Pavel Exner

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8954697/publications.pdf

Version: 2024-02-01

293	6,136	87888	110387
papers	citations	38 h-index	64 g-index

315	315	315	837
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Soft quantum waveguides in three dimensions. Journal of Mathematical Physics, 2022, 63, .	1.1	2
2	Spectrum of periodic chain graphs with time-reversal non-invariant vertex coupling. Annals of Physics, 2022, 443, 168992.	2.8	2
3	Gap opening in two-dimensional periodic systems. Communications in Contemporary Mathematics, 2021, 23, 1950080.	1.2	0
4	Note on a Product Formula Related to Quantum Zeno Dynamics. Annales Henri Poincare, 2021, 22, 1669-1697.	1.7	1
5	Quantum Graphs with Vertices Violating the Time Reversal Symmetry. Physics of Particles and Nuclei, 2021, 52, 330-336.	0.7	1
6	Optimization of the lowest eigenvalue of a soft quantum ring. Letters in Mathematical Physics, 2021, 111, 1.	1.1	2
7	Magnetic field influence on the discrete spectrum of locally deformed leaky wires. Reports on Mathematical Physics, 2021, 88, 47-57.	0.8	0
8	Quantum graphs: Self-adjoint, and yet exhibiting a nontrivial PT-symmetry. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 416, 127669.	2.1	3
9	Ring chains with vertex coupling of a preferred orientation. Reviews in Mathematical Physics, 2021, 33, 2060005.	1.7	11
10	Singular SchrÃ¶dinger operators and Robin billiards. Afrika Matematika, 2020, 31, 71-88.	0.8	2
11	Spectral optimization for strongly singular SchrÃ¶dinger operators with a star-shaped interaction. Letters in Mathematical Physics, 2020, 110, 735-751.	1.1	1
12	Dirac Operators with a Î´-Shell Interaction. Physics of Particles and Nuclei, 2020, 51, 405-409.	0.7	0
13	Topological bulk-edge effects in quantum graph transport. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126390.	2.1	5
14	Spectral properties of soft quantum waveguides. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 355302.	2.1	6
15	Spectral Asymptotics of the Dirichlet Laplacian on a Generalized Parabolic Layer. Integral Equations and Operator Theory, 2020, 92, 1.	0.8	2
16	Spectral geometry in a rotating frame: Properties of the ground state. Journal of Mathematical Analysis and Applications, 2020, 489, 124130.	1.0	0
17	The Landau Hamiltonian with Î´-potentials supported on curves. Reviews in Mathematical Physics, 2020, 32, 2050010.	1.7	6
18	Spectral optimization for singular SchrÃ¶dinger operators. Operators and Matrices, 2020, , 705-716.	0.3	2

#	Article	IF	Citations
19	Leaky Quantum Structures. Proceedings of the Steklov Institute of Mathematics, 2020, 311, 114-128.	0.3	0
20	SchrÃ¶dinger Operators with a Switching Effect. Industrial and Applied Mathematics, 2020, , 13-31.	0.2	0
21	Spectral properties of spiral-shaped quantum waveguides. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 505303.	2.1	0
22	An optimization problem for finite point interaction families. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 405302.	2.1	0
23	On Dirac operators in $$mathbb {R}^3$$ R 3 with electrostatic and Lorentz scalar $$delta $$ Î´. Quantum Studies: Mathematics and Foundations, 2019, 6, 295-314.	0.9	32
24	Spectral asymptotics of the Laplacian on Platonic solids graphs. Journal of Mathematical Physics, 2019, 60, 122101.	1.1	7
25	Scattering on Leaky Wires in Dimension Three. Springer Optimization and Its Applications, 2019, , 81-91.	0.9	0
26	A geometric Iwatsuka type effect in quantum layers. Journal of Mathematical Physics, 2018, 59, 042105.	1.1	2
27	Asymptotics of the bound state induced by Î´-interaction supported on a weakly deformed plane. Journal of Mathematical Physics, 2018, 59, .	1.1	10
28	Quantum graphs with vertices of a preferred orientation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 283-287.	2.1	13
29	Aharonov and Bohm versus Welsh eigenvalues. Letters in Mathematical Physics, 2018, 108, 2153-2167.	1.1	4
30	Smilanskyâ€“Solomyak model with a Î´â€²-interaction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1207-1213.	2.1	4
31	On the spectral properties of Dirac operators with electrostatic Î´-shell interactions. Journal Des Mathematiques Pures Et Appliquees, 2018, 111, 47-78.	1.6	38
32	Spectral Theory of Infinite Quantum Graphs. Annales Henri Poincare, 2018, 19, 3457-3510.	1.7	21
33	Editorial â€“ Message from the President. EMS Newsletter, 2018, 2018-3, 3-4.	0.1	0
34	On the Bound States of Magnetic Laplacians on Wedges. Reports on Mathematical Physics, 2018, 82, 161-185.	0.8	9
35	A family of quantum graph vertex couplings interpolating between different symmetries. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 285301.	2.1	2
36	Geometrically Induced Spectral Effects in Tubes with a Mixed Dirichletâ€”Neumann Boundary. Reports on Mathematical Physics, 2018, 81, 213-231.	0.8	2

