

# Fritz Gesztesy

## List of Publications by Year in descending order

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72  
papers

1,725  
citations

304743

22  
h-index

302126

39  
g-index

77  
all docs

77  
docs citations

77  
times ranked

442  
citing authors

#	ARTICLE	IF	CITATIONS
1	On Matrix-Valued Herglotz Functions. <i>Mathematische Nachrichten</i> , 2000, 218, 61-138.	0.8	174
2	m-Functions and inverse spectral analysis for finite and semi-infinite Jacobi matrices. <i>Journal D'Analyse Mathématique</i> , 1997, 73, 267-297.	0.8	90
3	On spectral theory for Schrödinger operators with strongly singular potentials. <i>Mathematische Nachrichten</i> , 2006, 279, 1041-1082.	0.8	90
4	On Local Borg-Marchenko Uniqueness Results. <i>Communications in Mathematical Physics</i> , 2000, 211, 273-287.	2.2	81
5	Weyl-Titchmarsh theory for Sturm-Liouville operators with distributional potentials. <i>Opuscula Mathematica</i> , 2013, 33, 467.	0.8	79
6	The xi function. <i>Acta Mathematica</i> , 1996, 176, 49-71.	3.9	70
7	A description of all self-adjoint extensions of the Laplacian and Kreĭn-type resolvent formulas on non-smooth domains. <i>Journal D'Analyse Mathématique</i> , 2011, 113, 53-172.	0.8	68
8	Algebro-Geometric Solutions of the Baxter-Szegő Difference Equation. <i>Communications in Mathematical Physics</i> , 2005, 258, 149-177.	2.2	65
9	Uniqueness Results for Matrix-Valued Schrödinger, Jacobi, and Dirac-Type Operators. <i>Mathematische Nachrichten</i> , 2002, 239-240, 103-145.	0.8	57
10	An Addendum to Krein's Formula. <i>Journal of Mathematical Analysis and Applications</i> , 1998, 222, 594-606.	1.0	53
11	Nonlocal Robin Laplacians and some remarks on a paper by Filonov on eigenvalue inequalities. <i>Journal of Differential Equations</i> , 2009, 247, 2871-2896.	2.2	50
12	Zeros of the Wronskian and Renormalized Oscillation Theory. <i>American Journal of Mathematics</i> , 1996, 118, 571-594.	1.1	45
13	Variations on a theme of Jost and Pais. <i>Journal of Functional Analysis</i> , 2007, 253, 399-448.	1.4	44
14	Spectral theory for perturbed Krein Laplacians in nonsmooth domains. <i>Advances in Mathematics</i> , 2010, 223, 1372-1467.	1.1	41
15	Some Applications of Operator-valued Herglotz Functions. , 2001, , 271-321.		37
16	Weyl-Titchmarsh M -Function Asymptotics for Matrix-valued Schrödinger Operators. <i>Proceedings of the London Mathematical Society</i> , 2001, 82, 701-724.	1.3	34
17	Real-valued algebro-geometric solutions of the Camassa-Holm hierarchy. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 1025-1054.	3.4	33
18	The index formula and the spectral shift function for relatively trace class perturbations. <i>Advances in Mathematics</i> , 2011, 227, 319-420.	1.1	32

