List of Publications by Year in descending order

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DETED KUCHMENT

#	Article	IF	CITATIONS
1	Three-Representation Problem in Banach Spaces. Complex Analysis and Operator Theory, 2021, 15, 1.	0.6	3
2	Specific Examples of Liouville-Riemann-Roch Theorems. Lecture Notes in Mathematics, 2021, , 55-66.	0.2	0
3	Proofs of the Main Results. Lecture Notes in Mathematics, 2021, , 35-53.	0.2	0
4	Auxiliary Statements and Proofs of Technical Lemmas. Lecture Notes in Mathematics, 2021, , 67-84.	0.2	0
5	The Main Results. Lecture Notes in Mathematics, 2021, , 23-33.	0.2	Ο
6	Generic properties of dispersion relations for discrete periodic operators. Journal of Mathematical Physics, 2020, 61, .	1.1	14
7	Deep learning for 2D passive source detection in presence of complex cargo. Inverse Problems, 2020, 36, 104001.	2.0	1
8	Analyticity of the spectrum and Dirichlet-to-Neumann operator technique for quantum graphs. Journal of Mathematical Physics, 2019, 60, .	1.1	5
9	Compton camera imaging and the cone transform: a brief overview. Inverse Problems, 2018, 34, 054002.	2.0	35
10	Green's function asymptotics near the internal edges of spectra of periodic elliptic operators. Spectral gap interior. Journal of Spectral Theory, 2017, 7, 1171-1233.	0.8	8
11	Inversion of weighted divergent beam and cone transforms. Inverse Problems and Imaging, 2017, 11, 1071-1090.	1.1	21
12	Passive Detection of Small Low-Emission Sources: Two-Dimensional Numerical Case Studies. Nuclear Science and Engineering, 2016, 184, 125-150.	1.1	6
13	An overview of periodic elliptic operators. Bulletin of the American Mathematical Society, 2016, 53, 343-414.	1.5	116
14	Three-Dimensional Image Reconstruction from Compton Camera Data. SIAM Journal on Imaging Sciences, 2016, 9, 1708-1725.	2.2	26
15	Stabilizing inverse problems by internal data. II: non-local internal data and generic linearized uniqueness. Analysis and Mathematical Physics, 2015, 5, 391-425.	1.3	10
16	Tomography, Photoacoustic, and Thermoacoustic. , 2015, , 1488-1496.		2
17	Identities for sin <em>x</em> that Came from Medical Imaging. American Mathematical Monthly, 2013, 120, 609.	0.3	0
18	Quantum graph spectra of a graphyne structure. The Nanoscale Systems: Mathematical Modelingory and Applications, 2013, 2, 107-123.	0.3	7

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19	Detecting small low emission radiating sources. Inverse Problems and Imaging, 2013, 7, 47-79.	1.1	28
20	Stabilizing inverse problems by internal data. Inverse Problems, 2012, 28, 084007.	2.0	48
21	Critical Partitions and Nodal Deficiency of Billiard Eigenfunctions. Geometric and Functional Analysis, 2012, 22, 1517-1540.	1.8	17
22	Green's function asymptotics near the internal edges of spectra of periodic elliptic operators. Spectral edge case. Mathematische Nachrichten, 2012, 285, 1880-1894.	0.8	16
23	Mathematics of Hybrid Imaging: A Brief Review. Springer Proceedings in Mathematics, 2012, , 183-208.	0.5	27
24	A Bayesian approach to the detection of small low emission sources. Inverse Problems, 2011, 27, 115009.	2.0	6
25	2D and 3D reconstructions in acousto-electric tomography. Inverse Problems, 2011, 27, 055013.	2.0	50
26	On the location of spectral edges in mathbb {Z}-periodic media. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 474022.	2.1	28
27	Mathematics of thermoacoustic tomography. European Journal of Applied Mathematics, 2008, 19, .	2.9	250
28	On occurrence of spectral edges for periodic operators inside the Brillouin zone. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 7597-7618.	2.1	50
29	Index theorems for quantum graphs. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 14165-14180.	2.1	47
30	Range descriptions for the spherical mean Radon transform. Journal of Functional Analysis, 2007, 248, 344-386.	1.4	49
31	On the Spectra of Carbon Nano-Structures. Communications in Mathematical Physics, 2007, 275, 805-826.	2.2	122
32	Liouville theorems and spectral edge behavior on abelian coverings of compact manifolds. Transactions of the American Mathematical Society, 2007, 359, 5777-5815.	0.9	24
33	A Range Description for the Planar Circular Radon Transform. SIAM Journal on Mathematical Analysis, 2006, 38, 681-692.	1.9	52
34	On the Structure of Eigenfunctions Corresponding to Embedded Eigenvalues of Locally Perturbed Periodic Graph Operators. Communications in Mathematical Physics, 2006, 268, 673-686.	2.2	32
35	Quantum graphs: II. Some spectral properties of quantum and combinatorial graphs. Journal of Physics A, 2005, 38, 4887-4900.	1.6	179
36	Reconstructions in limited-view thermoacoustic tomography. Medical Physics, 2004, 31, 724-733.	3.0	319