#	Article	IF	Citations
37	Gap Control by Singular Schrodinger Operators in a Periodically Structured Metamaterial. Journal of Mathematical Physics, Analysis, Geometry, 2018, 14, 270-285.	0.1	4
38	Spectral and resonance properties of the Smilansky Hamiltonian. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 756-761.	2.1	6
39	Pseudo-orbit approach to trajectories of resonances in quantum graphs with general vertex coupling: Fermi rule and high-energy asymptotics. Journal of Mathematical Physics, 2017, 58, 042101.	1.1	3
40	Cantor spectra of magnetic chain graphs. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 165201.	2.1	2
41	Periodic quantum graphs from the Betheâ€“Sommerfeld perspective. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 455201.	2.1	12
42	A magnetic version of the Smilanskyâ€“Solomyak model. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 485203.	2.1	6
43	Spectral Properties of Magnetic Chain Graphs. Annales Henri Poincare, 2017, 18, 929-953.	1.7	4
44	Infinite quantum graphs. Doklady Mathematics, 2017, 95, 31-36.	0.6	2
45	Approximation of SchrÃ¶dinger operators with Î´-interactions supported on hypersurfaces. Mathematische Nachrichten, 2017, 290, 1215-1248.	0.8	25
46	A spectral isoperimetric inequality for cones. Letters in Mathematical Physics, 2017, 107, 717-732.	1.1	11
47	A regular analogue of the Smilansky model: Spectral properties. Reports on Mathematical Physics, 2017, 80, 177-192.	0.8	6
48	Quantum graphs with the Bethe-Sommerfeld property. Nanosystems: Physics, Chemistry, Mathematics, 2017, , 305-309.	0.4	2
49	On eigenvalue asymptotics for strong Î´-interactions supported by surfaces with boundaries. Asymptotic Analysis, 2016, 97, 1-25.	0.5	8
50	Generalized interactions supported on hypersurfaces. Journal of Mathematical Physics, 2016, 57, .	1.1	19
51	Semiclassical bounds in magnetic bottles. Reviews in Mathematical Physics, 2016, 28, 1650002.	1.7	1
52	Spectral analysis of a class of SchrÃ¶dinger operators exhibiting a parameter-dependent spectral transition. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 165302.	2.1	5
53	On the existence of bound states in asymmetric leaky wires. Journal of Mathematical Physics, 2016, 57, .	1.1	3
54	Strong Coupling Asymptotics for SchrÃ¶dinger Operators with an Interaction Supported by an Open Arc in three Dimensions. Reports on Mathematical Physics, 2016, 77, 1-17.	0.8	4

#	Article	IF	Citations
55	On resonances and bound states of Smilansky Hamiltonian. Nanosystems: Physics, Chemistry, Mathematics, 2016, , 789-802.	0.4	6
56	On the spectrum of narrow Neumann waveguide with periodically distributed $delta prime $ traps. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 315301.	2.1	7
57	Quantum Waveguides. Theoretical and Mathematical Physics (United States), 2015, , .	0.0	103
58	Gap asymptotics in a weakly bent leaky quantum wire. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 495301.	2.1	12
59	Spectra of magnetic chain graphs: coupling constant perturbations. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 125302.	2.1	7
60	Spectrum of a Dilated Honeycomb Network. Integral Equations and Operator Theory, 2015, 81, 535-557.	0.8	6
61	Leaky Waveguides. Theoretical and Mathematical Physics (United States), 2015, , 327-359.	0.0	0
62	Transport in Locally Perturbed Tubes. Theoretical and Mathematical Physics (United States), 2015, , 55-74.	0.0	0
63	Asymptotic eigenvalue estimates for a Robin problem with a large parameter. Portugaliae Mathematica, 2014, 71, 141-156.	0.4	27
64	A regular version of Smilansky model. Journal of Mathematical Physics, 2014, 55, .	1.1	12
65	Curvature-induced bound states in Robin waveguides and their asymptotical properties. Journal of Mathematical Physics, 2014, 55, .	1.1	14
66	Absence of Absolutely Continuous Spectrum for the Kirchhoff Laplacian on Radial Trees. Annales Henri Poincare, 2014, 15, 1109-1121.	1.7	6
67	On Some Sharp Spectral Inequalities for SchrÃ¶dinger Operators on Semiaxis. Communications in Mathematical Physics, 2014, 326, 531-541.	2.2	7
68	Strong Coupling Asymptotics for a Singular SchrÃ¶dinger Operator with an Interaction Supported by an Open Arc. Communications in Partial Differential Equations, 2014, 39, 193-212.	2.2	17
69	SchrÃ¶dinger operators with Î´- and Î´â€²-interactions on Lipschitz surfaces and chromatic numbers of associated partitions. Reviews in Mathematical Physics, 2014, 26, 1450015.	1.7	47
70	Non-equilibrium current via geometric scatterers. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 395301.	2.1	0
71	Spectral asymptotics of a strong <mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/	2.1	7
72	SchrÃ¶dinger operators withÎ´-interactions supported on conical surfaces. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 355202.	2.1	29

