* **76** (1996), 2605
 18. M.Razavy, *Phys.Lett.* **A228** (1997), 239
 19. E.N.Bulgakov, A.F.Sadreev, *Phys.Low Dim.Struct.* **1/2** (1997), 33
 20. W.Bulla, F.Gesztesy, W.Renger, B.Simon, *Proc. AMS* **125** (1997), 1487
 21. M. Razavy, *Int.J.Mod.Phys.* **B11** (1997), 2777
 22. M. Razavy, *Phys.Rev.* **A55** (1997), 4102
 23. E.N.Bulgakov, A.F.Sadreev, *JETP* **87** (1998), 1058
 24. M. Razavy, *Int.J.Mod.Phys.* **B12** (1998), 1907
 25. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 26. E.N.Bulgakov, A.F.Sadreev, *Tech.Phys.* **46** (2001), 1281
 27. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 28. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B66** (2002), 035331
 29. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 30. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 31. D.Levin, *J.Phys.* **A37** (2004), L9
 32. M.Melgaard, *Few Body Problems* **35** (2004), 77
 33. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 34. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 35. D.N.Maksimov, A.N.Sadreev, *Phys.Rev.* **E74** (2006), 016201
 36. M.Cherdantsev, *PhD thesis*, University of Bath 2008
 37. G.F.Dell'Antonio, E.Costa, *J.Phys.* **A43** (2010), 474014
 38. P.Duclos, H.Hogreve, *J.Phys.* **A43** (2010), 474018

39. E.Costa, *PhD thesis*, SISSA Trieste 2010
 40. E.Sadurni, W.P.Schleich, *AIP Conf.Proc.* **1323** (2010), 283
 41. O.O.Vakhnenko, *J.Math.Phys.* **52** (2011), 073513
 42. O.O.Vakhnenko, *Ukr.J.Phys.* **56** (2011), 669
 43. P.Amore, M.Rodriguez, C.A.Terrero-Escalante, *J.Phys.* **A45** (2012), 105303
 44. N.Raymond, *Gazette des Mathématiciens* **131** (2012), 5
 45. N.Popoff, *PhD thesis*, Université de Rennes 2012
 46. J.T.Londergan, D.P.Murdock, *Amer.J.Phys.* **80** (2012), 1085
 47. M.Dauge, N.Raymond, *J.Math.Phys.* **53** (2012), 123529
 48. M.Dauge, Y.Lafranche, N.Raymond, *ESAIM Proc.* **35** (2012), 14
 49. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 50. S.Bittner et al., *Phys.Rev.* **E87** (2013), 042912
 51. C.Y.Wang, *Mech.Res.Comm.* **57** (2014), 6
 52. A.Markowsky, N.Schopohl, *Phys.Rev.* **A89** (2014), 013622
 53. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
 54. T.Ourmières-Bonafos, *J.Spect.Theory* **4** (2014), 485
 55. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *J.Math.Phys.* **56** (2015), 021505
 56. C.Y.Wang, *Int.J.Appl.Mech.* **7** (2015), 1550024
 57. M.Dauge, Ourmières-Bonafos, N.Raymond, *Commun.Pure Appl.Anal.* **14** (2015), 1239
 58. E.Rivera-Mociños, E.Sadurní, *J.Phys.* **A49** (2016), 175302
 59. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 60. J.Kerner, T.Mühlenbruch, *Nanosystems* **8** (2017), 20
 61. J.Kerner, T.Mühlenbruch, *Rep.Math.Phys.* **80** (2017), 143
- P. Exner, P. Šeba: *Quantum junctions and the selfadjoint–extension theory*, Proceedings of the Workshop on Applications of Self-Adjoint Extensions in Quantum Physics (Dubna 1987); Lecture Notes in Physics, vol. 324, Springer, Heidelberg 1989; pp. 203–217.
1. V.Koshmanenko, in *Mathematical Results in Quantum Mechanics*, (M.Demuth et al., eds.), Birkhäuser, Basel 1994; p.347
 2. K.K.Wan, R.M.Fountain, *Found.Phys.* **26** (1996), 1165
 3. F.E.Harrison, K.K.Wan, *J.Phys.* **A30** (1997), 4731
 4. C.Trueeman, K.K.Wan, *J.Math.Phys.* **41** (2000), 195
 5. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 6. K.K.Wan, D.Menzies, *Int.J.Theor.Phys.* **48** (2009), 282
- P. Exner, P. Šeba, P. Šťovíček: *Quantum waveguides modelled by graphs*, Proceedings of the 24th Winter School on Stochastic Methods in Mathematics and Physics (Karpacz 1988), World Scientific, Singapore 1989; pp. 375–384.
1. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 2. D.C.Mattis, *Phys.Rev.* **71** (2005), 144424
- P.Exner, P.Šeba, P.Šťovíček: *Quantum waveguides*, Proceedings of the Workshop on Applications of Self-Adjoint Extensions in Quantum Physics (Dubna 1987); Lecture Notes in Phys., vol.324, Springer, Heidelberg 1989; pp.257–266.
1. I.Popov, S.Popova, *Phys.Lett.* **A173** (1993), 484
 2. I.Popov, S.Popova, *Europhys.Lett.* **24** (1993), 379
 3. F.Gagel, K.Maschke, *Phys.Rev.* **B49** (1994), 17170
 4. I.Popov, S.Popova, *Ž.Tech.Fiz.* **64** (1994), 23
 5. V.Geyler, I.Popov, *Z.Phys.* **B73** (1994), 437
 6. I.Popov, *Fiz.Tverd.Tela* **36** (1994), 1318

7. I.Popov, *Proc.Roy.Soc.* **A452**(1996), 1505
 8. S.L.Popova, *Pisma Z.Tech.Phys.* **22** (1996), 55
 9. K.K.Wan, R.M.Fountain, *Found.Phys.* **26** (1996), 1165
 10. F.E.Harrison, K.K.Wan, *J.Phys.* **A30** (1997), 4731
 11. K.K.Wan, R.M.Fountain, *Int.J.Theor.Phys.* **38** (1998), 2153
- P.Exner, P.Šeba: *Electrons in semiconductor microstructures: a challenge to operator theorists*, Proc. of the Workshop on Schrödinger Operators, Standard and Nonstandard (Dubna 1988), World Scientific, Singapore 1989; pp.79–100.
1. I.Popov, *Physica Scr.* **47** (1993), 682
 2. R.Carlson, *El.J.Diff.Eq.* **1997**(23) (1997), 1
 3. R.Carlson, *El.J.Diff.Eq.* **1998**(06) (1998), 1
 4. P.Kuchment, L.A.Kunyansky, *Exp.Math.* **8** (1999), 1
 5. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 6. Y.Saito, *El.J.Diff.Eq.* **2000**(31) (2000), 1
 7. R.Carlson, *El.J.Diff.Eq.* **2000**(71) (2000), 1
 8. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 9. P.Kuchment, H.B.Zeng, *J.Math.Anal.Appl.* **258** (2001), 671
 10. P.Kuchment, L.A.Kunyansky, *Adv.Comp.Math.* **16** (2002), 263
 11. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 12. P.Kuchment, *Waves in Random Media* **14** (2004), S107
 13. P.Kuchment, in *PDE and Inverse Problems*, (C.Conca et al., eds.), Contemp.Math., vol. 362, AMS 2004
 14. P.Kuchment, *J.Phys.* **A38** (2005), 4887
 15. P.Kurasov, M.Nowaczyk, *J.Phys.* **A38** (2005), 4901
 16. S.Molchanov, B.Vainberg, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.227
 17. S.Molchanov, B.Vainberg, *Commun.Math.Phys.* **273** (2007), 533
 18. J.M.Harrison et al., *J.Phys.* **A40** (2007), 7597
 19. P.Kuchment, O.Post, *Commun.Math.Phys.* **275** (2007), 805
 20. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
 21. M.Nowaczyk, *PhD thesis*, Lund University 2008
 22. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 23. D.Grieser, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.565
 24. A.El Soufi, E.M.Harrell, S.Ilias, *Trans.Am.Math.Soc.* **361** (2009), 2337
 25. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
 26. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
 27. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 28. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
- J. Dittrich, P. Exner, P. Šeba: *Dirac Hamiltonian with contact interaction on a sphere*, Proceedings of the Workshop on Schrödinger Operators, Standard and Nonstandard (Dubna 1988), World Scientific, Singapore 1989; pp. 191–204.
1. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 2. S.Kondej, *PhD thesis*, Wrocław University 2001
 3. R.Carlone, M.Malamud, A.Posilicano, *J.Diff.Eq.* **254** (2013), 3835
- J.Dittrich, P.Exner, P.Šeba: *Dirac operators with a spherically symmetric δ -shell interaction*, *J.Math.Phys.* **30** (1989), 2875–2580.

1. M.Loewe, *J.Phys.* **A23** (1990), 553
 2. B.Mendez, F.Dominguez–Adame, *J.Phys.* **A25** (1992), 2065
 3. B.Thaller: *The Dirac equation*, Springer, Berlin 1992
 4. M.N.Houkonnou et al., *J.Math.Phys.* **38** (1997), 2832
 5. V.N.Kapshai, T.A.Alferova, *J.Phys.* **A32** (1999), 5329
 6. M.N.Houkonnou et al., *J.Math.Phys.* **40** (1999), 4255
 7. G.Y.H.Avossevou, M.N.Houkonnou, *J.Math.Phys.* **41** (2000), 24
 8. M.N.Houkonnou, G.Y.H.Avossevou, *J.Math.Phys.* **41** (2000), 1718
 9. M.N.Houkonnou, G.Y.H.Avossevou, *J.Math.Phys.* **41** (2000), 1735
 10. R.Benguria, H.Castillo, M.Loewe, *J.Phys.* **A33** (2000), 5315
 11. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 12. M.N.Houkonnou, in *Proc. 1st Int. Workshop on Probl.Math.Phys.* (Cotonou, Benin) (2000), p.307
 13. G.Y.H.Avossevou, M.N.Houkonnou, in *Proc. 1st Int. Workshop on Probl.Math.Phys.* (Cotonou, Benin) (2000), p.347
 14. M.N.Houkonnou, G.Y.H.Avossevou, *J.Math.Phys.* **42** (2001), 30
 15. S.H.Dong, Z.Q.Ma, *Found.Phys.Lett.* **15** (2002), 171
 16. J.Shabani, D.Vyabandi, *J.Math.Phys.* **43** (2002), 6064
 17. J.Shabani, D.Vyabandi, *J.Math.Phys.* **43** (2002), 6380
 18. R.Benguria, H.Castillo, M.Loewe, *Rev.Mex.Fis.* **48** (2002), 106
 19. J.Ndirahisha, J.Shabani, *N.Cim.* **B119** (2004), 331
 20. G.Y.H.Avossevou, J.Govaerts, M.N.Houkonnou, in *Proc. 1st Int. Workshop on Probl.Math.Phys.* (Cotonou, Benin) (2004), p.544
 21. E.Cameron-Podnieks, *PhD thesis*, University of Bristol 2005
 22. N.Arrizabalaga, *J.Math.Phys.* **52** (2011), 092301
 23. M.Loewe, F.Marquez, R.Zamora, *J.Phys.* **A45** (2012), 465303
 24. R.Carlone, M.Malamud, A.Posilicano, *J.Diff.Eq.* **254** (2013), 3835
 25. N.Arrizabalaga, A.Mas, L.Vega, *J.Math.Pures et Appl.* **102** (2014), 617
 26. N.Arrizabalaga, A.Mas, L.Vega, *SIAM J.Math.Anal.* **47** (2015), 1044
 27. N.Arrizabalaga, A.Mas, L.Vega, *Commun.Math.Phys.* **344** (2016), 483
 28. A.Mas, *J.Math.Phys.* **58** (2017), 022301
 29. A.Mas, F.Pizzichillo, *J.Math.Phys.* **58** (2017), 082102
 30. N.Arrizabalaga, in *Advances in Quantum Mechanics* (A.Michelangeli, G.Dell’Antonio, eds.), Springer INdAM Series, vol.18 (2017), p.1
- P.Exner: *Resonances in curved quantum wires*, *Phys.Lett.* **A141** (1989), 213–216.
1. H.U.Baranger, *Phys.Rev.* **B42** (1990), 11479
 2. J.Goldstone, R.L.Jaffe, *Phys.Rev.* **B45** (1992), 14100
 3. J.U.Nöckel, *Phys.Rev.* **B46** (1992), 15348
 4. J.P.Carini et al., *Phys.Rev.* **B46** (1992), 15538
 5. J.P.Carini et al., *Phys.Rev.* **B48** (1993), 4503
 6. I.F.Herbut, *J.Phys.: Cond.Matter* **5** (1993), L607
 7. G.Dunne, R.L.Jaffe, *Ann.Phys.* **223** (1993), 180
 8. J.C.Martinez, *Phys.Lett.* **A193** (1994), 319
 9. J.P.Carini et al., *Phys.Rev.* **B55** (1997), 9842
 10. J.P.Carini et al., *Phys.Rev.* **B55** (1997), 9852
 11. E.Šimánek, *Phys.Rev.* **B57** (1998), 14634
 12. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999
 13. K.A.Mitchell, *Phys.Rev.* **A63** (2001), 042112
 14. P.Kuchment, *Waves in Random Media* **12** (2002), R1

15. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B66** (2002), 035331
 16. L.Ramdas Ram-Mohan: *Finite Element and Boundary Element Applications in Quantum Mechanics*, Oxford Univ. Press 2002
 17. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 18. B.Dwir, K.Leifer, E.Kapon, *Phys.Rev.* **B67** (2003), 075302
 19. A.A.Arsen'ev, *Sbornik Math.* **194** (2003), 1
 20. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 21. Y.Liu, B.Zeng, B.Yang, in *Microwave and Millimeter Wave Technology*, Proc. of the 4th ICMMT Conference (2004), 511
 22. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 23. G. Annino et al., *Phys.Rev.* *B73* (2006), 125308
 24. M.K.Fijavz, D.Mugnolo, E.Sikolya, *Appl.Math.Optim.* **55** (2007), 219
 25. J.Rubinstein, *Physica* **C452** (2007), 54
 26. G. Annino, M.Cassettari, M.Martinelli, *IEEE Trans.Micr.Theory Tech.* **57** (2009), 775
 27. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
 28. E.Sadurni, W.P.Schleich, *AIP Conf.Proc.* **1323** (2010), 283
 29. S.Bittner et al., *Phys.Rev.* **E87** (2013), 042912
 30. J.Stockhofe, P.Schmelcher, *Phys.Rev.* **A89** (2014), 033630
- P.Exner, P.Šeba: *Trapping modes in a curved electromagnetic waveguide with perfectly conducting walls*, *Phys.Lett.* **A144** (1990), 347–350.
1. Y.Avishai, *Phys.Rev.* **B44** (1991), 8028
 2. K.F.Berggren, *Physica Scripta* **T42** (1992), 141
 3. K.Vacek et al., *Phys.Rev.* **B47** (1993), 3695
 4. C.M.Savage et al., in *Fundamentals of Quantum Optics III* (F.Ehlotzky, ed.), LNP, vol.420, p.60; Springer 1993
 5. M.Andrews, C.M.Savage, *Phys.Rev.* **A50** (1994), 4535
 6. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999
 7. I.Yu.Popov, *Phys.Lett.* **A269** (2000), 148
 8. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 9. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 10. Y.Dabaghian, R.Blümel, *Phys.Rev.* **E68** (2003), 055201
 11. G. Annino et al., *Phys.Rev.* *B73* (2006), 125308
 12. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
 13. G. Annino, M.Cassettari, M.Martinelli, *IEEE Trans.Micr.Theory Tech.* **57** (2009), 775
 14. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
 15. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
 16. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 17. S.A.Nazarov, A.V.Shanin, *Applicable Anal.* **93** (2014), 572
 18. B.W.Shore et al., *New J.Phys.* **17** (2015), 013046
 19. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
- P.Exner, P.Šeba, P.Šťovíček: *Semiconductor edges can bind electrons*, *Phys.Lett.* **A150** (1990), 179–182.
1. S.Takagi, S.Tanzawa, *Progr.Theor.Phys.* **87** (1990), 561
 2. J.Goldstone, R.L.Jaffe, *Phys.Rev.* **B45** (1992), 14100
 3. M.Ikegami, *Surf.Sci.* **263** (1992), 193
 4. C.M.Savage et al., in *Fundamentals of Quantum Optics III* (F.Ehlotzky, ed.), LNP, vol.420, p.60; Springer 1993

5. I.F.Herbut, *J.Phys.: Cond.Matter* **5** (1993), L607
 6. G.Dunne, R.L.Jaffe, *Ann.Phys.* **223** (1993), 180
 7. M.Andrews, C.M.Savage, *Phys.Rev.* **A50** (1994), 4535
 8. P.Maraner, *J.Phys.* **A28** (1995), 2939
 9. P.Maraner, *Ann.Phys.* **246** (1996), 325
 10. K.Fujii et al., *Int.J.Mod.Phys.* **A12** (1997), 5235
 11. K.Yaman et al., *Macromolecules* **30** (1997), 1173
 12. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999
 13. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 14. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B66** (2002), 035331
 15. L.Ramdas Ram-Mohan: *Finite Element and Boundary Element Applications in Quantum Mechanics*, Oxford Univ. Press 2002
 16. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 17. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 18. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 19. G.Annino et al., *Phys.Rev.* *B73* (2006), 125308
 20. G.Annino, M.Cassettari, M.Martinelli, *IEEE Trans.Micr.Theory Tech.* **57** (2009), 775
 21. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
 22. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 23. G.Gupta, *PhD thesis*, National University of Singapore 2015
- M.S.Ashbaugh, P.Exner: *Lower bounds to bound state energies in bent tubes*, *Phys. Lett.* **A150** (1990), 183–186.
1. J.Goldstone, R.L.Jaffe, *Phys.Rev.* **B45** (1992), 14100
 2. I.Popov, S.Popova, *Phys.Lett.* **A173** (1993), 484
 3. I.Popov, S.Popova, *Europhys.Lett.* **24** (1993), 379
 4. V.A.Geyler, I.Yu.Popov, *Physics Lett.* **A187** (1994), 410
 5. W.Renger, W.Bulla, *Lett.Math.Phys.* **35** (1995), 1
 6. W.Bulla, F.Gesztesy, W.Renger, B.Simon, *Proc. AMS* **125** (1997), 1487
 7. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 8. K.A.Mitchell, *Phys.Rev.* **A63** (2001), 042112
 9. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 10. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B66** (2002), 035331
 11. L.Ramdas Ram-Mohan: *Finite Element and Boundary Element Applications in Quantum Mechanics*, Oxford Univ. Press 2002
 12. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 13. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 14. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 15. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 16. P.Freitas, D.Krejčířík, *Math.Phys.Anal.Geom.* **9** (2006), 335
 17. E.M.Harrell, *Comm.PDE* **32** (2007), 401
 18. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
 19. A.L.Delitsyn, B.T.Nguyen, D.S.Grebenkov, *Eur.J.Phys.* **B85** (2012), 176
 20. B.T.Nguyen, *PhD thesis*, École Polytechnique, Palaiseau 2012
 21. D.S.Grebenkov, B.T.Nguyen, *SIAM Review* **55** (2013), 601
 22. B.T.Nguyen, D.S.Grebenkov, A.L.Delitsyn, in *Geometric and Spectral Analysis* (P.Albin et al., eds.), Contemporary Mathematics, vol. 630, AMS 2014; p. 337
 23. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
- P.Exner: *Bound states and resonances in quantum wires*, Proceedings of the Workshop on Order, Disorder and Chaos in Quantum Systems (Dubna 1989), Integral Equations and Operator Theory, vol.46; Birkhäuser Verlag, Basel 1990; pp.65–84.

1. W.Renger, W.Bulla, *Lett.Math.Phys.* **35** (1995), 1
 2. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999
 3. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 4. M.Melgaard, *Few Body Problems* **35** (2004), 77
 5. E.M.Harrell, *Comm.PDE* **32** (2007), 401
 6. V.Pivovarchik, Ch.Tretter, *J.Diff.Eq.Appl.* **21** (2015), 383
- J.Dittrich, P.Exner, P.Šeba: *Dirac Hamiltonian with Coulomb potential and spherically symmetric shell contact interaction*, in Proceedings of the Conference on Order, Disorder and Chaos (Dubna 1989), Operator Theory: Advances and Applications, vol.46; Birkhäuser, Basel 1990; pp.209–215.
1. B.Thaller: *The Dirac equation*, Springer, Berlin 1992
 2. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 3. R.Carlone, M.Malamud, A.Posilicano, *J.Diff.Eq.* **254** (2013), 3835
- P. Exner: *A model of resonance scattering on curved quantum wires*, *Annalen der Physik* **47** (1990), 123–138.
1. I.Popov, *Proc.Roy.Soc.* **A452**(1996), 1505
 2. A.Kiselev, *J.Math.Anal.Appl.* **212** (1997), 263
 3. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 4. S.Albeverio, W.Karwowski, K.Yasuda, *Acta Appl.Math.* **71** (2002), 31
 5. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 6. T.J.Christiansen, *J. d'Anal.Math.* **107** (2009), 79
- P.Exner: *A solvable model of two-channel scattering*, *Helv.Phys.Acta* **64** (1991), 592–609.
1. K.Watanabe, *Rep.Math.Phys.* **7** (1995), 979
 2. M.Melgaard, *PhD thesis*, Aalborg University 1999
 3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 4. B.Ducomet, *Math.Mod.Meth.Appl.Sci.* **11** (2001), 1411
 5. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A42** (2009), 035202
 6. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A43** (2010), 474009
 7. C.Cacciapuoti, R.Carlone, R.Figari, *J.Math.Phys.* **52** (2011), 083515
 8. V.Lotoreichik, H.Neidhardt, I.Yu.Popov, in *Mathematical Results in Quantum Mechanics*, World Scientific, Singapore 2014; p. 283
 9. I.Herbst, R.Mavi, *J.Phys.* **A49** (2016), 195204
- P.Duclos, P.Exner: *Curvature vs. thickness in quantum waveguides*, *Czech.J. Phys.* **41** (1991), 1009–1018
1. S.Matsutani, *J.Phys.* **A26** (1993), 5133
 2. W.Renger, W.Bulla, *Lett.Math.Phys.* **35** (1995), 1
 3. W.Bulla, F.Gesztesy, W.Renger, B.Simon, *Proc. AMS* **125** (1997), 1487
 4. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 5. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 6. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
- P. Exner: *Spectral properties of bent quantum wires*, Proceedings of the Summer School on Recent Developments in Quantum Mechanics (Poiana Brasov 1989), Kluwer, Dordrecht 1991; pp. 257–264.
1. P.Kuchment, *Waves in Random Media* **12** (2002), R1

- P.Exner: *Quantum waveguides: energy bounds and critical thickness*, Proceedings of the Conference on Rigorous Results in Quantum Dynamics (Liblice 1990); World Scientific, Singapore 1991; pp.125–142.
1. I.J.Clark, A.J.Bracken, *J.Phys.* **A29** (1996), 4527
 2. I.J.Clark, *Bull.Austral.Math.Soc.* **56** (1997), 525
- J.Dittrich, P.Exner, P.Šeba: *Dirac Hamiltonian with Coulomb potential and spherically symmetric shell contact interaction*, *J.Math.Phys.* **33** (1992), 2207–2214.
1. B.Mendez, F.Dominguez–Adame, *J.Phys.* **A25** (1992), 2065
 2. J.Horák, L.Krlín: *Deterministic chaos and mathematical models of turbulence*, Academia, Prague 1996.
 3. M.N.Houkonnou et al., *J.Math.Phys.* **38** (1997), 2832
 4. S.Benvegnu, *J.Math.Phys.* **38** (1997), 556
 5. M.N.Houkonnou et al., *J.Math.Phys.* **40** (1999), 4255
 6. G.Y.H.Avossevov, M.N.Houkonnou, *J.Math.Phys.* **41** (2000), 24
 7. M.N.Houkonnou, G.Y.H.Avossevov, *J.Math.Phys.* **41** (2000), 1718
 8. M.N.Houkonnou, G.Y.H.Avossevov, *J.Math.Phys.* **41** (2000), 1735
 9. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 10. M.N.Houkonnou, in *Proc. 1st Int. Workshop on Probl.Math.Phys.* (Cotonou, Benin) (2000), p.307
 11. G.Y.H.Avossevov, M.N.Houkonnou, in *Proc. 1st Int. Workshop on Probl.Math.Phys.* (Cotonou, Benin) (2000), p.347
 12. M.N.Houkonnou, G.Y.H.Avossevov, *J.Math.Phys.* **42** (2001), 30
 13. J.Shabani, D.Vyabandi, *J.Math.Phys.* **43** (2002), 6064
 14. J.Shabani, D.Vyabandi, *J.Math.Phys.* **43** (2002), 6380
 15. J.Ndirahisha, J.Shabani, *N.Cim.* **B119** (2004), 331
 16. G.Y.H.Avossevov, J.Govaerts, M.N.Houkonnou, in *Proc. 1st Int. Workshop on Probl.Math.Phys.* (Cotonou, Benin) (2004), p.544
 17. E.Cameron–Podnieks, *PhD thesis*, University of Bristol 2005
 18. N.Arrizabalaga, *J.Math.Phys.* **52** (2011), 092301
 19. R.Carlone, M.Malamud, A.Posilicano, *J.Diff.Eq.* **254** (2013), 3835
 20. A.Ibort, F.Lledó, J.M.Pérez-Pardo, *Ann. H.Poincaré* **16** (2015), 2367
- P. Exner, P. Šeba: *Schrödinger operators on unusual manifolds*, in “Ideas and Methods in Quantum and Statistical Physics”, R. Høegh–Krohn’s Memorial, vol. 2, Cambridge University Press 1992; pp. 227–253.
1. R.Carlson, *El.J.Diff.Eq.* **1997**(23) (1998), 1
 2. R.Carlson, *El.J.Diff.Eq.* **1998**(06) (1998), 1
 3. V.A.Geyler, I.Yu.Popov, *Rep.Math.Phys.* **42** (1998), 347
 4. R.Carlson, *Trans.Am.Math.Soc.* **351** (1999), 4069
 5. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 6. V.A.Geyler, V.V.Demidov, V.A.Margulis, *Tech.Phys.* **48** (2003), 661
- P. Exner, A. Truman: *Models of K -capture decay: stochastic vs. quantum mechanics*, Proceedings of the Conference on Stochastic and Quantum Mechanics (Swansea 1990); World Scientific, Singapore 1992; pp. 130–150.
1. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
- P.Exner: *Bound states in quantum waveguides of a slowly decaying curvature*, *J.Math.Phys.* **34** (1993), 23–28.

1. W.Renger, W.Bulla, *Lett.Math.Phys.* **35** (1995), 1
 2. I.J.Clark, A.J.Bracken, *J.Phys.* **A29** (1996), 4527
 3. W.Bulla, F.Gesztesy, W.Renger, B.Simon, *Proc. AMS* **125** (1997), 1487
 4. I.J.Clark, *Bull.Austral.Math.Soc.* **56** (1997), 525
 5. V.Bezák, *Wave Random Media* **8** (1998), 351
 6. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 7. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 8. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 9. V.V.Grushin, *Math. Notes* **75** (2004), 331
 10. M.Melgaard, *Few Body Problems* **35** (2004), 77
 11. V.V.Grushin, *Math.Notes* **77** (2005), 606
 12. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 13. R.R.Gadyl'shin, *Teor.Mat.Fiz.* **145** (2005), 1678
 14. M.Horvat, T.Prosen, *J.Phys.* **A40** (2007), 6349
 15. V.V.Grushin, *Math. Notes* **81** (2007), 291
 16. V.V.Grushin, *Math.Notes* **83** (2008), 463
 17. V.V.Grushin, *Math.Notes* **85** (2009), 661
 18. A.R.Bikmetov, R.R.Gadyl'shin, *Russ.J.Math.Phys.* **23** (2016), 1
 19. I.Kh.Khusnullin, *Trudy IMM UrO RAN* **23** (201), 273
- P. Exner: *A twisted Landau gauge*, Phys. Lett. **A178** (1993), 236–238.
1. O.Vakhnenko, *Phys.Lett.* **A249** (1998), 349
 2. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
- J. Blank, P. Exner, M. Havlíček: *Linear Operators in Quantum Physics* (in Czech); 680p.; Karolinum, Prague 1993.
1. M.Polakovič, *Int.J.Theor.Phys.* **37** (1998), 2923
 2. D.Nagaj et al., *Phys.Rev.* **A66** (2002), 062307
 3. P.Štelmachovič, M.Ziman, V.Bužek, *Fortschr.Phys.* **51** (2003), 280
 4. A.Paták, *PhD thesis*, Masaryk University Brno 2008
 5. V.Čejka, *PhD thesis*, TU Liberec, 2009
 6. J.Vlach, *PhD thesis*, Masaryk University Brno 2015
- J. Blank, P. Exner, M. Havlíček: *Hilbert–Space Operators in Quantum Physics*; xiii + 594 p.; American Institute of Physics, New York 1994.
1. A.Suzuki, S.Matsutani, *N.Cim.* **B111** (1996), 593
 2. K.K.Wan, R.M.Fountain, *Found.Phys.* **26** (1996), 1165
 3. F.E.Harrison, K.K.Wan, *J.Phys.* **A30** (1997), 4731
 4. A.Peres, *Phys.Scripta* **T76** (1998), 52
 5. K.K.Wan, R.M.Fountain, *Int.J.Theor.Phys.* **38** (1998), 2153
 6. E.V.Krishnamurty, *Int.J.Mod.Phys.* **C9** (1998), 213
 7. F.M.Kronz, *Synthese* **117** (1998), 31
 8. N.Chino, *Bull.Fac.Lett. Aichi Gakuin Univ.* **28** (1998), 1
 9. K.Loo, *J.Math.Phys.* **40** (1999), 64
 10. C.Trueeman, K.K.Wan, *J.Math.Phys.* **41** (2000), 195
 11. F.Ye, *J.Symb.Logic* **65** (2000), 357
 12. J.R.Klauder: *Beyond Conventional Quantization*, Cambridge University Press, Cambridge 2000
 13. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 14. G.W.Johnson, M.L.Lapidus: *The Feynman Integral and Feynman's Operational*

- Calculus*, Clarendon Press, Oxford 2000
15. K.Loo, *J.Phys.* **A33** (2000), 9205
 16. K.Loo, *J.Phys.* **A33** (2000), 9215
 17. B.Thaller: *Visual Quantum Mechanics*, Springer, Berlin 2000
 18. N.Röhrhl, *PhD thesis*, Universität Stuttgart, 2000
 19. J.P.Antoine, J.P.Gazeau, P.Monceau, *J.Math.Phys.* **42** (2001), 2349
 20. S.Nagy, J.Pipek, *Int.J.Quant.Chem.* **84** (2001), 523
 21. E.M.Harrell, *SIAM Rev.* **42** (2001), 385
 22. G.Paz, *J.Phys.* **A35** (2002), 3727
 23. J.Dittrich, J.Kříž, *J.Phys.* **A35** (2002), L269
 24. J.Dittrich, J.Kříž, *J.Math.Phys.* **43** (2002), 3892
 25. S.Ôta, *J.Operator Theory* **48** (2002), 151
 26. M.Znojil, *J.Nonlin.Math.Phys.* **9**, Suppl.2 (2002), 122
 27. L.Nielsen, *Acta Appl.Math.* **74** (2002), 265
 28. V.V.Nesterenko, I.G.Pirozhenko, J.Dittrich, *Class.Quant.Grav.* **20** (2003), 431
 29. J.I.Concha, H.V.Poor, in *Communication, Information, and Network Security* (V.K.Bhargava et al., eds), Kluwer, Boston 2003; p. 89
 30. L.Hartmann, J.R.Klauder, *J.Math.Phys.* **45** (2004), 87
 31. J.I.Concha, H.V.Poor, *IEEE Trans. Inf. Theory* **50** (2004), 725
 32. K.Broderix, H.Leschke, P.Müller, *J.Funct.Anal.* **212** (2004), 287
 33. A.Teleki, T.Obert, *J.Math.Chem.* **35** (2004), 329
 34. Ch.S.Chihara: *A Structural Account of Mathematics*, Oxford Univ. Press 2004
 35. M.Znojil, *Phys.Lett.* **A342** (2005), 36
 36. J.N.Kriel, A.Y.Morozov, F.G.Scholz, *J.Phys.* **A38** (2005), 205
 37. A.N.Grundland, L.Šnobl, *J.Gem.Phys.* **56** (2006), 512
 38. A.Jenčová, D.Petz, *Commun.Math.Phys.* **263** (2006), 259
 39. A.López-Castillo, C.R. de Oliveira, *J.Phys.* **A39** (2006), 3447
 40. D.I. Borisov, *Math.Sbornik* **197** (2006), 475
 41. M.Kudlek, *Fund.Informaticae* **72** (2006) 255
 42. A.Jenčová, D.Petz, *Infim.Dim.Anal.Quant.Prob.Rel.Top.* **9** (2006), 331
 43. P.Luft, G.Chadzitaskos, J.Tolar, *J.Phys.* **A40** (2007), 4833
 44. W.Boos, *J.Math.Phys.* **48** (2007), 122106
 45. A.Stockmeyer, H.Zenk, *Lett.Math.Phys.* **83** (2008), 59
 46. P.D.Hislop, *Bull.Am.Math.Soc.* **45** (2008), 469
 47. P.Siegl, *J.Phys.* **A41** (2008), 244025
 48. F.Delduc et al., *J.Phys.Conf.Ser.* **103** (2008), 012020
 49. J.Earman, *Synthese* **169** (2009), 27
 50. P.Siegl, *Pramana* **73** (2009), 279
 51. V.Karakostas, *Neuroquantology* **4** (2009), 635
 52. C.R.de Oliveira: *Intermediate Spectral Theory and Quantum Dynamics*, Birkhäuser, Basel 2009.
 53. F.Belgiorno, S.L.Cacciatori, *J.Phys.* **A42** (2009), 135207
 53. G.Friesecke, B.Schmidt, *Proc.Roy.Soc.* **A466** (2010), 2137
 54. A.Jenčová, D.Petz, J.Pitrik, *Acta Math.Sci. (Szeged)* **76** (2010), 111
 55. S.Ôta, *Colloq.Math.* **120** (2010), 191
 56. D.Petz: *Hilbert Space Methods for Quantum Mechanics*, Springer LNP 808, 2010
 57. B.Sanborn, *PhD thesis*, Arizona State University 2011
 58. Y.Mensah,M.N.Houkonnou, *Theor.Math.Appl.* **2** (2012), 39
 59. S.Ôta, *Sugaku Exp.* **25** (2012), 47
 60. G.L.Leonardi, E.Torriani, *Stoch.Systems* **4** (2014), 173

J.-P. Antoine, P. Exner, P. Šeba, J. Shabani: *A mathematical model of heavy-quarkonia mesonic*

decays, Ann. Phys. **233** (1994), 1–16.

1. M.N.Houkonnou et al., *J.Math.Phys.* **38** (1997), 2832
2. M.N.Houkonnou, M.Houkpe, J.Shabani, *J.Math.Phys.* **40** (1999), 4255
3. G.Y.H.Avossevou, M.N.Houkonnou, *J.Math.Phys.* **41** (2000), 24
4. M.N.Houkonnou, G.Y.H.Avossevou, *J.Math.Phys.* **41** (2000), 1718
5. M.N.Houkonnou, G.Y.H.Avossevou, *J.Math.Phys.* **41** (2000), 1735
6. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
7. G.Y.H.Avossevou, M.N.Houkonnou, in *Proc. 1st Int. Workshop on Probl.Math.Phys.* (Cottonou, Benin) (2000), p.347
8. J.Shabani, D.Vyabandi, *J.Math.Phys.* **43** (2002), 6064
9. E.Demiralp, *J.Phys.* **A38** (2005), 4783

J.E.Avron, P.Exner, Y.Last: *Periodic Schrödinger operators with large gaps and Wannier–Stark ladders*, Phys.Rev.Lett. **72** (1994), 896–899.

