

Alexander Teplyaev

List of Publications by Year in descending order

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67
all docs

67
docs citations

67
times ranked

205
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative approach to Grover's quantum walk on graphs. Quantum Information Processing, 2024, 23, .	2.2	0
2	Mixed boundary valued problems for linear and nonlinear wave equations in domains with fractal boundaries. Calculus of Variations and Partial Differential Equations, 2022, 61, 1.	1.6	4
3	Spectral decimation of a self-similar version of almost Mathieu-type operators. Journal of Mathematical Physics, 2022, 63, .	1.2	2
4	Spectral analysis on Barlow and Evans's projective limit fractals. Journal of Spectral Theory, 2021, 11, 91-123.	0.9	8
5	Spectra of perfect state transfer Hamiltonians on fractal-like graphs. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 125301.	2.1	14
6	Hamiltonian systems, Toda lattices, solitons, Lax pairs on weighted Z-graded graphs. Journal of Mathematical Physics, 2021, 62, .	1.2	3
7	On the existence of optimal shapes in architecture. Applied Mathematical Modelling, 2021, 94, 676-687.	4.3	9
8	Besov class via heat semigroup on Dirichlet spaces III: BV functions and sub-Gaussian heat kernel estimates. Calculus of Variations and Partial Differential Equations, 2021, 60, 1.	1.6	10
9	Non-Lipschitz Uniform Domain Shape Optimization in Linear Acoustics. SIAM Journal on Control and Optimization, 2021, 59, 1007-1032.	2.2	6
10	Discretization of the Koch Snowflake Domain with Boundary and Interior Energies. SEMA SIMAI Springer Series, 2021, , 79-102.	0.0	2
11	Besov class via heat semigroup on Dirichlet spaces I: Sobolev type inequalities. Journal of Functional Analysis, 2020, 278, 108459.	1.3	11
12	Perfect quantum state transfer on diamond fractal graphs. Quantum Information Processing, 2020, 19, 1.	2.2	19
13	Ornstein-Uhlenbeck processes with singular drifts: integral estimates and Girsanov densities. Probability Theory and Related Fields, 2020, 178, 861-891.	1.7	1
14	Besov class via heat semigroup on Dirichlet spaces II: BV functions and Gaussian heat kernel estimates. Calculus of Variations and Partial Differential Equations, 2020, 59, 1.	1.6	13
15	Magnetostatic Problems in Fractal Domains. Fractals and Dynamics in Mathematics, Science and the Arts, 2020, , 477-502.	0.0	3
16	Fractal AC Circuits and Propagating Waves on Fractals. Fractals and Dynamics in Mathematics, Science and the Arts, 2020, , 557-567.	0.0	6
17	Dual graphs and modified Barlow-Bass resistance estimates for repeated barycentric subdivisions. Discrete and Continuous Dynamical Systems - Series S, 2019, 12, 27-42.	1.1	2
18	Regularized Laplacian determinants of self-similar fractals. Letters in Mathematical Physics, 2018, 108, 1563-1579.	1.2	6

#	ARTICLE	IF	CITATIONS
19	Fractal snowflake domain diffusion with boundary and interior drifts. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 457, 672-693.	1.1	4
20	Densely defined non-closable curl on carpet-like metric measure spaces. <i>Mathematische Nachrichten</i> , 2018, 291, 1743-1756.	0.7	2
21	From Non-symmetric Particle Systems to Non-linear PDEs on Fractals. <i>Springer Proceedings in Mathematics and Statistics</i> , 2018, , 503-513.	0.0	2
22	Power dissipation in fractal AC circuits. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 325205.	2.1	9
23	Wave Equation on One-Dimensional Fractals with Spectral Decimation and the Complex Dynamics of Polynomials. <i>Journal of Fourier Analysis and Applications</i> , 2017, 23, 994-1027.	1.0	6
24	Energy and Laplacian on Hanoi-type fractal quantum graphs. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 165206.	2.1	18
25	Singularly continuous spectrum of a self-similar Laplacian on the half-line. <i>Journal of Mathematical Physics</i> , 2016, 57, .	1.2	10
26	Spectral dimension and Bohr's formula for Schrödinger operators on unbounded fractal spaces. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 395203.	2.1	12
27	Metric and spectral triples for Dirichlet and resistance forms. <i>Journal of Noncommutative Geometry</i> , 2015, 9, 359-390.	0.5	13
28	One-dimensional wave equations defined by fractal Laplacians. <i>Journal D'Analyse Mathématique</i> , 2015, 127, 219-246.	0.8	14
29	Finite Energy Coordinates and Vector Analysis on Fractals. <i>Progress in Probability</i> , 2015, , 209-227.	0.0	3
30	Vector analysis for Dirichlet forms and quasilinear PDE and SPDE on metric measure spaces. <i>Stochastic Processes and Their Applications</i> , 2013, 123, 4373-4406.	0.9	24
31	Existence of a Meromorphic Extension of Spectral Zeta Functions on Fractals. <i>Letters in Mathematical Physics</i> , 2013, 103, 1377-1388.	1.2	12
32	Dirac and magnetic Schrödinger operators on fractals. <i>Journal of Functional Analysis</i> , 2013, 265, 2830-2854.	1.3	35
33	Random Walks on Barycentric Subdivisions and the Strichartz Hexacarpet. <i>Experimental Mathematics</i> , 2012, 21, 402-417.	0.7	5
34	Derivations and Dirichlet forms on fractals. <i>Journal of Functional Analysis</i> , 2012, 263, 2141-2169.	1.3	33
35	Spatial log-periodic oscillations of first-passage observables in fractals. <i>Physical Review E</i> , 2012, 86, 061125.	2.1	24
36	Spectral analysis on infinite Sierpiński fractafolds. <i>Journal D'Analyse Mathématique</i> , 2012, 116, 255-297.	0.8	29