#	Article	IF	Citations
73	Approximations of Quantum-Graph Vertex Couplings by Singularly Scaled Rank-One Operators. Letters in Mathematical Physics, 2014, 104, 1079-1094.	1.1	10
74	A regular analogue of Smilansky model. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 985-986.	0.2	0
75	A variation on Smilansky's model. , 2014, , .		0
76	Spectral estimates for Dirichlet Laplacians on perturbed twisted tubes. Operators and Matrices, 2014, , 167-183.	0.3	0
77	A General Approximation of Quantum Graph Vertex Couplings by Scaled SchrÃ¶dinger Operators on Thin Branched Manifolds. Communications in Mathematical Physics, 2013, 322, 207-227.	2.2	30
78	Spectral asymptotics of a strong Î´â€² interaction on a planar loop. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 345201.	2.1	14
79	Approximations of quantum-graph vertex couplings by singularly scaled potentials. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 345202.	2.1	5
80	Spectral estimates for Dirichlet Laplacians and SchrÃ¶dinger operators on geometrically nontrivial cusps. Journal of Spectral Theory, 2013, 3, 465-484.	0.8	1
81	Tunneling resonances in systems without a classical trapping. Journal of Mathematical Physics, 2013, 54, 012102.	1.1	10
82	Improving ERC Ethical Standards. Science, 2013, 341, 1043-1043.	12.6	2
83	Essential spectrum of SchrÃ¶dinger operators with Î´-interactions on the union of compact Lipschitz hypersurfaces. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 523-524.	0.2	11
84	FOREWORD: THREE QUARTERS A CENTURY. Acta Polytechnica, 2013, 53, .	0.6	1
85	Solvable Models of Resonances and Decays. Operator Theory: Advances and Applications, 2013, , 165-227.	0.2	5
86	RESONANCES ON HEDGEHOG MANIFOLDS. Acta Polytechnica, 2013, 53, 416-426.	0.6	2
87	Spectral estimates for a class of SchrÃ¶dinger operators with infinite phase space and potential unbounded from below. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 075204.	2.1	9
88	On the ground state of quantum graphs with attractive Î´-coupling. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 713-717.	2.1	25
89	Decay Law Regularity. Integral Equations and Operator Theory, 2012, 72, 1-2.	0.8	1
90	Dynamics of an electron confined to a â€œhybrid planeâ€•and interacting with a magnetic field. Reports on Mathematical Physics, 2011, 67, 211-227.	0.8	9

#	Article	IF	Citations
91	Inverse scattering problem for quantum graph vertices. Physical Review A, 2011, 83, .	2.5	5
92	Built-up structure criticality. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 3922-3931.	2.6	1
93	Remarks on the Trotterâ€“Kato Product Formula for Unitary Groups. Integral Equations and Operator Theory, 2011, 69, 451-478.	0.8	6
94	Non-Weyl resonance asymptotics for quantum graphs in a magnetic field. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 805-807.	2.1	14
95	VERTEX COUPLINGS IN QUANTUM GRAPHS: APPROXIMATIONS BY SCALED SCHRÃ–DINGER OPERATORS. , 2011, , .		5
96	Approximation of a general singular vertex coupling in quantum graphs. Annals of Physics, 2010, 325, 548-578.	2.8	52
97	Tripartite connection condition for a quantum graph vertex. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 375, 113-118.	2.1	7
98	On the absence of absolutely continuous spectra for SchrÃ¶dinger operators on radial tree graphs. Journal of Mathematical Physics, 2010, 51, .	1.1	7
99	High-energy asymptotics of the spectrum of a periodic square lattice quantum graph. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 474024.	2.1	5
100	Non-Weyl asymptotics for quantum graphs with general coupling conditions. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 474013.	2.1	26
101	On the location of spectral edges in mathbb {Z}-periodic media. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 474022.	2.1	28
102	Resonances from perturbations of quantum graphs with rationally related edges. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 105301.	2.1	21
103	Spectrum of Dirichlet Laplacian in a conical layer. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 474023.	2.1	16
104	On geometric perturbations of critical SchrÃ¶dinger operators with a surface interaction. Journal of Mathematical Physics, 2009, 50, 112101.	1.1	16
105	Approximation of quantum graph vertex couplings by scaled SchrÃ¶dinger operators on thin branched manifolds. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 415305.	2.1	35
106	The distribution of landed property. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 4619-4623.	2.6	1
107	Spectral Filtering in Quantum Y-Junction. Journal of the Physical Society of Japan, 2009, 78, 124004.	1.6	12
108	Hiatus perturbation for a singular SchrÃ¶dinger operator with an interaction supported by a curve in R3. Journal of Mathematical Physics, 2008, 49, 032111.	1.1	16