1. M.Maioli, A.Sacchetti, *J.Phys.* **A28** (1995), 1101
2. V.Grecchi, A.Sacchetti, *Ann.Phys.* **241** (1995), 258
3. L.Dmitrieva et al., *J.Phys.* **A30** (1997), 3087
4. P.Duclos, P.Šťovíček, M.Vittot, *J.Phys.* **A30** (1997), 7167
5. V.Grecchi, A.Sacchetti, *Phys.Rev.Lett.* **78** (1997), 4474
6. I.M.Mladenov, *Europhys.Lett.* **37** (1997), 159
7. I.M.Mladenov, *Phys.Lett.* **A230** (1997), 245
8. A.Kiselev, *J.Math.Anal.Appl.* **212** (1997), 263
9. M.Maioli, A.Sacchetti, *J.Phys.* **A31** (1998), 1115
10. T.Cheon, T.Shigehara, *Phys.Lett.* **A243** (1998), 111
11. N.L.Chuprikov, *J.Phys.: Cond.Matt.* **10** (1998), 707
12. T.Cheon, T.Shigehara, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.203
13. V.Kostykin, R.Schrader, *J.Phys.* **A32** (1999), 595
14. N.L.Chuprikov, *J.Phys.: Cond.Matt.* **11** (1999), 1069
15. T.Kottos, U.Smilansky, *Ann.Phys.* **274** (1999), 76
16. P.Kuchment, L.A.Kunyansky, *Exp.Math.* **8** (1999), 1
17. A.Kiselev, *Trans.Am.Math.Soc.* **352** (2000), 243
18. T.Cheon, T.Shigehara, K.Takayanagi, *J.Phys.Soc.Japan* **69** (2000), 345
19. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
20. I.Tsutsui, T.Fülöp, T.Cheon, *J.Phys.Soc.Jpn.* **69** (2000), 3473
21. F.M.Dittes, *Phys.Rep.* **339** (2000), 216
22. J.H.Schenker, M.Aizenman, *Lett.Math.Phys.* **53** (2000), 253
23. S.M.Al-Jaber, *N.Cim.* **B115** (2000), 1397
24. J.Desbois, *Eur.J.Phys.* **B24** (2001), 261
25. V.Kostykin, R.Schrader, *J.Math.Phys.* **42** (2001), 1563
26. P.Kuchment, *Waves in Random Media* **12** (2002), R1
27. P.Kurasov, J.Larson, *J.Math.Anal.Appl.* **266** (2002), 127
28. J.Brüning, V.A.Geyler, *J.Math.Phys.* **44** (2003), 371
29. T.Kottos, U.Smilansky, *J.Phys.* **A36** (2003), 3501
30. P.L.Christiansen et al., *J.Phys.* **A36** (2003), 7589
31. P.Djakov, B.Mityagin, *Lett.Math.Phys.* **65** (2003), 95
32. M.Christ, A.Kiselev, *Ark.Mat.* **41** (2003), 1
33. B.E.R.Seif, *PhD thesis*, Universität Köln 2003
34. R.Carlson, *Waves in Random Media* **14** (2004), S29
35. V.Kostykin, R.Schrader, *Waves in Random Media* **14** (2004), S75

36. T.Kottos, H.Schanz, *Waves in Random Media* **14** (2004), S91
 37. P.Kuchment, *Waves in Random Media* **14** (2004), S107
 38. M.Maioli, A.Sacchetti, *J.Phys.* **A37** (2004), 2371
 39. P.Djakov, B.Mityagin, *Comp.Rend.Math.* **339** (2004), 351
 40. T.Cheon, T.Shigehara, *J. Phys.Soc.Japan* **73** (2004), 2896
 41. P.Kuchment, in *PDE and Inverse Problems*, (C.Conca et al., eds.), Contemp.Math., vol. 362, AMS 2004
 42. P.Kuchment, *J.Phys.* **A38** (2005), 4887
 43. A.Comtet, J.Desbois, Ch.Textier, *J.Phys.* **A38** (2005), R341
 44. D.Bar, *Int.J.Theor.Phys.* **44** (2005), 1281
 45. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A39** (2006), 9329
 46. O.Post, *Ann. H.Poincaré* **7** (2006), 933
 47. K.Chen, S.Molchanov, B.Vainberg, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.81
 48. S.A.Fulling, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.161
 49. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 50. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A40** (2007), 5443
 51. P.Hejvčík, T.Cheon, *Europhys.Lett.* **81** (2008), 50001
 52. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 53. P.Schaposchnikow, S.Gnutzmann, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.691
 54. F.Lledó, O.Post, *J.Math.Anal.Appl.* **348** (2008), 806
 55. N.H.March, G.G.N.Angilella, *J.Math.Chem.* **46** (2009), 532
 56. P.D.Hislop, O.Post, *Waves in Random and Complex Media* **19** (2009), 216
 57. F.M.de Andrade, *PhD thesis*, Universidad Federal do Paraná 2009
 58. A.V.Zolotaryuk, *J.Phys.* **A43** (2010), 105302
 59. A.V.Zolotaryuk, *Phys.Lett.* **A374** (2010), 1636
 60. C.Filgueiras et al., *Ann.Phys.* **325** (2010), 2529
 61. O.Mustafa, S.H.Mazharimoussavi, *Phys.Scripta* **82** (2010), 065013
 62. J.Y.Romanova et al., *J.Phys.: Cond.Matt.* **23** (2011), 305901
 63. A.V.Zolotaryuk, Y. Zolotaryuk, *J.Phys.* **A44** (2011), 375305
 64. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 65. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B26** (2012), 1250092
 66. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B26** (2012), 1250177
 67. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B27** (2013), 1350001
 68. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 69. C.Zhang, S.Sun, *J.Appl.Math.Comp.* **41** (2013), 351
 70. R.Adami, D.Noja, *Commun.Math.Phys.* **318** (2013), 247
 71. A.V.Zolotaryuk, *Phys.Rev.* **A87** (2013), 052121
 72. R.Band, G.Berkolaiko, *Phys.Rev.Lett.* **111** (2013), 130404
 73. M.Dzh.Manafov, A.Kablan, *El.J.Qualit.Theor.Diff.Eq.* **2013** (76) (2013), 1
 74. A.S. de Castro, *Rev.Bras.Ens.Fis.* **36** (2014), 2307
 75. D.Barseghyan, A.Khrabustovskyi, *J.Phys.* **A48** (2015), 255201
 76. N.C.Dias, C.Jorge, J.N.Prata, *J.Diff.Eqs* **260** (2016), 6548
 77. J.-C.Cuenin, Ch.Tretter, *J.Math.Anal.Appl.* **441** (2016), 235
 78. F.M.Andrade et al., *Phys.Rep.* **647** (2016), 1
 79. K.Konno, T.Nagasawa, R.Takahashi, *Ann.Phys.* **375** (2016), 91
- J.F. Brasche, P. Exner, Yu.A. Kuperin, P. Šeba: *Schrödinger operators with singular interactions*, *J. Math. Anal. Appl.* **184** (1994), 112–139.
1. P.Stollmann, in *Mathematical Results in Quantum Mechanics*,

- (M.Demuth et al., eds.), Birkhäuser, Basel 1994; p.153
2. V.Koshmanenko, in *Mathematical Results in Quantum Mechanics*, (M.Demuth et al., eds.), Birkhäuser, Basel 1994; p.347
 3. M.A.Antonec, V.A.Geyler, *Russ.J.Math.Phys.* **4** (1996), 413
 4. M.Takeda, *Potential Anal.* **9** (1998), 261
 5. C.A.Guerin, M.Holschneider, *J.Math.Phys.* **39** (1998), 4165
 6. D.Krejčířík, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.281
 7. M.Takeda, *Potential Anal.* **11** (1999), 235
 8. S.Albeverio, V.Koshmanenko, *J.Funct.Anal.* **169** (1999), 32
 9. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 10. D.Kim, *Osaka J.Math.* **37** (2000), 147
 11. S.Albeverio, V.Koshmanenko, *Rep.Math.Phys.* **45** (2000), 307
 12. R.Ford, *El.J.Diff.Eqs.* **2000**(7) (2000), 1
 13. S.Albeverio, W.Karwowski, V.Koshmanenko, *Rep.Math.Phys.* **48** (2001), 359
 14. S.Kondej, *PhD thesis*, Wroclaw University 2001
 15. V.Koshmanenko, *Operator Theory: Adv.Appl.* **126** (2001), 169
 16. M. Takeda, *J.Funct.Anal.* **191** (2002), 343
 17. M.Takeda, *Potential Anal.* **19** (2003), 51
 18. A.Ben Amor, *Math.Phys.El.J.* **10** (2004), 7
 19. A.Posilicano, *Meth.Funct.Anal.Topol.* **10** (2004), 57
 20. J.Kuhn et al., *J.Opt.* **B7** (2005), S77
 21. S.Albeverio, R.Hrinyv, Y.Mykytyuk, *J.Funct.Anal.* **222** (2005), 143
 22. E.Demiralp, *J.Phys.* **A38** (2005), 4783
 23. A.Ben Amor, Ch.Remling, *Int.Eq.Oper.Theory* **52** (2005), 395
 24. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
 25. K.Ožanová, *J.Phys.* **A39** (2006), 3071
 26. R.O.Hrinyv, Y.V.Mikityuk, *J.Funct.Anal.* **238** (2006), 27
 27. S.Kondej, I.Veselić, *Ann.H.Poincaré* **8** (2007), 109
 28. J.Brüning, V.Geyler, K.Pankrashkin, *J.Phys.* **A40** (2007), F113
 29. D.Borisov, *Math.Phys.Anal.Geom.* **10** (2007), 155
 30. J.Brüning, V.Geyler, K.Pankrashkin, *Russ.J.Math.Phys.* **14** (2007), 423
 31. C.Remling, *Math.Phys.Anal.Geom.* **10** (2007), 359
 32. K.Tsuchida, *PhD thesis*, Tohoku University
 33. B.M.Brown, M.S.P.Eastham, I.G.Wood, *Arch. der Math.* **90** (2008), 554
 34. H.D.Cornean, P.Duclos, B.Ricaud, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.657
 35. R.L.Frank, in *Spectral and Scattering Theory for Quantum Magnetic Systems* (P.Briet et al., eds.), Contemporary Math., vol.500, AMS, Providence 2008; p.63
 36. J.Kühn, *PhD thesis*, Universidade Federal do Paraná 2008
 37. V.Ryzhov, *Compl.Anal.Oper.Theory* **3** (2009), 289
 38. H.Vogt, *Ann H.Poincaré* **10** (2009), 395
 39. D.Lenz, P.Stollmann, I.Veselić, *Documenta Math.* **14** (2009), 167
 40. C.R.de Oliveira: *Intermediate Spectral Theory and Quantum Dynamics*, Birkhäuser, Basel 2009.
 41. V.Yu.Lotoreichik, I.S.Lobanov, I.Yu.Popov, J.Behrndt, *Proc of "Days on Diffraction 2007"*, art. 5562613 , p.140
 42. I.S.Lobanov, V.I.Lotoreichik, I.Yu.Popov, *Teor.Mat.Fiz.* **162** (2010), 332
 43. M.Mokhtar-Kharroubi, *J.Funct.Anal.* **259** (2010), 780
 44. S.Kondej, M.R.Dudek, *Rev.Adv.Mater.Sci.* **23** (2010), 126
 45. S.Kondej, *Comp.Meth.Sci.Tech.* **16** (2010)

46. I.S.Lobanov, V.Yu.Lotoreichik, I.Yu.Popov, *TMF* **162** (2010), 332
 47. S.Kondej, *J.Phys.Studies* **15** (2011), 1006
 48. D.A.Eremin, I.Yu.Popov, *Nanosystems* **2**(2) (2011), 15
 49. D.Lenz, P.Stollmann, I.Veselić, in *Spectral Theory and Analysis*, (J.Janas et al., eds.), *Operator Theory: Adv.Appl.*, Birkhäuser 2011, p. 83
 50. J.Cisło, S.Kondej, *Rep.Math.Phys.* **68** (2011), 225
 51. H.Triebel: *Fractals and Spectra*, 2nd printing, Birkhäuser, Basel 2011
 52. B.T.Kaynak, O.T.Turgut, *J.Phys.* **A45** (2012), 265202
 53. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
 54. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 55. V.Lotoreichik, *Nanosystems* **4**(2) (2013), 166
 56. E.Shargorodsky, *Arch.Rat.Mech.Anal.* **209** (2013), 41
 57. T.Klimsyak, A.Rozkosz, *J.Func.Anal.* **265** (2013), 890
 58. J.Behrndt, M.Langer, V.Lotoreichik, *Int.Eq.Oper.Theory* **77** (2013), 1
 59. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
 60. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **339** (2013), 266
 61. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831
 62. V.Duchêne, N.Raymond, *J.Phys.* **A47** (2014), 155203
 63. V.Lotoreichik, *Operators & Matrices* **8** (2014), 573
 64. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201
 65. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
 66. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
 67. V.A.Gradusov, *PhD thesis*, Sankt Petersburg State University 2008
 68. V.A.Gradusov, S.V.Yakovlev, *Teor.Mat.Fiz.* **183** (2015), 90
 69. V.Lotoreichik, J.Rohleder, *Oper. Theory Adv.Appl.* **247** (2015), 173
 70. U.Freiberg, C.Seifert, *J.Evol.Eqs* **15** (2015), 869
 71. J.Behrndt, G.Grubb, M.Langer, V.Lotoreichik, *J.Spect.Theory* **5** (2015), 697
 72. V.Lotoreichik, J.Rohleder, in Proc. IWOTA 2013 (T.Bhattacharyya, M.Dritschel, eds.), *Oper.Theory Adv.Appl.* **247** (2015), 173
 73. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 74. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 75. V.Bruneau, N.Popoff, *Analysis & PDE* **9** (2016), 1259
 76. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 77. V Koshmanenko, M Dudkin: *The Method of Rigged Spaces in Singular Perturbation Theory of Self-Adjoint Operators*, Birkhäuser 2016
 78. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 79. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 80. J.Behrndt, M.Langer, V.Lotoreichik, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.129
 81. S.Kondej, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.419
 82. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
 83. S.Kondej, *J.Phys.* **A50** (2017), 315203
 84. J.Behrndt, M.Malamud, H.Neidhardt, *J.Funct.Anal.* **273** (2017), 1970
 85. M.Karuhanga, *J.Math.Anal.Appl.* (2017) **456** (2017), 1365
 86. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
 87. S.Egger, J.Kerner, *Rev.Math.Phys.* **29** (2017), 17500325
- P. Exner, E. Šerešová: *Appendix resonances on a simple graph*, *J. Phys.* **A27** (1994), 8269–8278.
1. V.Kostrykin, R.Schrader, *J.Phys.* **A32** (1999), 595
 2. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000

3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 4. J.Rubinstein, M.Schatzman, *Arch.Rat.Mech.Anal.* **160** (2001), 271
 5. J.Rubinstein, M.Schatzman, *Arch.Rat.Mech.Anal.* **160** (2001), 309
 6. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 7. A.M.Gomilko, V.N.Pivovarchik, *Ukrain.Math.J.* **60** (2008), 1360
 8. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 9. J.Lipovský, *J.Phys.* **A49** (2016), 375202
 10. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 11. I.Yu.Popov, A.I.Popov, *J.King Saud Univ.Sci.* **29** (2017), 133
 12. R.Carlone, A.Posilicano, *Phys.Lett.* **A381** (1976), 1076
 13. I.Y.Popov, A.I.Popov, *Rep.Math.Phys.* **80** (2017), 1
- P.Exner, M.Tater: *A one-band model for a weakly coupled quantum-wire resonator*, *Phys. Rev.* **B50** (1994), 18350–18354.
1. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 2. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 3. J.Rubinstein, O.Sternberg, G.Wolansky, *Physica* **C452** (2007), 54
 4. I.Y.Popov, A.I.Popov, *Rep.Math.Phys.* **80** (2017), 1
- J.-P. Antoine, P.Exner, P.Šeba, J.Šhabani: *A Fermi-type rule for contact embedded-eigenvalue perturbations*, Proceedings of the Conference on Mathematical Results in Quantum Mechanics (Blossin 1993); Birkhäuser Verlag, Basel 1994; pp. 79–87.
1. M.N.Houkonnou et al., *J.Math.Phys.* **38** (1997), 2832
 2. G.Y.H.Avossevov, M.N.Houkonnou, *J.Math.Phys.* **41** (2000), 24
 3. M.N.Houkonnou, G.Y.H.Avossevov, *J.Math.Phys.* **41** (2000), 1718
 4. M.N.Houkonnou, G.Y.H.Avossevov, *J.Math.Phys.* **41** (2000), 1735
 5. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
- P.Duclos, P.Exner: *Curvature-induced bound states in quantum waveguides in two and three dimensions*, *Rev.Math.Phys.* **7** (1995), 73–102.
1. I.J.Clark, A.J.Bracken, *J.Phys.* **A29** (1996), 339
 2. I.J.Clark, A.J.Bracken, *J.Phys.* **A29** (1996), 4527
 3. I.J.Clark, *Biochem.Bioen.* **41** (1996), 59
 4. W.Bulla, F.Gesztesy, W.Renger, B.Simon, *Proc. AMS* **125** (1997), 1487
 5. M.Razavy, *Int.J.Mod.Phys.* **B11** (1997), 2777
 6. K.Yaman et al., *Macromolecules* **30** (1997), 1173
 7. I.J.Clark, *Bull.Austral.Math.Soc.* **56** (1997), 525
 8. E.N.Bulgakov, A.F.Sadreev, *JETP* **87** (1998), 1058
 9. M.Razavy, *Int.J.Mod.Phys.* **B12** (1998), 1907
 10. E.B.Davies, L.Parnowski, *Quart.J.Mech.Appl.Math.* **58** (1998), 477
 11. I.J.Clark, *Appl.Math.Lett.* **12** (1999), 125
 12. F.Kleespies, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.275
 13. D.Krejčířík, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.281
 14. V.Kostykin, R.Schrader, *J.Phys.* **A32** (1999), 595
 15. I.Yu.Popov, *Tech.Phys.Lett.* **25** (1999), 106
 16. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999

17. I.Yu.Popov, *Phys.Lett.* **A269** (2000), 148
18. G.Cantele, D.Ninno, G.Iadonisi, *Phys.Rev.* **B61** (2000), 13730
19. S.V.Frolov, I.Yu.Popov, *J.Math.Phys.* **41** (2000), 4391
20. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
21. T.Dotera, Y.Suzuki, *Phys.Rev.* **E62** (2000), 5318
22. F.Kleespies, P.Stollmann, *Rev.Math.Phys.* **12** (2000), 1345
23. I.Y.Popov, *Appl.Math.Lett.* **14** (2001), 109
24. K.A.Mitchell, *Phys.Rev.* **A63** (2001), 042112
25. S.Shevchenko, Y.A.Kolesnichenko, *JETP* **92** (2001), 811
26. B.S.Pavlov, I.Yu.Popov, S.V.Frolov, *Europ.J.Phys.* **B21** (2001), 283
27. R.Froese, I.Herbst, *Commun.Math.Phys.* **220** (2001), 489
28. I.Yu.Popov, *Tech.Phys.Lett.* **27** (2001), 855
29. I.Yu.Popov, *Rep.Math.Phys.* **48** (2001), 277
30. I.Yu.Popov, *J.Math.Phys.* **43** (2002), 215
31. J.Dittrich, J.Kříž, *J.Phys.* **A35** (2002), L269
32. J.Dittrich, J.Kříž, *J.Math.Phys.* **43** (2002), 3892
33. I.Yu.Popov, *Theor.Math.Phys.* **131** (2002), 791
34. E.Granot, *Phys.Rev.* **B65** (2002), 233101
35. S.N.Shevchenko, Y.A.Kolesnichenko, *Physica* **E14** (2002), 177
36. P.Kuchment, *Waves in Random Media* **12** (2002), R1
37. D.Krejčířík, *J.G geom.Phys.* **45** (2002), 202
38. J.Dittrich, J.Kříž, in *Mathematical Results in Quantum Mechanics*, (R.Weder et al., eds.), Contemporary Math., vol.307, AMS 2002; p.107
39. K.Yoshitomi, in *Mathematical Results in Quantum Mechanics*, (R.Weder et al., eds.), Contemporary Math., vol.307, AMS 2002; p.333
40. A.B.Mikhailova, B.S.Pavlov, in *Operator Methods in Ordinary and PDE* (S.Albeverio et al., eds.), Operator Theory: Adv.Appl. **132** (2002), 287
41. D.Krejčířík, *J.G geom.Phys.* **45** (2003), 203
42. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
43. I.Yu.Popov, S.V.Frolov, *J.Phys.* **A36** (2003), 1655
44. I.Yu.Popov, in *Mathematical Aspects of Wave Propagation*, Univ. Jyväskylä 2003; p.813
45. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
46. M.Encinosa, B.Entemadi, *Found.Phys.Lett.* **16** (2003), 403
47. M.Encinosa, L.Mott, *Phys.Rev.* **A68** (2003), 014102
48. K.Kurata et al., *Nonlin.Anal.–Theor.Meth.Appl.* **55** (2003), 83
49. D.Levin, *J.Phys.* **A37** (2004), L9
50. C.M.Linton, K.Ratcliffe, *J.Math.Phys.* **45** (2004), 1359
51. K.Krejčířík, R.Tiedra de Aldecoa, *J.Phys.* **A37** (2004), 5449
52. G.Dell'Antonio, L.Tenuta, *J.Phys.* **A 37** (2004), 5605
53. V.V.Grushin, *Math. Notes* **75** (2004), 331
54. D.Gridin, A.T.I.Adamou, R.V.Craster, *Phys.Rev.* **B69** (2004), 155317
55. R.R.Gadyshin, *C.R.Mecanique* **332** (2004), 647
56. M.Melgaard, *Few Body Problems* **35** (2004), 77
57. A.Schulze-Halberg, *Mod.Phys.Lett.* **A19** (2004), 1759
58. A.Schulze-Halberg, *Found.Phys.Lett.* **17** (2004), 677
59. I.Veselić, in *Spectral Theory of Schrödinger Operators*, (R.del Rio, C.Villegas-Blas, eds.), Contemp.Math., vol.340, AMS 2004; p.97
60. R.Benguria, M.Loss, in *PDE and Inverse Problems*, (C.Conca et al., eds.), Contemp.Math., vol. 362, AMS 2004; p.53
61. L.Mott, M.Encinosa, B.Etemadi, *Physica* **E25** (2005), 521
62. D.Gridin, R.V.Craster, A.T.I.Adamou, *Proc.Roy.Soc.* **A461** (2005), 1181
63. O.Post, *J.Phys.* **A38** (2005), 4917

64. V.V.Grushin, *Math.Notes* **77** (2005), 606
65. A.Schulze-Halberg, *Found.Phys.Lett.* **18** (2005), 291
66. M.Encinosa, L.Mott, B.Etemadi, *Phys.Scripta* **72** (2005), 13
67. M.Encinosa, *Physica* **E28** (2005), 209
68. M.Y.Planida, *Doklady Math.* **71** (2005), 466
69. T.Ekholm, H.Kovařík, *Comm. PDE* **30** (2005), 539
70. D.Gridin, A.T.I.Adamou, R.V.Craster, *Wave Motion* **42** (2005), 352
71. N.Fujita, O.Terasaki, *Phys.Rev.* **B72** (2005), 085459
72. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
73. A.T.I.Adamou, D.Gridin, R.V.Craster, *Quart. J.Mech.Appl.Math.* **58** (2005), 419
74. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
75. R.R.Gadyl'shin, *Teor.Mat.Fiz.* **145** (2005), 1678
76. V.V.Belov et al., *Phys.-Uspekhi* **48** (2005), 962
77. R.Tiedra de Aldecoa, *PhD thesis*, Université de Genève 2005
78. M.Vittot, in *Proc. of PHYSCON 2005* (St. Petersburg, 2005), p.626
79. M.Encinosa, *Phys.Rev.* **A73** (2006), 012102
80. E.R.Johnson, M.Levitin, E.Parnovski, *SIAM J.Math.Anal.* **37** (2006), 1465
81. H.Linde, *J.Phys.* **A 39** (2006), 5105
82. M.Encinosa, M.Jack, *Physica Scripta* **73** (2006), 439
83. G.Dell'Antonio, L.Tenuta, *J.Math.Phys.* **47** (2006), 072102
84. D.Krejčířík, *J.Ineq.Appl.* **2006** (2006), 46409
85. M.Solomyak, *J.Phys.* **A39** (2006), 10477
86. C.Forster, T.Weidl, *Quart.J.Mech.Appl.Math.* **59** (2006), 399
87. C.Lin, Z.Q.Lu, *Commun.PDE* **31** (2006), 1529
88. U.Smilansky, M.Solomyak, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.283
89. J.Brüning et al., *Russ.J.Math.Phys.* **13** (2006), 380
90. P.Freitas, D.Krejčířík, *Math.Phys.Anal.Geom.* **9** (2006), 335
91. J.Postnova, R.V.Craster, *Wave Motion* **44** (2007), 205
92. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
93. S.Albeverio, C.Cacciapuoti, D.Finco, *J.Math.Phys.* **48** (2007), 032103
94. E.M.Harrell, *Comm.PDE* **32** (2007), 401
95. H.Taira, H.Shima, *J.Phys.* **G41** (2007), 1142
96. V.V.Grushin, *Math. Notes* **81** (2007), 291
97. S.Molchanov, B.Vainberg, *Commun.Math.Phys.* **273** (2007), 533
98. J.M.Harrison et al., *J.Phys.* **A40** (2007), 7597
99. H.Kovařík, A.Sacchetti, *J.Phys.* **A40** (2007), 8371
100. P.Kuchment, O.Post, *Commun.Math.Phys.* **275** (2007), 805
101. H.Najar, *J.Stat.Phys.* **128** (2007), 1093
102. G.Bouchitte et al., *ESAIM-Control Opt.Calc.Var.* **13** (2007), 793
103. M.Jílek, *SIGMA* **3** (2007), 108
104. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
105. I.Veselić: *Existence and Regularity Properties of the Integrated Density of States of Random Schrödinger Operators*, LNP 1917, Springer 2008
106. M.V.Karasev, *Russ.J.Math.Phys.* **14** (2007), 440
107. A.T.I.Adamou, R.V.Craster, S.G.L.Smith, *J.Fluid Mech.* **592** (2007), 195
108. M.Ashbaugh, R.Benguria, in *Festschrift in Honor of B.Simon's 60th Birthday* (F.Gesztesy et al., eds), *Proc.Symp.Pure Math.* **76**, AMS, Providence, 2007; p.105
109. J.Postnova, R.V.Craster, *Wave Motion* **45** (2007), 569
110. T.Ekholm, H.Kovařík, D.Kejčířík, *Arch.Rat.Mech.Anal.* **188** (2008), 245
111. P.Freitas, D.Krejčířík, *Indiana Univ.Math.J.* **57** (2008), 343

112. J.Brüning et al., *Russ.J.Math.Phys.* **15** (2008), 1
113. V.V.Grushin, *Math.Notes* **83** (2008), 463
114. H.Kovařík, S.Vugalter, *J.Math.Anal.Appl.* **345** (2008), 566
115. S.Hein, W.Koch, *J.Fluid Mech.* **605** (2008), 401
116. D.Krejčířík, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.617
117. H.Kovařík, D.Krejčířík, *Math.Nachr.* **281** (2008), 1159
118. V.Atanasov, R.Dandoloff, *Phys.Lett.* A372 (2008), 6141
119. M.Levitin, M.Marletta, *Proc.Roy.Soc.Edinburg* **A138** (2008), 1043
120. D.Borisov, D.Krejčířík, *Integral Eq. Operator Theory* **62** (2008), 489
121. M.Cherdantsev, *PhD thesis*, University of Bath 2008
122. E.S.Trifanova, *Tech.Phys.Lett.* **35** (2009), 180
123. A.El Soufi, *Indiana Univ.Math.J.* **58** (2009), 335
124. V.V.Grushin, *Math.Notes* **85** (2009), 661
125. W.Koch, *J.Fluid Mech.* **628** (2009), 155
126. D.Krejčířík, *ESAIM:COCV* **15** (2009), 555
127. M.Delebecque-Fendt, F.Méhats, *Commun.Math.Phys.* **292** (2009), 829
128. A.Bertoni et al., *J.Phys.: Conf.Series* **193** (2009), 012018
129. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
130. V.Rabinovich, M.Quino Cerdan, *Math.Meth.Appl.Sci.* **33** (2010), 527
131. H.Najar, S.Ben Hariz, M.Ben Salah, *Math.Phys.Anal.Gem.* **13** (2010), 19
132. L.Cardoulis, P.Gaitan, *Inv.Probl.* **26** (2010), 035012
133. A.Bikmetov, R.Gadyl'shin, *Russ.J.Math.Phys.* **17** (2010), 19
134. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E81** (2010), 036606
135. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
136. J.Wachsmuth, S.Teufel, *Phys.Rev.* **A82** (2010), 022112
137. L.G.Ixaru, *Comp.Phys.Commun.* **181** (2010), 1738
138. C.Cacciapuoti, D.Finco, *Asympt.Anal.* **70** (2010), 199
139. S.A.Nazarov, *Acoust.Phys.* **56** (2010), 1004
140. S.A.Nazarov, *J.Math.Sci.* **172** (2011), 555
141. R.Gadyl'shin, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 135
142. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
143. C.R. de Oliveira, *Rep.Math.Phys.* **67** (2011), 1
144. C.R. de Oliveira, A.A.Verri, *J.Math.Anal.Appl.* **381** (2011), 454
145. J.Lampart, S.Teufel, J.Wachsmuth, in *Mathematical Results in Quantum Physics – Proceedings of QMath11*, World Scientific, Singapore 2011; p. 183
146. J.Brüning et al., *Russ.J.Math.Phys.* **18** (2011), 33
147. S.Nazarov, *Teor.Mat.Fiz.* **167** (2011), 606
148. F.Delebecque, *Math. Models and Methods in Appl.Sci.* **21** (2011), 1443
149. D.Borisov, G.Cardone, *ESAIM* **17** (2011), 887
150. V.S.Rabinovich, *Mem.Diff.Eq.Math.Phys.* **53** (2011), 127
151. S.A.Nazarov, *Akust.zhurn.* **57** (2011), 746
152. G.Burlak, Y.Karlovich, V.Rabinovich, *Commun.Math.Anal.Conf.* **3** (2011), 50
153. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
154. S.Nazarov, *Acoust.Phys.* **57** (2011), 764
155. D.Krejčířík, A.Pratelli, *Pacific J.Math.* **254** (2011), 309
156. N.R.T.Biggs, *Wave Motion* **49** (2012), 24
157. D.Borisov, D.Krejčířík, *Asympt.Anal.* **76** (2012), 49
158. D.Borisov, G.Cardone, *J.Math.Phys.* **53** (2012), 023503
159. C.Förster, T.Weidl, *St.Petersburg Math.J.* **23** (2012), 179
160. V.Jakubský, M.S.Plyushchay, *Phys.Rev.* **D85** (2012), 045035

161. R.T.Lewis, Junfang Li, Yanyan Li, *J.Funct.Anal.* **262** (2012), 3159
162. N.Raymond, *Gazette des Mathématiciens* **131** (2012), 5
163. E.Soccorsi, *HDR thèse*, Université d'Aix-Marseille 2012
164. G.Cardone, S.A.Nazarov, K.Ruotsalainen, *Math.Sbornik* **203** (2012), 153
165. S.A.Nazarov, *St.Petersburg Math.J.* **23** (2012), 351
166. V.Bonnailie-Noel, M.Dauge, N.Popoff, N.Raymond, *ZAMP* **63** (2012), 203
167. S.Nazarov, *St.Petersburg Math.J.* **23** (2012), 571
168. G.Kaoullas, E.R.Johnson, *J.Fluid.Mech.* **700** (2012), 283
169. V.Lescarret, G.Schneider, *ZAMP* **63** (2012), 401
170. A.L.Delitsyn, B.T.Nguyen, D.S.Grebenkov, *Eur.J.Phys.* **B85** (2012), 176
171. D.Krejčířík, H.Šediváková, *Rev.Math.Phys.* **24** (2012), 1250018
172. T.Tudorovskiy, M.I.Katsnelson, *Phys.Rev.* **B86** (2012), 045419
173. S.I.Popov, M.I.Gavrilov, I.Yu.Popov, *Phys.Scripta* **86** (2012), 035003
174. L.Cardoullis, M.Cristofol, *Int.J.Math.Math.Sci.* **2012** (2012), 651390
175. J.H.Videman, S.A.Nazarov, V.C.Piat, *J.Math.Sci.* **185** (2012), 536
176. N.Popoff, *PhD thesis*, Université de Rennes 2012
177. A.Haenel, C.Schulz, J.Wirth, *Quart.J.Mech.Appl.Math.* **65** (2012), 535
178. G.Bouchitte, L.Mascarenhas, L.Trabucho, *J.Math.Phys.* **53** (2012), 123517
179. S.Nazarov, *St.Petersburg Math.J.* **23** (2012), 1023
180. S.N.Gaulter, N.R.T.Biggs, *Proc.Roy.Soc.* **A469** (2012), 20120384
181. M.Dauge, N.Raymond, *J.Math.Phys.* **53** (2012), 123529
182. M.Dauge, Y.Lafranche, N.Raymond, *ESAIM Proc.* **35** (2012), 14
183. Nguyen Thanh Binh, *PhD thesis*, École Polytechnique Palaiseau 2012
184. C.R. de Oliveira, A.A.Verri, in *Spectral Analysis of Quantum Hamiltonians* – (R.Benguria, E.Friedmann, M.Mantoiu, eds.), Birkhäuser, Basel 2012; p. 253
185. R.D.Benguria, H.Linde, B.Loewe, *Bull.Math.Sci.* **2** (2012), 1
186. I.Yu.Popov, P.I.Smirnov, *Phys.Lett.* **A377** (2013), 439
187. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
188. G.Cardone, S.A.Nazarov, K.Ruotsalainen, *ESAIM* **47** (2013), 305
189. V.S.Rabinovich, R.Castillo-Peréz, F.Urbano-Alt., *Math.Meth.Appl.Sci.* **36** (2013), 761
190. S.I.Popov, *Nanosystems* **4** (2013), 173
191. D.Krejčířík, H.Šediváková, in *Microlocal Methods in Mathematical Physics and Global Analysis*, Springer Trends in Mathematics 2013, p.29
192. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
193. D.S.Grebenkov, B.T.Nguyen, *SIAM Review* **55** (2013), 601
194. G.Cardone, *Proc. AMS* **1558** (2013), 1809
195. L.G.Ixaru, D.S.Delion, *Romanian J.Phys.* **58** (2013), 1396
196. S.A.Nazarov, *Sbornik Math.* **204** (2013), 1639
197. R.Purice, *Habilitation thesis*, Institutul “Simion Stoilow”, Bucharest 2013
198. S.A.Nazarov, *J.Math.Sci.* **196** (2014), 346
199. A.Markowsky, N.Schopohl, *Phys.Rev.* **A89** (2014), 013622
200. S.A.Nazarov, A.V.Shanin, *Applicable Anal.* **93** (2014), 572
201. J.Stockhofe, P.Schmelcher, *Phys.Rev.* **A89** (2014), 033630
202. M.Belov, G.Krylov, *Phys.Scripta* **89** (2014), 075804
203. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *ZAMM* **94** (2014), 477
204. D.Krejčířík, N.Raymond, *Ann.H.Poincaré* **15** (2014), 1993
205. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
206. T.Ourmières-Bonafos, *J.Spect.Theory* **4** (2014), 485
207. J.Wachsmuth, S.Teufel *Mem.Amer.Math.Soc.* **230**(1083) (2014), 1
208. A.Ferreira Rossini, *PhD thesis*, Universidad Federal de São Carlos 2014
209. B.T.Nguyuyen, D.S.Grebenkov, A.L.Delitsyn, in *Geometric and Spectral Analysis* (P.Albin et al., eds.), Contemporary Mathematics, vol. 630, AMS 2014; p. 337

210. Zheng Ren, Pu-Xian Gao, *Nanoscale* **6** (2014), 9366
211. D.Krejčířík, M.Tušek, *J.Diff.Eqs* **258** (2015), 281
212. B.W.Shore et al., *New J.Phys.* **17** (2015), 013046
213. P.Uusitalo, *Ann.Acad.Sci.Fennicæ* **40** (2015), 329
214. V.Bonaille-Noël, N.Raymond, *ZAMM* **95** (2015), 120
215. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *J.Math.Phys.* **56** (2015), 021505
216. C.Kreisbeck, L.Mascarenhas, *Applicable Anal.* **94** (2015), 1153
217. D.Krejčířík, *Appl.Math.Lett.* **46** (2015), 7
218. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
219. M.Dauge, Ourmières-Bonafos, N.Raymond, *Commun.Pure Appl.Anal.* **14** (2015), 1239
220. Ch.Hazard, *IMA J. Appl.Math.* **80** (2015), 1049
221. R.Ferreira, M.L.Mascarenhas, A.Piatnitski, *Portugal.Math.* **72** (2015), 247
222. H.Najar, in *Applied Mathematics in Tunisia* (A.Jeribi, M.A.Hammami, A.Masmoudi, eds.), Springer Proc. in Math.& Stat., vol. 131 (2015), p. 101
223. S.Haag, J.Lampart, S.Teufel, *Ann.H.Poincaré* **16** (2015), 2535
224. D.Krejčířík, N.Raymond, M.Tušek, *J.Geom.Anal.* **25** (2015), 2546
225. Ph.Briet, M.Gharsalli, *Rep.Math.Phys.* **76** (2015), 317
226. G.P.Leonardi, in *New Trends in Shape Optimization* – (A.Pratelli, G.Leugering, eds.), Birkhäuser, Basel 2015; p. 117
227. J.Williamson, M.Encinosa, in *Metamaterials, Metadevices, and Metasystems 2015* (N.Engheta, M.A.Noginov, N.I.Zheludev, eds.), Proc. SPIE, art.no. 95442W
228. V.Stefanopoulos, *J.Diff.Eqs* **260** (2016), 115
229. H.Najar, M.Raissi, *Math.Meth.Appl.Sci.* **39** (2016), 92
230. A.S.Bonnet-Ben-Dhia et al., *C.R.Acad.Sci.Paris, Ser.I* **354** (2016), 27
231. R.Novák, *Asympt.Anal.* **96** (2016), 251
232. G.P.Leonardi, A.Pratelli, *Calc.Var.& PDE* **55** (2016), 15
233. G.Raikov, *J.Spect.Theory* **6** (2016), 331
234. A.R.Bikmetov, R.R.Gadylyshin, *Russ.J.Math.Phys.* **23** (2016), 1
235. R.Assel, M.Ben Salah, *Serdica Math.J.* **42** (2016), 43
236. S.Nazarov, *Comp.Math.Math.Phys.* **56** (2016), 864
237. S.A.Nazarov, K.Ruotsalainen, M.Silvola, *J.Elast.* **124** (2016), 193
238. S.Jimbo, K.Kurata, *Indiana Univ.Math.J.* **65** (2016), 867
239. M.P.Faleeva, I.Yu.Popov, *Proc Days on Diffraction* (2016), 133
240. Ph.Briet, M.Gharsalli, *J.Phys.* **A49** (2016), 495202
241. F.Méhats, N.Raymond, *Ann.H.Poincaré* **18** (2017), 281
242. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
243. M.Faleeva, I.Popov, *ITM Web Conf.* **9** (2017), 01009
244. V.Lotoreichik, P.Siegl, *Proc. AMS* **145** (2017), 1231
245. J.Lampart, S.Teufel, *Math. Annalen* **367** (2017), 1647
246. A.Pratelli, G.Sarraco, *Rev.Mat.Iberoam.* **33** (2017), 219
247. C.R.de Oliveira, A.A.Verri, *Math.Scandinavica* **120** (2017), 145
248. I.Kh.Khusnullin, *Trudy IMM UrO RAN* **23** (2017), 273
249. T.Durante, *AIP Conf.Proc.* **1863** (2017), 510003
250. F.Bakharev, S.Matveenko, S.Nazarov, *Z.Anal.Anw.* **36** (2017), 329
251. G.Bouchitté, G.Buttazzo, *ESAIM* **23** (2017), 627
252. S.Fournais, L.Le Treust, N.Raymond, J.Van Schaftigen, *J.Math.Soc.Japan* **69** (2017), 1667
- P. Duclos, P. Exner, P. Šťovíček: *Curvature-induced resonances in a two-dimensional Dirichlet tube*, *Ann.Inst. H. Poincaré: Phys.Théor.* **62** (1995), 81–101.
1. L.Nedelec, *Commun.Part.Diff.Eq.* **22** (1997), 143
 2. K.S.Na, L.E.Reichl, *J.Stat.Phys.* **92** (1998), 519
 3. E.Croc, V.Iftimie, *Int.Eq.Oper.Theory* **33** (1999), 389

4. O.Poisson, *Math.Meth.Anal.Appl.* **22** (1999), 773
 5. S.Matsutani, *Rev.Math.Phys.* **12** (2000), 431
 6. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 7. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 8. K.Krejčířík, R.Tiedra de Aldecoa, *J.Phys.* **A37** (2004), 5449
 9. S.Matsutani, *J.Geom.Symm.Phys.* **2** (2004), 18
 10. R.Tiedra de Aldecoa, *PhD thesis*, Université de Genève 2005
 11. R.Tiedra de Aldecoa, *Ann.H.Poincaré* **7** (2006), 105
 12. M.Melgaard, *Acta Phys.Polonica* **B38** (2007), 197
 13. M.Melgaard, *Mod.Phys.Lett.* **B21** (2007), 767
 14. H.Kovářík, A.Sacchetti, *J.Phys.* **A40** (2007), 8371
 15. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
 16. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A42** (2009), 035202
 17. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E81** (2010), 036606
 18. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
 19. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A43** (2010), 474009
 20. C.R. de Oliveira, *Rep. Math. Phys.* **67** (2011), 1
 21. C.Cacciapuoti, R.Carlone, R.Figari, *J.Math.Phys.* **52** (2011), 083515
 22. V.S.Rabinovich, *Mem.Diff.Eq.Math.Phys.* **53** (2011), 127
 23. G.Burlak, Y.Karlovich, V.Rabinovich, *Commun.Math.Anal.Conf.* **3** (2011), 50
 24. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
 25. V.Kalvin, *SIAM J.Math.Anal.* **44** (2012), 355
 26. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 27. V.S.Rabinovich, R.Castillo-Peréz, F.Urbano-Alt., *Math.Meth.Appl.Sci.* **36** (2013), 761
 28. I.F.Melikhov, I.Yu.Popov, *Nanosystems* **4**(4) (2013), 559
 29. I.F.Melikhov, I.Yu.Popov, *J.Phys.:Conf.Ser.* **541** (2014), 012099
 30. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 31. I.F.Melikhov, I.Yu.Popov, *Chinese J.Phys.* **53** (2015), UNSP 060820
 32. Ph.Briet, M.Gharsalli, *J.Phys.* **A49** (2016), 495202
- P.Exner: *Lattice Kronig–Penney models*, *Phys.Rev.Lett.* **74** (1995), 3503–3506.
1. K.Moulopoulos, S.Roche, *J.Phys.:Cond.Matt.* **7** (1995), 8883
 2. T.Kottos, U.Smilansky, *Phys.Rev.Lett.* **79** (1997), 4964
 3. P.Benioff, *Fortschr.Phys.* **46** (1998), 423
 4. V.Kostyřkin, R.Schrader, *J.Phys.* **A32** (1999), 595
 5. P.Kuchment, L.A.Kunyansky, *Exp.Math.* **8** (1999), 1
 6. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 7. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 8. F.-M.Dittes, *Phys.Rep.* **339** (2000), 215
 9. P.Kuchment, H.B.Zeng, *J.Math.Anal.Appl.* **258** (2001), 671
 10. N.E.Hurt, *Rev.Math.Phys.* **13** (2001), 1459
 11. J.Desbois, *Eur.J.Phys.* **B24** (2001), 261
 12. P.Kuchment, L.A.Kunyansky, *Adv.Comp.Math.* **16** (2002), 263
 13. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 14. T.Kottos, U.Smilansky, *J.Phys.* **A36** (2003), 3501
 15. P.L.Christiansen et al., *J.Phys.* **A36** (2003), 7589
 16. A.G.M.Schmidt, B.K.Cheng, M.G.E.da Luz, *J. Phys.* **A36** (2003), L545
 17. B.E.R.Seif, *PhD thesis*, Universität Köln 2003
 18. T.Kottos, H.Schanz, *Waves in Random Media* **14** (2004), S91
 19. P.Kuchment, *Waves in Random Media* **14** (2004), S107