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37	Disconnected Julia sets and gaps in the spectrum of Laplacians on symmetric finitely ramified fractals. <i>Mathematical Research Letters</i> , 2012, 19, 537-553.	0.5	16
38	Uniqueness of Brownian motion on Sierpiński carpets. <i>Journal of the European Mathematical Society</i> , 2010, 12, 655-701.	1.3	64
39	Thermodynamics of Photons on Fractals. <i>Physical Review Letters</i> , 2010, 105, 230407.	7.8	64
40	Laplacians on the basilica Julia set. <i>Communications on Pure and Applied Analysis</i> , 2010, 9, 211-231.	0.8	27
41	Products of random matrices and derivatives on p.c.f. fractals. <i>Journal of Functional Analysis</i> , 2008, 254, 1188-1216.	1.3	10
42	Harmonic Coordinates on Fractals with Finitely Ramified Cell Structure. <i>Canadian Journal of Mathematics</i> , 2008, 60, 457-480.	0.8	48
43	Harmonic Coordinates on Fractals with Finitely Ramified Cell Structure. <i>Canadian Journal of Mathematics</i> , 2008, 60, 457.	0.8	4
44	Infinite dimensional i.f.s. and smooth functions on the Sierpinski gasket. <i>Indiana University Mathematics Journal</i> , 2007, 56, 1377-1404.	0.9	3
45	Electrical resistance of N-gasket fractal networks. <i>Pacific Journal of Mathematics</i> , 2007, 233, 15-40.	0.4	20
46	A note on the theorems of M.G. Krein and L.A. Sakhnovich on continuous analogs of orthogonal polynomials on the circle. <i>Journal of Functional Analysis</i> , 2005, 226, 257-280.	1.3	9
47	Calculus on the Sierpinski gasket I: polynomials, exponentials and power series. <i>Journal of Functional Analysis</i> , 2004, 215, 290-340.	1.3	20
48	Spectral Zeta Function of Symmetric Fractals. , 2004, , 245-262.		11
49	Dirichlet forms on the Sierpiński gasket. <i>Pacific Journal of Mathematics</i> , 2004, 217, 149-174.	0.4	18
50	Self-Similarity, Operators and Dynamics. <i>Mathematical Physics Analysis and Geometry</i> , 2003, 6, 201-218.	1.0	57
51	Energy partition on fractals. <i>Indiana University Mathematics Journal</i> , 2003, 52, 133-156.	0.9	8
52	The Spectrum of the Laplacian on the Pentagasket. , 2003, , 1-24.		19
53	Gradients on Fractals. <i>Journal of Functional Analysis</i> , 2000, 174, 128-154.	1.3	54
54	What Is Not in the Domain of the Laplacian on Sierpinski Gasket Type Fractals. <i>Journal of Functional Analysis</i> , 1999, 166, 197-217.	1.3	88

#	ARTICLE	IF	CITATIONS
55	Spectral Analysis on Infinite Sierpiński Gaskets. Journal of Functional Analysis, 1998, 159, 537-567.	1.3	110
56	Gaps labeling theorem for the bubble-diamond self-similar graphs. Journal of Physics A: Mathematical and Theoretical, 0, , .	2.1	0