#	Article	IF	Citations
109	Quantum networks modelled by graphs. AIP Conference Proceedings, 2008, , .	0.4	6
110	A Markov process associated with plot-size distribution in Czech Land Registry and its number-theoretic properties. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 045004.	2.1	1
111	On the spectrum of a bent chain graph. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 415206.	2.1	22
112	On the optimization of the principal eigenvalue for single-centre point-interaction operators in a bounded region. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 065305.	2.1	3
113	INTERLACED DENSE POINT AND ABSOLUTELY CONTINUOUS SPECTRA FOR HAMILTONIANS WITH CONCENTRIC-SHELL SINGULAR INTERACTIONS. , 2008, , .		3
114	APPROXIMATIONS OF SINGULAR VERTEX COUPLINGS IN QUANTUM GRAPHS. Reviews in Mathematical Physics, 2007, 19, 571-606.	1.7	35
115	LOCALIZATION ON A QUANTUM GRAPH WITH A RANDOM POTENTIAL ON THE EDGES. Reviews in Mathematical Physics, 2007, 19, 923-939.	1.7	24
116	Nontrivial edge coupling from a Dirichlet network squeezing: the case of a bent waveguide. Journal of Physics A: Mathematical and Theoretical, 2007, 40, F511-F523.	2.1	38
117	The decay law can have an irregular character. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 1333-1340.	2.1	11
118	Convergence of resonances on thin branched quantum waveguides. Journal of Mathematical Physics, 2007, 48, 092104.	1.1	31
119	Unstable system dynamics: Do we understand it fully?. Reports on Mathematical Physics, 2007, 59, 351-363.	0.8	5
120	A remark on helical waveguides. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 369, 393-399.	2.1	7
121	Vladimir A. Geyler. Russian Journal of Mathematical Physics, 2007, 14, 371-376.	1.5	0
122	A â€œHybrid Planeâ€•with spin-orbit interaction. Russian Journal of Mathematical Physics, 2007, 14, 430-434.	1.5	27
123	Zeno Product Formula Revisited. Integral Equations and Operator Theory, 2007, 57, 67-81.	0.8	10
124	Absolute Continuity of the Spectrum for Periodically Modulated Leaky Wires in $${mathbb{R}^{3}}$$. Annales Henri Poincare, 2007, 8, 241-263.	1.7	8
125	On the Dense Point and Absolutely Continuous Spectrum for Hamiltonians with Concentric Î´ Shells. Letters in Mathematical Physics, 2007, 82, 25-37.	1.1	11
126	On the critical exponent in an isoperimetric inequality for chords. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 368, 1-6.	2.1	7

#	Article	IF	Citations
127	On Relations Between Stable and Zeno Dynamics in a Leaky Graph Decay Model. , 2007, , 21-34.		1
128	Approximations by graphs and emergence of global structures. Reports on Mathematical Physics, 2006, 57, 445-455.	0.8	7
129	Resonance asymptotics in the generalized Winter model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 360, 57-61.	2.1	8
130	Inequalities for Means of Chords, with Application to Isoperimetric Problems. Letters in Mathematical Physics, 2006, 75, 225-233.	1.1	36
131	Addendum to P. Exner, E.M. Harrell, M. Loss: Inequalities for means of chords, with application to isoperimetric problems, Lett. Math. Phys. 75 (2006), 225â€“233. Letters in Mathematical Physics, 2006, 77, 219-219.	1.1	3
132	Distant perturbation asymptotics in window-coupled waveguides. I. The nonthreshold case. Journal of Mathematical Physics, 2006, 47, 113502.	1.1	15
133	Approximations by Graphs and Emergence of Global Structures. Acta Physica Polonica A, 2006, 109, 23-31.	0.5	1
134	Point Interaction Polygons: An Isoperimetric Problem. Lecture Notes in Physics, 2006, , 55-64.	0.7	0
135	ON EXISTENCE OF QUANTUM ZENO DYNAMICS. , 2006, , .		0
136	Boseâ€“Einstein condensation in geometrically deformed tubes. Journal of Physics A, 2005, 38, L463-L470.	1.6	8
137	A Product Formula Related to Quantum Zeno Dynamics. Annales Henri Poincare, 2005, 6, 195-215.	1.7	25
138	Convergence of spectra of graph-like thin manifolds. Journal of Geometry and Physics, 2005, 54, 77-115.	1.4	136
139	Spectrum of the SchrÃ¶dinger Operator in a Perturbed Periodically Twisted Tube. Letters in Mathematical Physics, 2005, 73, 183-192.	1.1	20
140	An isoperimetric problem for point interactions. Journal of Physics A, 2005, 38, 4795-4802.	1.6	10
141	Scattering by local deformations of a straight leaky wire. Journal of Physics A, 2005, 38, 4865-4874.	1.6	16
142	Singular interactions in quantum mechanics: solvable models. Journal of Physics A, 2005, 38, .	1.6	6
143	The von Neumann way to treat systems of mixed dimensionality. Reports on Mathematical Physics, 2005, 55, 79-92.	0.8	2
144	An isoperimetric problem for leaky loops and related mean-chord inequalities. Journal of Mathematical Physics, 2005, 46, 062105.	1.1	31