20. J.Kuhn et al., *J.Opt.* **B7** (2005), S77
 21. P.Kuchment, *J.Phys.* **A38** (2005), 4887
 22. A.Comtet, J.Desbois, Ch.Textier, *J.Phys.* **A38** (2005), R341
 23. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
 24. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A39** (2006), 9329
 25. O.Post, *Ann. H.Poincaré* **7** (2006), 933
 26. K.Chen, S.Molchanov, B.Vainberg, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.81
 27. K.Pankrashkin, *J.Math.Phys.* **47** (2006), 112105
 28. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 29. J.Brüning, V.Geyler, K.Pankrashkin, *Commun.Math.Phys.* **269** (2007), 87
 30. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A40** (2007), 5443
 31. F.Klopp, K.Pankrashin, *J.Stat.Phys.* **131** (2008), 651
 32. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 33. J.Kühn, *PhD thesis*, Universidade Federal do Paraná 2008
 34. K.Pankrashkin, *J.Phys.* **A42** (2009), 265304
 35. F.M.de Andrade, *PhD thesis*, Universidad Federal do Paraná 2009
 36. A.V.Zolotaryuk, *J.Phys.* **A43** (2010), 105302
 37. A.V.Zolotaryuk, *Phys.Lett.* **A374** (2010), 1636
 38. A.Comtet, Ch.Textier, Y.Tourigny, *J.Stat.Phys.* **140** (2010), 427
 39. Ch.Textier, *J.Phys.* **A43** (2010), 425203
 40. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
 41. O.Mustafa, S.H.Mazharimoussavi, *Phys.Scripta* **82** (2010), 065013
 42. Ch.Textier, *HDR thèse*, Université Paris Sud, 2010
 43. A.V.Zolotaryuk, Y. Zolotaryuk, *J.Phys.* **A44** (2011), 375305
 44. C.-F.Yang, *Tamkang J.Math.* **42** (2011), 329
 45. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 46. J.M.Harrison, K.Kirsten, C.Textier, *J.Phys.* **A45** (2012), 125206
 47. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B26** (2012), 1250092
 48. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B26** (2012), 1250177
 49. Yu.Ershova, A.V.Kiselev, *Meth.Funct.Anal.Topol.* **18** (2012), 343
 50. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B27** (2013), 1350001
 51. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 52. A.V.Zolotaryuk, *Phys.Rev.* **A87** (2013), 052121
 53. Yu.Yu.Ershova, I.I.Karpenko, A.V.Kiselev, *Carpathian Math.Publ.* **6** (2014), 230
 54. Yu.Ershova, A.V.Kiselev, *Meth.Funct.Anal.Topol.* **20** (2014), 134
 55. M.Calcada et al., *Front.Phys.* (2014), doi: 10.3389/fphy.2014.00023
 56. T.Cheon, S.S.Poghosyan, *J.Phys.Soc.Japan* **84** (2015), 064006
 57. D.Barseghyan, A.Khrabustovskyi, *J.Phys.* **A48** (2015), 255201
 58. T.Cheon, S.Poghosyan, in *CSIT-2015 Proceedings* (S.Shoukourian, ed.), p. 133
 59. Yu.Ershova, I.I.Karpenko, A.V.Kiselev, *Mathematika* **62** (2016), 210
 60. N.C.Dias, C.Jorge, J.N.Prata, *J.Diff.Eqs* **260** (2016), 6548
 61. Yu.Ershova, I.I.Karpenko, A.V.Kiselev, *J.Spect.Theory* **6** (2016), 43
 62. F.M.Andrade et al., *Phys.Rep.* **647** (2016), 1
 63. V.Chulaevsky. *Univ.J.Appl.Math.* **4** (2016), 67
 64. K.D.Cherednichenko, A.V.Kiselev, *Commun.Math.Phys.* **349** (2017), 441
 65. B.Delourme, S.Joly, P.Fliss, E.Vasilevskaya, *Asympt.Anal.* **103** (2017), 103
- P. Exner: *A quantum pipette*, *J.Phys.* **A28** (1995), 5323-5330.
1. S.L.Popova, *Pisma Z.Tech.Phys.* **22** (1996), 55
 2. O.Vakhnenko, *Phys.Lett.* **A249** (1998), 349
 3. J.Rubinstein, M.Schatzman, *Arch.Rat.Mech.Anal.* **160** (2001), 271

4. J.Rubinstein, M.Schatzman, *Arch.Rat.Mech.Anal.* **160** (2001), 309
 5. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 6. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 7. V.V.Belov et al., *Dokl.Math.* **68** (2003), 460
 8. V.V.Belov et al., *Russ.J.Math.Phys.* **11** (2004), 109
 9. V.V.Grushin, *Math. Notes* **75** (2004), 331
 10. V.V.Belov et al., *Teor.mat.fiz.* **141** (2004), 1562
 11. J.Rubinstein, M.Schatzman, *Math.Models Meth.Appl.Sci.* **15** (2005), 301
 12. V.V.Grushin, *Math.Notes* **77** (2005), 606
 13. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 14. V.V.Belov et al., *J.Eng.Math.* **55** (2006), 183
 15. V.V.Grushin, *Math. Notes* **81** (2007), 291
 16. V.V.Grushin, *Math.Notes* **85** (2009), 661
 17. H.Najar, O.Olendski, *J.Phys.* **A44** (2011), 305304
 18. O.Olendski, *Annalen der Phys.* **527** (2015), 278
 19. Ph.Briet, M.Gharsalli, *Rep.Math.Phys.* **76** (2015), 317
 20. S.Nazarov, *Comp.Math.Math.Phys.* **56** (2016), 864
 21. Ph.Briet, M.Gharsalli, *J.Phys.* **A49** (2016), 495202
- P. Exner: *The absence of the absolutely continuous spectrum for δ' Wannier–Stark ladders*, *J. Math. Phys.* **36** (1995), 4561–4570.
1. L.Dmitrieva et al., *J.Phys.* **A30** (1997), 3087
 2. A.Kiselev, *J.Math.Anal.Appl.* **212** (1997), 263
 3. M.Maioli, A.Sacchetti, *J.Phys.* **A31** (1998), 1115
 4. F.Bentosela, Ph.Briet, *Ann.Inst.H.Poincaré* **71** (1999), 497
 5. V.S.Buslaev, *Amer.Math.Soc.Transl.* **189** (1999), 45
 6. A.Kiselev, *Trans.Am.Math.Soc.* **352** (2000), 243
 7. A.A.Pozharskii, *Theor.Math.Phys.* **123** (2000), 524
 8. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 9. J.Sahbani, *J.Math.Phys.* **41** (2000), 8006
 10. P.Briet, *Rev.Math.Phys.* **13** (2001), 587
 11. A.A.Pozharskii, *Algebra i Analiz* **14** (2002), 158; transl. *St.Petersburg Math J.* **14** (2003), 119
 12. G.Perelman, *Commun.Math.Phys.* **234** (2003), 359
 13. M.Christ, A.Kiselev, *Ark.Mat.* **41** (2003), 1
 14. M.Maioli, A.Sacchetti, *J.Phys.* **A37** (2004), 2371
 15. G.Perelman, *Asympt.Anal.* **44** (2005), 1
 16. A.A.Pozharskii, *Theor.Math.Phys.* **146** (2006), 343
 17. Y.Arlinskii, E.Tsekanovskii, in *Mark Krein Centenary Conference, vol. 1* (V. Adamyan et al., eds.), *Operator Theory Adv. Appl.* **190** (2009), 65
 18. Yu.D.Golovaty, R.O.Hryniv, *J.Phys.* **A43** (2010), 155204
 19. J.F.Brasche, L.P.Nizhnik, *Meth.Funct.Anal.Topol.* **19** (2013), 4
 20. A.Kostenko, M.Malamud, in “Spectral Analysis, Differential Equations and Mathematical Physics” (Gesztesy Festschrift; H.Holden et al., eds.), AMS 2013; p.235
 21. A.Kostenko, M.Malamud, *Ann.H.Poincaré* **15** (2014), 501
 22. I.Kh.Khusnullin, *PhD thesis*, Ufa University 2015
- P. Exner: *Contact interactions on graph superlattices*, *J.Phys.* **A29** (1996), 87–102.
1. F.A.B.Coutinho, Y.Nogami, J.F.Perez, *J.Phys.* **A30** (1997), 3937
 2. T.Cheon, T.Shigehara, *Phys.Lett.* **A243** (1998), 111
 3. T.Cheon, *Phys.Lett.* **A248** (1998), 285

4. P.Benioff, *Fortschr.Phys.* **46** (1998), 423
5. V.A.Geyler, I.Yu.Popov, *Rep.Math.Phys.* **42** (1998), 347
6. V.Kostykin, R.Schrader, *J.Phys.* **A32** (1999), 595
7. F.Coutinho, Y.Nogami, J.F.Perez, *J.Phys.* **A32** (1999), L133
8. W.Axmann, P.Kuchment, L.Kunyansky, *J.Lightwave Technol.* **17** (1999), 1996
9. T.Cheon, T.Shigehara, K.Takayanagi, *J.Phys.Soc.Japan* **69** (2000), 345
10. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
11. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
12. V.Alonso, C.De Vincenzo, *Int.J.Theor.Phys.* **39**(2000), 1483
13. I.Tsutsui, T.Fülöp, T.Cheon, *J.Phys.Soc.Jpn.* **69** (2000), 3473
14. S.M.Al-Jaber, *N.Cim.* **B115** (2000), 1397
15. Yu.Melnikov, B.Pavlov, *J.Math.Phys.* **42** (2001), 1202
16. V.Kostykin, R.Schrader, *J.Math.Phys.* **42** (2001), 1563
17. P.Kuchment, H.B.Zeng, *J.Math.Anal.Appl.* **258** (2001), 671
18. N.E.Hurt, *Rev.Math.Phys.* **13** (2001), 1459
19. M.Harmer, A.Mikhailova, B.Pavlov, *Proc. CMA* **39** (2001), 118
20. J.Desbois, *Eur.J.Phys.* **B24** (2001), 261
21. P.Kurasov, F.Stenberg, *J.Phys.* **A35** (2002), 101
22. P.Kuchment, L.A.Kunyansky, *Adv.Comp.Math.* **16** (2002), 263
23. P.Kuchment, *Waves in Random Media* **12** (2002), R1
24. P.L.Christiansen et al., *J.Phys.* **A36** (2003), 7589
25. A.G.M.Schmidt, B.K.Cheng, M.G.E.da Luz, *J. Phys.* **A36** (2003), L545
26. T.Kottos, H.Schanz, *Waves in Random Media* **14** (2004), S91
27. P.Kuchment, *Waves in Random Media* **14** (2004), S107
28. T.Cheon, I.Tsutsui, T.Fülöp, *Phys.Lett.* **A330** (2004), 338
29. J.Kuhn et al., *J.Opt.* **B7** (2005), S77
30. M.Harmer, *J.Phys.* **A38** (2005), 4875
31. V.Yurko, *Inverse Problems* **21** (2005), 1075
32. A.Comtet, J.Desbois, Ch.Texier, *J.Phys.* **A38** (2005), R341
33. K.Pankrashkin, *J.Phys.* **A38** (2005), 8979
34. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
35. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A39** (2006), 9329
36. P.Hejčík, T.Cheon, *Phys. Lett.* **A356** (2006), 290
37. C.Fox, V.Oleinik, B.Pavlov, in *Recent Advances in Differential Equations*, (N.Chernov et al., eds.), Contemp.Math., vol. 412, AMS 2004, p.151
38. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
39. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A40** (2007), 5443
40. V.A.Yurko, *Inverse Problems* **23** (2007), 893
41. P.Kuchment, O.Post, *Commun.Math.Phys.* **275** (2007), 805
42. G.Freilig, V.Yurko, *Results in Math.* **50** (2007), 195
43. G.Freilig, V.Yurko, *Applicable Anal.* **86** (2007), 653
44. R.K.Dubey et al., *Canad.J.Phys.* **85** (2007), 967
45. V.Yurko, *J.Diff.Eq.* **244** (2008), 431
46. M.Nowaczyk, *PhD thesis*, Lund University 2008
47. R.K.Dubey, V.J.Menon, D.N.Tripathi, *Indian J.Pure Appl.Phys.* **46** (2008), 295
48. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
49. K.Pankrashkin, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.459
50. J.Kühn, *PhD thesis*, Universidade Federal do Paraná 2008
51. F.M.de Andrade, *PhD thesis*, Universidad Federal do Paraná 2009
52. Y.Hasebe, T.Cheon, *Proc. of 4th Int. Conf. on Quantum, Nano and Micro Technologies* (ICQNM, St. Maarten 2010), p.65

53. Y.Furuhashi et al., *J.Phys.* **A43** (2010), 354010
 54. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
 55. O.Mustafa, S.H.Mazharimoussavi, *Phys.Scripta* **82** (2010), 065013
 56. Y.Hasebe, T.Cheon, *Proc. of 4th Int. Conf. on Quantum, Nano and Micro Technologies* (ICQNM, St. Maarten 2010), p.65
 57. Ch.Textier, *HDR thèse*, Université Paris Sud, 2010
 58. R.Adami et al., *Rev.Math.Phys.* **23** (2011), 409
 59. G.Freiling, M.Ignatyev, *Inverse Problems* **27** (2011), 095003
 60. T.Cheon, O.Turek, *Phys.Lett.* **A375** (2011), 2775
 61. C.-F.Yang, *Tamkang J.Math.* **42** (2011), 329
 62. M.Ignatyev, *Tamkang J.Math.* **42** (2011), 365
 63. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B26** (2012), 1250092
 64. S.Man'ko, *J.Math.Phys.* **53** (2012), 123521
 65. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 66. A.V.Zolotaryuk, *Phys.Rev.* **A87** (2013), 052121
 67. S.A.Buterin, G.Freiling, *Tamkang J.Math.* **44** (2013), 327
 68. I.Yu.Popov, A.N.Skorynina, I.V.Blinova, *J.Math.Phys.* **55** (2014), 033504
 69. M.Calcada et al., *Front.Phys.* (2014), doi: 10.3389/fphy.2014.00023
 70. D.Mugnolo, S.Nicaise, *Math.Nachr.* **288** (2015), 295
 71. D.Barseghyan, A.Khrabustovskiy, *J.Phys.* **A48** (2015), 255201
 72. M.Ignatyev, *Inverse Problems* **31** (2015), 125006
 73. R.-J.Lange, *J.Math.Phys.* **56** (2015), 122105
 74. M.Ignatyev, *Tamkang J.Math.* **46** (2015), 401
 75. P.Štředa, J.Kučera, *Phys.Rev.* **B92** (2015), 235152
 76. F.M.Andrade et al., *Phys.Rep.* **647** (2016), 1
 77. B.Delourme, S.Joly, P.Fliss, E.Vasilevskaya, *Asympt.Anal.* **103** (2017), 103
- P. Exner, P. Šeba, M. Tater, D. Vaněk: *Bound states and scattering in quantum waveguides coupled laterally through a boundary window*, *J. Math. Phys.* **37** (1996), 4867–4887.
1. M.Razavy, *Phys.Lett.* **A228** (1997), 239
 2. K.S.Na, L.E.Reichl, *J.Stat.Phys.* **92** (1998), 519
 3. E.B.Davies, L.Parnowski, *Quart.J.Mech.Appl.Math.* **58** (1998), 477
 4. F.Kleespies, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.275
 5. D.Krejčířík, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.281
 6. N.E.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 7. F.Kleespies, P.Stollmann, *Rev.Math.Phys.* **12** (2000), 1345
 8. J.Wiersig, *Phys.Rev.* **E64** (2001), 026212
 9. A.Aslyan, E.B.Davies, *J.Comp.Phys.* **174** (2001), 327
 10. J.Wiersig, *Phys.Rev.* **E65** (2002), 046217
 11. J.Dittrich, J.Kříž, *J.Math.Phys.* **43** (2002), 3892
 12. J.Dittrich, J.Kříž, in *Mathematical Results in Quantum Mechanics*, (R.Weder et al., eds.), Contemporary Math., vol.307, AMS 2002; p.107
 13. K.Yoshitomi, in *Mathematical Results in Quantum Mechanics*, (R.Weder et al., eds.), Contemporary Math., vol.307, AMS 2002; p.333
 14. A.A.Arsen'ev, *Sbornik Math.* **194** (2003), 1
 15. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 16. C.M.Linton, K.Ratcliffe, *J.Math.Phys.* **45** (2004), 1359
 17. S.Hein, T.Hohage, W.Koch, *J.Fluid Mech.* **506** (2004), 255
 18. D.Borisov, T.Ekholm, H.Kovařík, *Ann.H.Poincaré* **6** (2005), 327

19. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 20. E.Maglione, L.S.Ferreira, G.Cattapan, *J.Phys.* **A39** (2006), 1207
 21. H.Linde, *J.Phys.* **A 39** (2006), 5105
 22. D.I. Borisov, *Math.Sbornik* **197** (2006), 475
 23. Y.Duan, W.Koch, C.M.Linton, M.McIver, *J.Fluid Mech.* **571** (2007), 119
 24. O.Olendski, L.Mikhailovska, *J.Phys.* **A40** (2007), 4609
 25. D.I. Borisov, *J.Phys.* **A40** (2007), 5045
 26. H.Najar, *J.Stat.Phys.* **128** (2007), 1093
 27. M.Jílek, *SIGMA* **3** (2007), 108
 28. M.D.Malykh, *Comp.Math.Math.Phys.* **49** (2009), 279
 29. D.Borisov, G.Cardone, *J.Phys.* **A42** (2009), 365205
 30. V.Rabinovich, M.Quino Cerdan, *Math.Meth.Appl.Sci.* **33** (2010), 527
 31. H.Najar, S.Ben Hariz, M.Ben Salah, *Math.Phys.Anal.Geom.* **13** (2010), 19
 32. P.Duclos, H.Hogreve, *J.Phys.* **A43** (2010), 474018
 33. D.Borisov, R.Bunoiu, G.Cardone, *Ann. H. Poincaré* **11** (2010), 1591
 34. D.Borisov, R.Bunoiu, G.Cardone, *C.R. Acad.Sci. Paris, Ser. I* **349** (2011), 53
 35. H.Najar, O.Olendski, *J. Phys.* **A44** (2011), 305304
 36. D.Borisov, R.Bunoiu, G.Cardone, *J.Math.Sci.* **176** (2011), 774
 37. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
 38. P.Amore, M.Rodriguez, C.A.Terrero-Escalante, *J.Phys.* **A45** (2012), 105303
 39. S.Nazarov, *St.Petersburg Math.J.* **23** (2012), 571
 40. A.L.Delitsyn, B.T.Nguyen, D.S.Grebenkov, *Eur.J.Phys.* **B85** (2012), 176
 41. S.Nazarov, *St.Petersburg Math.J.* **23** (2012), 1023
 42. Nguyen Thanh Binh, *PhD thesis*, École Polytechnique Palaiseau 2012
 43. S.A.Nazarov, *Math.Notes* **93** (2013), 60
 44. D.Borisov, R.Bunoiu, G.Cardone, *ZAMP* **64** (2013), 439
 45. I.F.Melikhov, I.Yu.Popov, *Nanosystems* **4**(4) (2013), 559
 46. D.S.Grebenkov, B.T.Nguyen, *SIAM Review* **55** (2013), 601
 47. A.K.Motovilov, *Phys.At.Nucl.* **77** (2014), 453
 48. I.F.Melikhov, I.Yu.Popov, *J.Phys.:Conf.Ser.* **541** (2014), 012099
 49. Ph.Briet, J.Dittrich, E.Soccorsi, *J.Math.Phys.* **55** (2014), 112104
 50. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 51. I.F.Melikhov, I.Yu.Popov, *Chinese J.Phys.* **53** (2015), UNSP 060820
 52. D.Borisov, *J.Math.Sci.* **205** (2015), 141
 53. D.Borisov, *J.Math.Sci.* **210** (2015), 590
 54. H.Najar, in *Applied Mathematics in Tunisia* (A.Jeribi, M.A.Hammami, A.Masmoudi, eds.), Springer Proc. in Math.& Stat., vol. 131 (2015), p. 101
 55. H.Najar, M.Raissi, *Math.Meth.Appl.Sci.* **39** (2016), 92
 56. R.Assel, M.Ben Salah, *Serdica Math.J.* **42** (2016), 43
 57. Chia Wei Hsu et al., *Nature Rev. Materials* **1** (2016), 16048
 58. A.Hänel, T.Weidl, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.315
 59. L.Kumar et al., *Eur.Phys.J.Plus* **132** (2017), 285
 60. F.Bakharev, S.Matveenko, S.Nazarov, *Z.Anal.Anw.* **36** (2017), 329
 61. B.M.Brown, V.Hoang, M.Plum, M.Radosz, I.Wood, *J.London Math.Soc.* **95** (2017), 942
- P. Exner, R. Gawlista, P. Šeba, M. Tater: *Point interactions in a strip*, *Ann. Phys.* **252** (1996), 133-179.
1. G.Vattay et al., *Chaos, Fractals & Solitons* **8** (1997), 1031
 2. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000

4. G.Cattapan, E.Maglione, *Am.J.Phys.* **71** (2003), 903
 5. E.Granot, *Europhys.Lett.* **68** (2004), 860
 6. V.A.Margulis, M.A. Pyataev, *Phys.Rev.* **B72** (2005), 075312
 7. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 8. O.Olendski, L.Mikhailovska, *J.Phys.* **A40** (2007), 4609
 9. Ph.Blanchard, R.Figari, A.Mantile, *J.Math.Phys.* **48** (2007), 082108
 10. P.N.Racec, E.R.Racec, H.Neidhardt, *Phys.Rev.* **B79** (2009), 155305
 11. H.Najar, O.Olendski, *J. Phys.* **A44** (2011), 305304
 12. F.Erman, O.T.Turgut, *J. Phys.* **A46** (2013), 055401
 13. A.F.Sadreev, *J.Opt.Soc.Amer.* **A33** (2016), 1277
 14. F.Erman, *Int.J.Geom.Meth.Mod.Phys.* **14** (2017), 1750011
- P. Exner: *Weakly coupled states on branching graphs*, *Lett. Math. Phys.* **38** (1996), 313–320.
1. V.Kostyřkin, R.Schrader, *J.Phys.* **A32** (1999), 595
 2. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 4. N.E.Hurt, *Rev.Math.Phys.* **13** (2001), 1459
 5. P.Kurasov, F.Stenberg, *J.Phys.* **A35** (2002), 101
 6. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 7. T.Cheon, *Pramana* **59** (2002), 311
 8. J.Boman, P.Kurasov, *Adv.Appl.Math.* **35** (2005), 58
 9. V.N.Pivovarchik, *Funct.Anal.Appl.* **39** (2005), 148
 10. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 11. V.Pivovarchik, *Math.Nachr.* **280** (2007), 1595
 12. H.Kovařík, *SIAM J.Math.Anal.* **39** (2007), 1135
 13. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 14. A.M.Gomilko, V.N.Pivovarchik, *Ukrain.Math.J.* **60** (2008), 1360
 15. V.Pivovarchik, *J.Phys.* **A42** (2009), 375213
 16. T.Ekholm, A.Enblom, H.Kovařík, *J.Diff.Eq.* **248** (2010), 850
 17. Ch.Texier, *HDR thèse*, Université Paris Sud, 2010
 18. I.Kac, V.Pivovarchik, *J.Phys.* **A44** (2011), 105301
 19. O.Turek, T.Cheon, *Europhys.Lett.* **98** (2012), 50005
 20. S.Demirel, *PhD thesis*, Universität Stuttgart 2012
 21. S.Demirel, *J.Math.Phys.* **53** (2012), 082110
 22. V.Pivovarchik, O.Taystruk, *Meth.Funct.Anal.Topol.* **18** (2012), 189
 23. T.Cheon, *Int.J.Adv.Syst.Meas.* **5** (2012), 34
 24. O.Turek, T.Cheon, *Ann.Phys.* **330** (2013), 104
 25. V.Pivovarchik, N.Rozhenko, *Appl.Anal.* **92** (2013), 784
 26. O.Turek, T.Cheon, *J.Math.Phys.* **54** (2013), 032104
 27. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
 28. T.Cheon, in “Nonlinear phenomena in complex systems: from nano to macro scale”, *Proceedings of a NATO Workshop (Samarkand 2013)*, Springer 2014; p. 179
 29. R.Adami, C.Cacciapuoti, D.Finco, D.Noja, *Ann.Inst.H.Poincaré* **C31** (2014), 1289
- P. Exner, P. Šeba: *Point interactions in dimension two and three as models of small scatterers*, *Phys. Lett.* **A222** (1996), 1–4.
1. G.Vattay et al., *Chaos, Fractals & Solitons* **8** (1997), 1031
 2. A.Lupu-Sax, *PhD thesis*, Harvard University 1998
 3. M.Sieber, *J.Phys.* **A32** (1999), 7679
 4. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000

5. M.Sieber, *J.Phys.* **A33** (2000), 6263
 6. J.Cserti et al., *Phys.Rev.Lett.* **85** (2000), 3704
 7. S.Correia, *J.Phys.* **A34** (2001), 9349
 8. O.Giraud, *PhD thesis*, Université Paris XI, 2002
 9. P.L.Christiansen et al., *J.Phys.* **A36** (2003), 7589
 10. F.Bentosela, in *Spectral Theory of Schrödinger Operators*, (R.del Rio, C.Villegas-Blas, eds.), Contemporary Math., vol.340, AMS 2004; p.217
 11. J.Kuhn et al., *J.Opt.* **B7** (2005), S77
 12. S.Gerritsen, G.E.W.Bauer, *Phys.Rev.* **E73** (2006), 016618
 13. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
 14. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A39** (2006), 9329
 15. D.Laurent, O.Legrand, F.Mortessagne, *Phys.Rev.* **E74** (2006), 046219
 16. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A40** (2007), 5443
 17. M.Sieber, *Nonlinearity* **20** (2007), 2721
 18. C.P.Dettmann et al., *Europhys.Lett.* **82** (2008), 34002
 19. T.Tudorovskiy, R.Höhm, U.Kuhl, H.-J.Stöckmann, *J.Phys.* **A41** (2008), 275101
 20. J.Kühn, *PhD thesis*, Universidade Federal do Paraná 2008
 21. A.V.Zolotaryuk, *J.Phys.* **A43** (2010), 105302
 22. A.V.Zolotaryuk, *Phys.Lett.* **A374** (2010), 1636
 23. P.A.Martin, A.Maurel, W.J.Parnell, *J.Acoust.Soc.Am.* **128** (2010), 571
 24. F.M.Hales, M.Sieber, H.Waalkens, *J.Phys.* **A44** (2011), 155305
 25. A.V.Zolotaryuk, Y. Zolotaryuk, *J.Phys.* **A44** (2011), 375305
 26. S.Lj.S.Kočinac, V.Milanović, *Mod.Phys.Lett.* **B26** (2012), 1250092
 27. H.Ueberschär, *Phil.Trans.Roy.Soc.* **A372** (2014), 20120509
 28. F.Loran, A.Mostafazadeh, *Phys.Rev.* **A93** (2016), 042707
 29. J.Griffin, *J.Math.Phys.* **57** (2016), 082101
 30. M.Bialous et al., *Phys. Rev.* **E94** (2016), 042211
 31. P.Kurlberg, H.Ueberschär, *J.Eur.Math.Soc.* **19**, 2947
- P. Exner, R. Gawlista: *Band spectra of rectangular graph superlattices*, *Phys. Rev.* **B53** (1996), 7275–7286.
1. T.Kottos, U.Smilansky, *Phys.Rev.Lett.* **79** (1997), 4964
 2. V.A.Geyler, I.Yu.Popov, *Rep.Math.Phys.* **42** (1998), 347
 3. V.A.Geyler, K.V.Pankrashkin, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.259
 4. T.Kottos, U.Smilansky, *Ann.Phys.* **274** (1999), 76
 5. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 6. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 7. V.Pivovarchik, *SIAM J.Math.Anal.* **32** (2001), 81
 8. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 9. P.Kuchment, *Waves in Random Media* **14** (2004), S107
 10. K.Pankrashkin, *Lett.Math.Phys.* **77** (2006), 139
 11. C.Fox, V.Oleinik, B.Pavlov, in *Recent Advances in Differential Equations*, (N.Chernov et al., eds.), Contemp.Math., vol. 412, AMS 2004, p.151
 12. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 13. J.M.Harrison et al., *J.Phys.* **A40** (2007), 7597
 14. P.Kuchment, O.Post, *Commun.Math.Phys.* **275** (2007), 805
 15. V.Pivovarchik, *Math.Nachr.* **280** (2007), 1595
 16. N.Goldman, P.Gaspard, *Phys.Rev.* **B77** (2008), 024302
 17. Y.Latushkin, V.Pivovarchik, *Int.Eq.Oper.Theory* **61** (2008), 365
 18. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291

19. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 20. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 21. R.Band, G.Berkolaiko, *Phys.Rev.Lett.* **111** (2013), 130404
 22. E.Pelantová, Š.Starosta, M.Znojil, *J.Phys.* **A49** (2016), 155201
- P. Exner, S.A. Vugalter: *Asymptotic estimates for bound states in quantum waveguides coupled laterally through a narrow window*, Ann. Inst. H. Poincaré: Phys. Théor. **65** (1996), 109–123.
1. I.Yu.Popov, *Rep.Math.Phys.* **40** (1997), 521
 2. K.Yoshitomi, *J.Diff.Eq.* **142** (1998), 123
 3. F.Kleespies, in *Mathematical Results in Quantum Mechanics*, (J.Dittrich et al., eds.), Birkhäuser, Basel 1999; p.275
 4. I.Yu.Popov, *Tech.Phys.Lett.* **25** (1999), 106
 5. I.Yu.Popov, *Rep.Math.Phys.* **43** (1999), 427
 6. I.Yu.Popov, S.V.Frolov, *Tech.Phys.Lett.* **26** (2000), 8
 7. I.Yu.Popov, *Phys.Lett.* **A269** (2000), 148
 8. S.V.Frolov, I.Yu.Popov, *J.Math.Phys.* **41** (2000), 4391
 9. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 10. F.Kleespies, P.Stollmann, *Rev.Math.Phys.* **12** (2000), 1345
 11. I.Yu.Popov, *Appl.Math.Lett.* **14** (2001), 109
 12. B.S.Pavlov, I.Yu.Popov, S.V.Frolov, *Europ.J.Phys.* **B21** (2001), 283
 13. I.Yu.Popov, *Rep.Math.Phys.* **48** (2001), 277
 14. I.Yu.Popov, *J.Math.Phys.* **43** (2002), 215
 15. O.P.Mel'nychuk, I.Yu.Popov, *Tech.Phys.Lett.* **28** (2002), 340
 16. I.Yu.Popov, *Theor.Math.Phys.* **131** (2002), 791
 17. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 18. K.Yoshitomi, in *Mathematical Results in Quantum Mechanics*, (R.Weder et al., eds.), Contemporary Math., vol.307, AMS 2002; p.333
 19. I.Yu.Popov, S.V.Frolov, *J.Phys.* **A36** (2003), 1655
 20. I.Yu.Popov, S.V.Frolov, *Zap.Nauch.Sem. POMI* **300** (2003), 221
 21. I.Yu.Popov, in *Mathematical Aspects of Wave Propagation*, Univ. Jyväskylä 2003; p.813
 22. C.M.Linton, K.Ratcliffe, *J.Math.Phys.* **45** (2004), 1359
 23. R.R.Gadyshin, *C.R.Mecanique* **332** (2004), 647
 24. H.Hawkins, L.Parnowski, *Mathematika* **51** (2004), 171
 25. D.Borisov, T.Ekholm, H.Kovařík, *Ann.H.Poincaré* **6** (2005), 327
 26. O.P.Mel'nychuk, I.Yu.Popov, *J.Math.Phys.* **46** (2005), 073501
 27. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 28. E.Maglione, L.S.Ferreira, G.Cattapan, *J.Phys.* **A39** (2006), 1207
 29. H.Linde, *J.Phys.* **A 39** (2006), 5105
 30. D.I. Borisov, *Math.Sbornik* **197** (2006), 475
 31. C.Forster, T.Weidl, *Quart.J.Mech.Appl.Math.* **59** (2006), 399
 32. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
 33. O.Olendski, L.Mikhailovska, *J.Phys.* **A40** (2007), 4609
 34. L.V.Gortinskaya, I.Yu.Popov, *Acoust.Phys.* **53** (2007), 421
 35. H.Najar, *J.Stat.Phys.* **128** (2007), 1093
 36. M.I.Gavrilov et al., *Phys.Part.Nucl.Lett.* **4** (2007), 237
 37. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
 38. H.Najar, S.Ben Hariz, M.Ben Salah, *Math.Phys.Anal.Geom.* **13** (2010), 19
 39. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E81** (2010), 036606
 40. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
 41. K.Pankrashkin, *J.Phys.* **A43** (2010), 474030

42. I.Yu.Popov, A.I.Trifanov, E.S.Trifanova, *Comp.Math.Math.Phys.* **50** (2010), 1830
 43. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
 44. H.Najar, O.Olendski, *J. Phys.* **A44** (2011), 305304
 45. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
 46. S.I.Popov, M.I.Gavrilov, I.Yu.Popov, *Phys.Scripta* **86** (2012), 035003
 47. S.A.Nazarov, *Math.Notes* **93** (2013), 60
 48. S.I.Popov, *Nanosystems* **4** (2013), 173
 49. I.F.Melikhov, I.Yu.Popov, *Nanosystems* **4**(4) (2013), 559
 50. I.F.Melikhov, I.Yu.Popov, *J.Phys.:Conf.Ser.* **541** (2014), 012099
 51. Ph.Briet, J.Dittrich, E.Soccorsi, *J.Math.Phys.* **55** (2014), 112104
 52. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 53. I.F.Melikhov, I.Yu.Popov, *Chinese J.Phys.* **53** (2015), UNSP 060820
 54. D.Borisov, *J.Math.Sci.* **205** (2015), 141
 55. D.Borisov, *J.Math.Sci.* **210** (2015), 590
 56. H.Najar, in *Applied Mathematics in Tunisia* (A.Jeribi, M.A.Hammami, A.Masmoudi, eds.), Springer Proc. in Math.& Stat., vol. 131 (2015), p. 101
 57. H.Najar, M.Raissi, *Math.Meth.Appl.Sci.* **39** (2016), 92
 58. M.P.Faleeva, I.Yu.Popov, *Proc Days on Diffraction* (2016), 133
 59. M.Faleeva, I.Popov, *ITM Web Conf.* **9** (2017), 01009
 60. A.Hänel, T.Weidl, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.315
 61. L.Kumar et al., *Eur.Phys.J.Plus* **132** (2017), 285
- J. Asch, P. Duclos, P. Exner: *Stark–Wannier Hamiltonians with pure point spectrum*, Proceedings of the Conference on Differential Equations, Asymptotic Analysis, and Mathematical Physics (Potsdam 1996); Akademie Verlag, Berlin 1997; pp. 10–25
1. A.S.Mazmanishvili, I.A.Knyaz, *J.Nano.El.Phys.* **8** (2016), 04014
- P. Exner: *A duality between Schrödinger operators on graphs and certain Jacobi matrices*, Ann. Inst. H. Poincaré: Phys. Théor. **66** (1997), 359–371.
1. J.Desbois, *J.Phys.* **A33** (2000), L63
 2. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 4. M.Hirokawa, *J.Funct.Anal.* **174** (2000), 322
 5. N.E.Hurt, *Rev.Math.Phys.* **13** (2001), 1459
 6. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 7. P.Kuchment, *Waves in Random Media* **14** (2004), S107
 8. K.Pankrashkin, *Lett.Math.Phys.* **77** (2006), 139
 9. O.Post, *Ann. H.Poincaré* **7** (2006), 933
 10. P.Kuchment, B.Vainberg, *Commun.Math.Phys.* **268** (2006), 673
 11. K.Pankrashkin, *J.Math.Phys.* **47** (2006), 112105
 12. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 13. J.Brüning, V.Geyler, K.Pankrashkin, *Commun.Math.Phys.* **269** (2007), 87
 14. U.Smilansky, *J.Phys.* **A40** (2007), F621
 15. Ch.Texier, *J.Phys.* **A41** (2008), 085207
 16. M.Lawniczak et al, *Phys.Rev.* **E77** (2008), 056210
 17. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 18. K.Pankrashkin, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.459
 19. O.Post, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.469
 20. F.Lledó, O.Post, *J.Math.Anal.Appl.* **348** (2008), 806

21. D.Lenz, C.Schubert, P.Stollmann, *Integral Eq. Operator Theory* **62** (2008), 541
 22. O.Post, *Proc. "Mathematische Analyse von Evolution, Information und Komplexität"*, Univ. Ulm 2008, p. 145
 23. G.Berkolaiko, J.M.Harrison, J.H.Wilson, *J.Phys.* **A42** (2009), 025204
 24. U.Smilansky, *J.Phys.* **A42** (2009), 035101
 25. F.Klopp, K.Pankrashkin, *Lett.Math.Phys.* **87** (2009), 99
 26. V.Rabinovich, S.Roch, *Func.Anal.Appl.* **43** (2009), 151
 27. M.Lawniczak et al., *Phys.Scripta* **T135** (2009), 014050
 28. A.Boutet de Monvel, D.Lenz, P.Stollmann, *Israel J.Math.* **173** (2009), 189
 29. M.Lawniczak et al., *Acta Phys. Polonica* **A116** (2009), 749
 30. M.Lawniczak et al., *Phys.Rev.* **E81** (2010), 046204
 31. Ch.Textier, *J.Phys.* **A43** (2010), 425203
 32. A.Iantschenko, E.Korotyaev, *Math.Model.Nat.Phenomena* **5** (2010), 175
 33. E.L.Korotyaev, A.Kutsenko, *Asympt.Anal.* **66** (2010), 187
 34. E.L.Korotyaev, A.Kutsenko, in *Differential Equations: Advances in Mathematics Research*, vol.10, Nova Sci.Publ. 2010; p.273
 35. Ch.Textier, *HDR thèse*, Université Paris Sud, 2010
 36. I.Kac, V.Pivovarchik, *J.Phys.* **A44** (2011), 105301
 37. M.Lawniczak et al., *Phys.Scripta* **T143** (2011), 014014
 38. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 39. M.Lawniczak, S.Bauch, O.Hul, L.Sirko, *Phys.Scripta* **147** (2012), 014018
 40. K. Pankrashkin, *J.Math.Anal.Appl.* **396** (2012), 640
 41. V.Pivovarchik, O.Taystruk, *Meth.Funct.Anal.Topol.* **18** (2012), 189
 42. Yu.Ershova, A.V.Kiselev, *Meth.Funct.Anal.Topol.* **18** (2012), 343
 43. K.Pankrashkin, *J.Funct.Anal.* **265** (2013), 2910
 44. V.Lotoreichik, S.Simonov, *Rep.Math.Phys.* **74** (2014), 45
 45. Yu.Yu.Ershova, I.I.Karpenko, A.V.Kiselev, *Carpathian Math.Publ.* **6** (2014), 230
 46. Yu.Ershova, Av.Kiselev, *Meth.Funct.Anal.Topol.* **20** (2014), 134
 47. V.Pivovarchik, O.Taystruk, *Meth.Funct.Anal.Topol.* **20** (2014), 164
 48. D.U.Matrasulov, J.R.Yusupov, K.K.Sabirov, Z.A.Sobirov, *Nanosystems* **6** (2015), 173
 49. Yu.Ershova, I.I.Karpenko, A.V.Kiselev, *Mathematika* **62** (2016), 210
 50. D.Lenz, K.Pankrashkin, *Int.Eq.Operator Theory* **84** (2016), 151
 51. Yu.Ershova, I.I.Karpenko, A.V.Kiselev, *J.Spect.Theory* **6** (2016), 43
 52. A.E.Rastegin, *J.Phys.* **A50** (2017), 215204
- P. Exner: *Magneto-resonances on a lasso graph*, *Found. Phys.* **27** (1997), 171–190.
1. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 2. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 3. Ch.Textier, G.Montambaux, *J.Phys.* **A34** (2001), 10307
 4. N.E.Hurt, *Rev.Math.Phys.* **13** (2001), 1459
 5. Ch.Textier, *J.Phys.* **A35** (2002), 3389
 6. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 7. V.Pivovarchik, *Math.Nachr.* **280** (2007), 1595
 8. A.M.Gomilko, V.N.Pivovarchik, *Ukrain.Math.J.* **60** (2008), 1360
 9. Ch.Textier, *HDR thèse*, Université Paris Sud, 2010
 10. P.A.Jacquet, *Phys.Rev.* **A84** (2011), 062126
 11. C.Cacciapuoti, D.Finco, D.Noja, *Phys.Rev.* **E91** (2015), 013206
 12. D.Noja, D.Pelinovsky, G.Shaikhova, *Nonlinearity* **28** (2015), 2343
 13. B.Dietz, A.Richter, R.Samajdar, *Phys.Rev.* **E92** (2015), 022904
 14. M.Möller, V.Pivovarchik: *Spectral Theory of Operator Pencils, Hermite-Biehler Functions, and their Applications*, OTAA, vol. 246; Birkhäuser, Basel 2015

15. J.Lipovský, *J.Phys.* **A49** (2016), 375202
16. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265

P. Exner, S.A. Vugalter: *Bounds states in a locally deformed waveguide: the critical case*, *Lett. Math. Phys.* **39** (1997), 59–68.