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37	Quantum graphs: I. Some basic structures. Waves in Random and Complex Media, 2004, 14, S107-S128.	1.5	434
38	Quantum graphs. Waves in Random and Complex Media, 2004, 14, S3-S5.	1.5	9
39	Call for papers for a special issue on Quantum Graphs and their Applications. Waves in Random and Complex Media, 2002, 12, E3-E3.	1.5	3
40	Graph models for waves in thin structures. Waves in Random and Complex Media, 2002, 12, R1-R24.	1.5	204
41	Differential Operators on Graphs and Photonic Crystals. Advances in Computational Mathematics, 2002, 16, 263-290.	1.6	36
42	7. The Mathematics of Photonic Crystals. , 2001, , 207-272.		102
43	Integral Representations and Liouville Theorems for Solutions of Periodic Elliptic Equations. Journal of Functional Analysis, 2001, 181, 402-446.	1.4	28
44	Convergence of Spectra of Mesoscopic Systems Collapsing onto a Graph. Journal of Mathematical Analysis and Applications, 2001, 258, 671-700.	1.0	108
45	Numerical harmonic analysis on the hyperbolic plane. Applicable Analysis, 2000, 76, 351-362.	1.3	4
46	On absence of embedded eigenvalues for schr×dinger operators with perturbed periodic potentials. Communications in Partial Differential Equations, 2000, 25, 1809-1826.	2.2	30
47	Spectral Properties of High Contrast Band-Gap Materials and Operators on Graphs. Experimental Mathematics, 1999, 8, 1-28.	0.7	37
48	An Efficient Finite Element Method for Computing Spectra of Photonic and Acoustic Band-Gap Materials. Journal of Computational Physics, 1999, 150, 468-481.	3.8	153
49	Asymptotic methods for thin high-contrast two-dimensional PBG materials. Journal of Lightwave Technology, 1999, 17, 1996-2007.	4.6	20
50	Spectral Properties of Classical Waves in High-Contrast Periodic Media. SIAM Journal on Applied Mathematics, 1998, 58, 683-702.	1.8	85
51	Band-Gap Structure of Spectra of Periodic Dielectric and Acoustic Media. I. Scalar Model. SIAM Journal on Applied Mathematics, 1996, 56, 68-88.	1.8	123
52	Band-Gap Structure of Spectra of Periodic Dielectric and Acoustic Media. II. Two-Dimensional Photonic Crystals. SIAM Journal on Applied Mathematics, 1996, 56, 1561-1620.	1.8	120
53	Approximation by spherical waves inL p -spaces. Journal of Geometric Analysis, 1996, 6, 365-383.	1.0	46
54	Range conditions for the exponential Radon transform. Journal D'Analyse Mathematique, 1996, 68, 1-13.	0.8	24

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55	On local tomography. Inverse Problems, 1995, 11, 571-589.	2.0	80
56	Band-gap structure of the spectrum of periodic Maxwell operators. Journal of Statistical Physics, 1994, 74, 447-455.	1.2	12
57	On the Behavior of Floquet Exponents of a Kind of Periodic Evolution Problems. Journal of Differential Equations, 1994, 109, 309-324.	2.2	3
58	Floquet Theory for Partial Differential Equations. , 1993, , .		452