#	Article	IF	Citations
145	Sufficient conditions for the anti-Zeno effect. Journal of Physics A, 2005, 38, L449-L454.	1.6	7
146	A model of interband radiative transition. Journal of the Mathematical Society of Japan, 2004, 56, 753.	0.4	1
147	An approximation to ÂÂ couplings on graphs. Journal of Physics A, 2004, 37, L329-L335.	1.6	33
148	Exponential splitting of bound states in a waveguide with a pair of distant windows. Journal of Physics A, 2004, 37, 3411-3428.	1.6	35
149	SchrÃ¶dinger operators with singular interactions: a model of tunnelling resonances. Journal of Physics A, 2004, 37, 8255-8277.	1.6	12
150	Topologically nontrivial quantum layers. Journal of Mathematical Physics, 2004, 45, 774-784.	1.1	59
151	STRONG-COUPLING ASYMPTOTIC EXPANSION FOR SCHRÃ–DINGER OPERATORS WITH A SINGULAR INTERACTION SUPPORTED BY A CURVE IN â„3. Reviews in Mathematical Physics, 2004, 16, 559-582.	1.7	24
152	Spectra of soft ring graphs. Waves in Random and Complex Media, 2004, 14, S47-S60.	1.5	19
153	Lieb-Thirring Inequalities for Geometrically Induced Bound States. Letters in Mathematical Physics, 2004, 70, 83-95.	1.1	25
154	Enhanced binding revisited for a spinless particle in nonrelativistic QED. Journal of Mathematical Physics, 2004, 45, 4174-4185.	1.1	27
155	A lower bound to the spectral threshold in curved tubes. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2004, 460, 3457-3467.	2.1	33
156	Absolute Continuity in Periodic Thin Tubes and Strongly Coupled Leaky Wires. Letters in Mathematical Physics, 2003, 65, 75-82.	1.1	10
157	Eigenvalue Asymptotics for the SchrÃ¶dinger Operator with a Î´-Interaction on a Punctured Surface. Letters in Mathematical Physics, 2003, 65, 19-26.	1.1	14
158	Persistent currents due to point obstacles. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 307, 209-214.	2.1	1
159	Magnetic layers with periodic point perturbations. Reports on Mathematical Physics, 2003, 52, 255-280.	0.8	21
160	Leaky quantum graphs: approximations by point-interaction Hamiltonians. Journal of Physics A, 2003, 36, 10173-10193.	1.6	36
161	Bound states due to a strong Â interaction supported by a curved surface. Journal of Physics A, 2003, 36, 443-457.	1.6	38
162	Extended Standard Map with Spatio-Temporal Asymmetry. Journal of the Physical Society of Japan, 2003, 72, 1087-1091.	1.6	17

#	Article	IF	Citations
163	Large gaps in point-coupled periodic systems of manifolds. Journal of Physics A, 2003, 36, 4875-4890.	1.6	35
164	Quantum mechanics of layers with a finite number of point perturbations. Journal of Mathematical Physics, 2002, 43, 1152-1184.	1.1	28
165	Geometric coupling thresholds in a two-dimensional strip. Journal of Mathematical Physics, 2002, 43, 6265-6278.	1.1	65
166	Multiple bound states in scissor-shaped waveguides. Physical Review B, 2002, 66, .	3.2	42
167	Generalized boundary conditions for the Aharonovâ€“Bohm effect combined with a homogeneous magnetic field. Journal of Mathematical Physics, 2002, 43, 2151.	1.1	24
168	Persistent currents for the 2D SchrÃ¶dinger operator with a strong Î´-interaction on a loop. Journal of Physics A, 2002, 35, 3479-3487.	1.6	16
169	Asymptotics of eigenvalues of the SchrÃ¶dinger operator with a strong Î´-interaction on a loop. Journal of Geometry and Physics, 2002, 41, 344-358.	1.4	69
170	Curvature-Induced Bound States for a $ delta $ Interaction Supported by a Curve in $ mathbb{R}^3 $. Annales Henri Poincare, 2002, 3, 967-981.	1.7	33
171	Open quantum dots: resonances from perturbed symmetry and bound states in strong magnetic fields. Reports on Mathematical Physics, 2001, 47, 253-267.	0.8	44
172	Geometrically induced spectrum in curved leaky wires. Journal of Physics A, 2001, 34, 1439-1450.	1.6	87
173	A single-mode quantum transport in serial-structure geometric scatterers. Journal of Mathematical Physics, 2001, 42, 4050-4078.	1.1	40
174	Bound States in Weakly Deformed Strips and Layers. Annales Henri Poincare, 2001, 2, 553-572.	1.7	71
175	Bound States in Curved Quantum Layers. Communications in Mathematical Physics, 2001, 223, 13-28.	2.2	83
176	Band Gap of the SchrÃ¶dinger Operator with a Strong Î´-Interaction on a Periodic Curve. Annales Henri Poincare, 2001, 2, 1139-1158.	1.7	22
177	Potential Approximations to Î´′: An Inverse Klauder Phenomenon with Norm-Resolvent Convergence. Communications in Mathematical Physics, 2001, 224, 593-612.	2.2	87
178	Bound States of Infinite Curved Polymer Chains. Letters in Mathematical Physics, 2001, 57, 87-96.	1.1	11
179	Geometric Phase Related to Point-Interaction Transport on a Magnetic Lobachevsky Plane. Letters in Mathematical Physics, 2001, 55, 9-16.	1.1	8
180	WAVEGUIDES COUPLED THROUGH A SEMITRANSPARENT BARRIER: A BIRMANâ€“SCHWINGER ANALYSIS. Reviews in Mathematical Physics, 2001, 13, 307-334.	1.7	13