1. K.Yoshitomi, *J.Diff.Eq.* **142** (1998), 123
2. E.B.Davies, L.Parnovski, *Quart.J.Mech.Appl.Math.* **58** (1998), 477
3. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999
4. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
5. P.Kuchment, *Waves in Random Media* **12** (2002), R1
6. K.Krejčířík, R.Tiedra de Aldecoa, *J.Phys.* **A37** (2004), 5449
7. R.R.Gadyl'shin, *C.R.Mecanique* **332** (2004), 647
8. M.Y.Planida, *Doklady Math.* **71** (2005), 466
9. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
10. R.R.Gadyl'shin, *Teor.Mat.Fiz.* **145** (2005), 1678
11. R.Tiedra de Aldecoa, *PhD thesis*, Université de Genève 2005
12. C.Forster, T.Weidl, *Quart.J.Mech.Appl.Math.* **59** (2006), 399
13. V.V.Grushin, *Math. Notes* **81** (2007), 291
14. V.V.Grushin, *Math.Notes* **83** (2008), 463
15. V.V.Grushin, *Math.Notes* **85** (2009), 661
16. R.Gadyl'shin, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 135
17. S.Nazarov, *Teor.Mat.Fiz.* **167** (2011), 606
18. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
19. M.I.Gavrilov, I.Yu.Popov, S.I.Popov, *Vest. SPITMO*, No. 71 (2011), 45
20. S.I.Popov, M.I.Gavrilov, I.Yu.Popov, *Phys.Scripta* **86** (2012), 035003
21. G.Cardone, S.A.Nazarov, K.Ruotsalainen, *ESAIM* **47** (2013), 305
22. S.I.Popov, *Nanosystems* **4** (2013), 173
23. I.F.Melikhov, I.Yu.Popov, *Nanosystems* **4**(4) (2013), 559
24. G.Cardone, *Proc. AMS* **1558** (2013), 1809
25. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *ZAMM* **94** (2014), 477
26. I.F.Melikhov, I.Yu.Popov, *J.Phys.:Conf.Ser.* **541** (2014), 012099
27. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
28. I.F.Melikhov, I.Yu.Popov, *Chinese J.Phys.* **53** (2015), UNSP 060820
29. A.R.Bikmetov, R.R.Gadyl'shin, *Russ.J.Math.Phys.* **23** (2016), 1
30. P.Amore, F.M.Fernández, C.P.Hofmann, *Eur.J.Phys.* **B89** (2016), 163
31. S.A.Nazarov, K.Ruotsalainen, M.Silvola, *J.Elast.* **124** (2016), 193

P. Exner, P. Šeba: *Resonance statistics in a microwave cavity with a thin antenna*, *Phys. Lett.* **A228** (1997), 146–150.

1. T.Cheon, T.Shigehara, *Phys.Lett.* **A233** (1997), 11
2. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
4. J.Brüning, V.A.Geyler, *J.Math.Phys.* **44** (2003), 371
5. I.V.Blinova, I.Yu.Popov, M.M.Sandler, *Russ.J.Math.Phys.* **14** (2007), 388
6. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
7. T.Tudorovskiy et al, *J.Phys.* **A41** (2008), 275101
8. T.Tudorovskiy, U.Kuhl, H.-J.Stöckmann, *New J.Phys.* **12** (2010), 123021
9. T.Tudorovskiy, U.Kuhl, H.-J.Stöckmann, *J.Phys.* **A44** (2011), 135101

10. O.Turek, T.Cheon, *J.Math.Phys.* **54** (2013), 032104
 11. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 12. R.Carlone, A.Posilicano, *Phys.Lett.* **A381** (1976), 1076
 13. A.López-Yela, J.M.Pérez-Pardo, *J.Comput.Phys.* **347** (2017), 235
- P. Exner, S.A. Vugalter: *Bound–state asymptotic estimates for window–coupled Dirichlet strips and layers*, *J. Phys.* **A30** (1997), 7863–7878.
1. I.Yu.Popov, *Tech.Phys.Lett.* **25** (1999), 106
 2. I.Yu.Popov, *Rep.Math.Phys.* **43** (1999), 427
 3. J.T.Londergan, J.P.Carini, D.P.Murdock: *Binding and scattering in two-dimensional systems*, LNP m60, Springer, Berlin 1999
 4. I.Yu.Popov, S.V.Frolov, *Tech.Phys.Lett.* **26** (2000), 8
 5. I.Yu.Popov, *Phys.Lett.* **A269** (2000), 148
 6. S.V.Frolov, I.Yu.Popov, *J.Math.Phys.* **41** (2000), 4391
 7. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 8. I.Y.Popov, *Appl.Math.Lett.* **14** (2001), 109
 9. B.S.Pavlov, I.Yu.Popov, S.V.Frolov, *Europ.J.Phys.* **B21** (2001), 283
 10. I.Yu.Popov, *Tech.Phys.Lett.* **27** (2001), 855
 11. I.Yu.Popov, *Rep.Math.Phys.* **48** (2001), 277
 12. I.Yu.Popov, *J.Math.Phys.* **43** (2002), 215
 13. O.P.Mel’nichuk, I.Yu.Popov, *Tech.Phys.Lett.* **28** (2002), 340
 14. I.Yu.Popov, *Theor.Math.Phys.* **131** (2002), 791
 15. I.Yu.Popov, S.V.Frolov, *J.Phys.* **A36** (2003), 1655
 16. I.Yu.Popov, S.V.Frolov, *Zap.Nauch.Sem. POMI* **300** (2003), 221
 17. I.Yu.Popov, in *Mathematical Aspects of Wave Propagation*, Univ. Jyvaskyla 2003; p.813
 18. C.M.Linton, K.Ratcliffe, *J.Math.Phys.* **45** (2004), 1359
 19. C.M.Linton, K.Ratcliffe, *J.Math.Phys.* **45** (2004), 1380
 20. O.P.Mel’nichuk, I.Yu.Popov, *J.Math.Phys.* **46** (2005), 073501
 21. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 22. L.V.Gortinskaya, I.Yu.Popov, E.S.Tesovskaya, *Proc of “Days on Diffraction 2005”*, art. 1613392, p.116
 23. E.Magliione, L.S.Ferreira, G.Cattapan, *J.Phys.* **A39** (2006), 1207
 24. I.Yu.Popov, E.S.Tesovskaya, *Teor.Mat.Fiz.* **146** (2006), 361
 25. H.Linde, *J.Phys.* **A 39** (2006), 5105
 26. D.I. Borisov, *Math.Sbornik* **197** (2006), 475
 27. D.I. Borisov, *J.Phys.* **A40** (2007), 5045
 28. M.I.Gavrilov et al., *Phys.Part.Nucl.Lett.* **4** (2007), 237
 29. D.Borisov, G.Cardone, *J.Phys.* **A42** (2009), 365205
 30. I.Yu.Popov, A.I.Trifanov, E.S.Trifanova, *Comp.Math.Math.Phys.* **50** (2010), 1830
 31. D.Borisov, R.Bunoiu, G.Cardone, *Ann. H. Poincaré* **11** (2010), 1591
 32. H.Najar, O.Olendski, *J. Phys.* **A44** (2011), 305304
 33. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
 34. D.G.Matveev, I.Yu.Popov, *Nanosystems* **3** (2012), 6
 35. S.A.Nazarov, *Math.Notes* **93** (2013), 60
 36. D.Borisov, R.Bunoiu, G.Cardone, *ZAMP* **64** (2013), 439
 37. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 38. D.Borisov, *J.Math.Sci.* **205** (2015), 141
 39. D.Borisov, *J.Math.Sci.* **210** (2015), 590
 40. H.Najar, M.Raissi, *Math.Meth.Appl.Sci.* **39** (2016), 92
 41. R.Assel, M.Ben Salah, *Serdica Math.J.* **42** (2016), 43
 42. D.I.Borisov, M.Znojil, *Sbornik Math.* **208**, (2017), 173
 43. A.Hänel, T.Weidl, in *Functional Analysis and Operator Theory for Quantum Physics*

(J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.315

- J. Asch, P. Duclos, P. Exner: *Stark–Wannier Hamiltonians with pure point spectrum*, Proceedings of the Conference on Differential Equations, Asymptotic Analysis, and Mathematical Physics (Potsdam 1996); Akademie Verlag, Berlin 1997; pp. 10–25.
1. M.Maioli, A.Sacchetti, *J.Phys.* **A31** (1998), 1115
 2. F.Bentosela, Ph.Briet, *Ann.Inst.H.Poincaré* **71** (1999), 497
 3. A.Kiselev, *Trans.Am.Math.Soc.* **352** (2000), 243
 4. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 5. G.Perelman, *Commun.Math.Phys.* **234** (2003), 359
 6. M.Christ, A.Kiselev, *Ark.Mat.* **41** (2003), 1
 7. G.Perelman, *Asympt.Anal.* **44** (2005), 1
 8. C.R.de Oliveira, M.S.Simsen, *Math.Probl.Eng.* **2009** (2009), 902506
- J. Asch, P. Duclos, P. Exner: *Stability of driven systems with growing gaps. Quantum rings and Wannier ladders*, *J. Stat. Phys.* **92** (1998), 1053–1069.
1. P.Briet, *Rev.Math.Phys.* **13** (2001), 587
 2. O.Bourget, *J.Math.Anal.Appl.* **276** (2002), 28
 3. G.Perelman, *Commun.Math.Phys.* **234** (2003), 359
 4. O.Bourget, J.S.Howland, A.Joye, *Commun.Math.Phys.* **234** (2003), 191
 5. M.Maioli, A.Sacchetti, *J.Phys.* **A37** (2004), 2371
 6. A.Joye, *Ann. H.Poincaré* **5** (2004), 347
 7. T.Cheon, T.Shigehara, *J. Phys.Soc.Japan* **73** (2004), 2896
 8. G.Perelman, *Asympt.Anal.* **44** (2005), 1
 9. E.Hamza, A.Joye, G.Stolz, *J.Math.Phys.Anal.Geom.* **12** (2009), 381
 10. C.R.de Oliveira, M.S.Simsen, *Math.Probl.Engineering* **2009** (2009), 902506
 11. A.Joye, M.Merkli, *J.Stat.Phys.* **140** (2010), 1025
 12. A.Joye, *Commun.Math.Phys.* **307** (2011), 65
 13. V.Lotoreichik, *Opuscula Math.* **31** (2011), 615
 14. M.Motta Ferraz, *PhD thesis*, Universidade Federal de Itajubá 2012
 15. E.Hamza, A.Joye, *Ann. H.Poincaré* **13** (2012), 1767
 16. J.-C.Cuenin, Ch.Tretter, *J.Math.Anal.Appl.* **441** (2016), 235
- P. Duclos, P. Exner, B. Meller: *Exponential bounds on curvature–induced resonances in a two–dimensional Dirichlet tube*, *Helv. Phys. Acta* **71** (1998), 133–162.
1. L.Nedelec, *Commun.Part.Diff.Eq.* **22** (1997), 143
 2. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 3. T.Christiansen, *Ann.H.Poincaré* **3** (2002), 895
 4. K.Krejčířík, R.Tiedra de Aldecoa, *J.Phys.* **A37** (2004), 5449
 5. T.Christiansen, *J.Funct.Anal.* **216** (2004), 172
 6. R.Tiedra de Aldecoa, *PhD thesis*, Université de Genève 2005
 7. H.Kovařík, A.Sacchetti, *J.Phys.* **A40** (2007), 8371
 8. H.Isozaki, Y.Kurylev, M.Lassas, *J.Funct.Anal.* **258** (2010), 2060
 9. L.A.Cano Garcia, *PhD thesis*, Universität Bonn 2010
 10. C.R. de Oliveira, *Rep. Math. Phys.* **67** (2011), 1
 11. V.S.Rabinovich, *Mem.Diff.Eq.Math.Phys.* **53** (2011), 127
 12. G.Burlak, Y.Karlovich, V.Rabinovich, *Commun.Math.Anal.Conf.* **3** (2011), 50
 13. V.Kalvin, *SIAM J.Math.Anal.* **44** (2012), 355
 14. V.S.Rabinovich, R.Castillo-Peréz, F.Urbano-Alt., *Math.Meth.Appl.Sci.* **36** (2013), 761
 15. V.Kalvin, *Comm.Contemp.Math.* **15** (2013), 1250065
 16. L.A.Cano-García, in *Geometric and Topological Methods for Quantum Field Theory*

- (A.Cardona, I.Contreras, A.F.Reyes-Lega, eds.), Cambridge Univ. Press 2013; p. 307
17. M.Belov, G.Krylov, *Phys.Scripta* **89** (2014), 075804
- P. Exner: *Laterally coupled quantum waveguides*, Advances in Differential Equations and Mathematical Physics (Atlanta 1997); AMS “Contemporary Mathematics” Series, vol. 217, Providence, R.I., 1998; pp. 69–82.
1. H.Hawkins, L.Parnowski, *Mathematika* **51** (2004), 171
 2. D.G.Matveev, I.Yu.Popov, *Tech.Phys.Lett.* **35** (2009), 1007
 3. D.G.Matveev, *Vest. SPITMO*, No. 70 (2011), 29
 4. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
 5. D.G.Matveev, I.Yu.Popov, *Nanosystems* **3** (2012), 6
- P. Exner, M. Tater: *Evanescent modes in a multiple scattering factorization*, Czech. J. Phys. **48** (1998), 617–624.
1. V.Kostykin, R.Schrader, *J.Phys.* **A32** (1999), 595
 2. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 3. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 4. V.Kostykin, R.Schrader, *J.Math.Phys.* **42** (2001), 1563
 5. R.Khachatryan, R.Schrader, A.Sedrakyan, *J.Phys.* **A42** (2009), 304019
 6. I.Y.Popov, A.I.Popov, *Rep.Math.Phys.* **80** (2017), 1
- F. Bentosela, P. Exner, V.A. Zagrebnov: *A mechanism of porous–silicon luminescence*, Phys. Rev. **B53** (1998), 1382–1385.
1. D.P.Yu, Z.G.Bai, J.J.Wang, *Phys.Rev.* **B59** (1999), R2498
 2. M.Cruz et al., *Phys.Rev.* **B59** (1999), 15381
 3. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 4. D.P.Yu et al., in *Semiconductor Quantum Dots*, Material Res.Soc.Symp.Proc. (S.C.Moss et al., eds) **571** (2000), 19
 5. A.A.Lisachenko, A.M.Aprelev, *Tech.Phys.Lett.* **27** (2001), 134
 6. A.A.Lisachenko et al., *Phys.Low Dim. Struct.* **1-2** (2002), 71
 7. H.L.Hsiao, A.B.Yang, H.L.Hwang, *Appl.Surf.Sci.* **212** (2003), 73
 8. M.Kapoor, K.Singh, R.K.Pandey, *Physica* **E23** (2004), 183
 9. J.Sun, Y.W.Lu, X.W.Du, *Mat.Lett.* **59** (2005), 2394
- P. Exner, A.F. Sadreev, P. Šeba, P. Středa, P. Feher: *Strength of topologically induced magnetic moments in a quantum device*, Phys. Rev. Lett. **80** (1998), 1710–1713.
1. S.Nakanishi, M.Tsukada, *Jpn.J.Appl.Phys.* **2-37** (1998), L1400
 2. E.Šimánek, *Phys.Rev.* **B59** (1999), 10152
 3. S.Nakanishi, M.Tsukada, *Surface Sci.* **438** (1999), 1
 4. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 5. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 6. Y.F.Chen, K.F.Huang, *Phys.Rev.* **E68** (2003), 066207
 7. L.G.Wang, Y.Li, D.W.Yu, *Acta Phys. Sinica* **54** (2005), 233
 8. L.G.Wang, D.W.Yu, Y.Li, K.Tagami, *Chinese J.Chem.Phys.* **18** (2005), 533
 9. W.Acevedo, T.Dittrich, *J.Phys.* **A42** (2009), 045102
 10. P.Antonelli, P.Marcati, *Commun.Math.Phys.* **287** (2009), 657
- F. Bentosela, P. Exner, V.A. Zagrebnov: *Electron trapping by a current vortex*, J. Phys. **A31** (1998), L305–311.
1. R.M.Cavalcanti, C.A.A.de Carvalho, *J.Phys.* **A31** (1998), 7061
 2. V.M.Tkachuk, S.I.Vakarchuk, *J.Phys.* **A34** (2001), 653

- P. Exner, P. Šeba: *Probability current tornado loops in three-dimensional scattering*, Phys. Lett. **A245** (1998), 35–39.
1. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 2. A.G.M.Schmidt, B.K.Cheng, M.G.E.da Luz, *Phys.Rev.* **A66** (2002), 062712
- F. Bentosela, P. Exner, V.A. Zagrebnov: *Anomalous electron trapping by magnetic flux tubes and electric current vortices*, Proceedings of the Conference “Mathematical Results in Quantum Mechanics” (Prague 1998); *Operator Theory : Advances and Applications*, Birkhäuser Verlag, Basel 1999; pp. 191–196.
1. V.M.Tkachuk, S.I.Vakarchuk, *Ukr.J.Phys.Studies* **9** (1999), 291
- F. Bentosela, R.M. Cavalcanti, P. Exner, V.A. Zagrebnov: *Anomalous electron trapping by localized magnetic fields*, J. Phys. **A32** (1999), 3029–3039.
1. V.M.Tkachuk, S.I.Vakarchuk, *Ukr.J.Phys.Studies* **9** (1999), 291
 2. V.M.Tkachuk, S.I.Vakarchuk, *J.Phys.* **A34** (2001), 653
 3. H.Falomir, G.Pisani, *J.Phys.* **A34** (2001), 4143
 4. N.Ueki, *Japan J.Math.* **28** (2002), 261
 5. R.R.Gadyl’shin, *Teor.Mat.Fiz.* **138** (2004), 33
 6. N.Ueki, *J.Math. Kyoto Univ.* **44** (2004), 615
 7. A.R.Bikmetov, D.I.Borisov, *Teor.Mat.Fiz.* **145** (2005), 1691
 8. D.I.Borisov, R.R.Gadyl’shin, *Teor.Mat.Fiz.* **147** (2006), 496
 9. A.R.Bikmetov, R.R.Gadyl’shin, *Math.Notes* **79** (2006), 729
 10. N.Ueki, *Osaka J.Math.* **45** (2008), 565
 11. A.Bikmetov, R.Gadyl’shin, *Russ.J.Math.Phys.* **17** (2010), 19
 12. L.E.Oxman, *J. High Energy Phys.* **2011** (7), 078
 13. R.Frank, S.Morozov, S.Vugalter, *Calc. Var. & PDE* **40** (2011), 253
 14. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
 15. I.Kh.Khusnullin, *PhD thesis*, Ufa University 2015
 16. T.Ekholm, R.L.Frank, H.Kovařík, *Calc. Var. & PDE* **53** (2015), 781
- P. Exner, H. Grosse: *Some properties of the one-dimensional generalized point interactions (a torso)*, mp_arc 99–390; math-ph/9910029.
1. F.Gieres, *Rep.Progr.Phys.* **63** (2000), 1893
 2. I.Tsutsui, T.Fülöp, T.Cheon, *J.Math.Phys.* **42** (2001), 5687
 3. P.Kurasov, J.Larson, *J.Math.Anal.Appl.* **266** (2002), 127
 4. T.Nagasawa, M.Sakamoto, K.Takanaga, *Phys.Lett.* **B562** (2003), 358
 5. T.Nagasawa, M.Sakamoto, K.Takanaga, *Phys.Lett.* **B583** (2004), 357
 6. M.Hallnäs, E.Langmann, *J.Math.Phys.* **46** (2005), 052101
 7. M.Hallnäs, E.Langmann, C.Paufler, *J.Phys.* **A38** (2005), 4957
 8. T.Nagasawa, M.Sakamoto, K.Takanaga, *J.Phys.* **A38** (2005), 8053
 9. M.J.Rave, W.C.Kerr, *Eur.J.Phys.* **B45** (2005), 473
 10. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
 11. V.Caudrelier, N.Crampe, *Nucl.Phys.* **B783** (2006), 351
 12. F.A.B.Coutinho et al., *Canad.J.Phys* **84** (2006), 991
 13. T.Fülöp, I. Tsutsui, *J.Phys.* **A40** (2007), 4585
 14. M.Hallnäs, *PhD thesis*, KTH Stockholm 2007
 15. R.Adami, D.Noja, *J.Phys.* **A42** (2009), 495302
 16. K.Yoshitomi, *J.Australian Math.Soc.* **87** (2009), 421
 17. Y.Furuhashi et al., *J.Phys.* **A43** (2010), 354010
 18. S.De Vincenzo, C.Sánchez, *Canad.J.Phys.* **88** (2010), 809
 19. Y.Shikano, M.Hirokawa, *J.Phys.:Conf.Ser.* **302** (2011), 012044

20. R.Adami, D.Noja, *Commun.Math.Phys.* **318** (2013), 247
 21. R.Adami, D.Noja, N.Visciglia, *Discr.Cont.Dyn.Syst.* **B18** (2013), 1155
 22. R.Band, G.Berkolaiko, *Phys.Rev.Lett.* **111** (2013), 130404
 23. M.Hirokawa, T.Kosaka, *SIAM J.Appl.Math.* **73** (2013), 2247
 24. S.Ohya, *Ann.Phys.* **351** (2014), 900
 25. S.Ohya, *J.Phys.: Conf.Ser.* **563** (2014), 012021
 26. R.-J.Lange, *J.Math.Phys.* **56** (2015), 122105
 27. M.A.Lee et al., *Front.Phys.* (2016), doi: 10.3389/fphy.2016.00010
 28. K.Konno, T.Nagasawa, R.Takahashi, *Ann.Phys.* **375** (2016), 91
 29. M.A.Lee, J.T.Lunardi, L.A.Manzoni, E.A.Nyquist, *Front.Phys.* **4** (2016), 10
- P. Exner, E.M. Harrell, M. Loss: *Optimal eigenvalues for some Laplacians and Schrödinger operators depending on curvature*, Proceedings of the Conference “Mathematical Results in Quantum Mechanics” (QMath7); Operator Theory: Advances and Applications, Birkhäuser Verlag, Basel 1999; pp. 47–53.
1. P.Freitas, *Commun.Math.Phys.* **217** (2001), 375
 2. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 3. A.B.Mikhailova, B.S.Pavlov, in *Operator Methods in Ordinary and PDE* (S.Albeverio et al., eds.), Operator Theory: Adv.Appl. **132** (2002), 287
 4. A.Burchard, L.E.Thomas, *Commun. PDE* **28** (2003), 271
 5. A.Burchard, L.E.Thomas, *J.Geom.Anal.* **15** (2005), 543
 6. H.Linde, *Proc.Am.Math.Soc.* **134** (2006), 3629
 7. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
 8. M.Ashbaugh, R.Benguria, in *Festschrift in Honor of B.Simon’s 60th Birthday* (F.Gesztesy et al., eds), *Proc.Symp.Pure Math.* **76**, AMS, Providence, 2007; p.105
 9. R.D.Benguria, H.Linde, B.Loewe, *Bull.Math.Sci.* **2** (2012), 1
 10. A.El Soufi, *Indiana Univ.Math.J.* **58** (2009), 335
 11. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 12. V.Stefanopoulos, *J.Diff.Eqs* **260** (2016), 115
- P. Exner, M. Hirokawa, O. Ogurusu: *Anomalous Pauli electron states for magnetic fields with tails*, *Lett. Math. Phys.* **50** (1999), 103–114.
1. V.A.Geyler, P.Šťovíček, *Rev.Math.Phys.* **16** (2004), 851
 2. N.Ueki, *J.Math. Kyoto Univ.* **44** (2004), 615
- P. Exner, D. Krejčířík: *Quantum waveguide with a lateral semitransparent barrier: spectral and scattering properties*, *J. Phys.* **A32** (1999), 4475–4494.
1. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 2. S.Albeverio, P.Kurasov: *Singular Perturbations of Differential Operators*, Cambridge University Press, Cambridge 2000
 3. A.Asłanyan, E.B.Davies, *J.Comp.Phys.* **174** (2001), 327
 4. A.A.Arsen’ev, *Sbornik Math.* **194** (2003), 1
 5. M.Jílek, *SIGMA* **3** (2007), 108
 6. P.Duclos, H.Hogreve, *J.Phys.* **A43** (2010), 474018
 7. S.I.Popov, M.I.Gavrilov, I.Yu.Popov, *Phys.Scripta* **86** (2012), 035003
 8. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201
 9. S.Kondej, *J.Phys.* **A50** (2017), 315203
- P. Exner, A. Joye, H. Kovařík: *Edge currents in the absence of edges*, *Phys. Lett.* **A264** (1999), 124–130.
1. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 2. Ch.Ferrari, *PhD thesis*, EPFL Lausanne 2003

3. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 4. J.-M.Combes, F.Germinet, P.Hislop, in *Mathematical Physics of Quantum Mechanics* (J.Asch, A.Joye, eds.), Springer Lect. Notes Phys., vol. 690, Berlin 2006; p. 307
 5. P.Hislop, E.Soccorsi, *Rev.Math.Phys.* **20** (2008), 71
 6. B.Helffer, K.Pankrashkin, *Asymp.Anal.* **63** (2009), 1
 7. H.Fakhri, B.Mojaveri, M.A.G.Nobary, *Rep.Math.Phys.* **66** (2010), 299
 8. E.Soccorsi, *HDR thèse*, Université d'Aix-Marseille 2012
- P. Exner, S.A. Vugalter: *On the number of particles that a curved quantum waveguide can bind*, *J. Math. Phys.* **40** (1999), 4630–4638.
1. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 2. H.Linde, *J.Phys. A* **39** (2006), 5105
 3. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 4. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
 5. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
 6. M.I.Gavrilov, I.Yu.Popov, S.I.Popov, *Vest. SPITMO*, No. 71 (2011), 45
 7. S.I.Popov, M.I.Gavrilov, I.Yu.Popov, *Phys.Scripta* **86** (2012), 035003
 8. S.I.Popov, M.I.Gavrilov, I.Yu.Popov, *Proc of "Days on Diffraction 2012"*, art. 6402779, p. 203
 9. S.I.Popov, *Nanosystems* **4** (2013), 173
 10. I.F.Melikhov, I.Yu.Popov, *Nanosystems* **4**(4) (2013), 559
 11. A.Del Campo, M.G.Boshier, A.Saxena, *Scientific Reports* **4** (2014), 5274
 12. I.F.Melikhov, I.Yu.Popov, *J.Phys.:Conf.Ser.* **541** (2014), 012099
 13. I.F.Melikhov, I.Yu.Popov, *Chinese J.Phys.* **53** (2015), UNSP 060820
- P. Exner, V.A. Geyler: *Berry phase in magnetic systems with point interactions*, *J. Geom. Phys.* **36** (2000), 178–197.
1. J.R.Choi, *Physica* **A310** (2002), 109
 2. J.H.Gweon, J.R.Choi, *J. Korean Phys.Soc.* **42** (2003), 325
 3. N.Askour, Z.Mouyan, *Phys.Scripta* **68** (2003), 32
 4. J.R.Choi, *Mod.Phys.Lett.* **17** (2003), 1365
 5. J.Chee, *Ann.Phys.* **324** (2009), 97
- T. Cheon, P. Exner, P. Šeba: *Wave function shredding by sparse potential barriers*, *Phys. Lett.* **A277** (2000), 1–6.
1. C.R.de Oliveira, G.A.Pellegrino, *J.Phys.* **A34** (2001), L239
 2. P.L.Christiansen et al., *J.Phys.* **A36** (2003), 7589
 3. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
 4. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A39** (2006), 9329
 5. A.V.Zolotaryuk, P.L.Christiansen, S.V.Iermakova, *J.Phys.* **A40** (2007), 5443
 6. F.M.de Andrade, *PhD thesis*, Universidad Federal do Paraná 2009
 7. A.V.Zolotaryuk, *J.Phys.* **A43** (2010), 105302
 8. A.V.Zolotaryuk, *Phys.Lett.* **A374** (2010), 1636
 9. O.Mustafa, S.H.Mazharimoussavi, *Phys.Scripta* **82** (2010), 065013
 10. A.V.Zolotaryuk, Y. Zolotaryuk, *J.Phys.* **A44** (2011), 375305
 11. V.Lotoreichik, *Opuscula Math.* **31** (2011), 615
 12. S.Lj.S.Kočinac, V.Milanovič, *Mod.Phys.Lett.* **B26** (2012), 1250092
 13. S.Lj.S.Kočinac, V.Milanovič, *Mod.Phys.Lett.* **B26** (2012), 1250177
 14. S.Man'ko, *J.Math.Phys.* **53** (2012), 123521
 15. S.Lj.S.Kočinac, V.Milanovič, *Mod.Phys.Lett.* **B27** (2013), 1350001
 16. A.V.Zolotaryuk, *Phys.Rev.* **A87** (2013), 052121

17. N.C.Dias, C.Jorge, J.N.Prata, *J.Diff.Eqs* **260** (2016), 6548
 18. F.M.Andrade et al., *Phys.Rep.* **647** (2016), 1
- P. Duclos, P. Exner, D. Krejčířik: *Locally curved quantum layers*, Ukrainian J. Phys. **45** (2000), 595–601.
1. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 2. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 3. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 4. I.M.Mladenov, *Suppl.Circ.Mat.Palermo.* **72** (2004), 159
 5. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 6. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
 7. I.F.Melikhov, I.Yu.Popov, *Nanosystems* **4**(4) (2013), 559
 8. I.F.Melikhov, I.Yu.Popov, *J.Phys.:Conf.Ser.* **541** (2014), 012099
 9. I.F.Melikhov, I.Yu.Popov, *Chinese J.Phys.* **53** (2015), UNSP 060820
- P. Exner, V.A. Geyler: *Berry phase for a potential well transported in a homogeneous magnetic field*, Phys. Lett. **A276** (2000), 16–18.
1. J.R.Choi, *Physica* **A310** (2002), 109
 2. J.R.Choi, *Mod.Phys.Lett.* **17** (2003), 1365
 3. A.Spall Ricci, *N.Cim.* **B119** (2005), 1215
 4. W.L.Yang, J.L.Chen, *Phys. Rev.* **A75** (2007), 024101
 5. H.Fakhri, B.Mojaveri, M.A.G.Nobary, *Rep.Math.Phys.* **66** (2010)
 6. M.Campisi, S.Denisov, P.Hänggi, *Phys.Rev.* **A86** (2012), 032114
- P. Exner, H. Kovařík: *Magnetic strip waveguides*, J. Phys. **A33** (2000), 3297–3311.
1. S.Shirai, *Publ.RIMS* **39** (2003), 297
 2. S.Shirai, *J.Math.Phys.* **46** (2005), 052112
 3. D.Krejčířik, J.Kříž, *Publ. RIMS* **41** (2005), 757
 4. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 5. H.Fakhri, B.Mojaveri, M.A.G.Nobary, *Rep.Math.Phys.* **66** (2010)
 6. P.Hislop, N.Popoff, E.Soccorsi, *Ann.H.Poincaré* **17** (2016), 37
 7. P.Miranda, *Ann.H.Poincaré* **17** (2016), 1713
 8. M.Tušek, *J.Phys.* **A49** (2016), 365205
- P. Exner: *Point interactions in a tube*, in “Stochastic Processes: Physics and Geometry: New Interplays II” (A volume in honor of S. Albeverio; F. Gesztesy et al., eds.); CMS Conference Proceedings, vol. 29, Providence, R.I. 2000; pp. 165–174.
1. N.Hurt: *Mathematical Physics of Quantum Wires and Devices*, Kluwer, Dordrecht 2000
 2. F.Erman, O.T.Turgut, *J. Phys.* **A46** (2013), 055401
- S.A. Albeverio, P. Exner, V.A. Geyler: *Geometric phase related to point-interaction transport on a magnetic Lobachevsky plane*, Lett. Math. Phys. **55** (2001), 9–16.
1. Z.Mouayn, *Bull.Belg.Math.Soc.* **12** (2005), 249
 2. O.Lisovyy, *J.Math.Phys.* **48** (2007), 052112
 3. Z.Mouayn, B.Mellal, *Appl. of Math.* **57** (2007), 97
- P. Šeba, P. Exner, K.N. Pichugin, A. Vyhnal, P. Středa: *Two-component interference effect: model of a spin-polarized transport*, Phys. Rev. Lett. **86** (2001), 1598–1601.
1. C.M.Hu et al., *Phys.Rev.* **B63** (2001), 125333
 2. J.Nitta et al., *Physica* **E10** (2001), 467
 3. C.M.Hu, T.Matsuyama, *Phys.Rev.Lett.* **87** (2001), 066803
 4. P.R.Hammar, M.Johnson, *Appl.Phys.Lett.* **79** (2001), 2591

5. A.L.Efros, E.I.Rashba, M.Rosen, *Phys.Rev.Lett.* **87** (2001), 206601
 6. V.N.Gridnev, *JETP Lett.* **74** (2001), 380
 7. I.Zutić, *J.Supercond.* **15** (2002), 15
 8. C.M.Hu et al., *Physica* **E12** (2002), 395
 9. J.Nitta et al., *Physica* **E12** (2002), 753
 10. T.Matsuyama et al., *Phys.Rev.* **B65** (2002), 155322
 11. C.M.Hu et al., *J.Appl.Phys.* **91** (2002), 7251
 12. M.W.Lu et al., *Eur.J.Phys.* **B27** (2002), 565
 13. M.Johnson, J.Byers, *Phys.Rev.* **B67** (2003), 125112
 14. B.K.Nikolić, J.K.Freericks, in *Towards the controllable quantum states* (S.Takayanagi, J.Nitta, eds.), World Scientific, Singapore 2003
 15. Wei Wu et al., *J.Phys.: Cond.Mat.* **16** (2004), 125
 16. H.Su, M.Y.Gu, *Phys.Lett.* **A335** (2005), 316
 17. M.W.Lu, *Canad.J.Phys.* **83** (2005), 219
 18. M.W.Lu, *Surf.Rev.Lett.* **12** (2005), 67
 19. J.-S.Jeong, H.-W.Lee, *Phys.Rev.* **B74** (2006), 195311
 20. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A40** (2007), 249
 21. S.Y.Cho, *Phys.Rev.* **77** (2008), 245326
 22. J.S.Jeong, H.W.Lee, *J.Korean Phys.Soc.* **53** (2008), 1020
 23. R.Figari, A.Teta, *Quantum Dynamics of a Particle in a Tracking Chamber*, SpringerBriefs, Berlin 2014; p. 63
 24. R.Carlone, R.Figari, C.Negulescu, *Comm.Comp.Phys.* **18** (2015), 247
- D. Borisov, P. Exner, R. Gadyl'shin, D. Krejčířík: *Bound states in weakly deformed strips and layers*, Ann. H. Poincaré **2** (2001), 553–572.
1. T.Tsurumi, M.Wadati, *J.Phys.Soc.Japan* **70** (2001), 512
 2. A.Aslyan, E.B.Davies, *J.Comp.Phys.* **174** (2001), 327
 3. T.Ekholm, H.Kovařík, *Comm. PDE* **30** (2005), 539
 4. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
 5. V.V.Grushin, *Math. Notes* **81** (2007), 291
 6. H.Kovařík, A.Sacchetti, *J.Phys.* **A40** (2007), 8371
 7. M.Jílek, *SIGMA* **3** (2007), 108
 8. V.V.Grushin, *Math.Notes* **83** (2008), 463
 9. H.Kovařík, S.Vugalter, *J.Math.Anal.Appl.* **345** (2008), 566
 10. M.D.Malykh, *Comp.Math.Math.Phys.* **49** (2009), 279
 11. V.V.Grushin, *Math.Notes* **85** (2009), 661
 12. S.A.Nazarov, *Acoust.Phys.* **56** (2010), 1004
 13. S.Nazarov, *Teor.Mat.Fiz.* **167** (2011), 606
 14. S.Nazarov, *St.Petersburg Math.J.* **23** (2012), 571
 15. J.H.Videman, S.A.Nazarov, V.C.Piat, *J.Math.Sci.* **185** (2012), 536
 16. S.Nazarov, *St.Petersburg Math.J.* **23** (2012), 1023
 17. G.Cardone, S.A.Nazarov, K.Ruotsalainen, *ESAIM* **47** (2013), 305
 18. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
 19. G.Cardone, *Proc. AMS* **1558** (2013), 1809
 20. J.Stockhofe, P.Schmelcher, *Phys.Rev.* **A89** (2014), 033630
 21. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *ZAMM* **94** (2014), 477
 22. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 23. S.A.Nazarov, K.Ruotsalainen, M.Silvola, *J.Elast.* **124** (2016), 193
 24. S.A.Nazarov, *J.Math.Sci.* **219** (2016), 994
 25. I.Yu.Popov, A.I.Popov, *J.King Saud Univ.Sci.* **29** (2017), 133
 26. A.I.Popov, I.Y.Popov, D.A.Gerasimov, *AIP Conf.Proc.* **1863** (2017), 390002
 27. B.M.Brown, V.Hoang, M.Plum, M.Radosz, I.Wood, *J.London Math.Soc.* **95** (2017), 942

P. Duclos, P. Exner, D. Krejčířík: *Bound states in curved quantum layers*, Commun. Math. Phys. **223** (2001), 13–28.

1. J.Dittrich, J.Kříž, *J.Phys.* **A35** (2002), L269
2. M.K.Kostov, M.W.Cole, G.D.Mahan, *Phys.Rev.* **66** (2002), 075407
3. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
4. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
5. S.Matsutani, *J.Geom.Symm.Phys.* **2** (2004), 18
6. I.Veselić, in *Spectral Theory of Schrödinger Operators*, (R.del Rio, C.Villegas-Blas, eds.), Contemporary Math., vol.340, AMS 2004; p.97
7. N.T.Bagraev et al., *Phys.Rev.* **B71** (2005), 165308
8. D.Gridin, R.V.Craster, A.T.I.Adamou, *Proc.Roy.Soc.* **A461** (2005), 1181
9. D.Gridin, R.V.Craster, A.T.I.Adamou, *Proc.Roy.Soc.* **A461** (2005), 4057
10. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
11. C.Lin, Z.Q.Lu, *Commun.PDE* **31** (2006), 1529
12. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
13. H.Taira, H.Shima, *J.Phys.* **G41** (2007), 1142
14. C.Lin, Z.Q.Lu, *J.Math.Phys.* **48** (2007), 053522
15. V.Atanasov, R.Dandoloff, *Phys.Lett.* **A371** (2007), 118
16. V.Atanasov, R.Dandoloff, in *Geometry, Integrability and Quantization* (I.M.Mladenov, ed.), SOFTEX, Sofia 2008; p.135
17. I.Veselić: *Existence and Regularity Properties of the Integrated Density of States of Random Schrödinger Operators*, LNP 1917, Springer 2008
18. H.Kovařík, S.Vugalter, *J.Math.Anal.Appl.* **345** (2008), 566
19. V.Atanasov, R.Dandoloff, *Phys.Lett.* **A372** (2008), 6141
20. L.Cardoulis, M.Cristofol, P.Gaitan, *J.Phys.:Conf.Ser.* **124**, 012015
21. L.Cardoulis, M.Cristofol, P.Gaitan, *J. Inverse Ill-Posed Probl.* **16** (2008), 127
22. R.V.Craster, S.Guenneau, S.D.M.Adams, *Phys.Rev.* **B79** (2009), 045129
23. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
24. S.Albeverio et al., *Int.J.Theor.Phys.* **49** (2010), 728
25. Z.Q.Lu, J.Rowlet, *J.Math.Phys.* **53** (2012), 073519
26. L.Cardoulis, M.Cristofol, *Int.J.Math.Math.Sci.* **2012** (2012), 651390
27. J.Mao, *J.Math.Anal.Appl.* **397** (2013), 791
28. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **339** (2013), 266
29. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
30. N.Raymond, *Math.Models Meth.Appl.Sci.* **24** (2014), 2785
31. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
32. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
33. M.Dauge, Ourmières-Bonafos, N.Raymond, *Commun.Pure Appl.Anal.* **14** (2015), 1239
34. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
35. V.Atanasov, *J.Phys.Soc.Japan* **86** (2017), 074004

P. Duclos, P. Exner, B. Meller: *Open quantum dots: resonances from perturbed symmetry and bound states in strong magnetic fields*, Rep. Math. Phys. **47** (2001), 253–267.

1. D.Borisov, T.Ekholm, H.Kovařík, *Ann.H.Poincaré* **6** (2005), 327
2. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
3. G.Annino et al., *Phys.Rev.* *B73* (2006), 125308
4. H.Kovařík, A.Sacchetti, *J.Phys.* **A40** (2007), 8371
5. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A42** (2009), 035202
6. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A43** (2010), 474009
7. C.Cacciapuoti, R.Carlone, R.Figari, *J.Math.Phys.* **52** (2011), 083515
8. V.S.Rabinovich, *Mem.Diff.Eq.Math.Phys.* **53** (2011), 127
9. V.S.Rabinovich, *Doklady Math.* **84** (2011), 685

10. G.Burlak, Y.Karlovich, V.Rabinovich, *Commun.Math.Anal.Conf.* **3** (2011), 50
 11. V.S.Rabinovich, R.Castillo-Peréz, F.Urbano-Alt., *Math.Meth.Appl.Sci.* **36** (2013), 761
 12. H.Najar, in *Applied Mathematics in Tunisia* (A.Jeribi, M.A.Hammami, A.Masmoudi, eds.), Springer Proc. in Math.& Stat., vol. 131 (2015), p. 101
 13. H.Najar, M.Raïssi, *Math.Meth.Appl.Sci.* **39** (2016), 92
 14. Chia Wei Hsu et al., *Nature Rev. Materials* **1** (2016), 16048
 15. N.Rivera et al., *Nature Sci.Rep.* **6** (2016), 33394
- P. Exner: *Bound states of infinite curved polymer chains*, Lett. Math. Phys. **57** (2001), 87–96.
1. P.L.Christiansen et al., *J.Phys.: Cond.Mat.* **13** (2001), 1181
 2. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 3. N.T.Bagraev et al., *Phys.Rev.* **B71** (2005), 165308
 4. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 5. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
- P. Exner, T. Ichinose: *Geometrically induced spectrum in curved leaky wires*, J. Phys. **A34** (2001), 1439–1450.
1. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 2. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 3. Yu.B.Gaidei et al., *New.J.Phys.* **7** (2005), 52
 4. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 5. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 6. Y.B.Gaidei et al., in *Nonlinear Waves: Classical and Quantum Aspects*, (F.K.H.Abdullaev, V.V.Konotop, eds), NATO Sci.Series II, vol. 153 (2005), 107
 7. H.D.Cornean, P.Duclos, B.Ricaud, *Few Body Syst.* **38** (2006), 125
 8. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 9. S.Kondej, I.Veselić, *Ann.H.Poincaré* **8** (2007), 109
 10. B.M.Brown, M.S.P.Eastham, I.G.Wood, *Arch. der Math.* **90** (2008), 554
 11. B.M.Brown, M.S.P.Eastham, I.G.Wood, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.331
 12. H.D.Cornean, P.Duclos, B.Ricaud, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.657
 13. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Phys.* **A42** (2009), 055207
 14. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Math.Anal.Appl.* **354** (2009), 24
 15. M.S.P.Eastham, *J.Assoc. Arab Univ.* **7** (2009), 1
 16. I.S.Lobanov, V.I.Lotoreichik, I.Yu.Popov, *Teor.Mat.Fiz.* **162** (2010), 332
 17. S.Kondej, M.R.Dudek, *Rev.Adv.Mater.Sci.* **23** (2010), 126
 18. S.Kondej, *Comp.Meth.Sci.Tech.* **16** (2010)
 19. I.S.Lobanov, V.Yu.Lotoreichik, I.Yu.Popov, *TMF* **162** (2010), 332
 20. D.A.Eremin, I.Yu.Popov, *Nanosystems* **2**(2) (2011), 15
 21. J.Cisło, S.Kondej, *Rep.Math.Phys.* **68** (2011), 225
 22. S.Kondej, J.Vaz, *J.Math.Phys.* **53** (2012), 033503
 23. D.A.Eremin, D.A.Ivanov, I.Yu.Popov, *Z.Anal.Anw.* **31** (2012), 125
 24. B.T.Kaynak, O.T.Turgut, *J. Phys.* **A45** (2012), 265202
 25. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
 26. S.Kondej, *Ann.H.Poincaré* **13** (2012), 1451
 27. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 28. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 29. V.Lotoreichik, *Nanosystems* **4**(2) (2013), 166
 30. J.Behrndt, M.Langer, V.Lotoreichik, *Int.Eq. Oper.Theory* **77** (2013), 1
 31. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
 32. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831

33. V.Duchêne, N.Raymond, *J.Phys.* **A47** (2014), 155203
 34. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201
 35. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
 36. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 37. V.Lotoreichik, J.Rohleder, *Oper. Theory Adv.Appl.* **247** (2015), 173
 38. J.Behrndt, G.Grubb, M.Langer, V.Lotoreichik, *J.Spect.Theory* **5** (2015), 697
 39. V.Lotoreichik, J.Rohleder, in Proc. IWOTA 2013 (T.Bhattacharyya, M.Dritschel, eds.), *Oper.Theory Adv.Appl.* **247** (2015), 173
 40. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 41. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 42. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 43. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 44. F.Erman, *Turkish J.Phys.* **40** (2016), 316
 45. S.Kondej, D.Krejčířík, *J.Math.Anal.Appl.* **446** (2017), 1328
 46. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 47. F.Erman, M.Gadella, H.Uncu, *Phys.Rev.* **D95** (2017), 045004
 48. J.Behrndt, M.Langer, V.Lotoreichik, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.129
 49. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
 50. J.Behrndt, M.Malamud, H.Neidhardt, *J.Funct.Anal.* **273** (2017), 1970
- P. Exner, A. Joye: *Avoided crossings in mesoscopic systems: electron propagation on a non-uniform magnetic cylinder*, *J. Math. Phys.* **42** (2001), 4707–4738.
1. T.Tsurumi, M.Wadati, *J.Phys.Soc.Japan* **70** (2001), 1512
 2. C.Fermanian Kammerer, C.Lasser, *J.Math.Phys.* **44** (2003), 507
 3. Y.Colin de Verdière, *Ann. de l'Inst.Fourier* **53** (2003), 1023
 4. C.Fermanian Kammerer, *Math.Nachr.* **271** (2004), 22
- P. Exner, A. Joye, H. Kovařík: *Magnetic transport in a straight parabolic channel*, *J. Phys.* **A34** (2001), 9733–9752.
1. J.-M.Combes et al., in *Mathematical Results in Quantum Mechanics*, (R.Weder et al., eds.), Contemporary Math., vol.307, AMS 2002; p.69
 2. Ch.Ferrari, N.Macris, in *Operator Algebras and Mathematical Physics* (J.-M.Combes et al., eds.), Theta, Bucharest 2003; p.115
 3. Ch.Ferrari, N.Macris, *J.Math.Phys.* **44** (2003), 3734
 4. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 5. J.-M.Combes, F.Germinet, P.Hislop, in *Mathematical Physics of Quantum Mechanics* (J.Asch, A.Joye, eds.), Springer Lect. Notes Phys., vol. 690, Berlin 2006; p. 307
 6. J.Brüning, V.Geyler, K.Pankrashkin, *Rev.Math.Phys.* **20** (2008), 1
 7. P.Hislop, E.Soccorsi, *Rev.Math.Phys.* **20** (2008), 71
 8. P.Hislop, E.Soccorsi, *Ann. H.Poincaré* **9** (2008), 1141
 9. Ph.Briet et al., in *Spectral and Scattering Theory for Quantum Magnetic Systems* (P.Briet et al., eds.), Contemporary Math., vol.500, AMS, Providence 2008; p.33
 10. E.Soccorsi, *HDR thèse*, Université d'Aix-Marseille 2012
 11. M.Tušek, *J.Phys.* **A49** (2016), 365205
- P. Exner, D. Krejčířík: *Waveguides coupled through a semitransparent barrier: a Birman-Schwinger analysis*, *Rev. Math. Phys.* **13** (2001), 307–334.
1. A.Aslyan, E.B.Davies, *J.Comp.Phys.* **174** (2001), 327
 2. P.Duclos, H.Hogreve, *J.Phys.* **A43** (2010), 474018
 3. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201

4. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
 5. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
- P. Exner, D. Krejčířík: *Bound states in mildly curved layers*, *J. Phys.* **A34** (2001), 5969–5985.
1. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 2. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E67** (2003), 056625
 3. Yu.B.Gaidei et al., *New.J.Phys.* **7** (2005), 52
 4. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 5. Y.B.Gaidei et al., in *Nonlinear Waves: Classical and Quantum Aspects*, (F.K.H.Abdullaev, V.V.Konotop, eds), NATO Sci.Series II, vol. 153 (2005), 107
 6. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
- P. Exner, H. Neidhardt, V.A. Zagrebnov: *Potential approximations to δ' : an inverse Klauder phenomenon with norm-resolvent convergence*, *Commun. Math. Phys.* **224** (2001), 593–612.
1. R.O.Hryniv, Y.V.Mykytyuk, *Meth.Funct.Anal.Topol.* **7** (2001), 31
 2. P.Kurasov, J.Larson, *J.Math.Anal.Appl.* **266** (2002), 127
 3. T.Cheon, *Pramana* **59** (2002), 311
 4. P.L.Christiansen et al., *J.Phys.* **A36** (2003), 7589
 5. W.B.Huddell, R.J.Hughes, *J.Math.Anal.Appl.* **282** (2003), 512
 6. T.Fülöp, I.Tsutsui, T.Cheon, *J.Phys.Soc.Japan* **72** (2003), 2737
 7. T.Cheon, I.Tsutsui, T.Fülöp, *Phys.Lett.* **A330** (2004), 338
 8. T.Cheon, T.Shigehara, *J. Phys.Soc.Japan* **73** (2004), 2896
 9. F.Dufey, S.H.Lin, *J.Phys.* **A38** (2005), 3857
 10. M. Harmer, *J.Phys.* **A39** (2006), 14329
 11. K.Yoshitomi, *Math.Proc. Cambridge Phil.Soc.* **143** (2007), 185
 12. S.Fassari, F.Rinaldi, *Rep.Math.Phys.* **64** (2009), 367
 13. C.R.de Oliveira: *Intermediate Spectral Theory and Quantum Dynamics*, Birkhäuser, Basel 2009
 14. S. Fassari, F.Rinaldi, *Rep.Math.Phys.* **64** (2009), 367
 15. Yu.D.Golovaty, S.S.Man'ko, *Ukr.Math.Bull.* **6** (2009), 173
 16. Yu.D.Golovaty, R.O.Hryniv, *J.Phys.* **A43** (2010), 155204
 17. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
 18. Yu.Golovaty, *Int.Eq.Oper.Theory* **75** (2013), 341
 19. R.Adami, D.Noja, *Commun.Math.Phys.* **318** (2013), 247
 20. R.Adami, D.Noja, N.Visciglia, *Discr.Cont.Dyn.Syst.* **B18** (2013), 1155
 21. Y.D.Golovaty, R.O.Hryniv, *Proc.Roy.Soc.Edinburgh* **143** (2013), 791
 22. S.Albeverio, S.Fassari, F.Rinaldi, *J.Phys.* **A46** (2013), 385305
 23. J.F.Brasche, L.P.Nizhnik, *Meth.Funct.Anal.Topol.* **19** (2013), 4
 24. J.F.Brasche, L.Nizhnik, *Operators and Matrices* **7** (2013), 887
 25. S.S.Poghosyan, T.Cheon, *J.Phys.Soc.Japan* **83** (2014), 044004
 26. D.Mugnolo, S.Nicaise, *J.Diff.Eq.* **256** (2014), 2115
 27. J.Eckhardt, A.Kostenko, M.Malamud, G.Teschl, *J.Diff.Eq.* **257** (2014), 415
 28. R.Adami, D.Noja, *Mat.Model.Nat.Phenomena* **9** (2014), 1
 29. A.V.Zolotaryuk, Y.Zolotaryuk, *Phys.Lett.* **A379** (2015), 511
 30. S.Albeverio, S.Fassari, F.Rinaldi, *J.Phys.* **A48** (2015), 185301
 31. T.Cheon, S.S.Poghosyan, *J.Phys.Soc.Japan* **84** (2015), 064006
 32. D.Barseghyan, A.Khrabustovskyi, *J.Phys.* **A48** (2015), 255201
 33. A.V.Zolotaryuk, *J.Phys.* **A48** (2015), 255304
 34. S.Albeverio, S.Fassari, F.Rinaldi, *J.Phys.* **A49** (2016), 025302
 35. M.Jex, V.Lotoreichik, *J.Math.Phys.* **57** (2016), 022101
 36. N.C.Dias, C.Jorge, J.N.Prata, *J.Diff.Eqs* **260** (2016), 6548
 37. S.Albeverio, S.Fassari, F.Rinaldi, *Nanosystems* **7** (2016), 803

38. V Koshmanenko, M Dudkin: *The Method of Rigged Spaces in Singular Perturbation Theory of Self-Adjoint Operators*, Birkhäuser 2016
39. A.V.Zolotaryuk, *J.Phys.* **A50** (2017), 225303
- P. Exner, K. Němcová: *Bound states in point interaction star graphs*, *J. Phys.* **A34** (2001), 7783–7794.
1. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 2. A.G.M.Schmidt, B.K.Cheng, M.G.E.da Luz, *J. Phys.* **A36** (2003), L545
 3. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 4. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Math.Anal.Appl.* **354** (2009), 24
 5. M.Znojil, *Int.J.Theor.Phys.* **50** (2011), 1614
 6. V.Duchêne, N.Raymond, *J.Phys.* **A47** (2014), 155203
 7. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
 8. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 9. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
 10. A.E.Rastegin, *J.Phys.* **A50** (2017), 215204
- P. Exner, M. Tater, D. Vaněk: *A single-mode quantum transport in serial-structure geometric scatterers*, *J. Math. Phys.* **42** (2001), 4050–4078.
1. J.Brüning et al., *J.Phys.* **A35** (2002), 4239
 2. J.E.Avron et al., *J.Math.Phys.* **43** (2002), 3415
 3. J.Brüning, V.A.Geyler, *J.Math.Phys.* **44** (2003), 371
 4. V.A.Geyler, V.V.Demidov, V.A.Margulis, *Tech.Phys.* **48** (2003), 661
 5. A.G.M.Schmidt, M.G.E. da Luz, *Phys.Rev.* **A69** (2004), 052708
 6. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 7. L.-F.Mao, *J.Electron Devices* **6** (2008), 182
 8. M.A.Kokoreva, V.A.Margulis, M.A.Pyataev, *Physica* **E43** (2011), 1610
 9. Yu Jiang, M. Martínez-Mares, E.Castaño, A. Robledo, *Phys.Rev.* **E85** (2012), 057202
 10. V.Domínguez-Rocha, M.Martínez-Mares, *J.Phys.* **A46** (2013), 235101
 11. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 12. R.Carlone, A.Posilicano, *Phys.Lett.* **A381** (1976), 1076
 13. I.Y.Popov, A.I.Popov, *Rep.Math.Phys.* **80** (2017), 1
- P. Exner, K. Yoshitomi: *Band gap of the Schrödinger operator with a strong δ -interaction on a periodic curve*, *Ann. H. Poincaré* **2** (2001), 1139–1158.
1. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 2. P.Kuchment, in *PDE and Inverse Problems*, (C.Conca et al., eds.), Contemp.Math., vol. 362, AMS 2004
 3. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 4. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Phys.* **A42** (2009), 055207
 5. B.T.Kaynak, O.T.Turgut, *J. Phys.* **A45** (2012), 265202
 6. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
 7. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 8. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 9. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
 10. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 11. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 12. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 13. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
- P. Exner, T. Weidl: *Lieb-Thirring inequalities on trapped modes in quantum wires*, Proceedings of the XIII International Congress on Mathematical Physics (London 2000); International

Press of Boston, 2001; pp. 437–443.

1. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 2. D.Hundertmark, in *Festschrift in Honor of B.Simon's 60th Birthday* (F.Gesztesy et al., eds), *Proc.Symp.Pure Math.* **76**, AMS, Providence, 2007; p.463
 3. H.Kovařík, S.Vugalter, *J.Math.Anal.Appl.* **345** (2008), 566
 4. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
 5. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
 6. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
 7. T.Ekholm, R.Frank, H.Kovařík, *Adv.Math.* **211** (2011), 5165
 8. G.Grillo, H.Kovařík, Y.Pinchover, *Arch.Rat.Mech.Anal.* **213** (2014), 215
- D. Borisov, P. Exner, R. Gadył'shin: *Geometric coupling thresholds in a two-dimensional strip*, *J. Math. Phys.* **43** (2002), 6265–6278.
1. H.Hawkins, L.Parnowski, *Mathematika* **51** (2004), 171
 2. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 3. L.V.Gortinskaya, I.Yu.Popov, E.S.Tesovskaya, *Proc of "Days on Diffraction 2005"*, art. 1613392, p.116
 4. E.Maglione, L.S.Ferreira, G.Cattapan, *J.Phys.* **A39** (2006), 1207
 5. I.Yu.Popov, E.S.Tesovskaya, *Teor.Mat.Fiz.* **146** (2006), 361
 6. O.Olendski, L.Mikhailovska, *J.Phys.* **A40** (2007), 4609
 7. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E81** (2010), 036606
 8. S.A.Nazarov, *Acoust.Phys.* **56** (2010), 1004
 9. H.Najar, O.Olendski, *J. Phys.* **A44** (2011), 305304
 10. S.Nazarov, *St.Petersburg Math.J.* **23** (2012), 571
 11. S.A.Nazarov, *Math.Notes* **93** (2013), 60
 12. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 13. H.Najar, in *Applied Mathematics in Tunisia* (A.Jeribi, M.A.Hammami, A.Masmoudi, eds.), Springer Proc. in Math.& Stat., vol. 131 (2015), p. 101
 14. H.Najar, M.Raissi, *Math.Meth.Appl.Sci.* **39** (2016), 92
 15. R.Assel, M.Ben Salah, *Serdica Math.J.* **42** (2016), 43
 16. S.A.Nazarov, *Algebra i Analiz* **28** (2016), 111
 17. K.Pankrashkin, *J.Math.Anal.Appl.* **449** (2017), 907
- E.N. Bulgakov, P. Exner, K.N. Pichugin, A.F. Sadreev: *Multiple bound states in scissor-shaped waveguides*, *Phys.Rev.* **B66** (2002), 155109
1. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B67** (2003), 035310
 2. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 3. G.Annino et al., *Phys.Rev.* *B73* (2006), 125308
 4. S.Longhi, *Eur.J.Phys.* **B57** (2007), 45
 5. H.D.Cornean, P.Duclos, B.Ricaud, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.657
 6. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E81** (2010), 036606
 7. E.Sadurni, W.P.Schleich, *AIP Conf.Proc.* **1323** (2010), 283
 8. P.Amore, M.Rodriguez, C.A.Terrero-Escalante, *J.Phys.* **A45** (2012), 105303
 9. A.L.Delitsyn, B.T.Nguyen, D.S.Grebenkov, *Eur.J.Phys.* **B85** (2012), 176
 10. P.Amore, F.M.Fernandez, M.Rodriguez, *Central Eur.J.Phys.* **10** (2012), 913
 11. B.T.Nguyen, *PhD thesis*, École Polytechnique, Palaiseau 2012
 12. M.Dauge, N.Raymond, *J.Math.Phys.* **53** (2012), 123529
 13. S.Bittner et al., *Phys.Rev.* **E87** (2013), 042912
 14. D.S.Grebenkov, B.T.Nguyen, *SIAM Review* **55** (2013), 601

15. M.I.Molina, Y.S.Kivshar, *Stud.Appl.Math.* **133** (2014), 337
 16. N.A.Gallo, M.I.Molina, *J.Phys.* **A48** (2015), 045302
 17. S.Longhi, *Phys.Rev.* **A93** (2016), 022102
- P. Exner, S. Kondej: *Curvature-induced bound states for a δ interaction supported by a curve in \mathbb{R}^3* , *Ann. H. Poincaré* **3** (2002), 967–981.
1. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 2. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 3. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
 4. B.T.Kaynak, O.T.Turgut, *J. Phys.* **A45** (2012), 265202
 5. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
 6. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 7. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 8. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
 9. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 10. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 11. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 12. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 13. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
- P. Exner, K. Němcová: *Quantum mechanics of layers with a finite number of point perturbations*, *J. Math. Phys.* **43** (2002), 1152–1184.
1. K.Thirulogasanthar et al., *J.Math.Phys.* **47** (2004), 2694
 2. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 3. O.Olendski, L.Mikhailovska, *J.Phys.* **A40** (2007), 4609
 4. Ph.Blanchard, R.Figari, A.Mantile, *J.Math.Phys.* **48** (2007), 082108
 5. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201
 6. S.Kondej, *J.Phys.* **A50** (2017), 315203
- P. Exner, P. Šťovíček, P.Vytrás: *Generalised boundary conditions for the Aharonov-Bohm effect combined with a homogeneous magnetic field*, *J. Math. Phys.* **43** (2002), 2151–2168.
1. M.N.Houkonnou, *J.Phys.* **A36** (2003), L523
 2. S.P.Gavrilov, D.M.Gitman, A.A.Smirnov, *J.Math.Phys.* **45** (2004), 1873
 3. T.Mine, *Ann.H.Poincaré* **6** (2005), 125
 4. J.F.Brasche, M.Melgaard, *Int.Eq.Oper.Theory* **52** (2005), 419
 5. M.Persson, *El.J.Diff.Eq.* **2005**(55) (2005), 1
 6. T.Iwai, Y.Yabu, *J.Phys.* **A39** (2006), 739
 7. T.Mine, Y.Nomura, *Rev.Math.Phys.* **18** (2006), 913
 8. O.Lisovyy, *J.Math.Phys.* **48** (2007), 052112
 9. G.Rozenblum, G.Tashchiyan, *Comm.PDE* **33** (2008), 1948
 10. T.Mine, Y.Nomura, *Ann.Inst.Fourier* **59** (2009), 659
 11. V.G.Bagrov et al., *J.Phys.* **A43** (2010), 354016
 12. C.Meresse, *PhD thesis*, Université de la Mediteranee 2010
 13. T.Mine, *Acta Polytechnica* **50** (5) (2010), 62
 14. P.P.Meira Filho, *PhD thesis*, Universidade do Sao Paulo 2010
 15. V.G.Bagrov et al., *J.Phys.* **A44** (2011), 055301
 16. K.Pankrashkin, S.Richard, *Rev.Math.Phys.* **23** (2011), 53
 17. V.G.Bagrov et al., *J.Phys.* **A45** (2012), 244008
 18. V.G.Bagrov, D.M.Gitman, A.D.Levin, *J.Math.Phys.* **53** (2012), 052304
 19. D.M.Gitman, I.V.Tyutin, B.L.Voronov: *Self-adjoint Extensions in Quantum Mechanics*, Birkhäuser, Basel 2012

- P.Exner, K.Yoshitomi: *Asymptotics of eigenvalues of the Schrödinger operator with a strong δ -interaction on a loop*, *J. Geom. Phys.* **41** (2002), 344–358.
1. G.Honnouvo, M.N.Houkonnou, *J.Phys.* **A37** (2004), 693
 2. J.F.Brasche, in *Spectral Theory of Schrödinger Operators*, (R.del Rio, C.Villegas-Blas, eds.), Contemporary Math., vol.340, AMS 2004; p.51
 3. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 4. S.Kondej, I.Veselić, *Ann.H.Poincaré* **8** (2007), 109
 5. J.Brüning, V.Geyler, K.Pankrashkin, *Rev.Math.Phys.* **20** (2008), 1
 6. S.Kondej, *Ann.H.Poincaré* **13** (2012), 1451
 7. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 8. J.Behrndt, M.Langer, V.Lotoreichik, *Int.Eq.Oper.Theory* **77** (2013), 1
 9. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
 10. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831
 11. K.Pankrashkin, *Nanosystems* **4**(4) (2013), 474
 12. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201
 13. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 14. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 15. V.Bruneau, N.Popoff, *Analysis & PDE* **9** (2016), 1259
 16. J.Behrndt, M.Malamud, H.Neidhardt, *J.Funct.Anal.* **273** (2017), 1970
 17. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
- P. Exner, K. Yoshitomi: *Persistent currents for 2D Schrödinger operator with a strong δ -interaction on a loop*, *J. Phys.* **A35** (2002), 3479–3487.
1. P.Kuchment, *Waves in Random Media* **12** (2002), R1
 2. P.Kuchment, *Waves in Random Media* **14** (2004), S107
 3. G.Honnouvo, M.N.Houkonnou, *J.Phys.* **A37** (2004), 693
 4. E.Demiralp, *J.Phys.* **A38** (2005), 4783
 5. Q.-G.Lin, X.-J.Hu, *Eur.J.Phys.* **B56** (2007), 235
 6. J.Cisło, S.Kondej, *Rep.Math.Phys.* **68** (2011), 225
 7. S.Kondej, *Ann.H.Poincaré* **13** (2012), 1451
 8. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 9. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 10. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
 11. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831
 12. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 13. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
- F. Bentosela, P. Duclos, P. Exner: *Absolute continuity in periodic thin tubes and strongly coupled leaky wires*, *Lett. Math. Phys.* **65** (2003), 75–82.
1. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 2. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 3. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 4. D.Borisov, K.Pankrashkin, *J.Phys.* **A46** (2013), 235203
 5. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 6. S.Fliss, P.Joly, *Arch.Rat.Mech.Anal.* **219** (2016), 349
 7. G.Raikov, *J.Spect.Theory* **6** (2016), 331
 8. P.Kuchment, *Bull.AMS* **53** (2016), 343
 9. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
- J. Brüning, P. Exner, V.A. Geyler: *Large gaps in point-coupled periodic systems of manifolds*, *J. Phys.* **A36** (2003), 4875–4890.

1. O.Post, *Ann. H.Poincaré* **7** (2006), 933
 2. F.Lledó, O.Post, *Rev.Math.Phys.* **20** (2008), 199
 3. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 4. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 5. K. Pankrashkin, *J.Math.Anal.Appl.* **396** (2012), 640
 6. K. Pankrashkin, *Arch. der Math.* **102** (2014), 155
 7. I.Yu.Popov, A.N.Skorynina, I.V.Blinova, *J.Math.Phys.* **55** (2014), 033504
 8. J.-C.Cuenin, Ch.Tretter, *J.Math.Anal.Appl.* **441** (2016), 235
 9. P.Kuchment, *Bull.AMS* **53** (2016), 343
 10. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
- T. Cheon, P. Exner, P. Šeba: *Extended standard map with spatio-temporal asymmetry*, J. Phys. Soc. Japan **72** (2003), 1087–1091.
1. T.Jonckheere et al., *Phys.Rev.Lett.* **91** (2003), 253003
 2. J.B.Gong, P.Brumer, *Phys.Rev.* **E70** (2004), 016202
 3. G.G.Carlo et al., *Phys.Rev.Lett.* **94** (2005), 164101
 4. J.B.Gong, P.Brumer, *Annual Rev.Quant.Chem.* **56** (2005), 1
 5. D.Poletti, G.C.Carlo, B.-W.Li, *Phys.Rev.* **E75** (2007), 011102
 6. P.H.Jones et al., *Phys.Rev.Lett.* **97** (2007), 073002
 7. A.Kenfack, J.Gong, A.K.Pattanyak, *Phys.Rev.Lett.* **100** (2008), 044104
 8. J.Wang, J.Gong, *Phys.Rev.* **E78** (2008), 036219
 9. L.Chen et al., *Physica* **A388** (2009), 4328
 10. I.Dana, V.B.Roitberg, *Phys.Rev.* **E83** (2011), 066213
 11. I.Dana, *J.Phys.: Conf.Ser.* **285** (2011), 012048
 12. L.Chen, C.Xiong, H-C.Yuan, L-H.Ding, *Physica* **A398** (2014), 83
 13. L.Chen, C.Xiong, H-C.Yuan, L-H.Ding, *Physica* **A416** (2014), 225
 14. I.Dana, *Phys.Rev.* **E91** (2015), 012914
- P. Exner: *Spectral properties of Schrödinger operators with a strongly attractive δ interaction supported by a surface*, Proceedings of the NSF Summer Research Conference (Mt. Holyoke 2002); AMS “Contemporary Mathematics” Series, vol. 339, Providence, R.I., 2003; pp. 25–36.
1. G.Dell’Antonio, L.Tenuta, *J.Phys.* **A 37** (2004), 5605
 2. M.Corregi, *PhD thesis*, ISAS Trieste 2004
 3. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 4. S.Kondej, I.Veselić, *Ann.H.Poincaré* **8** (2007), 109
 5. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 6. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **339** (2013), 266
 7. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
 8. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 9. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 10. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
- P. Exner, S. Kondej: *Bound states due to a strong δ interaction supported by a curved surface*, J. Phys. **A36** (2003), 443–457.
1. D. Lenz et al., *Markov Proc.Rel. Fields* **9** (2003), 717
 2. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 3. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
 4. D.A.Eremin, I.Yu.Popov, *Nanosystems* **2**(2) (2011), 15
 5. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 6. J.Behrndt, M.Langer, V.Lotoreichik, *Int.Eq.Oper.Theory* **77** (2013), 1
 7. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **339** (2013), 266
 8. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426

9. V.Lotoreichik, J.Rohleder, *Oper. Theory Adv.Appl.* **247** (2015), 173
 10. J.Behrndt, G.Grubb, M.Langer, V.Lotoreichik, *J.Spect.Theory* **5** (2015), 697
 11. V.Lotoreichik, J.Rohleder, in Proc. IWOTA 2013 (T.Bhattacharyya, M.Dritschel, eds.), *Oper.Theory Adv.Appl.* **247** (2015), 173
 12. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 13. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 14. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 15. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 16. J.Behrndt, M.Malamud, H.Neidhardt, *J.Funct.Anal.* **273** (2017), 1970
 17. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
- P. Exner, K. Němcová: *Magnetic layers with periodic point perturbations*, Rep. Math. Phys. **52** (2003), 255–280.
1. K.Thirulogasanthar et.al, *J.Math.Phys.* **47** (2004), 2694
 2. H.Fakhri, B.Mojaveri, M.A.G.Nobary, *Rep.Math.Phys.* **66** (2010)
- P. Exner, K. Němcová: *Leaky quantum graphs: approximations by point interaction Hamiltonians*, J. Phys. **A36** (2003), 10173–10193.
1. M.Harmer, *J.Phys.* **A38** (2005), 4875
 2. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 3. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 4. M. Harmer, *J.Phys.* **A39** (2006), 14329
 5. B.M.Brown, M.S.P.Eastham, I.G.Wood, *Arch. der Math.* **90** (2008), 554
 6. B.M.Brown, M.S.P.Eastham, I.G.Wood, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.331
 7. H.D.Cornean, P.Duclos, B.Ricaud, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.657
 8. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Phys.* **A42** (2009), 055207
 9. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Math.Anal.Appl.* **354** (2009), 24
 10. M.Znojil, *Phys.Rev.* **D80** (2009), 105004
 11. M.S.P.Eastham, *J.Assoc. Arab Univ.* **7** (2009), 1
 12. M.Znojil, *Int.J.Theor.Phys.* **50** (2011), 1614
 13. H.Najar, O.Olendski, *J. Phys.* **A44** (2011), 305304
 14. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 15. V.Lotoreichik, *Nanosystems* **4**(2) (2013), 166
 16. M.Znojil, *Acta Polytechnica* **53** (2013), 317
 17. V.Duchêne, N.Raymond, *J.Phys.* **A47** (2014), 155203
 18. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
 19. V.Lotoreichik, J.Rohleder, *Oper. Theory Adv.Appl.* **247** (2015), 173
 20. V.Lotoreichik, J.Rohleder, in Proc. IWOTA 2013 (T.Bhattacharyya, M.Dritschel, eds.), *Oper.Theory Adv.Appl.* **247** (2015), 173
 21. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 22. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 23. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 24. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
- P. Exner, K. Yoshitomi: *Eigenvalue asymptotics for the Schrödinger operator with a δ -interaction on a punctured surface*, Lett. Math. Phys. **65** (2003), 19–26; erratum **67** (2004), 81–82.
1. S.Kondej, I.Veselić, *Ann.H.Poincaré* **8** (2007), 109
 2. D.Lenz, P.Stollmann, I.Veselić, in *Spectral Theory and Analysis*, (J.Janas et al., eds.), *Operator Theory: Adv.Appl.*, Birkhäuser 2011, p. 83

3. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 4. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 5. S.Kondej, D.Krejčířik, *J.Math.Anal.Appl.* **446** (2017), 1328
- D. Borisov, P. Exner: *Exponential splitting of bound states in a waveguide with a pair of distant windows*, *J. Phys.* **A37** (2004), 3411–3428.
1. D.Krejčířik, J.Kříž, *Publ. RIMS* **41** (2005), 757
 2. K.Pankrashkin, *Rep.Math.Phys.* **58** (2006), 207
 3. S.Kondej, I.Veselić, *Lett.Math.Phys.* **79** (2007), 95
 4. S.Kondej, I.Veselić, *Ann.H.Poincaré* **8** (2007), 109
 5. O.Olendski, L.Mikhailovska, *J.Phys.* **A40** (2007), 4609
 6. H.Najar, *J.Stat.Phys.* **128** (2007), 1093
 7. H.Najar, S.Ben Hariz, M.Ben Salah, *Math.Phys.Anal.Geom.* **13** (2010), 19
 8. O.Olendski, L.Mikhailovska, *Phys.Rev.* **E81** (2010), 036606
 9. J.Sjöstrand, *J.Pseudo-diff.Oper.Appl.* **1** (2010), 75
 10. H.Najar, O.Olendski, *J. Phys.* **A44** (2011), 305304
 11. A.M.Golovina, *Russ.J.Math.Phys.* **19** (2012), 182
 12. S.A.Nazarov, *Math.Notes* **93** (2013), 60
 13. A.M.Golovina, *St.Petersburg Math.J.* **25** (2014), 735
 14. B.Helffer, K.Pankrashkin, *J.London Math.Soc.* **91** (2015), 225
 15. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 16. H.Najar, in *Applied Mathematics in Tunisia* (A.Jeribi, M.A.Hammami, A.Masmoudi, eds.), Springer Proc. in Math.& Stat., vol. 131 (2015), p. 255
 17. R.Assel, M.Ben Salah, *Serdica Math.J.* **42** (2016), 43
 18. A.Hänel, T.Weidl, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařik, A.Laptev, eds.), EMS Publ., Zürich 2017; p.315
- G. Carron, P. Exner, D. Krejčířik: *Topologically non-trivial quantum layers*, *J. Math. Phys.* **45** (2004), 774–784.
1. N.Fujita, O.Terasaki, *Phys.Rev.* **B72** (2005), 085459
 2. C.Lin, Z.Q.Lu, *Commun.PDE* **31** (2006), 1529
 3. C.Lin, Z.Q.Lu, *J.Funct.Anal.* **244** (2007), 1
 4. C.Lin, Z.Q.Lu, *J.Math.Phys.* **48** (2007), 053522
 5. P.Freitas, I.Salavessa, *Ann.Math.Pur.Appl.* **190** (2011), 77
 6. Z.Q.Lu, J.Rowlet, *J.Math.Phys.* **53** (2012), 073519
 7. M.Dauge, N.Raymond, *J.Math.Phys.* **53** (2012), 123529
 8. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
 9. N.Raymond, *Math.Model.Meth.Appl.Sci.* **24** (2014), 2785
 10. T.Ourmières-Bonafos, *J.Spect.Theory* **4** (2014), 485
 11. N.Raymond, *Math.Models Meth.Appl.Sci.* **24** (2014), 2785
 12. V.Bonaille-Noël, N.Raymond, *ZAMM* **95** (2015), 120
 13. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 14. M.Dauge, Ourmières-Bonafos, N.Raymond, *Commun.Pure Appl.Anal.* **14** (2015), 1239
 15. K.Pankrashkin, N.Popoff, *Calc. Var. & PDE* **54** (2015), 1947
 16. S.Haag, J.Lampart, S.Teufel, *Ann.H.Poincaré* **16** (2015), 2535
 17. K.Pankrashkin, N.Popoff, *J.Math.Pur.Appl.* **106** (2016), 615
 18. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 19. J.Lampart, S.Teufel, *Math. Annalen* **367** (2017), 1647
 20. P.V.Gilkey, C.Y.Kim, J.H.Park, *Tohoku Math.J.* **69** (2017), 1
- I. Catto, P. Exner, Ch. Hainzl: *Enhanced binding revisited for a spinless particle in non-relativistic QED*, *J. Math. Phys.* **45** (2004), 4174–4185.

1. J.-M.Barbaroux, H.Linde, S.Vugalter, *J.Math.Phys.* **46** (2005), 122103
 2. T.O.Sorensen, E.Stockmeyer, *Proc.Roy.Soc.Edinburgh* **138** (2008), 169
 3. F.Hiroshima, I.Sasaki, *Math.Z.* **259** (2008), 657
 4. I.M.Sigal, *J.Stat.Phys.* **134** (2009), 899
 5. F.Hiroshima, H.Spohn, A.Suzuki, *J.Math.Phys.* **52** (2011), 062104
 6. I.Sigal, in “Quantum Theory from Small to Large Scales” (J.Fröhlich et al., eds.), Les Houches Summer School, vol. 95, Oxford Univ.Press 2012
 7. F.Hiroshima, I.Sasaki, H.Spohn, A.Suzuki: *Enhanced Binding in Quantum Field Theory*, COE Lecture Notes, vol. 38, Kyushyu University 2012
 8. M.Köenberg, O.Matte, *Commun.Math.Phys.* **323** (2013), 635
 9. F.Hiroshima, I.Sasaki, *Publ. RIMS* **51** (2015), 655
- T. Cheon, P. Exner: *An approximation to δ^l couplings on graphs*, *J. Phys.* **A37** (2004), L329–335.
1. J.Kuhn et al., *J.Opt.* **B7** (2005), S77
 2. S.Albeverio, K.Pankrashkin, *J.Phys.* **A38** (2005), 4859
 3. K.Pankrashkin, *J.Phys.* **A38** (2005), 8979
 4. F.M.Zanetti et al., *J.Phys.* **A39** (2006), 2493
 5. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 6. M. Harmer, *J.Phys.* **A39** (2006), 14329
 7. J.Kühn, *PhD thesis*, Universidade Federal do Paraná 2008
 8. S.S.Man’ko, *J.Phys.* **A43** (2010), 445304
 9. O.Post, in *Mathematical Results in Quantum Physics – Proceedings of QMath11*, World Scientific, Singapore 2011; p. 60
 10. C.-F.Yang, *Tamkang J.Math.* **42** (2011), 329
 11. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 12. K. Pankrashkin, *J.Math.Anal.Appl.* **396** (2012), 640
 13. J.von Below, D.Mugnolo, *Lin.Alg.Appl.* **439** (2013), 1792
- P. Exner, P. Freitas, D. Krejčířík: *A lower bound to the spectral threshold in curved tubes*, *Proc. Roy. Soc.* **A460** (2004), 3457–3467.
1. R.Tiedra de Aldecoa, *PhD thesis*, Université de Genève 2005
 2. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
 3. A.L.Delitsyn, B.T.Nguyen, D.S.Grebenkov, *Eur.J.Phys.* **B85** (2012), 176
 4. Nguyen Thanh Binh, *PhD thesis*, École Polytechnique Palaiseau 2012
 5. J.Mao, L.Hou, *Commun. Korean Math.Soc.* **28** (2013), 177
 6. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
 7. D.S.Grebenkov, B.T.Nguyen, *SIAM Review* **55** (2013), 601
 8. B.T.Ngyuyen, D.S.Grebenkov, A.L.Delitsyn, in *Geometric and Spectral Analysis* (P.Albin et al., eds.), Contemporary Mathematics, vol. 630, AMS 2014; p. 337
- P. Exner, S. Kondej: *Strong-coupling asymptotic expansion for Schrödinger operators with a singular interaction supported by a curve in \mathbb{R}^3* , *Rev. Math. Phys.* **16** (2004), 559–582.
1. V.Koshmanenko, *J.Phys.* **A38** (2005), 4999
 2. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 3. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 4. J.Brüning, V.Geyler, K.Pankrashkin, *Rev.Math.Phys.* **20** (2008), 1
 5. P.Freitas, D.Krejčířík, *Indiana Univ.Math.J.* **57** (2008), 343
 6. D.Alpay, J.Behrndt, *J.Funct.Anal.* **257** (2009), 1666
 7. B.T.Kaynak, O.T.Turgut, *J. Phys.* **A45** (2012), 265202
 8. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
 9. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
 10. A.Hänel, *PhD thesis*, Universität Stuttgart 2015

11. V Koshmanenko, M Dudkin: *The Method of Rigged Spaces in Singular Perturbation Theory of Self-Adjoint Operators*, Birkhäuser 2016
 12. J.Behrndt,R.Frank,Ch.Kühn,V.Lotoreichik,J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
- P. Exner, S. Kondej: *Schrödinger operators with singular interactions: a model of tunneling resonances*, *J. Phys.* **A37** (2004), 8255–8277.
1. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 2. J.Brüning, V.Geyler, K.Pankrashkin, *Rev.Math.Phys.* **20** (2008), 1
 3. D.Alpay, J.Behrndt, *J.Funct.Anal.* **257** (2009), 1666
 4. H.Arnabak, P.L.Christiansen, Y.B.Gaididei, *Proc.Roy.Soc.* **A369** (2011), 1228
 5. V.M.Adamyan, I.Yu.Popov, I.V.Blinova, *El.J.Theor.Phys.* **35** (2016), 173
- P. Exner, H. Linde, T. Weidl: *Lieb-Thirring inequalities for geometrically induced bound states*, *Lett. Math. Phys.* **70** (2004), 83–95.
1. D.Hundertmark, in *Festschrift in Honor of B.Simon's 60th Birthday* (F.Gesztesy et al., eds), *Proc.Symp.Pure Math.* **76**, AMS, Providence, 2007; p.463
 2. H.Kovářík, S.Vugalter, *J.Math.Anal.Appl.* **345** (2008), 566
 3. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
- P. Exner, M. Tater: *Spectra of soft ring graphs*, *Waves in Random Media* **14** (2004), S47-60.
1. M.N.Houkonnou, *J.Phys.* **A36** (2003), L523
 2. E.Demiralp, *J.Phys.* **A38** (2005), 4783
 3. K.Ožanová, *J.Phys.* **A39** (2006), 3071
 4. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 5. S.Kondej, J.Vaz, *J.Math.Phys.* **53** (2012), 033503
 6. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
 7. M.Jex, V.Lotoreichik, *J.Math.Phys.* **57** (2016), 022101
 8. S.Kondej, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovářík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.419
 9. T.Ourmières-Bonafos, K.Pankrashkin, F.Pizzichillo, *J.Math.Anal.Appl.* **458** (2018), 566
- S. Albeverio, F. Gesztesy, R. Høegh-Krohn, H. Holden: *Solvable Models in Quantum Mechanics*, 2nd edition with an appendix by P. Exner; AMS Chelsea, Providence, R.I., 2005¹
1. A.Comtet, J.Desbois, Ch.Texier, *J.Phys.* **A38** (2005), R341
 2. J.Brüning, V.Geyler, K.Pankrashkin, *J.Math.Phys.* **46** (2005), 113508
 3. R.Adami, U.Boscain, in *Proc. 44th IEEE Conf. on Decision and Control* (2005), p. 1080
 4. A.López-Castillo, C.R. de Oliveira, *J.Phys.* **A39** (2006), 3447
 5. I.G.Pirozhenko, *J.Phys.* **A39** (2006), 6657
 6. K.Pankrashkin, *Lett.Math.Phys.* **77** (2006), 139
 7. O.Post, *Ann. H.Poincaré* **7** (2006), 933
 8. P.Hejčík,T.Cheon, *Phys. Lett.* **A356** (2006), 290
 9. J.F. van Diejen, *Commun.Math.Phys.* **267** (2006), 461
 10. K.Pankrashkin, *Rep.Math.Phys.* **58** (2006), 207
 11. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A40** (2007), 249
 12. T.Fülöp, I. Tsutsui, *J.Phys.* **A40** (2007), 4585
 13. Ph.Blanchard, R.Figari, A.Mantile, *J.Math.Phys.* **48** (2007), 082108
 14. J.Brüning, V.Geyler, K.Pankrashkin, *Ann.H.Poincaré* **8** (2007), 781
 15. J.Brüning, V.Geyler, K.Pankrashkin, *Commun.Math.Phys.* **269** (2007), 87
 16. K.Yoshitomi, *Math.Proc. Cambridge Phil.Soc.* **143** (2007), 185
 17. J.Brasche, K.Ožanová, *SIAM J.Math.Anal.* **38** (2007), 281
 18. J.Brüning et al., *Fullerenes Nanotubes and Carbon Nanostructures* **15** (2007), 21

¹Only the references mentioning the appendix explicitly are listed.