#	Article	IF	Citations
181	Bound states in mildly curved layers. Journal of Physics A, 2001, 34, 5969-5985.	1.6	12
182	Magnetic transport in a straight parabolic channel. Journal of Physics A, 2001, 34, 9733-9752.	1.6	10
183	Bound states in point-interaction star graphs. Journal of Physics A, 2001, 34, 7783-7794.	1.6	11
184	Avoided crossings in mesoscopic systems: Electron propagation on a nonuniform magnetic cylinder. Journal of Mathematical Physics, 2001, 42, 4707-4738.	1.1	4
185	Two-Component Interference Effect: Model of a Spin-Polarized Transport. Physical Review Letters, 2001, 86, 1598-1601.	7.8	24
186	Berry phase for a potential well transported in a homogeneous magnetic field. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 276, 16-18.	2.1	7
187	Wave function shredding by sparse quantum barriers. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 277, 1-6.	2.1	18
188	Berry phase in magnetic systems with point perturbations. Journal of Geometry and Physics, 2000, 36, 178-197.	1.4	6
189	Magnetic strip waveguides. Journal of Physics A, 2000, 33, 3297-3311.	1.6	14
190	Anomalous electron trapping by localized magnetic fields. Journal of Physics A, 1999, 32, 3029-3039.	1.6	18
191	Quantum waveguides with a lateral semitransparent barrier: spectral and scattering properties. Journal of Physics A, 1999, 32, 4475-4494.	1.6	13
192	On the number of particles that a curved quantum waveguide can bind. Journal of Mathematical Physics, 1999, 40, 4630-4638.	1.1	31
193	Edge currents in the absence of edges. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 264, 124-130.	2.1	14
194	Anomalous Pauli Electron States for Magnetic Fields with Tails. Letters in Mathematical Physics, 1999, 50, 103-114.	1.1	2
195	Magnetoresonances in quantum-dot resonators. , 1999, , .		0
196	Optimal Eigenvalues for Some Laplacians and SchrÃ¶dinger Operators Depending on Curvature. , 1999, , 47-58.		33
197	Anomalous electron trapping by magnetic flux tubes and electric current vortices. , 1999, , 191-196.		0
198	Evanescent modes in a multiple scattering factorization. European Physical Journal D, 1998, 48, 617-624.	0.4	6

#	Article	IF	Citations
199	Stability of Driven Systems with Growing Gaps, Quantum Rings, and Wannier Ladders. Journal of Statistical Physics, 1998, 92, 1053-1070.	1.2	47
200	Probability current tornado loops in three-dimensional scattering. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 245, 35-39.	2.1	2
201	Electron trapping by a current vortex. Journal of Physics A, 1998, 31, L305-L311.	1.6	5
202	Mechanism of porous-silicon luminescence. Physical Review B, 1998, 57, 1382-1385.	3.2	9
203	Strength of Topologically Induced Magnetic Moments in a Quantum Device. Physical Review Letters, 1998, 80, 1710-1713.	7.8	20
204	Bound-state asymptotic estimates for window-coupled Dirichlet strips and layers. Journal of Physics A, 1997, 30, 7863-7878.	1.6	49
205	Bound States in a Locally Deformed Waveguide: The Critical Case. Letters in Mathematical Physics, 1997, 39, 59-68.	1.1	59
206	Weakly Coupled States on Braching graphs, Lett. Math. Phys. 38(3) (1996), 313â€“320. Letters in Mathematical Physics, 1997, 42, 193-193.	1.1	1
207	Magnetoresonances on a lasso graph. Foundations of Physics, 1997, 27, 171-190.	1.3	42
208	Resonance statistics in a microwave cavity with a thin antenna. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 228, 146-150.	2.1	37
209	Bound states and scattering in quantum waveguides coupled laterally through a boundary window. Journal of Mathematical Physics, 1996, 37, 4867-4887.	1.1	110
210	Point Interactions in a Strip. Annals of Physics, 1996, 252, 133-179.	2.8	42
211	Point interactions in two and three dimensions as models of small scatterers. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 222, 1-4.	2.1	42
212	Weakly coupled states on branching graphs. Letters in Mathematical Physics, 1996, 38, 313-320.	1.1	55
213	Band spectra of rectangular graph superlattices. Physical Review B, 1996, 53, 7275-7286.	3.2	49
214	Contact interactions on graph superlattices. Journal of Physics A, 1996, 29, 87-102.	1.6	91
215	Lattice Kronig-Penney Models. Physical Review Letters, 1995, 74, 3503-3506.	7.8	102
216	A quantum pipette. Journal of Physics A, 1995, 28, 5323-5330.	1.6	21