19. D.Borisov, *Math.Phys.Anal.Geom.* **10** (2007), 155
20. T.Fülöp, *SIGMA* **3** (2007), 107
21. V.Bezák, *J.Math.Phys.* **48** (2007), 112108
22. H.Niikuni, *Ann. H.Poincaré* **8** (2007), 1279
23. J.Brüning, V.Geyler, K.Pankrashkin, *Rev.Math.Phys.* **20** (2008), 1
24. P.Hejčák, T.Cheon, *Europhys.Lett.* **81** (2008), 50001
25. T.Ekholm, R.L.Frank, *J.Eur.Math.Soc.* **10** (2008), 739
26. H.D.Cornean, P.Duclos, B.Ricaud, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.657
27. J.Behrndt, M.M.Malamud, H.Neidhardt, *Proc. London Math.Soc.* **97** (2008), 568
28. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A42** (2009), 035202
29. F.Klopp, K.Pankrashkin, *Lett.Math.Phys.* **87** (2009), 99
30. H.Boumaza, *Lett.Math.Phys.* **87** (2009), 81
31. P.Kurasov, *J. d'Anal.Math.* **107** (2009), 251
32. H.Hogreve, *Int.J.Quant.Chem.* **109** (2009), 1430
33. B.Helffer, K.Pankrashkin, *Asymp.Anal.* **63** (2009), 1
34. D.Lenz, P.Stollmann, I.Veselić, *Documenta Math.* **14** (2009), 167
35. T.Fülöp, I.Tsutsui, *J.Phys.* **A42** (2009), 475301
36. C.R.de Oliveira: *Intermediate Spectral Theory and Quantum Dynamics*, Birkhäuser, Basel 2009.
37. S. Fassari, F.Rinaldi, *Rep.Math.Phys.* **64** (2009), 367
38. A.Iwatsuka, T.Mine, S.Shimada, in *Spectral and Scattering Theory for Quantum Magnetic Systems* (Ph.Briet et al., eds.), *Contemp.Math.*, vol. 500, AMS 2009; p.139
39. Yu.D.Golovaty, S.S.Man'ko, *Ukr.Math.Bull.* **6** (2009), 173
40. A.V.Zolotaryuk, *J.Phys.* **A43** (2010), 105302
41. H.Erkol, E.Demiralp, *Molec.Phys.* **107** (2009), 2053
42. F.Hmidi, A.Mantile, F.Nier, *Math.Phys.Anal.Geom.* **13** (2010), 83
43. H.Niikuni, *J.Math.Anal.Appl.* **366** (2010), 283
44. A.V.Zolotaryuk, *Phys.Lett.* **A374** (2010), 1636
45. Yu.D.Golovaty, R.O.Hryniv, *J.Phys.* **A43** (2010), 155204
46. N.Goloschapova, L.Oridoroga, *Int.Eq.Oper.Theory* **67** (2010), 1
47. S.Kondej, M.R.Dudek, *Rev.Adv.Mater.Sci.* **23** (2010), 126
48. A.S.Kostenko, M.M.Malamud, *J.Diff.Eq.* **249** (2010), 260
49. Y.Furuhashi et al., *J.Phys.* **A43** (2010), 354010
50. T.Cheon, *Phys.Lett.* **A374** (2010), 4585
51. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
52. J.Behrndt et al., *Proc.Roy.Soc. Edinburgh* **A140** (2010), 927
53. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A43** (2010), 474009
54. P.Duclos, P.Šťovíček, M.Tušek, *J.Phys.* **A43** (2010), 474020
55. P.Duclos, A.Jensen, *J.Phys.* **A43** (2010), 474019
56. K.Pankrashkin, *HDR thèse*, Université Paris-Sud 2010
57. S.Kondej, *Comp.Meth.Sci.Tech.* **16** (2010)
58. S.S.Man'ko, *Mat.Stud.* **33** (2010), 173
59. K.Pankrashkin, S.Richard, *Rev.Math.Phys.* **23** (2011), 53
60. A.Mantile, *J.Phys.* **A44** (2011), 145305
61. S.Kuzhel, S.Trunk, *J.Math.Anal.Appl.* **379** (2011), 272
62. S.Kondej, *J.Phys.Studies* **15** (2011), 1006
63. R.Adami et al., *Rev.Math.Phys.* **23** (2011), 409
64. A.V.Zolotaryuk, Y. Zolotaryuk, *J.Phys.* **A44** (2011), 375305
65. V.V.Nesterenko, I.G.Pirozhenko, *Class.Quant.Grav.* **28** (2011), 175020
66. C.Cacciapuoti, R.Carlone, R.Figari, *J.Math.Phys.* **52** (2011), 083515
67. E. de Prunelé, *J.Phys.* **A44** (2011), 425302

68. V.Lotoreichik, *Opuscula Math.* **31** (2011), 615
69. D.Lenz, P.Stollmann, I.Veselić, in *Spectral Theory and Analysis*, (J.Janas et al., eds.), *Operator Theory: Adv.Appl.*, Birkhäuser 2011, p. 83
70. R.O.Hryniv, Y.V.Mykytyuk, P.A.Perry, *Comm. PDE* **36** (2011), 1587
71. Yu.M.Berezanskii, J.Brasche, L.P.Nizhnik, *Meth.Funct.Anal.Topol.* **17** (2011), 193
72. Feng Tian, *PhD thesis*, University of Iowa 2011
73. S.Fassari, F.Rinaldi, *Rendiconti di Mat.VII* **31** (2011), 35
74. J.Cisło, S.Kondej, *Rep.Math.Phys.* **68** (2011), 225
75. S.Kondej, J.Vaz, *J.Math.Phys.* **53** (2012), 033503
76. B.T.Kaynak, O.T.Turgut, *J. Phys.* **A45** (2012), 265202
77. I.Yu.Popov, *J.Math.Phys.* **53** (2012), 063505
78. O.Turek, T.Cheon, *Europhys.Lett.* **98** (2012), 50005
79. S.Demirel, *PhD thesis*, Universität Stuttgart 2012
80. A.Tanaka, T.Cheon, Sang Wook Kim, *J.Phys.* **A45** (2012), 335305
81. S.Kondej, *Ann.H.Poincaré* **13** (2012), 1451
82. I.V.Blinova, V.V.Gusarov, I.Yu.Popov, *Commun.Theor.Phys.* **58** (2012), 55
83. R.Hryniv, N.Pronska, *Inverse Problems* **28** (2012), 085008
84. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
85. S.Demirel, *J.Math.Phys.* **53** (2012), 082110
86. K.Pankrashkin, *J.Math.Anal.Appl.* **396** (2012), 640
87. A.A.Boitsev, I.Yu.Popov, O.V.Sokolov, *Nanosystems* **3**(4) (2012), 9
88. S.Man'ko, *J.Math.Phys.* **53** (2012), 123521
89. H.Niikuni, *Far East J.Math.Sci.* **71** (2012), 205
90. S.Fassari, F.Rinaldi, *Rep.Math.Phys* **69** (2012), 353
91. D.Rajter-Ćirić, D.Seleši, *Monatsh.Math.* **168** (2012), 75
92. I.I.Karpenko, D.L.Tyshkevich, *Meth.Funct.Anal.Topol.* **18** (2012), 360
93. Y.Golovaty, *Meth. Funct. Anal.Topol.* **18** (2012), 243
94. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
95. R.Carlone, M.Malamud, A.Posilicano, *J.Diff.Eq.* **254** (2013), 3835
96. R.Adami, D.Noja, N.Visciglia, *Discr.Cont.Dyn.Syst.* **B18** (2013), 1155
97. A.V.Zolotaryuk, *Phys.Rev.* **A87** (2013), 052121
98. A.Posilicano, *J.Funct.Anal.* **265** (2013), 303
99. V.L.Makarov, N.O.Rossakhata, D.V.Dragunov, *J.Comp.Appl.Math.* **250** (2013), 39
100. N.Pronska, *Int.Eq. Oper.Theory* **76** (2013), 403
101. J.F.Brasche, L.P.Nizhnik, *Meth.Funct.Anal.Topol.* **19** (2013), 4
102. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
103. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **339** (2013), 266
104. K.Pankrashkin, *J.Funct.Anal.* **265** (2013), 2910
105. R.Band, G.Berkolaiko, *Phys.Rev.Lett.* **111** (2013), 130404
106. A.Kostenko, M.Malamud, in "Spectral Analysis, Differential Equations and Mathematical Physics" (Gesztesy Festschrift; H.Holden et al., eds.), AMS 2013; p.235
107. G.Teschl, K.Unterkofler, in "Spectral Analysis, Differential Equations and Mathematical Physics" (Gesztesy Festschrift; H.Holden et al., eds.), AMS 2013; p.341
108. M.Manafov, A.Kablan, *El.J.Diff.Eq.* **2013**(237) (2013), 1
109. M.Malamud, K.Schmüdgen, *J.Funct.Anal.* **263** (2013), 2921
110. T.Cheon, O.Turek, *Ann.Phys.* **330** (2013), 104
111. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831
112. J.F.Brasche, L.Nizhnik, *Operators and Matrices* **7** (2013), 887
113. M.Manafov, *Hacettepe J.Math.Stat.* **42** (2013), 339
114. V.L.Makarov, N.O.Rossokhata, D.V.Dragunov, *J.Comp.Appl.Math.* **250** (2013), 39
115. T.Aissiou, *PhD thesis*, Concordia University Montreal 2013
116. M.Cranston, S.Molchanov, N.Squartini, *J.Funct.Anal.* **266** (2014), 1238

117. A.Kostenko, M.Malamud, *Ann.H.Poincaré* **15** (2014), 501
118. I.S.Lobanov, I.Yu.Popov, A.I.Popov, T.V.Gerya, *Appl.Math.Comp.* **235** (2014), 17
119. S.S.Poghosyan, T.Cheon, *J.Phys.Soc.Japan* **83** (2014), 044004
120. D.P.Challa, S.Mourad, *Multiscale Modelling & Simulation* **12** (2014), 55
121. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201
122. M.Hirokawa, T.Kosaka, *J.Math.Anal.Appl.* **417** (2014), 856
123. H.Niikuni, *Int.Eq.Oper.Theory* **79** (2014), 477
124. K.Pankrashkin, S.Richard, *J.Math.Phys.* **55** (2014), 062305
125. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
126. V.Banica, L.I.Ignat, *Analysis & PDE* **7** (2014), 903
127. G.Bräunlich, Ch.Hainzl, R.Seiringer, *Rev.Math.Phys.* **26** (2014), 1450012
128. V.Lotoreichik, S.Simonov, *Rep.Math.Phys.* **74** (2014), 45
129. A.A.Boitsev, I.Yu.Popov, O.V.Sokolov, *J.Phys.:Conf.Ser.* **541** (2014), 012092
130. R.Adami, C.Cacciapuoti, D.Finco, D.Noja, *J.Diff.Eq.* **257** (2014), 3738
131. M.O.Kovaleva, I.Yu.Popov, in *Mathematical Results in Quantum Mechanics*, World Scientific, Singapore 2014; p. 275
132. Minjae Lee, *Phys.Rev.* **E90** (2014), 062904
133. T.Cheon, in “Nonlinear phenomena in complex systems: from nano to macro scale”, Proceedings of a NATO Workshop (Samarkand 2013), Springer 2014; p. 179
134. Ch.Shirley, *PhD thesis*, Université Pierre et Marie Curie 2014
135. A.Posilicano, *Arabian J.Math.* **3** (2014), 437
136. J.Behrndt, M.Holzmann, V.Lotoreichik, *Proc.Appl.Math.Mech.* **14** (2014), 1005
137. A.V.Zolotaryuk, Y.Zolotaryuk, *J.Phys.* **A48** (2015), 035302
138. A.V.Zolotaryuk, Y.Zolotaryuk, *Phys.Lett.* **A379** (2015), 511
139. M.Manafov, A.Kablan, *El.J.Diff.Eq.* **2015**(26) (2015), 1
140. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
141. Ch.Shirley, *J.Stat.Phys.* **158** (2015), 1298
142. J.M.Guilarte, J.M.Castañeda, A.M.Mosquera, *Eur.Phys.J.Plus* **130** (2015), 48
143. D.Barseghyan, A.Khrabustovskyi, *J.Phys.* **A48** (2015), 255201
144. A.V.Zolotaryuk, *J.Phys.* **A48** (2015), 255304
145. A.Yu.Zakharov, *Semiconductors* **7** (2015), 843
146. A.Posilicano, *J.Evol.Eqs* **15** (2015), 727
147. L.Golinskii, M.Malamud, L.Oridoroga, *J.Fourier Anal.Appl.* **21** (2015), 915
148. E.N.Grishanov, I.Yu.Popov, *Superlattices and Microstructures* **86** (2015), 68
149. I.Yu.Popov, I.V.Blinova, A.I.Popov, *J.Phys.:Conf.Ser.* **661** (2015), 012024
150. J.E.Galkowski, *PhD thesis*, UC Berkeley 2015
151. Y.A.M.Yousif, *PhD thesis*, Sudan University of Science and Technology 2015
152. T.I.Vdovenko, *Ukrainian NTU Sci.News* **2015** (2015), 15
153. Ch.Baker, *PhD thesis*, Ohio State University 2015
154. T.Cheon, S.Poghosyan, in *CSIT-2015 Proceedings* (S.Shoukourian, ed.), p. 133
155. V.Banica, N.Visciglia, *J.Diff.Eqs* **260** (2016), 4410
156. R.Juršėnas, *J.Phys.* **A49** (2016), 065202
157. M.Manafov, *El.J.Diff.Eq.* **2016**(11) (2016), 1
158. M.Jex, V.Lotoreichik, *J.Math.Phys.* **57** (2016), 022101
159. Minjae Lee, *J.Phys.* **49** (2016), 085204
160. J.Kerner, T.Mühlenbruch, *J.Math.Phys.* **57** (2016), 023509
161. E.Grishanov, D.Eremin, D.Ivanov, I.Popov, *Chinese J.Phys.* **25** (2016), 047303
162. V.M.Adamyan, I.Yu.Popov, I.V.Blinova, *El.J.Theor.Phys.* **35** (2016), 173
163. Minjae Lee, *SIAM J.Math.Anal.* **48** (2016), 1459
164. R.Adami, M.Hauray, C.Negulescu, *Comm.Math.Sci.* **14** (2016), 1373
165. A.Mantile, *Asympt.Anal.* **98** (2016), 1
166. M.Dudkin, T.Vdovenko, *Meth.Funct.Anal.Topology* **22** (2016), 137

167. A.S.Kostenko, M.M.Malamud, D.D.Natyagajlo, *Mat.Notes* **100** (2016), 49
168. A.Alsaedi et al., *Math.Meth.Appl.Sci.* **39** (2016), 3607
169. I.V.Popova, A.S.Melikhova, I.Yu.Popov, *J.Phys.: Conf.Series* **735** (2016), 012062
170. C.Cacciapuoti, A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 303
171. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
172. V Koshmanenko, M Dudkin: *The Method of Rigged Spaces in Singular Perturbation Theory of Self-Adjoint Operators*, Birkhäuser 2016
173. M.D.Manafov, *Filomat* **30** (2016), 2935
174. A.Yu.Ananieva, *Ukr.Mat.Vesnik* **13** (2016), 28
175. M.Belov, I.Popov, I. Blinova, *ITM Web Conf.* **9** (2017), 01007
176. R.Carlone, A.Posilicano, *Phys.Lett.* **A381** (1976), 1076
177. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
178. R.Carlone, R.Figari, C.Negulescu, *J.Math.Anal.Appl.* **450** (2017), 1294
179. A.V.Zolotaryuk, *J.Phys.* **A50** (2017), 225303
180. G.Basti, A.Teta, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.71
181. R.Carlone, M.Correggi, R.Figari, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.189
182. Ya.Granovskyi, M.Malamud, H.Neidhardt, A.Posilicano, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.271
183. S.Kondej, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.419
184. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
185. O.Turek, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.543
186. Le Chen, Yaozhong Hu, D.Nualart, *Potential Anal.* **46** (2017), 779
187. M.Ikeda, T.Inui, *Analysis & PDE* **10** (2017), 481
188. R.Carlone, A.Fiorenza, L.Tentarelli, *J.Funct.Anal.* **273** (2017), 1258
189. M.Ikeda, T.Inui, *Analysis & PDE* **10** (2017), 481
190. S.Kondej, *J.Phys.* **A50** (2017), 315203
191. J.Behrndt, M.Malamud, H.Neidhardt, *J.Funct.Anal.* **273** (2017), 1970
192. C.Cacciapuoti, D.Finco, D.Noja, A.Teta, *J.Funct.Anal.* **273** (2017), 1762
193. U.Linden, *PhD thesis*, Universität Stuttgart 2017
194. D.A.Eremin et al., *Nanosystems* **7** (2016), 420
195. S.Kuzhel, M.Znojil, *Banach J.Math.Anal.* **11** (2017), 923
196. S.Egger, J.Kerner, *Rev.Math.Phys.* **29** (2017), 17500325
- P. Exner: *Sufficient conditions for the anti-Zeno effect*, *J. Phys.* **A38** (2005), L449–454.
1. O.V.Prezhdo et al., *AIChE Annual Conf.Proc.* (2005), p. 10650
 2. B.F.Habenicht, C.F.Craig, O.V.Prezhdo, *Phys.Rev.Lett.* **96** (2006), 187401
 3. O.V.Prezhdo et al., *Springer Ser.Chem.Phys.* **83** (2007), p.5
 4. C.Frischkorn et al., *Springer Ser.Chem.Phys.* **87** (2007), p.387
 5. B.F.Habenicht, S.V.Kilina, O.V.Prezhdo, *Pure Appl.Chem.* **80** (2008), 1433
 6. D.W.Wang, L.G.Wang, Z.H. Li, S.Y.Zhu, *Phys.Rev.* **A80** (2009), 042101
- P. Exner: *An isoperimetric problem for point interactions*, *J. Phys. A: Math. Gen.* **38** (2005), 4795–4802.
1. G.Khimshiashvili, *Bull.Georg.Nat.Acad.Sci.* **7** (2013), 15
 2. G.Giorgadze, G.Khimshiashvili, *Bull.Georg.Nat.Acad.Sci.* **9** (2015), 19
 3. G.Khimshiashvili, G.Panina, D.Siersma, *J.Gem.Phys.* **98** (2015), 110

4. G.Giorgadze, G.Khimshiashvili, *Bull.Georg.Nat.Acad.Sci.* **9** (2015), 43
 5. G.Khimshiashvili, G.Panina, D.Siersma, *J.G geom.Phys.* **106** (2016), 42
 6. A.Y.Uteshev, M.V.Yashina, in *Trans.Computer Sci.XXVII*, LNCS 9750 (2016), Springer; p. 68
 7. S.Albeverio, I.M.Karabash, *Operators and Matrices* **11** (2017), 1097
- P. Exner: *An isoperimetric problem for leaky loops and related mean-chord inequalities*, *J. Math. Phys.* **46** (2005), 062105
1. S.Kondej, I.Veselić, *Ann.H.Poincaré* **8** (2007), 109
 2. D.Lenz, P.Stollmann, I.Veselić, *Documenta Math.* **14** (2009), 167
 3. D.Lenz, P.Stollmann, I.Veselić, in *Spectral Theory and Analysis*, (J.Janas et al., eds.), *Operator Theory: Adv.Appl.*, Birkhäuser 2011, p. 83
 4. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 5. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 6. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 7. S.Kondej, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.419
 8. V.S.Rabinovich, *Math.Notes* **102** (2017), 761
- P. Exner: *von Neumann way to treat systems of a mixed dimensionality*, *Rep. Math. Phys.* **55** (2005), 79–92.
1. K.Pankrashkin, *Rep.Math.Phys.* **58** (2006), 207
 2. J.Brüning, V.Geyler, K.Pankrashkin, *Rev.Math.Phys.* **20** (2008), 1
- P. Exner, T. Ichinose: *A product formula related to quantum Zeno dynamics*, *Ann. H. Poincaré* **6** (2005), 195–215.
1. P.Facchi et al., *J.Opt.* **6** (2004), S492
 2. A.U.Schmidt, in *Mathematical physics research on leading edge*, Nova Sci, Hauppauge, NY 2004; p.113
 3. A.Shaji, *J.Phys.* **A37** (2004), 11285
 4. P.Facchi et al., *Phys.Rev.* **A71** (2005), 022302
 5. V.Cachia, *Bull. London Math.Soc.* **37** (2005), 621
 6. J.Echanobe, A.del Campo, J.G.Muga, *Phys.Rev.* **A77** (2008), 032112
 7. P.Facchi, S.Pascazio, *J.Phys.* **A41** (2008), 493001
 8. R.Nittka, *J.Funct.Anal.* **257** (2009), 1429
 9. P.Facchi, G.Marmo, S.Pascazio, *J.Phys.:Conf.Ser.* **196** (2009), 012017
 10. P.Facchi, S.Graffi, M.Ligabò, *J.Phys.* **A43** (2010), 032001
 11. P.Facchi, M.Ligabò, *J.Math.Phys.* **51** (2010), 022103
 12. J.B.MacKrorry, K.Jacobs, D.A.Steck, *New J.Phys.* **12** (2010), 113023
 13. P.Facchi, M.Ligabò, *J.Math.Phys* bf 58 (2017), 032103
- P. Exner, S. Kondej: *Scattering by local deformations of a straight leaky wire*, *J. Phys.* **A38** (2005), 4865–4874.
1. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 2. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 3. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 4. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 5. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 6. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 7. J.Behrndt, M.Malamud, H.Neidhardt, *J.Funct.Anal.* **273** (2017), 1970

- P. Exner, S. Kondej: *Leaky quantum wire and dots: a resonance model*, Proceedings of the XIV International Congress on Mathematical Physics (Lisbon 2003), World Scientific, Singapore 2005.
1. D.Krejčířík, J.Kříž, *Publ. RIMS* **41** (2005), 757
 2. K.Gustafson, *Int.J.Theor.Phys.* **46** (2007), 1867
- P. Exner, H. Kovařík: *Spectrum of the Schrödinger operator in a perturbed periodically twisted tube*, *Lett. Math. Phys.* **73** (2005), 183–192.
1. D.Krejčířík, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.617
 2. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
 3. D.Krejčířík, E.Zuazua, *J.Math.Pures Appl.* **94** (2010), 277
 4. C.R. de Oliveira, *Rep. Math. Phys.* **67** (2011), 1
 5. D.Borisov, G.Cardone, *J.Math.Phys.* **52** (2011), 123513
 6. E.Soccorsi, *HDR thèse*, Université d’Aix-Marseille 2012
 7. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 8. J.Stockhofe, P.Schmelcher, *Phys.Rev.* **A89** (2014), 033630
 9. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *J.Math.Phys.* **56** (2015), 021505
 10. D.Krejčířík, *Appl.Math.Lett.* **46** (2015), 7
 11. Ph.Briet, H.Hammedi, D.Krejčířík, *Lett.Math.Phys.* **105** (2015), 939
 12. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 13. G.Raikov, *J.Spect.Theory* **6** (2016), 331
 14. Ph.Briet, H.Hammedi, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.161
- P. Exner, O. Post: *Convergence of spectra of graph-like thin manifolds*, *J. Geom. Phys.* **54** (2005), 77–115.
1. K.Pankrashkin, *J.Phys.* **A38** (2005), 8979
 2. G.Dell’Antonio, L.Tenuta, *J.Math.Phys.* **47** (2006), 072102
 3. K.Pankrashkin, *Lett.Math.Phys.* **77** (2006), 139
 4. S.Molchanov, B.Vainberg, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.227
 5. J.Rubinstein, in *Quantum Graphs and Their Applications*, (G.Berkolaiko et al., eds.), Contemp.Math., vol. 415, AMS 2006; p.251
 6. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 7. S.Albeverio, C.Cacciapuoti, D.Finco, *J.Math.Phys.* **48** (2007), 032103
 8. B.Pavlov, *Math.Proc. Cambridge Phil.Soc.* **142** (2007), 365
 9. S.Molchanov, B.Vainberg, *Commun.Math.Phys.* **273** (2007), 533
 10. J.M.Harrison et al., *J.Phys.* **A40** (2007), 7597
 11. A.B.Mikhailova, B.S.Pavlov, L.V.Prokhorov, *Math.Nacht.* **280** (2007), 1376
 12. E.Korotyaev, I.Lobanov, *Ann. H.Poincaré* **8** (2007), 1151
 13. V.L.Chernyshev, A.I.Shafarevich, *Math.Notes* **82** (2007), 542
 14. J.Brüning, V.E.Grikurov, *Proc of “Days on Diffraction 2007”*, art. 4531985, p. 31
 15. S.Molchanov, B.Vainberg, in *Stochastic Analysis in Mathematical Physics*, World Scientific, Singapore 2007; p. 69
 16. S.Markvorsen, *Geom.Dedicata* **133** (2008), 7
 17. J.Brüning, V.Grikurov, *Russ.J.Math.Phys.* **15** (2008), 17
 18. J.M.Harrison, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.261
 19. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 20. D.Grieser, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.565
 21. B.S.Pavlov, *Russ.J.Math.Phys.* **15** (2008), 364
 22. A.A.Tolchennikov, *Sbornik Math.* **199** (2008), 1071
 23. D.Grieser, *Proc. London Math.Soc.* **97** (2008), 718

24. A.-I.Bonciocat, *PhD thesis*, Rheinischen Friedrich-Wilhelms-Universität Bonn 2008
25. M.Cherdantsev, *PhD thesis*, University of Bath 2008
26. D.Grieser, D.Jerison, *Pacif.J.Math.* **240** (2009), 109
27. A.Khrabustovskiy, *J.Math.Phys.Anal.Geom* **5** (2009), 145
28. V.Adamyan, B.Pavlov, A.Yafasov, in *Mark Krein Centenary Conference, vol. 1* (V. Adamyan et al., eds.), *Operator Theory Adv. Appl.* **190** (2009), 3
29. M.S.Dorofeev, A.V.Shanin, *Waves in Random and Complex Media* **19** (2009), 556
30. A.A.Tolchennikov, *PhD thesis*, Moscow State University 2009
31. V.Adamyan, B.Pavlov, in *Recent Advances in Operator Theory in Hilbert and Krein Spaces*, (J. Behrndt, K.-H. Förster, C. Trunk, eds.), *Operator Theory Adv. Appl.* **198** (2010), 1
32. S.Endres, F.Steiner, *J.Phys.* **A43** (2010), 095204
33. S.Molchanov, B.Vainberg, *Waves in Random and Complex Media* **20** (2010), 260
34. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
35. V.L. Chernyshev, *Proc. Steklov Inst.Math.* **270** (2010), 246
36. G.F.Dell'Antonio, E.Costa, *J.Phys.* **A43** (2010), 474014
37. E.Costa, *PhD thesis*, SISSA Trieste 2010
38. D.Mugnolo, *Adv.Diff.Eq.* **15** (2010), 1125
39. C.Cacciapuoti, D.Finco, *Asympt.Anal.* **70** (2010), 199
40. K.Pankrashkin, *HDR thèse*, Université Paris-Sud 2010
41. G.Martin, A.M.Yafasov, B.S.Pavlov, *Nanosystems: Phys.Chem.Math.* **1** (2010), 108
42. B.Pavlov, in *Characteristic Functions, Scattering Functions and Transfer Functions* (D.Alpay, V.Vinnikov, eds.), *Operator Theory: Adv.Appl.* **197** (2010), 281
43. S.Molchanov, B.Vainberg, in *Integral Methods in Science and Engineering, I. Analytic Methods* (C.Constanda, E.M.Pérez, eds.), Birkhäuser, Boston 2010; p. 255
44. A.A.Tolchennikov, V.L.Chernyshev, A.I.Shafarevich, *Nelin.Dinam.* **6** (2010), 623
45. L.Hillairet, C.Judge, *Commun.Math.Phys.* **302** (2011), 291
46. K.Pankrashkin, S.Roganova, N.Yeganefar, *Int.Eq. Oper.Theory* **71** (2011), 199
47. L.Hillairet, *HDR thèse*, Université de Nantes 2011
48. A.Khrabustovskiy, *J.Diff.Eq.* **252** (2012), 2339
49. D.Borisov, G.Cardone, *J.Math.Phys.* **53** (2012), 023503
50. L.P.Nizhnik, *Meth.Func.Anal.Topol.* **18** (2012), 68
51. S.Demirel, *PhD thesis*, Universität Stuttgart 2012
52. S.Albeverio, S.Kusuoka, *Ann.Probab.* **40** (2012), 2131
53. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
54. E.Zuazua, in *Modelling and Optimisation of Flows on Networks*, *LNM* **2062** (2013), 463
55. R.Band, G.Berkolaiko, *Phys.Rev.Lett.* **111** (2013), 130404
56. D.Borisov, P.Freitas, *Analysis & PDE* **6** (2013), 1051
57. A.Hussein, *Rev.Math.Phys.* **26** (2014), 1430003
58. D.Mugnolo: *Semigroup Methods for Evolution Equations on Networks*, Springer 2014
59. A.Khrabustovskiy, in *Mathematical Results in Quantum Mechanics*, World Scientific, Singapore 2014; p. 267
60. A.Khrabustovskiy, *J.Math.Phys.* **55** (2014), 121502
61. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
62. J.-C.Kiik, P.Kurasov, M.Usman, *Phys.Lett.* **A379** (2015), 1871
63. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *Compt.Rend.* **343** (2015), 360
64. F.L.Bakharev, S.G.Matveenko, S.A.Nazarov, *Doklady Math.* **92** (2015), 514
65. M.Egidi, *PhD thesis*, Durham University 2015
66. K.Pankrashkin, *Nanosystems* **6** (2015), 46
67. R.Schoen, H.Tran, *J.Diff.Eqs* **261** (2016), 2584
68. Wen Liu, *PhD thesis*, Texas A&M University 2008
69. P.Kurasov, R.Ogik, *Rep.Math.Phys.* **78** (2016), 199

70. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *Mater.Phys.Mech.* **29** (2016), 107
71. S.A.Nazarov, K.Ruotsalainen, P.Uusitalo, *Mater.Phys.Mech.* **29** (2016), 116
72. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
73. S.A.Nazarov, *J.Math.Sci.* **219** (2016), 994
74. K.D.Cherednichenko, A.V.Kiselev, *Commun.Math.Phys.* **349** (2017), 441
75. F.L.Bakharev, S.G.Matveenko, S.A.Nazarov, *St.Peterburg Math.J.* **28** (2017), 171
76. S.A.Nazarov, *Izvestiya:Math.* **81** (2017), 29
77. Z.Sobirov, D.Babajanov, D.Matrasulov, *Nanosystems* **8** (2017), 29
78. G.Cardone, A.Khrabustovskyi, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.177
79. Y.Pinchover, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.459
- P. Exner, V.A. Zagrebnov: *Bose-Einstein condensation in geometrically deformed tubes*, *J. Phys.* **A38** (2005), L463–470.
1. O.Olendski, L.Mikhailovska, *Phys.Rev.* **B72** (2005), 235314
 2. H.Linde, *J.Phys.* **A 39** (2006), 5105
 3. P.Amore, M.Rodriguez, C.A.Terrero-Escalante, *J.Phys.* **A45** (2012), 105303
 4. S.I.Popov, M.I.Gavrilov, I.Yu.Popov, *Phys.Scripta* **86** (2012), 035003
 5. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 6. S.I.Popov, *Nanosystems* **4** (2013), 173
 7. A.Markowsky, N.Schopohl, *Phys.Rev.* **A89** (2014), 013622
- P. Exner, P. Hejčík, P. Šeba: *Approximations by graphs and emergence of global structures*, Proceedings of the 2nd Workshop on Quantum Chaos and Localization Phenomena (Warsaw 2005), *Acta Phys. Polonica* **A109** (2005), 23–31.
1. K.-F.Berggren, J.Larsson, O.Bengtson, *Acta Phys. Polonica* **A109** (2005), 23
 2. O.Hul et al., *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.595
- D. Borisov, P. Exner: *Distant perturbation asymptotics in window-coupled waveguides. I. The non-threshold case*, *J. Math. Phys.* **47** (2006), 113502
1. S.A.Nazarov, *Math.Notes* **93** (2013), 60
 2. A.Hänel, *PhD thesis*, Universität Stuttgart 2015
 3. A.Hänel, T.Weidl, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.315
- P. Exner, M. Fraas: *Resonance asymptotics in the generalized Winter model*, *Phys. Lett.* **A360** (2006), 57–61.
1. A.Sacchetti, in *Advances in Quantum Mechanics* (A.Michelangeli, G.Dell’Antonio, eds.), Springer INdAM Series, vol.18 (2017), p.283
- P. Exner, E.M. Harrell, M. Loss: *Inequalities for means of chords, with application to isoperimetric problems*, *Lett.Math.Phys.* **75** (2006), 225–233.
1. S.Tabachnikov, *Discr.Comp.Geom.* **46** (2011), 724
 2. J.Cisło, S.Kondej, *Rep.Math.Phys.* **68** (2011), 225
 3. M.Ghomi, R.Howard, *Math.Annalen* **363** (2015), 985
 4. J.Behrndt, G.Grubb, M.Langer, V.Lotoreichik, *J.Spect.Theory* **5** (2015), 697
 5. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 6. J.Behrndt, M.Langer, V.Lotorichik, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.129
 7. S.Albeverio, I.M.Karabash, *Operators and Matrices* **11** (2017), 1097

- P. Exner, P. Hejčík, P. Šeba: *Approximations by graphs and emergence of global structures*, Rep. Math. Phys. **57** (2006), 445–455.
1. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 2. S.A.Fulling, *J.Phys.* **A39** (2006), 6377
 3. N.Bajorin et al., *J.Phys.* **A41** (2008), 015101
 4. N.Bajorin et al., *Fractals* **16** (2008), 243
 5. K.Pankrashkin, *J.Phys.* **A42** (2009), 265304
 6. M.Hinz, A.Teplyaev, *J.Funct.Anal.* **265** (2013), 2830
- P. Exner, O. Turek: *Approximations of permutation-symmetric vertex couplings in quantum graphs*, Proceedings of the Conference “Quantum Graphs and Their Applications” (Snowbird 2005); AMS “Contemporary Math” Series, vol. 415, pp. 109–120.
1. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 2. B.Bellazzini, P.Mintchev, P.Sorba, *J.Phys.* **A40** (2007), 2485
 3. V.Kostrykin, J.Potthoff, R.Schrader, *Contemporary Math.* **447** (2007), 175
 4. S.Cardanobile, D.Mugnolo, R.Nittka, *J.Phys.* **A41** (2008), 055102
 5. V.Kostrykin, J.Potthoff, R.Schrader, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.423
 6. B.Bellazzini et al, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.639
 7. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 8. J.von Below, D.Mugnolo, *Lin.Alg.Appl.* **439** (2013), 1792
- C. Cacciapiuoti, P. Exner: *Nontrivial edge coupling from a Dirichlet network squeezing: the case of a bent waveguide*, J. Phys. **A40** (2007), F511–F523.
1. D.Grieser, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.565
 2. A.V.Zolotaryuk, *J.Phys.* **A43** (2010), 105302
 3. Yu.D.Golovaty, R.O.Hryniv, *J.Phys.* **A43** (2010), 155204
 4. C.R. de Oliveira, *Rep. Math. Phys.* **67** (2011), 1
 5. A.V.Zolotaryuk, Y. Zolotaryuk, *J.Phys.* **A44** (2011), 375305
 6. D.Borisov, G.Cardone, *J.Math.Phys.* **53** (2012), 023503
 7. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 8. C.R. de Oliveira, A.A.Verri, *J.Phys.* **A45** (2012), 435201
 9. S.Man’ko, *J.Math.Phys.* **53** (2012), 123521
 10. S.Albeverio, S.Kusuoka, *Ann.Probab.* **40** (2012), 2131
 11. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 12. Yu.Golovaty, *Int.Eq.Oper.Theory* **75** (2013), 341
 13. A.V.Zolotaryuk, *Phys.Rev.* **A87** (2013), 052121
 14. Y.D.Golovaty, R.O.Hryniv, *Proc.Roy.Soc.Edinburgh* **143** (2013), 791
 15. J.F.Brasche, L.P.Nizhnik, *Meth.Funct.Anal.Topol.* **19** (2013), 4
 16. S.Albeverio, L.Di Persio, E.Mastrogiacomo, in “Spectral Analysis, Differential Equations and Mathematical Physics” (Gesztesy Festschrift; H.Holden et al., eds.), AMS 2013; p.1
 17. A.V.Zolotaryuk, Y.Zolotaryuk, *Int.J.Mod.Phys.* **B28** (2014), 1350203
 18. S.Manko, *Math.Bohemica* **139** (2014), 259
 19. M.O.Kovaleva, I.Yu.Popov, in *Mathematical Results in Quantum Mechanics*, World Scientific, Singapore 2014; p. 275
 20. A.V.Zolotaryuk, Y.Zolotaryuk, *J.Phys.* **A48** (2015), 035302
 21. A.V.Zolotaryuk, Y.Zolotaryuk, *Phys.Lett.* **A379** (2015), 511
 22. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
 23. A.V.Zolotaryuk, *J.Phys.* **A48** (2015), 255304
 24. N.C.Dias, C.Jorge, J.N.Prata, *J.Diff.Eqs* **260** (2016), 6548
 25. E.Rivera-Mociños, E.Sadurní, *J.Phys.* **A49** (2016), 175302

26. M.O.Kovaleva, I.Yu.Popov, *Zs.Anal.Anw* **35** (2016), 383
27. A.V.Zolotaryuk, *J.Phys.* **A50** (2017), 225303
- P. Exner: *Unstable system dynamics: do we understand it fully?*, *Rep. Math. Phys.* **59** (2007), 351–363.
1. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A42** (2009), 035202
 2. E.Torrontegui et al., *Adv.Quant.Chem.* **60** (2010), 485
 3. J.Glück, *Arch. der Math.* **106** (2016), 265
- P. Exner, R. Frank: *Absolute continuity of the spectrum for periodically modulated leaky wires in \mathbb{R}^3* , *Ann. H. Poincaré* **8** (2007), 241–263.
1. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
 2. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Phys.* **A42** (2009), 055207
 3. J.Cisło, S.Kondej, *Rep.Math.Phys.* **68** (2011), 225
 4. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 5. Vu Hoang, M.Radosz, *J.Math.Phys.* **55** (2014), 033506
 6. P.Kuchment, *Bull.AMS* **53** (2016), 343
- P. Exner, M. Fraas: *The decay law can have an irregular character*, *J. Phys.* **A40** (2007), 1333–1340.
1. G.García-Calderón, I.Maldonado, J.Villavicenzio, *Phys.Rev.* **A76** (2007), 012103
 2. C.Anastopoulos, *J.Math.Phys.* **49** (2008), 022103
 3. G.García-Calderón, R.Romo, J.Villavicenzio, *Phys.Rev.* **A79** (2009), 052121
 4. G.García-Calderón, *Adv.Quant.Chem.* **60C** (2010), 407
 5. G.Chaos-Cador, G.García-Calderón, *Phys.Rev.* **A87** (2013), 042114
 6. A.Sacchetti, in *Advances in Quantum Mechanics* (A.Michelangeli, G.Dell’Antonio, eds.), Springer INdAM Series, vol.18 (2017), p.283
- P. Exner, M. Fraas: *A remark on helical waveguides*, *Phys. Lett.* **A369** (2007), 393–399
1. M.Bhattacharya, *Optics Comm.* **279** (2007), 219
 2. D.Krejčířík, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.617
 3. V.Atanasov, *PhD thesis*, Université Cergy-Pontoise 2009
 4. M.Sumetsky, Y.Dulashko, S.Ghalmi, *Optics and Lasers in Engineering* **48** (2010), 272
 5. O.Steuernagel, *Optics Express* **20** (2012), 14371
 6. D.Reitz, A.Rauschenbeutel, *Optics Commun.* **285** (2012), 4705
 7. A.V.Zampetaki, J.Stockhofe, S.Kröhnke, P.Schmelcher, *Phys.Rev.* **E88** (2013), 043202
 8. C.A.Downing, M.G.Robinson, M.E.Portnoi, in “Fundamental and Applied Nano-Electromagnetics” (A.Maffucci, S.A.Maksimenko, eds.), NATO Science Series B, 2016; p. 27
 9. C.A.Downing, M.G.Robinson, M.E.Portnoi, *Phys.Rev.* **B94** (2016), 155306
- P. Exner, M. Fraas: *On the dense point and absolutely continuous spectrum for Hamiltonians with concentric δ shells*, *Lett. Math. Phys.* **82** (2007), 25–37.
1. C.K.Law, V.Pivovarchik, *J.Phys.* **A42** (2009), 035302
 2. K.Pankrashkin, *J.Phys.* **A42** (2009), 265304
 3. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 4. S.Albeverio, A.Kostenko, M.Malamud, H.Neidhardt, *J.Math.Phys.* **54** (2013), 052103
 5. A.Ibort, F.Lledó, J.M.Pérez-Pardo, *Ann. H.Poincaré* **16** (2015), 2367
 6. Ya.Granovskyi, M.Malamud, H.Neidhardt, A.Posilicano, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.271
 7. S.Kondej, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.419

- P. Exner, M. Fraas, E.M. Harrell: *On the critical exponent in an isoperimetric inequality for chords*, *Phys. Lett.* **A368** (2007), 1–6.
1. S.Albeverio, I.M.Karabash, *Operators and Matrices* **11** (2017), 1097
- P. Exner, M. Helm, P. Stollmann: *Localization on a quantum graph with a random potential on the edges*, *Rev. Math. Phys.* **19** (2007), 923–939.
1. F.Klopp, K.Pankrashin, *J.Stat.Phys.* **131** (2008), 651
 2. D.Lenz, N.Peyerimhoff, O.Post, I.Veselić, *Japan J.Math.* **3** (2008), 121
 3. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 4. M.Gruber, I.Veselić, *Rand. Oper. Stoch. Eq.* **16** (2008), 1
 5. F.Klopp, K.Pankrashkin, *Lett.Math.Phys.* **87** (2009), 99
 6. N.H.March, G.G.N.Angilella, *J.Math.Chem.* **46** (2009), 532
 7. O.Hul, P.Šeba, L.Sirko, *Phys.Rev.* **E79** (2009), 066204
 8. D.Lenz, N.Peyerimhoff, O.Post, I.Veselić, *Math.Phys.Anal.Geom.* **12** (2009), 219
 9. S.Currie, B.A.Watson, *Proc.Roy.Soc.Edinburgh* **139** (2009), 775
 10. P.D.Hislop, O.Post, *Waves in Random and Complex Media* **19** (2009), 216
 11. K.Pankrashkin, *HDR thèse*, Université Paris-Sud 2010
 12. O.Hul, L.Sirko, *Phys.Rev.* **E83** (2011), 066204
 13. C.Schubert, *PhD thesis*, TU Chemnitz 2011
 14. S.Currie, B.A.Watson, *Complex Anal. Oper. Theory* **6** (2012), 729
 15. M.Sabri, *Rev.Math.Phys.* **26** (2014), 1350020
 16. M.Sabri, *Lett.Math.Phys.* **104** (2014), 311
 17. S.Currie, *Operators and Matrices* **8** (2014), 467
 18. V.Chulaevsky, Y.Sukhov: *Multi-Scale Analysis for Quantum Systems with Interaction*, Birkhäuser, Basel 2014
 19. M.Sabri, *PhD thesis*, Université Paris 7, 2014
 20. M.Aizenman, S.Warzel: *Random Operators*, AMS Graduate Studies in Mathematics, vol. 168; Providence 2015
 21. Wen Liu, *PhD thesis*, Texas A&M University 2008
 22. V.Chulaevsky, *Univ.J.Appl.Math.* **4** (2016), 67
- P. Exner, T. Ichinose, S. Kondej: *On relations between stable and Zeno dynamics in a leaky graph decay model*, Proceedings of the Conference “Operator Theory and Mathematical Physics” (Bedlewo 2004); *Operator Theory: Advances and Applications*, vol. 174, Birkhäuser, Basel 2007; pp. 21–34.
1. S.Gnutzmann, U.Smilansky, *Adv.Phys.* **55** (2006), 527
- P. Exner, T. Ichinose, H. Neidhardt, V.A. Zagrebnov: *Zeno product formula revisited*, *Int. Eq. Operator Th.* **57** (2007), 67–81.
1. P.Facchi, S.Pascazio, *J.Phys.* **A41** (2008), 493001
 2. R.Nittka, *J.Funct.Anal.* **257** (2009), 1429
 3. P.Facchi, G.Marmo, S.Pascazio, *J.Phys.:Conf.Ser.* **196** (2009), 012017
 4. P.Facchi, M.Ligabò, *J.Math.Phys.* **51** (2010), 022103
 5. M.Przanowski, M.Skulimowski, J.Tosiek, in “Geometric Methods in Physics” (P.Kielanowski et al. eds.), Trends in Mathematics, Birkhäuser 2013; p. 265
 6. P.Facchi, M.Ligabò, *J.Math.Phys.* **58** (2017), 032103
- P. Exner, J. Lipovský: *Equivalence of resolvent and scattering resonances on quantum graphs*, in “Adventures in Mathematical Physics” (Cergy-Pontoise 2006; F. Germinet, P.D. Hislop, eds.); AMS “Contemporary Math” Series, vol. 447, pp. 73–81.
1. E.B.Davies, A.Pushnitski, *Analysis & PDE* **4** (2011), 729
 2. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 3. A.Švarc, *Phys.Rev.* **C87** (2013), 067001

- P. Exner, O. Post: *Convergence of resonances on thin branched quantum wave guides*, *J. Math. Phys.* **48** (2007), 092104
1. S.A.Fulling, P.Kuchment, J.H.Wilson, *J.Phys.* **A40** (2007), 14165
 2. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 3. E.Costa, *PhD thesis*, SISSA Trieste 2010
 4. D.Borisov, G.Cardone, *J.Math.Phys.* **53** (2012), 023503
 5. S.Demirel, *PhD thesis*, Universität Stuttgart 2012
 6. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 7. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
 8. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 9. Z.Sobirov, D.Babajanov, D.Matrasulov, *Nanosystems* **8** (2017), 29
 10. Y.Pinchover, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.459
- P. Exner, P. Šeba: *A “hybrid plane” with spin-orbit interaction*, *Russ. J. Math. Phys.* **14** (2007), 401–405.
1. C.Cacciapuoti, R.Carlone, R.Figari, *J.Phys.* **A42** (2009), 035202
 2. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 3. R.Juršėnas, *Rep.Math.Phys.* **75** (2015), 1
 4. R.Juršėnas, *J.Phys.* **A49** (2016), 065202
 5. R.Carlone, A.Posilicano, *Phys.Lett.* **A381** (1976), 1076
 6. A.López-Yela, J.M.Pérez-Pardo, *J.Comput.Phys.* **347** (2017), 235
- P. Exner, O. Turek: *Approximations of singular vertex couplings in quantum graphs*, *Rev. Math. Phys.* **19** (2007), 571–606.
1. J.Brüning, V.E.Grikurov, *Proc of “Days on Diffraction 2007”*, art. 4531985, p. 31
 2. J.Brüning, V.Grikurov, *Russ.J.Math.Phys.* **15** (2008), 17
 3. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 4. Y.Arlinskii, E.Tsekanovskii, in *Mark Krein Centenary Conference, vol. 1* (V. Adamyan et al., eds.), *Operator Theory Adv. Appl.* **190** (2009), 65
 5. Y.Hasebe, T.Cheon, *Proc. of 4th Int. Conf. on Quantum, Nano and Micro Technologies* (ICQNM, St. Maarten 2010), pp. 65-70.
 6. E.Costa, *PhD thesis*, SISSA Trieste 2010
 7. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 8. D.Finco, in *Advances in Quantum Mechanics* (A.Michelangeli, G.Dell’Antonio, eds.), Springer INdAM Series, vol.18 (2017), p.153
- P. Exner, M. Fraas: *Interlaced dense point and absolutely continuous spectra for Hamiltonians with concentric-shell singular interactions*, *Proceedings of the QMath10 Conference* (Moeciu 2007; I. Beltita, G. Nenciu, R. Purice, eds.), World Scientific, Singapore 2008; pp. 48–65.
1. S.Albeverio, A.Kostenko, M.Malamud, H.Neidhardt, *J.Math.Phys.* **54** (2013), 052103
 2. Ya.Granovskyi, M.Malamud, H.Neidhardt, A.Posilicano, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.271
 3. S.Kondej, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.419
- P. Exner, O. Post: *Quantum networks modelled by graphs*, *Proceedings of the Joint Physics/Mathematics Workshop on “Few-Body Quantum System”* (Aarhus 2007), *AIP Conf. Proc.*, vol. 998; Melville, NY, 2008, pp. 1–17.
1. D.Grieser, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.565
 2. P.N.Bibikov, L.V.Prokhorov, *J.Phys.* **A42** (2009), 045302

3. T.Ekholm, R.Frank, H.Kovařík, *Adv.Math.* **211** (2011), 5165
4. G.Leugering, J.Sokolowski, *ZAMM–J.Appl.Math.Mech.* **91** (2011), 926
5. R.Band, G.Berkolaiko, *Phys.Rev.Lett.* **111** (2013), 130404

P. Exner: *Leaky quantum graphs: a review*, Proceedings of the Isaac Newton Institute programme “Analysis on Graphs and Applications”, AMS “Proceedings of Symposia in Pure Mathematics” Series, vol. 77, Providence, R.I., 2008; pp. 523–564.

1. B.M.Brown, M.S.P.Eastham, I.G.Wood, *Arch. der Math.* **90** (2008), 554
2. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
3. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Phys.* **A42** (2009), 055207
4. B.M.Brown, M.S.P.Eastham, I.G.Wood, *J.Math.Anal.Appl.* **354** (2009), 24
5. E.Ragoucy, *J.Phys.* **A42** (2009), 295205
6. M.Znojil, *Phys.Rev.* **D80** (2009), 105004
7. M.S.P.Eastham, *J.Assoc. Arab Univ.* **7** (2009), 1
8. V.Caudrelier, E.Ragoucy, *Nucl.Phys.* **B828** (2010), 515
9. I.S.Lobanov, V.I.Lotoreichik, I.Yu.Popov, *Teor.Mat.Fiz.* **162** (2010), 332
10. I.S.Lobanov, V.Yu.Lotoreichik, I.Yu.Popov, *TMF* **162** (2010), 332
11. D.A.Eremin, I.Yu.Popov, *Nanosystems* **2**(2) (2011), 15
12. D.A.Eremin, D.A.Ivanov, I.Yu.Popov, *Z.Anal.Anw.* **31** (2012), 125
13. B.T.Kaynak, O.T.Turgut, *J. Phys.* **A45** (2012), 265202
14. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
15. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
16. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
17. V.Lotoreichik, *Nanosystems* **4**(2) (2013), 166
18. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
19. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **339** (2013), 266
20. A.Kostenko, M.Malamud, in “Spectral Analysis, Differential Equations and Mathematical Physics” (Gesztesy Festschrift; H.Holden et al., eds.), AMS 2013; p.235
21. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831
22. J.Behrndt, M.Langer, V.Lotoreichik, *Int.Eq. Oper.Theory* **77** (2013), 1
23. H.BelHadjAli, A.BenAmor, J.F.Brasche, *J.Math.Anal.Appl.* **409** (2014), 582
24. A.Kostenko, M.Malamud, *Ann.H.Poincaré* **15** (2014), 501
25. V.Duchêne, N.Raymond, *J.Phys.* **A47** (2014), 155203
26. V.Lotoreichik, *Operators & Matrices* **8** (2014), 573
27. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
28. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
29. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
30. J.J.Sarhad, K.E.Anderson, *Fund.Appl.Limnology* **186**, 135
31. V.Lotoreichik, J.Rohleder, *Oper. Theory Adv.Appl.* **247** (2015), 173
32. J.Behrndt, G.Grubb, M.Langer, V.Lotoreichik, *J.Spect.Theory* **5** (2015), 697
33. J.E.Galkowski, *PhD thesis*, UC Berkeley 2015
34. V.Lotoreichik, J.Rohleder, in Proc. IWOTA 2013 (T.Bhattacharyya, M.Dritschel, eds.), *Oper.Theory Adv.Appl.* **247** (2015), 173
35. M.Jex, V.Lotoreichik, *J.Math.Phys.* **57** (2016), 022101
36. J.Galkowski, *J.Phys.* **A49** (2016), 125205
37. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
38. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
39. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
40. O.Post, *Math.Nachr.* **289** (2016), 1052
41. S.Kondej, D.Krejčířík, *J.Math.Anal.Appl.* **446** (2017), 1328
42. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
43. B.Helffer, A.Kachmar, N.Raymond, *Comm.Contemp.Math.* (2016), 1650030

44. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 45. I.Y.Popov, I.V.Blinova, *Comm. Korean Math.Soc.* **31** (2016), 263
 46. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 47. A.Mas, *J.Math.Phys.* **58** (2017), 022301
 48. J.Behrndt,R.Frank,Ch.Kühn,V.Lotoreichik,J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 49. J.Behrndt, M.Langer, V.Lotorichik, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.129
 50. R.L.Frank, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.245
 51. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
 52. J.Behrndt, M.Malamud, H.Neidhardt, *J.Funct.Anal.* **273** (2017), 1970
 53. A.Mas, F.Pizzichillo, *J.Math.Phys.* **58** (2017), 082102
 54. T.Ourmières-Bonafos, K.Pankrashkin, F.Pizzichillo, *J.Math.Anal.Appl.* **458** (2018), 566
- J. Blank, P. Exner, M. Havlíček: *Hilbert–Space Operators in Quantum Physics*; 2nd edition, *xvii* + 654 p.; Theoretical and Mathematical Physics Series, Springer, Heidelberg 2008.
1. P.Kuchment, *Proc.Symp.Pure Math.* **77**, AMS, Providence, 2008; p.291
 2. G.Teschl: *Mathematical Methods in Quantum Mechanics*, AMS Graduate Series in Math., vol. 99; AMS, Providence, 2009
 3. S.Abramsky, *IEEE Proc.Symp.Logic Comp.Sci. (Edinburgh 2010)*, p.411
 4. B.Gardas, Z.Puchała, *J.Phys.* **A44** (2011), 215306
 5. P.Siegl, *Int.J.Theor.Phys.* **50** (2011), 991
 6. J.Paseka, *Int.J.Theor.Phys.* **50** (2011), 1198
 7. R.Adami et al., *Rev.Math.Phys.* **23** (2011), 409
 8. J.Paseka, Z.Riečanová, *Found.Phys.* **41** (2011), 1634
 9. N.C.Dias, A.Posilicano, J.N.Prata, *Comm.Pure Appl.Anal.* **10** (2011), 1687
 10. Z.Riečanová, M.Zajac, S.Pulmannová, *Rep.Math.Phys.* **68** (2011), 261
 11. J.Louko, E.Martinez-Pasqual, *J.Math.Phys.* **52** (2011), 123504
 12. M.Polakovič, Z.Riečanová, *Int.J.Theor.Phys.* **50** (2011), 1167
 13. Z.Riečanová, M.Zajac, *Acta Polytechnica* **51**(4) (2011), 73
 14. Z.Riečanová, *Acta Polytechnica* **51**(4) (2011), 78
 15. J.Janda, *Tatra Mts.Math.Publ.* **50** (2011), 63
 16. P.Amore, M.Rodriguez, C.A.Terrero-Escalante, *J.Phys.* **A45** (2012), 105303
 17. G.Chazitaskos, P.Luft, J.Tolar, *J.Phys.* **A45** (2012), 244027
 18. G.Kunstatte, J.Louko, *J.Phys.* **A45** (2012), 305302
 19. S.Demirel, *PhD thesis*, Universität Stuttgart 2012
 20. B.W.Roberts, *PhD thesis*, University of Pittsburgh 2012
 21. S.Pulmannová, Z.Riečanová, M.Zajac, *Rep.Math.Phys.* **69** (2012), 311
 22. C.Karakostas, *J.Gen.Philos.Sci.* **43** (2012), 45
 23. B.W.Roberts, *Phys.Rev.* **A86** (2012), 034103
 24. S.Abramsky, Ch.Heunen, *Proc.Sym.Appl.Math.* **71** (2012), 1
 25. Z.Riečanová, M.Zajac, *Rep.Math.Phys.* **70** (2012), 283
 26. J.Paseka, *Rep.Math.Phys.* **70** (2012), 375
 27. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 28. P.Hajíček, *Entropy* **15** (2013), 789
 29. A.Mostafazadeh, *Phil.Trans.Roy.Soc.* **A371** (2013), 20120050
 30. R.Adami, D.Noja, N.Visciglia, *Discr.Cont.Dyn.Syst.* **B18** (2013), 1155
 31. J.Paseka, S.Pulmannová, Z.Riečanová, *Int.J.Theor.Phys.* **52** (2013), 1994
 32. I.Chajda, J.Paseka, Lei Qiang, *Int.J.Theor.Phys.* **52** (2013), 2028
 33. S.Abramsky, *J.Philos.Logic* **42** (2013), 551
 34. B.Gardas, J.Dajka, *J.Phys.* **A46** (2013), 265302

35. A.Dvurečenskij, J.Janda, *Found.Phys.* **43** (2013), 1136
36. B.Gardas, *PhD thesis*, Katowice 2013
37. J.Janda, *Acta Polytechnica* **53** (2013), 289
38. Z.Riečanová, J.Janda, *Acta Polytechnica* **53** (2013), 457
39. D.S.Grebenkov, B.T.Nguyen, *SIAM Review* **55** (2013), 601
40. C.Fernandez, S.Richard, R.Tiedra-Aldecoa, *J.Spect.Theory* **3** (2013), 271
41. J.F.Kerner, *PhD thesis*, University of London 2013
42. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831
43. J.Janda, Z.Riečanová, *Int.J.Theor.Phys.* **52** (2013), 2151
44. P.Zieliński, *PhD thesis*, Łódź University of Technology 2013
45. M.Cranston, S.Molchanov, N.Squartini, *J.Funct.Anal.* **266** (2014), 1238
46. Quang San Phan, *J.Math.Phys.* **55** (2014), 013504
47. J.Janda, Z.Riečanová, *Soft Computing* **18** (2014), 413
48. J.Louko, S.P.Philpott, M.D.Waller, *Phys.Rev.* **D89** (2014), 044032
49. D.Noja, *Phil.Trans.Roy.Soc.* **A372** (2014, 20130002
50. A.Much, *J.Math.Phys.* **55** (2014), 022302
51. T.Pashby, *PhD thesis*, University of Pittsburgh 2014
52. Z.Riečanová, *Rep.Math.Phys.* **73** (2014), 213
53. S.Pulmannová, Z.Riečanová, E.Vinceková, *Rep.Math.Phys.* **73** (2014), 225
54. B.W.Roberts, *Stud.Hist.Phil.Sci.* **B47** (2014), 50
55. J.Paseka, *Math.Slovaca* **64** (2014), 777
56. G.L.Torrisi, *Comm.Stoch.Anal.* **8** (2014), 169
57. R.Adami, C.Cacciapuoti, D.Finco, D.Noja, *J.Diff.Eq.* **257** (2014), 3738
58. R.Seiringer, J.Yngvason, V.A.Zagrebnov, in *17th International Congress on Mathematical Physics* (A.Jensen, ed.), World Scientific, Singapore 2014; p. 610
59. R.Adami, C.Cacciapuoti, D.Finco, D.Noja, *Ann.Inst.H..Poincaré* **C31** (2014), 1289
60. J.Schmid, M.Griesemer, *Math.Phys.Anal.Geom.* **17** (2014), 265
61. M.Bureš, P.Siegl, *Ann.Phys.* **354** (2015), 316
62. J.Doukas, J.Louko, *Phys.Rev.* **91** (2015), 044010
63. A.Much, *J.Math.Phys.* **56** (2015), 022301
64. A.Hussein, D.Krejčířík, P.Siegl, *Trans.Am.Math.Soc.* **367** (2015), 2921
65. J.Louko, *Gen.Rel.Grav.* **47** (2015), 55
66. A.Much, *J.Math.Phys.* **46** (2015), 093501
67. J.Schmid, *PhD thesis*, Universität Stuttgart 2015
68. M.Y.Mahmoud, *PhD thesis*, Concordia University, Montréal 2015
69. D.Krejčířík, P.Siegl, M.Tater, J.Viola, *J.Math.Phys.* **56** (2015), 103513
70. J.Janda, J.Paseka, *Int.J.Theor.Phys.* **54** (2015), 4349
71. N.Privault, G.L.Torrisi, *ALEA, Lat.Am.J.Probab.Math.Stat.* **12** (2015), 309
72. E.G.Brown, J.Louko, *J. High Energy Phys.* **2015** (8), 061
73. F.W.Hennecke, *PhD thesis*, TU München 2015
74. R.Adami, E.Serra, P.Tilli, in *Mathematical technology of Networks* (D.Mugnolo, ed.), Springer Proc.Math.Stat., 2015; p. 1
75. J.Kerner, T.Mühlenbruch, *J.Math.Phys.* **57** (2016), 023509
76. M.G.Rasmussen, B.Ricaud, B.Savoie, *J.Math.Phys.* **57** (2016), 021901
77. Y.D.Han, T.Choi, *Nature Sci.Rep.* **6** (2016), 22986
78. O.O.Ibrogimov, P.Siegl, C.Tretter, *J.Diff.Eqs* **260** (2016), 3881
79. S.Abramsky, C.Heunen, in *Lecture Notes in Logic*, vol.45 “Logic and algebraic structures in quantum computing and information”, Cambridge University Press 2016; p. 88
80. R.Adami, *Math.Model.Nat.Phenom.* **11** (2016), 20
81. T.A.Bolokhov, *J.Math.Sci.* **215** (2016), 560
82. S.Jimbo, K.Kurata, *Indiana Univ.Math.J.* **65** (2016), 867
83. T.Pashby, *Dialectica* **70** (2016), 269

84. T.Siro, *PhD thesis*, Aalto University
 85. J.Niederle, J.Paseka, *Math.Slovaca* **66** (2016), 343
 86. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 87. V.Lotoreichik, P.Siegl, *Proc. AMS* **145** (2017), 1231
 88. B.Mityagin, P.Siegl, J.Viola, *J.Funct.Anal.* **272** (2017), 3129
 89. V.Jakubský, M.Tušek, *Ann.Phys.* **378** (2017), 171
 90. J.Kerner, T.Mühlenbruch, *Nanosystems* **8** (2017), 20
 91. G.L. Torrisi, *Bernoulli* **23** (2017), 2210
 92. P.Freitas, J.Lipovský, *J.Diff.Eqs* **263** (2017), 2780
 93. L.J.Zhou, M.E.Carrington, G.Kunstätter, J.Louko, *Phys.Rev.* **D95** (2017), 085007
 94. S.Akduman, A.Pankov, *Applicable Analysis* **96** (2017), 2149
 95. K.Yoshitomi, *Math.Slovaca* **67** (2017), 1031
 96. P.Siegl, F.Štampach, *Operators and Matrices* **11** (2017), 901
 97. V.Klika, *Chaos: Int.J.Interdisc.Sci.* **27** (2017), 073120
 98. J.Kerner, T.Mühlenbruch, *Rep.Math.Phys.* **80** (2017), 143
 99. S.Egger, J.Kerner, *Rev.Math.Phys.* **29** (2017), 17500325
- P. Exner, S. Kondej: *Hiatus perturbation for a singular Schrödinger operator with an interaction supported by a curve in \mathbb{R}^3* , *J. Math. Phys.* **49** (2008), 032111
1. B.T.Kaynak, O.T.Turgut, *J. Phys.* **A45** (2012), 265202
 2. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **327** (2012), 2605
 3. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
 4. M.Jex, V.Lotoreichik, *J.Math.Phys.* **57** (2016), 022101
 5. V Koshmanenko, M Dudkin: *The Method of Rigged Spaces in Singular Perturbation Theory of Self-Adjoint Operators*, Birkhäuser 2016
 6. A.Mas, *J.Math.Phys.* **58** (2017), 022301
 7. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
- P. Duclos, P. Exner, O. Turek: *On the spectrum of a bent chain graph*, *J. Phys.* **A41** (2008), 415206
1. S.Man'ko, *J.Math.Phys.* **53** (2012), 123521
 2. I.Yu.Popov, P.I.Smironov, *Phys.Lett.* **A377** (2013), 439
 3. M.A.Pyataev, M.A.Kokoreva, *Int.J.Mod.Phys.* **B27** (2013), 1350103
 4. I.Yu.Popov, A.N.Skorynina, I.V.Blinova, *J.Math.Phys.* **55** (2014), 033504
 5. H.Niikuni, *Int.Eq.Oper.Theory* **79** (2014), 477
 6. A.S.Melikhova, I.Yu.Popov, *J.Phys.:Conf.Ser.* **541** (2014), 012061
 7. D.A.Eremin, D.A.Ivanov, I.Yu.Popov, *Eur.Phys.J.* **B87** (2014), 181
 8. A.S.Melikhova, in *Mathematical Results in Quantum Mechanics*, World Scientific, Singapore 2014; p. 325
 9. A.S.Melikhova, I.Yu.Popov, *J.Phys.: Conf.Series* **541** (2014), 012061
 10. E.N.Grishanov et al., *Nanosystems* **6** (2015), 637
 11. M.O.Kovaleva, I.Yu.Popov, *Rep.Math.Phys.* **76** (2015), 171
 12. I.Yu.Popov, I.V.Blinova, A.I.Popov, *J.Phys.:Conf.Ser.* **661** (2015), 012024
 13. H.Niikuni, *Tokyo J.Math.* **38** (2015), 409
 14. H.Niikuni, *J.Appl.Math.Comp.* **50** (2016), 453
 15. I.V.Popova, A.S.Melikhova, I.Yu.Popov, *J.Phys.: Conf.Series* **735** (2016), 012062
 16. A.S.Melikhova, I.Yu.Popov, *Appl.Anal.* **96** (2017), 215
 17. M.Belov, I.Popov, I. Blinova, *ITM Web Conf.* **9** (2017), 01007
 18. A.S.Melikhova, *Nanosystems* **8** (2017), 188
 19. H.Niikuni, *Proc.Indian Acad.Sci.: Math.Sci.* **127** (2017), 471
 20. D.A.Eremin et al., *Nanosystems* **7** (2016), 420

- P. Exner, A. Mantile: *On the optimization of the principal eigenvalue for single-centre point-interaction operators in a bounded region*, J. Phys. **A41** (2008), 065305
1. D.Huet, *Int.J.Pure Appl.Math.* **62** (2010), 79
 2. A. Posilicano, *J.Funct.Anal.* **265** (2013), 303
- P. Exner, P. Šeba: *A Markov process associated with plot-size distribution in Czech Land Registry and its number-theoretic properties*, J. Phys. **A41** (2008), 045004
1. S.Volkov, *Alea* **6** (2009), 399
- T. Cheon, P. Exner, O. Turek: *Spectral filtering in quantum Y-junction*, J. Phys. Soc. Japan **78** (2009), 124004
1. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
 2. H.Niikuni, *Int.Eq.Oper.Theory* **79** (2014), 477
 3. H.Niikuni, *Tokyo J.Math.* **38** (2015), 409
- P. Exner, M. Fraas: *On geometric perturbations of critical Schrödinger operators with a surface interaction*, J. Math. Phys. **50** (2009), 112101
1. J.Behrndt, M.Langer, V.Lotoreichik, *Ann.H.Poincaré* **14** (2013), 385
 2. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **339** (2013), 266
 3. J.Behrndt, M.Langer, V.Lotoreichik, *Int.Eq.Oper.Theory* **77** (2013), 1
 4. B.T.Kaynak, O.T.Turgut, *Ann.Phys.* **356** (2015), 426
 5. M.Jex, V.Lotoreichik, *J.Math.Phys.* **57** (2016), 022101
 6. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 7. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 8. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
- P. Exner, O. Post: *Approximation of quantum graph vertex couplings by scaled Schrödinger operators on thin branched manifolds*, J. Phys. A **A42** (2009), 415305
1. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
 2. E.Costa, *PhD thesis*, SISSA Trieste 2010
 3. J.M.Harrison, K.Kirsten, *J.Phys.* **A44** (2011), 235301
 4. T.Cheon, in *Proc. ICQNM 2011*, p. 18
 5. S.Egger né Endres, *PhD thesis*, Universität Ulm 2011
 6. D.Borisov, G.Cardone, *J.Math.Phys.* **53** (2012), 023503
 7. T.Cheon, *Int.J.Adv.Syst.Meas.* **5** (2012), 34
 8. S.Man'ko, *J.Math.Phys.* **53** (2012), 123521
 9. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 10. D.Borisov, P.Freitas, *Analysis & PDE* **6** (2013), 1051
 11. J.L.Taylor, *J.Spect.Theory* **3** (2013), 293
 12. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
 13. M.Egidi, *PhD thesis*, Durham University 2015
 14. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 15. Z.Sobirov, D.Babajanov, D.Matrasulov, *Nanosystems* **8** (2017), 29
 16. Y.Pinchover, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.459
- P. Exner, P. Šeba, D. Vašata: *The distribution of landed property*, Physica **A388** (2009), 4619–4623.
1. M.Fiałkowski, A.Bitner, R.Holyst, in *Mathematical Results in Quantum Physics – Proceedings of QMath11*, World Scientific, Singapore 2011; p. 244

- T. Cheon, P. Exner, O. Turek: *Approximation of a general singular vertex coupling in quantum graphs*, Ann. Phys. **325** (2010), 548-578.
1. S.S.Man'ko, *J.Phys.* **A43** (2010), 445304
 2. O.Post, in *Mathematical Results in Quantum Physics – Proceedings of QMath11*, World Scientific, Singapore 2011; p. 60
 3. J.M.Harrison, K.Kirsten, *J.Phys.* **A44** (2011), 235301
 4. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 5. J.M.Harrison, K.Kirsten, C.Textier, *J.Phys.* **A45** (2012), 125206
 6. D.Mugnolo, R.Nittka, *J.Evol.Eq.* **12** (2012), 593
 7. S.Man'ko, *J.Math.Phys.* **53** (2012), 123521
 8. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 9. A.V.Zolotaryuk, *Phys.Rev.* **A87** (2013), 052121
 10. V.Eshniyozov, J.Yusupov, D.Matrasulov, I.Ibragimov, in *Low-Dimensional Functional Materials*, Springer 2013; p. 139
 11. D.Lenz, C.Schubert, I.Veselić, *Math.Nachr.* **287** (2014), 962
 12. D.Mugnolo: *Semigroup Methods for Evolution Equations on Networks*, Springer 2014
 13. D.U.Matrasulov, J.R.Yusupov, K.K.Sabirov, Z.A.Sobirov, *Nanosystems* **6** (2015), 173
 14. D.Barseghyan, A.Khrabustovskyi, *J.Phys.* **A48** (2015), 255201
 15. K.K.Sabirov et al., *Nanosystems* **6** (2015), 762
- T. Cheon, P. Exner, O. Turek: *Tripartite connection condition for quantum graph vertex*, Phys. Lett. **A375** (2010), 113–118.
1. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 2. J.-C.Kiik, P.Kurasov, M.Usman, *Phys.Lett.* **A379** (2015), 1871
 3. Wen Liu, *PhD thesis*, Texas A&M University 2008
- P. Exner, P. Kuchment, B. Winn: *On the location of spectral edges in \mathbb{Z} -periodic media*, J. Phys. **A43** (2010), 474022
1. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 2. S.A.Nazarov, *J.Math.Sci.* **186** (2012), 247
 3. D.Borisov, K.Pankrashkin, *J.Phys.* **A46** (2013), 235203
 4. S.A.Nazarov, *Vestnik St.Petersburg Univ.* **46** (2013), 89
 5. D.I.Borisov, K.V.Pankrashkin, *Funct.Anal.Appl.* **47** (2013), 238
 6. G.Berkolaiko, *Analysis & PDE* **6** (2013), 1213
 7. D.I.Borisov, K.V.Pankrashkin, *Math.Notes* **93** (2013), 5
 8. K. Pankrashkin, *Arch. der Math.* **102** (2014), 155
 9. F.Hiroshima, J.Lörinczi, *Pacific J.Math.Industry* **6** (2014), 7
 10. D.Barseghyan, A.Khrabustovskyi, *J.Phys.* **A48** (2015), 255201
 11. R.Band, G.Berkolaiko, T.Weyand, *J.Math.Phys.* **56** (2015), 122111
 12. S.A.Nazarov, J.Taskinen, *ZAMP* **66** (2015), 3017
 13. Z.Muminov, N.Abdul Manaf, U.Kuljanov, *AIP Conf.Proc.* **1739** (2016), 020013
- P. Exner, J. Lipovský: *Resonances from perturbations of quantum graphs with rationally related edges*, J. Phys. **A43** (2010), 105301
1. E.B.Davies, A.Pushnitski, *Analysis & PDE* **4** (2011), 729
 2. R.Band, G.Berkolaiko, U.Smilansky, *Ann. H.Poincaré* **13** (2012), 145
 3. J.Rohleder, *J.Phys.* **A48** (2015), 165202
 4. R.Assel, M.Jellouli, M. Khenissi, *J.Diff.Eqs* **261** (2016), 4030
 5. Minjae Lee, M.Zworski, *J.Math.Phys.* **57** (2016), 092101
- E.B. Davies, P. Exner, J. Lipovský: *Non-Weyl asymptotics for quantum graphs with general coupling conditions*, J. Phys. **A43** (2010), 474013

1. R.Carlson, *Networks and Heterogeneous Media* **6** (2011), 257
 2. S.Egger né Endres, *PhD thesis*, Universität Ulm 2011
 3. R.Band, G.Berkolaiko, U.Smilansky, *Ann. H.Poincaré* **13** (2012), 145
 4. O.Post: *Spectral Analysis on Graph-like Spaces*, LNM 2039; Springer, Berlin 2012
 5. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 6. J.Sjostrand, *Mém.Math.Soc. de France*, vol. 136, SMF 2014
 7. A.Hussein, *J.Evol.Eq.* **14** (2014), 477
 8. P.Kurasov, S.Naboko, *J.Spect.Theory* **4** (2014), 211
 9. Minjae Lee, M.Zworski, *J.Math.Phys.* **57** (2016), 092101
 10. S.Albeverio, I.M.Karabash, *Operators and Matrices* **11** (2017), 1097
- P. Exner, J. Lipovský: *On the absence of absolutely continuous spectra for Schrödinger operators on radial tree graphs*, *J.Math.Phys.* **51** (2010), 122107
1. V.Lotoreichik, *Opuscula Math.* **31** (2011), 615
 2. R.Carlson, *J.Spect.Theory* **7** (2017), 907
- P. Exner, M. Tater: *Spectrum of Dirichlet Laplacian in a conical layer*, *J. Phys.* **A43** (2010), 474023
1. P.Amore, M.Rodriguez, C.A.Terrero-Escalante, *J.Phys.* **A45** (2012), 105303
 2. N.Raymond, *Gazette des Mathématiciens* **131** (2012), 5
 3. M.Dauge, N.Raymond, *J.Math.Phys.* **53** (2012), 123529
 4. M.Dauge, Y.Lafranche, N.Raymond, *ESAIM Proc.* **35** (2012), 14
 5. N.Raymond, *HDR thèse*, Université de Rennes 1, 2014
 6. T.Ourmières-Bonafos, *J.Spect.Theory* **4** (2014), 485
 7. M.Dauge, Ourmières-Bonafos, N.Raymond, *Commun.Pure Appl.Anal.* **14** (2015), 1239
 8. K.Pankrashkin, *Math. Model. Nat. Phenom.* **11** (2016), 100
 9. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 10. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 11. P.Freitas, D.Krejčířkin *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.261
 12. T.Ourmières-Bonafos, K.Pankrashkin, F.Pizzichillo, *J.Math.Anal.Appl.* **458** (2018), 566
- P. Exner, O. Turek: *High-energy asymptotics of the spectrum of a periodic square-lattice quantum graph*, *J. Phys. A: Math. Theor.* **43** (2010), 474024
1. R.Band, G.Berkolaiko, *Phys.Rev.Lett.* **111** (2013), 130404
- R. Carlone, P. Exner: *Dynamics of an electron confined to a “hybrid plane” and interacting with a magnetic field*, *Rep. Math. Phys.* **67** (2011), 211–227.
1. M.A.Pyataev, M.A.Kokoreva, *Int.J.Mod.Phys.* **B27** (2013), 1350103
 2. R.Juršėnas, *Rep.Math.Phys.* **75** (2015), 1
 3. R.Juršėnas, *J.Phys.* **A49** (2016), 065202
 4. I.Y.Popov, A.I.Popov, *Rep.Math.Phys.* **80** (2017), 1
- T. Cheon, P. Exner, O. Turek: *Inverse scattering problem for quantum graph vertices*, *Phys. Rev.* **A83** (2011), 062715
1. G.Berkolaiko, P.Kuchment: *Introduction to Quantum Graphs*, AMS, Providence 2013
 2. V.Barrera-Figueroa, V.S.Rabinovich, *J.Phys.* **A50** (2017), 215207
- P. Exner, J. Lipovský: *Non-Weyl resonance asymptotics for quantum graphs in a magnetic field*, *Phys. Lett.* **A375** (2011), 805–807.
1. V.Pivovarchik, H.Woracek, *Asympt.Anal* **73** (2011), 169
 2. J.Sjostrand, *Mém.Math.Soc. de France*, vol. 136, SMF 2014
 3. P.Kurasov, S.Naboko, *J.Spect.Theory* **4** (2014), 211