#	Article	IF	Citations
217	CURVATURE-INDUCED BOUND STATES IN QUANTUM WAVEGUIDES IN TWO AND THREE DIMENSIONS. Reviews in Mathematical Physics, 1995, 07, 73-102.	1.7	326
218	The absence of the absolutely continuous spectrum for Î´â€‰â€² Wannierâ€“Stark ladders. Journal of Mathematical Physics, 1995, 36, 4561-4570.	1.1	46
219	One-band model for a weakly coupled quantum-wire resonator. Physical Review B, 1994, 50, 18350-18354.	3.2	3
220	Periodic SchrÃ¶dinger operators with large gaps and Wannier-Stark ladders. Physical Review Letters, 1994, 72, 896-899.	7.8	113
221	SchrÃ¶dinger-Operators with Singular Interactions. Journal of Mathematical Analysis and Applications, 1994, 184, 112-139.	1.0	184
222	A Mathematical Model of Heavy-Quarkonia Mesonic Decays. Annals of Physics, 1994, 233, 1-16.	2.8	16
223	A Fermi-type rule for contact embedded-eigenvalue perturbations. Operator Theory: Advances and Applications, 1994, , 79-87.	0.2	4
224	Appendix resonances on a simple graph. Journal of Physics A, 1994, 27, 8269-8278.	1.6	16
225	A twisted Landau gauge. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 178, 236-238.	2.1	5
226	Bound states in quantum waveguides of a slowly decaying curvature. Journal of Mathematical Physics, 1993, 34, 23-28.	1.1	25
227	Journal of Mathematical Physics, 1992, 33, 2207-2214.	1.1	34
228	Curvature vs. Thickness in quantum waveguides. European Physical Journal D, 1991, 41, 1009-1018.	0.4	4
229	Spectral Properties of Bent Quantum Wires. , 1991, , 257-264.		1
230	A Model of Resonance Scattering on Curved Quantum Wires. Annalen Der Physik, 1990, 502, 123-138.	2.4	34
231	Semiconductor edges can bind electrons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 150, 179-182.	2.1	34
232	Lower bounds to bound state energies in bent tubes. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 150, 183-186.	2.1	42
233	Trapping modes in a curved electromagnetic waveguide with perfectly conducting walls. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 144, 347-350.	2.1	40
234	Bound States and Resonances in Quantum Wires. , 1990, , 65-84.		5

#	Article	IF	Citations
235	Dirac Hamiltonian with Coulomb Potential and Contact Interaction on a Sphere. , 1990, , 209-219.		0
236	Quantum junctions and the self-adjoint extensions theory. , 1989, , 203-217.		2
237	One more theorem on the shortâ€time regeneration rate. Journal of Mathematical Physics, 1989, 30, 2563-2564.	1.1	21
238	A non-relativistic model of two-particle decay IV. Relation to the scattering theory, spectral concentration, and bound states. European Physical Journal D, 1989, 39, 121-138.	0.4	1
239	On existence of a bound state in an L-shaped waveguide. European Physical Journal D, 1989, 39, 1181-1191.	0.4	85
240	Resonances in curved quantum wires. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 141, 213-216.	2.1	30
241	Free quantum motion on a branching graph. Reports on Mathematical Physics, 1989, 28, 7-26.	0.8	135
242	Dirac operators with a spherically symmetric Î´â€shell interaction. Journal of Mathematical Physics, 1989, 30, 2875-2882.	1.1	69
243	Bound states in curved quantum waveguides. Journal of Mathematical Physics, 1989, 30, 2574-2580.	1.1	289
244	A new type of quantum interference transistor. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 129, 477-480.	2.1	20
245	Quantum-mechanical splitters: How should one understand them?. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 128, 493-496.	2.1	20
246	Mathematical models for quantum point-contact spectroscopy. European Physical Journal D, 1988, 38, 1-11.	0.4	6
247	A simple model of thin-film point contact in two and three dimensions. European Physical Journal D, 1988, 38, 1095-1110.	0.4	9
248	A non-relativistic model of two-particle decay III. The pole approximation. European Physical Journal D, 1988, 38, 591-610.	0.4	2
249	Quantum interference on graphs controlled by an external electric field. Journal of Physics A, 1988, 21, 4009-4019.	1.6	37
250	Quantum motion on a halfâ€line connected to a plane. Journal of Mathematical Physics, 1987, 28, 386-391.	1.1	58
251	A non-relativistic model of two-particle decay II. Reduced resolvent. European Physical Journal D, 1987, 37, 1028-1034.	0.4	5
252	A non-relativistic model of two-particle decay. European Physical Journal D, 1987, 37, 503-515.	0.4	24