- P. Exner: *Vertex couplings in quantum graphs: approximations by scaled Schrödinger operators*, Proceedings of the ICM Satellite Conference “Mathematics in Science and Technology” (New Delhi 2010; A.H. Siddiqi, R.C. Singh, P. Manchanda, eds.), World Scientific, Singapore 2011, pp. 71–92.
1. V.Banica, L.I.Ignat, *J.Math.Phys.* **52** (2011), 083703
 2. L.I.Ignat, A.F.Pazoto, L.Rosier, *Inv.Probl.* **28** (2012), 015011
 3. L.I.Ignat, *Habilitation thesis*, Inst. S.Stoilow, Bucharest 2012
 4. V.Banica, L.I.Ignat, *Analysis& PDE* **7** (2014), 903
 5. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
- P. Exner, H. Neidhardt, V.A. Zagrebnov: *Remarks on the Trotter-Kato product formula for unitary groups*, *Integral Equations and Operator Theory* **69** (2011), 451–478.
1. M.Asorey, P.Facchi, G.Marmo, S.Pascazio, *J.Phys.* **A46** (2013), 102001
 2. T.Laetsch, *J.Funct.Anal.* **265** (2013), 1667
 3. W.P.Petersen, P.-A.Vuillermot, *Zs.Angew.Math.Phys.* **65** (2014), 613
 4. T.Ichinose, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.401
 5. J.Haga, R.L.Maitra, *SIGMA* **13** (2017), 039
- D. Vašata, P. Exner, P. Šeba: *Built-up structure criticality*, *Physica* **A390** (2011), 3922–3931.
1. Y.Wang, Q.Zhang, C.Zhu, M.Hu, V.Duong, *Physica* **A441** (2016), 151
- P. Exner, D. Barseghyan: *Spectral estimates for a class of Schrödinger operators with infinite phase space and potential unbounded from below*, *J. Phys. A: Math. Theor.* **45** (2012), 075204
1. B.Camus, N.Rautenberg, *J.Math.Phys.* **56** (2015), 021506
 2. B.Camus, *Anal.Math.Phys.* **6** (2016), 59
 3. B.Camus, *Int.Eqs Oper.Theory* **85** (2016), 25
- P. Exner, M. Jex: *On the ground state of quantum graphs with attractive δ -coupling*, *Phys. Lett.* **A376** (2012), 713–717.
1. P.Kurasov, G.Malenová, S.Naboko, *J.Phys.* **A46** (2013), 275309
 2. P.Kurasov, *Acta Phys.Polonica* **A124** (2013), 1060
 3. P.Kurasov, S.Naboko, *J.Spect.Theory* **4** (2014), 211
 4. J.-C.Kiik, P.Kurasov, M.Usman, *Phys.Lett.* **A379** (2015), 1871
 5. G.Karreskog, P.Kurasov, I.Trygg Kupersmidt, *Proc.Am.Math.Soc.* **144** (2016), 1197
 6. J.B.Kennedy, P.Kurasov, G.Malenová, D.Mugnolo, *Ann.H.Poincaré* **17** (2016), 2439
 7. G.Berkolaiko, Wen Liu, *J.Math.Anal.Appl.* **445** (2017), 803
 8. J.Rohleder, *Proc. AMS* **145** (2017), 2119
 9. C.Cacciapuoti, D.Finco, D.Noja, *Nonlinearity* **30** (2017), 3271
 10. D.Finco, in *Advances in Quantum Mechanics* (A.Michelangeli, G.Dell’Antonio, eds.), Springer INdAM Series, vol.18 (2017), p.153
 11. J.Rohleder, *Proc.Amer.Math.Soc.* **145** (2017), 2119
 12. R.Band, G.Lévy, *Ann.H.Poincaré* **18** (2017), 3269
- H. Nowotny, P. Exner: *Improving ERC ethical standards*, *Science* **341** (6150) (2012), 1043.
1. D.Gurwitz, E.Milanesi, T.König, *PLOS Biology* **12** (2014), 1002010
 2. S.B.Krstić, *Sci.Eng.Ethics* **21** (2015), 1181
- J. Behrndt, P. Exner, V. Lotoreichik: *Essential spectrum of Schrödinger operators with δ -interactions on the union of compact Lipschitz hypersurfaces*, *Proc. Appl. Math. Mech.* (2013), 523–524.
1. V.S.Rabinovich, *Math.Notes* **102** (2017), 761

- D. Borisov, P. Exner, A. Golovina: *Tunneling resonances in systems without a classical trapping*, *J. Math. Phys.* **54** (2013), 012102
1. A.Markowsky, N.Schopohl, *Phys.Rev.* **A89** (2014), 013622
 2. I.Yu.Popov, A.I.Popov, *J.King Saud Univ.Sci.* **29** (2017), 133
 3. K.Pankrashkin, *J.Math.Anal.Appl.* **449** (2017), 907
 4. S.Kondej, *J.Phys.* **A50** (2017), 315203
 5. A.I.Popov, I.Y.Popov, D.A.Gerasimov, *AIP Conf.Proc.* **1863** (2017), 390002
- P. Exner, J. Lipovský: *Resonances on hedgehog manifolds*, *Acta Polytechnica* **53** (2013), 416–426.
1. S.S.Poghosyan, T.Cheon, *J.Phys.Soc.Japan* **83** (2014), 044004
- P. Exner, O. Post: *A general approximation of quantum graph vertex couplings by scaled Schrödinger operators on thin branched manifolds*, *Commun. Math. Phys.* **322** (2013), 207–227.
1. O.Turek, T.Cheon, *J.Math.Phys.* **54** (2013), 032104
 2. M.Hinz, A.Teplyaev, *J.Funct.Anal.* **265** (2013), 2830
 3. D.Noja, *Phil.Trans.Roy.Soc.* **A372** (2014), 20130002
 4. H.Uecker, D.Grieser, Z.Sobirov, D.Babajanov, D.Matrasulov, *Phys.Rev.* **E91** (2015), 023209
 5. J.-C.Kiik, P.Kurasov, M.Usman, *Phys.Lett.* **A379** (2015), 1871
 6. L.Baudouin, M.Yamamoto, *Appl.Anal.* **94** (2015), 2370
 7. P.Kurasov, R.Ogik, *Rep.Math.Phys.* **78** (2016), 199
 8. V.Adamyán, H.Langer, C.Tretter, M.Winklmeyer, *Int.Eq.Oper.Theory* **86** (2016), 121
 9. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 10. Z.Sobirov, D.Babajanov, D.Matrasulov, *Nanosystems* **8** (2017), 29
 11. Y.Pinchover, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovářík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.459
- P. Exner: *Momentum operators on graphs*, Fritz Gesztesy Festschrift (H. Holden, B. Simon, G. Teschl, eds.), AMS 2013
1. A.Hussein, D.Mugnolo, *J.Phys.* **A46** (2013), 235202
 2. S.Pedersen, F.Tian, *Int.Eq.Oper.Theory* **77** (2013), 57
 3. P.Kurasov, S.Naboko, *J.Spect.Theory* **4** (2014), 211
 4. D.Mugnolo: *Semigroup Methods for Evolution Equations on Networks*, Springer 2014
 5. D.Mugnolo, J.F.Rault, *Bull.Belg.Math.Soc.* **21** (2014), 415
 6. S.Pedersen, J.Phillips, Feng Tian, C.Watson, *Compl.Anal.Oper.Theory* **9** (2015), 1557
- P. Exner, D. Barseghyan: *Spectral estimates for Dirichlet Laplacians and Schrödinger operators on geometrically nontrivial cusps*, *J. Spect. Theory* **3** (2013), 465–484.
1. G.Radunović, *PhD thesis*, Zagreb University 2015
 2. D.Krejčířík, *Appl.Math.Lett.* **46** (2015), 7
- P. Exner, D. Barseghyan: *Spectral analysis of Schrödinger operators with unusual semiclassical behavior*, *Acta Polytechnica* **53** (2013), 271–279.
1. G.Radunović, *PhD thesis*, Zagreb University 2015
- P. Exner, M. Jex: *Spectral asymptotics of a strong δ' interaction on a planar loop*, *J. Phys. A: Math. Theor.* **46** (2013), 345201
1. V.Duchêne, N.Raymond, *J.Phys.* **A47** (2014), 155203
 2. S.Kondej, V.Lotoreichik, *J.Math.Anal.Appl.* **420** (2014), 1416
 3. V.Lotoreichik, J.Rohleder, *Oper. Theory Adv.Appl.* **247** (2015), 173
 4. J.Behrndt, G.Grubb, M.Langer, V.Lotoreichik, *J.Spect.Theory* **5** (2015), 697
 5. V.Lotoreichik, J.Rohleder, in *Proc. IWOTA 2013* (T.Bhattacharyya, M.Dritschel, eds.), *Oper.Theory Adv.Appl.* **247** (2015), 173

6. J.Behrndt, M.Langer, V.Lotoreichik, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.129
- P. Exner, S.S. Manko: *Approximations of quantum-graph vertex couplings by singularly scaled potentials*, *J. Phys. A: Math. Theor.* **46** (2013), 345202 (17pp)
1. Yu.Golovaty, V.Flyud, *Open Math.* **15** (2017), 404
- P. Exner: *Solvable models of resonances and decays*, Proceedings of the Conference “Mathematical Physics, Spectral Theory and Stochastic Analysis” (Goslar 2011; M. Demuth, W. Kirsch, eds.), Birkhäuser, Basel 2013; pp. 165–227.
1. S.Kondej, D. Krejčířík, *Publ. RIMS* **49** (2013), 831
 2. V.Lotoreichik, H.Neidhardt, I.Yu.Popov, in *Mathematical Results in Quantum Mechanics*, World Scientific, Singapore 2014; p. 283
 3. I.Herbst, R.Mavi, *J.Phys.* **A49** (2016), 195204
 4. J.Lipovský, *J.Phys.* **A49** (2016), 375202
 5. Minjae Lee, M.Zworski, *J.Math.Phys.* **57** (2016), 092101
 6. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
 7. A.Sacchetti, in *Advances in Quantum Mechanics* (A.Michelangeli, G.Dell’Antonio, eds.), Springer INdAM Series, vol.18 (2017), p.283
- J. Behrndt, P. Exner, V. Lotoreichik: *Schrödinger operators with δ -interactions supported on conical surfaces*, *J. Phys. A: Math. Theor.* **47** (2014), 355202 (16pp)
1. M.Dauge, Ourmières-Bonafos, N.Raymond, *Commun.Pure Appl.Anal.* **14** (2015), 1239
 2. K.Pankrashkin, *Math. Model. Nat. Phenom.* **11** (2016), 100
 3. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 4. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 5. V.Bonnaillie-Noël, M.Dauge, N.Popoff, N.Raymond, in *Spectral Theory and Mathematical Physics* (M.Mantoiu et al., eds.), OTAA Series, vol. 254, Springer 2016; p. 37
 6. V.Bruneau, N.Popoff, *Analysis & PDE* **9** (2016), 1259
 7. S.Kondej, D.Krejčířík, *J.Math.Anal.Appl.* **446** (2017), 1328
 8. T.Ourmières-Bonafos, K.Pankrashkin, F.Pizzichillo, *J.Math.Anal.Appl.* **458** (2018), 566
- P. Exner: *Resonances in quantum networks and their generalizations*, in “Nonlinear Phenomena in Complex Systems: From Nano to Macro Scale”, Proceedings of the NATO Advanced Research Workshop “New Challenges in Complex System Physics: Disaster Forecasting, Crisis Modeling and Sustainable Development” (Samarkand 2013), Springer 2014; pp. 159–178.
1. J.Rohleder, *J.Phys.* **A48** (2015), 165202
- P. Exner, K. Pankrashkin: *Strong coupling asymptotics for a singular Schrödinger operator with an interaction supported by an open arc*, *Comm. PDE* **39** (2014), 193–212.
1. S.Kondej, *J.Math.Phys.* **54** (2013), 093511
 2. S.Kondej, W.Leoński, *J.Phys.* **A47** (2014), 225201
 3. V.Lotoreichik, J.Rohleder, *Oper. Theory Adv.Appl.* **247** (2015), 173
 4. J.Behrndt, G.Grubb, M.Langer, V.Lotoreichik, *J.Spect.Theory* **5** (2015), 697
 5. V.Lotoreichik, J.Rohleder, in Proc. IWOTA 2013 (T.Bhattacharyya, M.Dritschel, eds.), *Oper. Theory Adv. Appl.* **247** (2015), 173
 6. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 7. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 8. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 9. V.Bruneau, N.Popoff, *Analysis & PDE* **9** (2016), 1259
 10. S.Kondej, D.Krejčířík, *J.Math.Anal.Appl.* **446** (2017), 1328

- P. Exner, A. Laptev, M. Usman: *On some sharp spectral inequalities for Schrödinger operators on semi-axis*, *Commun. Math. Phys.* **326** (2014), 531–541.
1. L.Schimmer, *Commun.Math.Phys.* **334** (2015), 473
 2. O.Mickelin, *Bull. Math.Sci.* **6** (2016), 1
- P. Exner, S.S. Manko: *Approximations of quantum-graph vertex couplings by singularly scaled rank-one operators*, *Lett. Math. Phys.* **104** (2014), 1079–1094.
1. R.Adami, D.Noja, *Mat.Model.Nat.Phenomena* **9** (2014), 1
 2. V.Adamyan, H.Langer, C.Tretter, M.Winklmeier, *Int.Eq. Oper. Theory* **86** (2016), 121
 3. A.V.Zolotaryuk, *J.Phys.* **A50** (2017), 225303
- J. Behrndt, P. Exner, V. Lotoreichik: *Schrödinger operators with δ and δ' -interactions on Lipschitz surfaces and chromatic numbers of associated partitions*, *Rev. Math. Phys.* **26** (2014), 1450015 (43pp)
1. A.Mantile, A.Posilicano, M.Sini, *J.Diff.Eqs* **261** (2016), 1
 2. A.Mantile, A.Posilicano, *Nanosystems* **7** (2016), 315
 3. A.Mas, *J.Math.Phys.* **58** (2017), 022301
 4. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
- P. Exner, A. Minakov: *Curvature-induced bound states in Robin waveguides and their asymptotical properties*, *J. Math. Phys.* **55** (2014), 122101 (19pp)
1. K.Pankrashkin, *Nanosystems* **6** (2015), 46
 2. R.Novák, *Asympt.Anal.* **96** (2016), 251
 3. K.Pankrashkin, *Math. Model. Nat. Phenom.* **11** (2016), 100
 4. K.Pankrashkin, N.Popoff, *J.Math.Pur.Appl.* **106** (2016), 615
 5. H.Kovařík, K.Pankrashkin, *Cal. Var. & PDE* **56** (2017), 49
- P. Exner, A. Minakov, L. Parnovski: *Asymptotic eigenvalue estimates for a Robin problem with a large parameter*, *Portugal. Math.* **71** (2014), 141–156.
1. B.Helffer, K.Pankrashkin, *J.London Math.Soc.* **91** (2015), 225
 2. P.Freitas, D.Krejčířík, *Adv.Math.* **280** (2015), 322
 3. K.Pankrashkin, N.Popoff, *Calc. Var. & PDE* **54** (2015), 1947
 4. K.Pankrashkin, *Nanosystems: Phys.Chem.Math.* **6** (2015), 46
 5. K.Pankrashkin, *Math. Model. Nat. Phenom.* **11** (2016), 100
 6. A.Kachmar, *Asympt.Anal.* **98** (2016), 341
 7. K.Pankrashkin, N.Popoff, *J.Math.Pur.Appl.* **106** (2016), 615
 8. B.Helffer, A.Kachmar, N.Raymond, *Comm.Contemp.Math.* (2016), 1650030
 9. A.Kachmar, P.Keraval, N.Raymond, *Confluentes Mathematici* **8** (2016), 39
 10. N.Raymond: *Bound States of the Magnetic Schrödinger Operators*, EMS, Zürich 2017
 11. A.V.Filinovskiy, *Math.Model.Anal.* **22** (2017), 37
 12. B.Helffer, A.Kachmar, *Trans.Am.Math.Soc.* **369** (2017), 3263
 13. S.Fournais, L.Le Treust, N.Raymond, J.Van Schaftigen, *J.Math.Soc.Japan* **69** (2017), 1667
- P. Exner, H. Kovařík: *Quantum Waveguides*; *xvii* + 382 p.; Springer International, Heidelberg 2015
1. V.Lotoreichik, J.Rohleder, in *Proc. IWOTA 2013* (T.Bhattacharyya, M.Dritschel, eds.), *Oper. Theory Adv. Appl.* **247** (2015), 173
 2. E.Pelantová, Š.Starosta, M.Znojil, *J.Phys.* **A49** (2016), 155201
 3. E.Rivera-Mociños, E.Sadurní, *J.Phys.* **A49** (2016), 175302
 4. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 5. M.Tušek, *J.Phys.* **A49** (2016), 365205

6. J.Behrndt, M.Langer, V.Lotoreichik, *Nanosystems* **7** (2016), 290
 7. Z. Sobirov et al., *Europhys.Lett.* **115** (2016), 50002
 8. K.Pankrashkin, *J.Math.Anal.Appl.* **449** (2017), 907
 9. V.Bolsinger, S.Krönke, P.Schmelcher, *J.Phys.* **B50** (2017), 034003
 10. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
 11. J.Yusupov, *Nanosystems* **8** (2017), 42
 12. V.Barrera-Figueroa, V.S.Rabinovich, *J.Phys.* **A50** (2017), 215207
 13. J.Behrndt, M.Langer, V.Lotorichik, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.129
 14. G.Cardone, A.Khrabustovskiy, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.177
 15. A.Hänel, T.Weidl, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.315
 16. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
 17. M.Wallace, R.Feres, G.Yablonsky, *Comput.& Math.Appl.* **73** (2017), 2015
 18. S.Kondej, *J.Phys.* **A50** (2017), 315203
 19. M.Tarulli, *Analysis* **37** (2017), 117
 20. J.Kerner, T.Mühlenbruch, *Rep.Math.Phys.* **80** (2017), 143
- P. Exner, S.S. Manko: *Spectra of magnetic chain graphs: coupling constant perturbations*, *J. Phys. A: Math. Theor.* **48** (2015), 125302
1. T.Cheon, S.S.Poghosyan, *J.Phys.Soc.Japan* **84** (2015), 064006
 2. F.M.Andrade et al., *Phys.Rep.* **647** (2016), 1
 3. J.Lipovský, *Acta Phys.Slovaca* **66** (2016), 265
- P. Exner, A. Khrabustovskiy: *On the spectrum of narrow Neumann waveguide with periodically distributed δ^l traps*, *J. Phys. A: Math. Theor.* **48** (2015), 315301
1. M.Jex, V.Lotoreichik, *J.Math.Phys.* **57** (2016), 022101
- P. Exner, S. Kondej: *Gap asymptotics in a weakly bent leaky quantum wire*, *J. Phys. A: Math. Theor.* **48** (2015), 495301
1. V.Lotoreichik, T.Ourmières, *Comm.PDE* **41** (2016), 999
 2. V.Bruneau, N.Popoff, *Analysis & PDE* **9** (2016), 1259
 3. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447
- P. Exner, O. Turek: *Spectrum of a dilated honeycomb network*, *Integral Equations and Operator Theory* **81** (2015), 535–557.
1. E.Pelantová, Š.Starosta, M.Znojil, *J.Phys.* **A49** (2016), 155201
 2. J.-C.Cuenin, Ch.Tretter, *J.Math.Anal.Appl.* **441** (2016), 235
- J. Dittrich, P. Exner, Ch. Kühn, K. Pankrashkin: *On eigenvalue asymptotics for strong δ -interactions supported by surfaces with boundaries*, *Asympt. Anal.* **97** (2016), 1–25.
1. V.Bruneau, N.Popoff, *Analysis & PDE* **9** (2016), 1259
 2. J.Behrndt, M.Langer, V.Lotorichik, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS-PH, Zürich 2017; p.129
 3. N.Arrizabalaga, L.Le Treust, N.Raymond, *Commun.Math.Phys.* **354** (2017), 641
- P. Exner, S. Vugalter: *On the existence of bound states in asymmetric leaky wires*, *J. Math. Phys.* **57** (2016), 022104
1. K.Pankrashkin, in *Functional Analysis and Operator Theory for Quantum Physics* (J.Dittrich, H.Kovařík, A.Laptev, eds.), EMS Publ., Zürich 2017; p.447

- P. Exner, S. Kondej: *Strong coupling asymptotics for Schrödinger operators with an interaction supported by an open arc in three dimensions*, Rep. Math. Phys. **77** (2016), 1–17.
1. J.Behrndt, R.Frank, Ch.Kühn, V.Lotoreichik, J.Rohleder, *Ann.H.Poincaré* **18** (2017), 1305
- P. Exner, J. Rohleder: *Generalized interactions supported on hypersurfaces*, J. Math. Phys. **57** (2016), 041507
1. S.Egger, J.Kerner, *Rev.Math.Phys.* **29** (2017), 17500325
- J. Behrndt, P. Exner, M. Holzmann, V. Lotoreichik: *Approximation of Schrödinger operators with δ -interactions supported on hypersurfaces*, Math. Nachr. **290** (2017), 1215–1248.
1. S.Kondej, *J.Phys.* **A50** (2017), 315203
 2. A.Mas, F.Pizzichillo, *J.Math.Phys.* **58** (2017), 082102
- J. Behrndt, P. Exner, M. Holzmann, V. Lotoreichik: *On the spectral properties of Dirac operators with electrostatic δ -shell interactions*, J. Math. Pures at Appliquées, to appear
1. A.Mas, F.Pizzichillo, *J.Math.Phys.* **58** (2017), 082102
- P. Exner, V. Lotoreichik: *A spectral isoperimetric inequality for cones*, Lett. Math. Phys. **107** (2017), 717–732.
1. S.Albeverio, I.M.Karabash, *Operators and Matrices* **11** (2017), 1097
 2. T.Ourmières-Bonafos, K.Pankrashkin, F.Pizzichillo, *J.Math.Anal.Appl.* **458** (2018), 566

Remarks: Many of the quoted papers are listed by the first author only. References to Russian papers are given mostly to the original edition; if there is a translation, the volume and page numbers may differ. References to a journal paper and its preprint version go both under the head of the former.

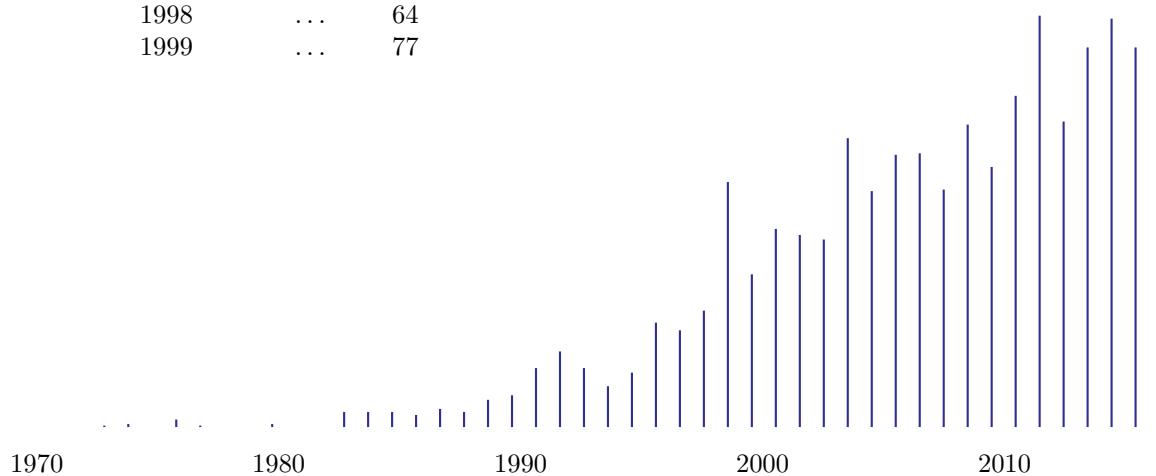
2 Summary

Number of cited works: 2476

Total number of citations: 3864 (average 15.64 per cited item)

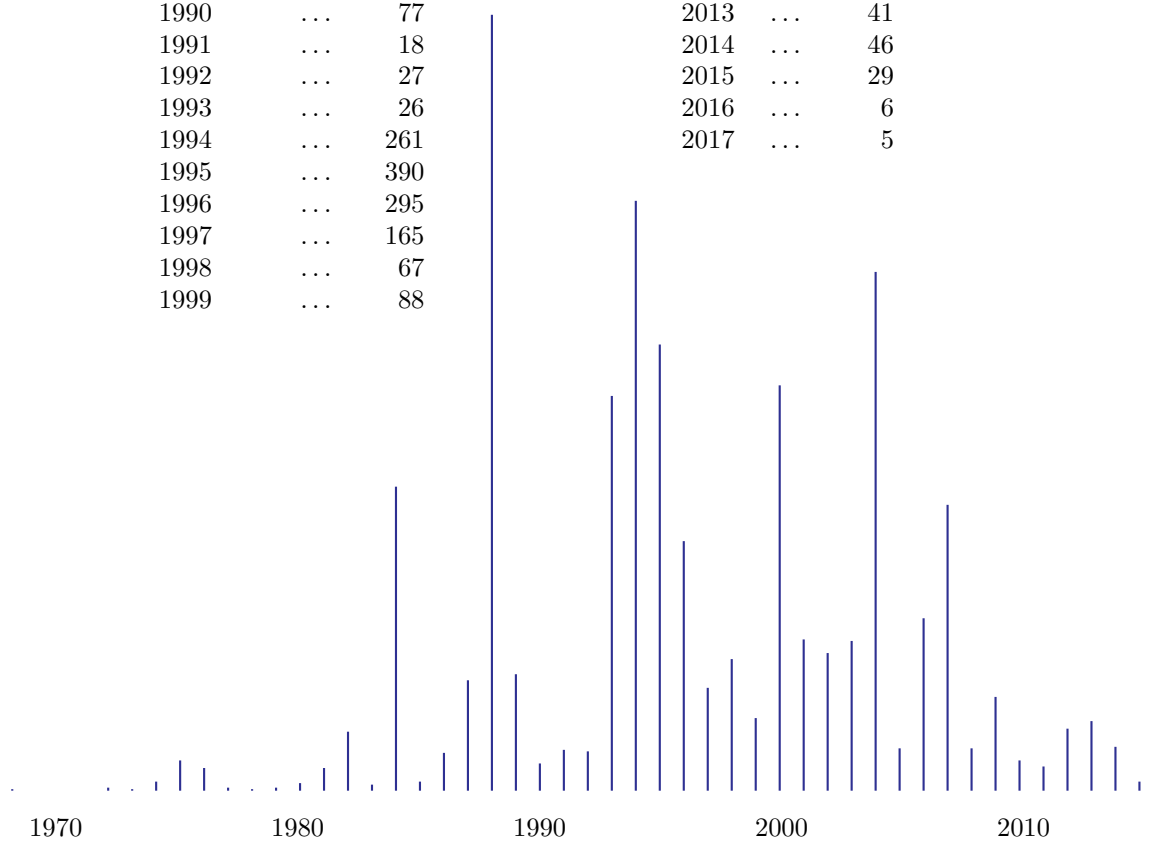
Citation numbers by year:

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			2018	...	5



Citation numbers by publication year:

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Citation numbers by source:

<i>J.Phys.A: Math.Theor.</i>	453		
<i>J.Math.Phys.</i>	234	<i>Asympt.Anal</i>	15
<i>Phys.Rev.B</i>	116	<i>Found.Phys.</i>	15
<i>Ann.H.Poincaré</i>	78	<i>Phys.Rep.</i>	15
<i>Phys.Lett.A</i>	72	<i>Russ.Tech.Phys.Lett.</i>	15
<i>Nanosystems:Phys.Chem.Math.</i>	70	<i>Acta Phys. Slovaca</i>	14
<i>Phys.Rev.A</i>	68	<i>Europhys.Lett.</i>	14
<i>J.Math.Anal.Appl.</i>	66	<i>J.Stat.Phys.</i>	14
<i>Phys.Rev.E</i>	65	<i>Physica A</i>	14
<i>Waves Rand.Compl.Med.</i>	60	<i>Int.J.Mod.Phys.</i>	13
<i>Rep.Math.Phys.</i>	58	<i>J.Phys.: Cond.Mat.</i>	13
<i>J.Funct.Anal.</i>	49	<i>Operators and Matrices</i>	13
<i>Ann.Phys.</i>	46	<i>Proc.AMS</i>	13
<i>J.Diff.Eq.</i>	45	<i>St.Petersburg Math J.</i>	13
<i>Math.Notes</i>	44	<i>El.J.Diff.Eq.</i>	12
<i>Commun.Math.Phys.</i>	38	<i>Physica E</i>	12
<i>Teor.Mat.Fiz.</i>	37	<i>Sbornik.Math.</i>	12
<i>Publ. RIMS</i>	36	<i>Int.J.Quant.Chem.</i>	11
<i>Rev.Math.Phys.</i>	36	<i>Phys.Rev.D</i>	11
<i>Int.J.Theor.Phys.</i>	32	<i>Proc. Roy. Soc. Edinburgh</i>	11
<i>Int.Eq.Oper.Theory</i>	29	<i>SIAM J.Math.Anal.</i>	11
<i>Phys.Scripta</i>	29	<i>N.Cim.B</i>	10
<i>Commun. PDE</i>	26	<i>Proc.Roy.Soc. A</i>	10
<i>J.Phys.: Conf.Ser.</i>	25	<i>Acta Phys.Polonica B</i>	9
<i>Phys.Rev.Lett.</i>	25	<i>Arch.Rat.Mech.Anal.</i>	9
<i>Adv.Phys.</i>	24	<i>Appl.Anal.</i>	8
<i>J.Spect.Theory</i>	24	<i>Appl.Math.Lett.</i>	8
<i>Eur.J.Phys.B</i>	21	<i>Commun.Pure Appl. Anal.</i>	8
<i>Lett.Math.Phys.</i>	21	<i>ESAIM–Control Opt.Calc.Var.</i>	8
<i>Math.Meth.Appl.Sci.</i>	21	<i>New J. Phys</i>	8
<i>Russ.J.Math.Phys.</i>	20	<i>Indiana Univ.Math.J.</i>	8
<i>J.Phys.Soc.Japan</i>	19	<i>Math.Model.Nat.Phenomena</i>	8
<i>Meth.Funct.Anal.Topol.</i>	19	<i>Quart.J.Mech.Appl.Math.</i>	8
<i>J.Math.Sci.</i>	18	<i>SIAM Review</i>	8
<i>Mod.Phys.Lett.</i>	18	<i>SIGMA</i>	8
<i>Math.Nachr.</i>	17	<i>Trans. AMS</i>	8
<i>Math.Phys.Anal.Geom.</i>	17		
<i>Analysis & PDE</i>	16		
Books:	236		
Proceedings:	300		
PhD and habilitation theses outside our group:	167		
Patents:	2		

Most cited works:

- P.Duclos, P.Exner: *Curvature-induced bound states in quantum waveguides in two and three dimensions*, Rev.Math.Phys. **7** (1995), 73–102. [252 citations]
- P.Exner, P.Šeba: *Bound states in curved quantum waveguides*, J.Math.Phys. **30** (1989), 2574–2580. [220 citations]
- S. Albeverio, F. Gesztesy, R. Høegh-Krohn, H. Holden: *Solvable Models in Quantum Mechanics*, 2nd edition with an appendix by P. Exner; AMS Chelsea, Providence, R.I., 2005 [196 citations]
- P.Exner: *Open Quantum Systems and Feynman Integrals*; Fundamental Theories of Physics, vol.6; *xix* + 356 p.; D. Reidel Publ. Co., Dordrecht 1985. [174 citations]
- J. Blank, P. Exner, M. Havlíček: *Hilbert–Space Operators in Quantum Physics*; *xiii* + 594 p.; American Institute of Physics, New York 1994; 2nd edition, *xvii* + 654 p.; Theoretical and Mathematical Physics Series, Springer, Heidelberg 2008. [158 citations (59+99)]
- P.Exner, P.Šeba: *Free quantum motion on a branching graph*, Rep.Math.Phys. **28** (1989), 7–26. [107 citations]
- J.F. Brasche, P. Exner, Yu.A. Kuperin, P. Šeba: *Schrödinger operators with singular interactions*, J. Math. Anal. Appl. **184** (1994), 112–139. [87 citations]
- J.E.Avron, P.Exner, Y.Last: *Periodic Schrödinger operators with large gaps and Wannier–Stark ladders*, Phys. Rev. Lett. **72** (1994), 896–899. [79 citations]
- P. Exner, O. Post: *Convergence of spectra of graph-like thin manifolds*, J. Geom. Phys. **54** (2005), 77–115. [79 citations]
- P. Exner: *Contact interactions on graph superlattices*, J.Phys. **A29** (1996), 87–102. [77 citations]
- P.Exner: *Lattice Kronig–Penney models*, Phys.Rev.Lett. **74** (1995), 3503–3506. [65 citations]
- P.Exner, P.Šeba, P.Šťovíček: *On existence of a bound state in an L-shaped waveguide*, Czech. J. Phys. **B39** (1989), 1181–1191. [61 citations]
- P. Exner, P. Šeba, M. Tater, D. Vaněk: *Bound states and scattering in quantum waveguides coupled laterally through a boundary window*, J. Math. Phys. **37** (1996), 4867–4887. [61 citations]
- P. Exner, S.A. Vugalter: *Asymptotic estimates for bound states in quantum waveguides coupled laterally through a narrow window*, Ann. Inst. H. Poincaré: Phys. Théor. **65** (1996), 109–123. [61 citations]
- P. Exner: *Leaky quantum graphs: a review*, Proceedings of the Isaac Newton Institute programme “Analysis on Graphs and Applications”, AMS “Proceedings of Symposia in Pure Mathematics” Series, vol. 77, Providence, R.I., 2008; pp. 523–564. [54 citations]
- P. Exner: *A duality between Schrödinger operators on graphs and certain Jacobi matrices*, Ann. Inst. H. Poincaré: Phys. Théor. **66** (1997), 359–371. [52 citations]
- P. Exner, T. Ichinose: *Geometrically induced spectrum in curved leaky wires*, J. Phys. **A34** (2001), 1439–1450. [50 citations]
- P. Exner, S.A. Vugalter: *Bound-state asymptotic estimates for window-coupled Dirichlet strips and layers*, J. Phys. **A30** (1997), 7863–7878. [43 citations]

P. Exner, H. Neidhardt, V.A. Zagrebnov: *Potential approximations to δ' : an inverse Klauder phenomenon with norm-resolvent convergence*, Commun. Math. Phys. **224** (2001), 593–612. [39 citations]

→ median=38 ←

P. Duclos, P. Exner, D. Krejčířík: *Bound states in curved quantum layers*, Commun. Math. Phys. **223** (2001), 13–28. [35 citations]

P. Duclos, P. Exner, P. Šťovíček: *Curvature-induced resonances in a two-dimensional Dirichlet tube*, Ann.Inst. H. Poincaré: Phys.Théor. **62** (1995), 81–101. [32 citations]

P. Exner, P. Šeba: *Point interactions in dimension two and three as models of small scatterers*, Phys. Lett. **A222** (1996), 1–4. [31 citations]

P. Exner, S.A. Vugalter: *Bound states in a locally deformed waveguide: the critical case*, Lett. Math. Phys. **39** (1997), 59–68. [31 citations]

J.Dittrich, P.Exner, P.Šeba: *Dirac operators with a spherically symmetric δ -shell interaction*, J.Math.Phys. **30** (1989), 2875–2580. [30 citations]

P.Exner: *Resonances in curved quantum wires*, Phys.Lett. **A141** (1989), 213–216. [30 citations]

P. Exner: *Weakly coupled states on branching graphs*, Lett. Math. Phys. **38** (1996), 313–320. [29 citations]

P. Exner, H. Grosse: *Some properties of the one-dimensional generalized point interactions (a torso)*, mp_arc 99–390; math-ph/9910029. [28 citations]

P.Exner, P.Šeba: *Electrons in semiconductor microstructures: a challenge to operator theorists*, Proc. of the Workshop on Schrödinger Operators, Standard and Nonstandard (Dubna 1988), World Scientific, Singapore 1989; pp. 79–100. [28 citations]

→ h-index=28 ←

D. Borisov, P. Exner, R. Gadyl'shin, D. Krejčířík: *Bound states in weakly deformed strips and layers*, Ann. H. Poincaré **2** (2001), 553–572. [27 citations]

C. Cacciapuoti, P. Exner: *Nontrivial edge coupling from a Dirichlet network squeezing: the case of a bent waveguide*, J. Phys. A: Math. Theor. **40** (2007), F511–F523. [27 citations]

J.Dittrich, P.Exner: *Tunneling through a singular potential barrier*, J. Math. Phys. **26** (1985), 2000–2008. [27 citations]

P. Šeba, P. Exner, K.N. Pichugin, A. Vyhnal, P. Středa: *Two-component interference effect: model of a spin-polarized transport*, Phys. Rev. Lett. **86** (2001), 1598–1601. [24 citations]

M.S.Ashbaugh, P.Exner: *Lower bounds to bound state energies in bent tubes*, Phys. Lett. **A150** (1990), 183–186. [23 citations]

P. Exner, K. Němcová: *Leaky quantum graphs: approximations by point interaction Hamiltonians*, J. Phys. **A36** (2003), 10173–10193. [23 citations]

P.Exner, P.Šeba, P.Šťovíček: *Semiconductor edges can bind electrons*, Phys.Lett. **A150** (1990), 179–182. [23 citations]

P. Exner: *The absence of the absolutely continuous spectrum for δ' Wannier–Stark ladders*, J. Math. Phys. **36** (1995), 4561–4570. [22 citations]

- P. Exner, R. Gawlista: *Band spectra of rectangular graph superlattices*, Phys. Rev. **B53** (1996), 7275–7286. [22 citations]
- P. Exner, P. Šeba: *Quantum-mechanical splitters: how one should understand them?* Phys.Lett. **128A** (1988), 493–496. [22 citations]
- P. Exner, M. Helm, P. Stollmann: *Localization on a quantum graph with a random potential on the edges*, Rev. Math. Phys. **19** (2007), 923–939. [22 citations]
- P. Exner: *A quantum pipette*, J. Phys. **A28** (1995), 5323–5330. [21 citations]
- G. Carron, P. Exner, D. Krejčířík: *Topologically non-trivial quantum layers*, J. Math. Phys. **45** (2004), 774–784. [30 citations]
- J. Dittrich, P. Exner, P. Šeba: *Dirac Hamiltonian with Coulomb potential and spherically symmetric shell contact interaction*, J.Math.Phys. **33** (1992), 2207–2214. [20 citations]
- P. Duclos, P. Exner, O. Turek: *On the spectrum of a bent chain graph*, J. Phys. A: Math. Theor. **41** (2008), 415206 [20 citations]
- P. Exner, H. Kovařík: *Quantum Waveguides*; *xvii* + 382 p.; Springer International, Heidelberg 2015 [20 citations]
- P. Exner, P. Šeba: *Quantum motion on a halfline connected to a plane*, J.Math. Phys. **28** (1987), 386–391. [20 citations]
- P. Exner, P. Šeba, P. Štoviček : *Quantum interference on graphs controlled by an external electric field*, J.Phys. **A21** (1988), 4009–4019. [20 citations]
- P. Exner: *Bound states in quantum waveguides of a slowly decaying curvature*, J.Math.Phys. **34** (1993), 23–28. [19 citations]
- P. Exner, P. Šeba: *A new type of quantum interference transistor*, Phys.Lett. **129A** (1988), 477–480. [19 citations]
- P. Exner, P. Šeba: *Trapping modes in a curved electromagnetic waveguide with perfectly conducting walls*, Phys.Lett. **A144** (1990), 347–350. [19 citations]
- P. Exner, P. Štoviček, P. Vytřas: *Generalised boundary conditions for the Aharonov-Bohm effect combined with a homogeneous magnetic field*, J. Math. Phys. **43** (2002), 2151–2168. [19 citations]
- D. Borisov, P. Exner: *Exponential splitting of bound states in a waveguide with a pair of distant windows*, J. Phys. **A37** (2004), 3411–3428. [18 citations]
- T. Cheon, P. Exner, P. Šeba: *Wave function shredding by sparse potential barriers*, Phys. Lett. **A277** (2000), 1–6. [18 citations]