#	Article	IF	Citations
253	Quantum motion on two planes connected at one point. Letters in Mathematical Physics, 1986, 12, 193-198.	1.1	30
254	Open quantum systems and Feynman integrals: Some problems. European Physical Journal D, 1986, 36, 1242-1254.	0.4	1
255	Nonexistence of finite-energy solutions in some gauge models. European Physical Journal D, 1986, 36, 1255-1258.	0.4	0
256	On a complete set of irreducible highest-weight representations forsl(3, â„‚). European Physical Journal D, 1985, 35, 359-369.	0.4	0
257	Open Quantum Systems and Feynman Integrals. , 1985, , .		156
258	Proton decay cannot be suppressed kinematically. Physical Review D, 1985, 32, 1170-1176.	4.7	2
259	Tunneling through a singular potential barrier. Journal of Mathematical Physics, 1985, 26, 2000-2008.	1.1	53
260	On the â€œkinematical fragmentationâ€•in proton decay. European Physical Journal D, 1984, 34, 1145-1149.	0.4	1
261	Some simple conditions on bound states of SchrÃ¶dinger operators in dimensiondâ‰§3. European Physical Journal D, 1984, 34, 1019-1031.	0.4	1
262	Generalized Bargmann inequalities. Reports on Mathematical Physics, 1984, 19, 249-255.	0.8	20
263	Complexâ€potential description of the damped harmonic oscillator. Journal of Mathematical Physics, 1983, 24, 1129-1135.	1.1	19
264	Representations of the PoincarÃ© group associated with unstable particles. Physical Review D, 1983, 28, 2621-2627.	4.7	22
265	On the optical approximation in twoâ€channel systems. Journal of Mathematical Physics, 1983, 24, 1542-1547.	1.1	5
266	Bosonâ€“fermion representations of Lie superalgebras: The example of osp(1,2). Journal of Mathematical Physics, 1982, 23, 350-353.	1.1	9
267	Complex potentials and rigorous Feynman integrals. European Physical Journal D, 1982, 32, 628-632.	0.4	2
268	Polygonal-path approximations on the path spaces of quantum-mechanical systems. International Journal of Theoretical Physics, 1982, 21, 397-417.	1.2	1
269	Uniform product formulae with application to the Feynman?Nelson integral for open systems. Letters in Mathematical Physics, 1982, 6, 153-159.	1.1	4
270	On the â€˜Feynman pathsâ€™. Letters in Mathematical Physics, 1982, 6, 215-220.	1.1	1

#	Article	IF	Citations
271	Path-integral expression of dissipative dynamics. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 83, 203-206.	2.1	10
272	Highest-weight representations ofsl(2, â„‚) andsl(3, â„‚) via canonical realizations. European Physical Journal D, 1981, 31, 459-469.	0.4	4
273	On Hilbert spaces of paths. European Physical Journal D, 1981, 31, 470-474.	0.4	1
274	A complete set of irreducible highest-weight representations forsl (3, â„‚). European Physical Journal D, 1981, 31, 1201-1206.	0.4	1
275	Feynman maps without improper integrals. European Physical Journal D, 1981, 31, 1207-1224.	0.4	1
276	Highest-weight representations of the sl(n+1,C) algebras: Maximal representations. Journal of Physics A, 1981, 14, 1039-1054.	1.6	1
277	Bounded energy approximation to an unstable quantum system. Reports on Mathematical Physics, 1980, 17, 275-285.	0.8	24
278	Quantum-mechanical pseudo-hamiltonians. European Physical Journal D, 1979, 29, 1325-1341.	0.4	27
279	Matrix canonical realizations of the Lie algebra o(m, n). II. Casimir operators. European Physical Journal D, 1978, 28, 949-962.	0.4	3
280	Unstable systems and repeated measurements. European Physical Journal D, 1977, 27, 117-126.	0.4	5
281	Unstable systems and repeated measurements. European Physical Journal D, 1977, 27, 233-246.	0.4	2
282	Corrections to the exponential decay law: Are they observable?. European Physical Journal D, 1977, 27, 855-864.	0.4	6
283	Unstable systems and repeated measurements III. Example (homogeneous chamber), conjecture for the general case and discussion. European Physical Journal D, 1977, 27, 361-372.	0.4	1
284	Remark on the decay of a mixed state. European Physical Journal D, 1976, 26, 976-982.	0.4	4
285	Canonical realizations of classical lie algebras. European Physical Journal D, 1976, 26, 1213-1228.	0.4	22
286	Remark on the energy spectrum of a decaying system. Communications in Mathematical Physics, 1976, 50, 1-10.	2.2	33
287	Remarks on the Two-Component Wave Equations for Massive Leptons. Physica Scripta, 1974, 9, 161-162.	2.5	1
288	Note on the description of an unstable system. European Physical Journal D, 1973, 23, 594-600.	0.4	30

#	Article	IF	Citations
289	Inelastic ep scattering in the polarized case. Nuclear Physics B, 1970, 19, 42-50.	2.5	1
290	On S-transformation in the strong coupling theory. European Physical Journal D, 1969, 19, 1480-1485.	0.4	2
291	Spectral optimization for Robin Laplacian on domains admitting parallel coordinates. Mathematische Nachrichten, 0, , .	0.8	1
292	On the spectrum of leaky surfaces with a potential bias. , 0, , 169-181.		0
293	Magnetic ring chains with vertex coupling of a preferred orientation. Journal of Physics A: Mathematical and Theoretical, 0, , .	2.1	2