#	ARTICLE	IF	CITATIONS
19	A criterion for Hill operators to be spectral operators of scalar type. <i>Journal D'Analyse Mathematique</i> , 2009, 107, 287-353.	0.8	31
20	A Survey on the Krein-von Neumann Extension, the Corresponding Abstract Buckling Problem, and Weyl-type Spectral Asymptotics for Perturbed Krein Laplacians in Nonsmooth Domains. <i>Operator Theory: Advances and Applications</i> , 2013, , 1-106.	0.2	31
21	The $\hat{\mathcal{L}}$ operator and its relation to Krein's spectral shift function. <i>Journal D'Analyse Mathematique</i> , 2000, 81, 139-183.	0.8	28
22	Evans Functions, Jost Functions, and Fredholm Determinants. <i>Archive for Rational Mechanics and Analysis</i> , 2007, 186, 361-421.	2.4	24
23	Inverse spectral theory for Sturm-Liouville operators with distributional potentials. <i>Journal of the London Mathematical Society</i> , 2013, 88, 801-828.	1.0	22
24	Generalized Polar Decompositions for Closed Operators in Hilbert Spaces and Some Applications. <i>Integral Equations and Operator Theory</i> , 2009, 64, 83-113.	0.8	21
25	The Krein-von Neumann extension and its connection to an abstract buckling problem. <i>Mathematische Nachrichten</i> , 2010, 283, 165-179.	0.8	21
26	(Modified) Fredholm Determinants for Operators with Matrix-Valued Semi-Separable Integral Kernels Revisited. <i>Integral Equations and Operator Theory</i> , 2003, 47, 457-497.	0.8	20
27	A BORG-TYPE THEOREM ASSOCIATED WITH ORTHOGONAL POLYNOMIALS ON THE UNIT CIRCLE. <i>Journal of the London Mathematical Society</i> , 2006, 74, 757-777.	1.0	19
28	Initial value problems and Weyl-Titchmarsh theory for Schrödinger operators with operator-valued potentials. <i>Operators and Matrices</i> , 2013, , 241-283.	0.3	18
29	Abstract wave equations and associated Dirac-type operators. <i>Annali Di Matematica Pura Ed Applicata</i> , 2012, 191, 631-676.	1.0	16
30	Spectral analysis of Darboux transformations for the focusing NLS hierarchy. <i>Journal D'Analyse Mathematique</i> , 2004, 93, 139-197.	0.8	15
31	Renormalized oscillation theory for Hamiltonian systems. <i>Advances in Mathematics</i> , 2017, 311, 569-597.	1.1	15
32	On Povzner-Wienholtz-type self-adjointness results for matrix-valued Sturm-Liouville operators. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2003, 133, 747-758.	1.2	14
33	On spectral theory for Schrödinger operators with operator-valued potentials. <i>Journal of Differential Equations</i> , 2013, 255, 1784-1827.	2.2	14
34	On self-adjoint boundary conditions for singular Sturm-Liouville operators bounded from below. <i>Journal of Differential Equations</i> , 2020, 269, 6448-6491.	2.2	14
35	Factorizations and Hardy-Rellich-type inequalities. , 0, , 207-226.		14
36	Essential Closures and AC Spectra for Reflectionless CMV, Jacobi, and Schrödinger Operators Revisited. <i>Acta Applicandae Mathematicae</i> , 2008, 103, 315-339.	1.0	13

#	ARTICLE	IF	CITATIONS
37	On the spectrum of Schrödinger operators with quasi-periodic algebro-geometric KDV potentials. <i>Journal D'Analyse Mathématique</i> , 2005, 95, 333-387.	0.8	12
38	Symmetrized perturbation determinants and applications to boundary data maps and Krein-type resolvent formulas. <i>Proceedings of the London Mathematical Society</i> , 2012, 104, 577-612.	1.3	12
39	Effective computation of traces, determinants, and $\zeta$ -functions for Sturm-Liouville operators. <i>Journal of Functional Analysis</i> , 2019, 276, 520-562.	1.4	12
40	Decoupling of deficiency indices and applications to Schrödinger-type operators with possibly strongly singular potentials. <i>Advances in Mathematics</i> , 2016, 301, 1022-1061.	1.1	11
41	On Birman's sequence of Hardy-Rellich-type inequalities. <i>Journal of Differential Equations</i> , 2018, 264, 2761-2801.	2.2	11
42	On the Witten index in terms of spectral shift functions. <i>Journal D'Analyse Mathématique</i> , 2017, 132, 1-61.	0.8	10
43	Boundary data maps and Krein's resolvent formula for Sturm-Liouville operators on a finite interval. <i>Operators and Matrices</i> , 2014, , 1-71.	0.3	10
44	Trace formulas for a class of non-Fredholm operators: A review. <i>Reviews in Mathematical Physics</i> , 2016, 28, 1630002.	1.7	9
45	On index theory for non-Fredholm operators: A $(1 + 1)$ -dimensional example. <i>Mathematische Nachrichten</i> , 2016, 289, 575-609.	0.8	8
46	Heat kernel bounds for elliptic partial differential operators in divergence form with Robin-type boundary conditions. <i>Journal D'Analyse Mathématique</i> , 2014, 122, 229-287.	0.8	7
47	On the Global Limiting Absorption Principle for Massless Dirac Operators. <i>Annales Henri Poincaré</i> , 2018, 19, 1993-2019.	1.7	7
48	On Matrix-Valued Herglotz Functions. <i>Mathematische Nachrichten</i> , 2000, 218, 61-138.	0.8	7
49	A Jost-Pais-Type Reduction of Fredholm Determinants and Some Applications. <i>Integral Equations and Operator Theory</i> , 2014, 79, 389-447.	0.8	6
50	THE COLE-HOPF AND MIURA TRANSFORMATIONS REVISITED. , 2000, , 198-214.		6
51	On the index of a non-Fredholm model operator. <i>Plant Systematics and Evolution</i> , 2016, , 881-914.	0.9	6
52	(Modified) Fredholm Determinants for Operators with Matrix-Valued Semi-Separable Integral Kernels Revisited. <i>Integral Equations and Operator Theory</i> , 2004, 48, 561-602.	0.8	5
53	An abstract approach to weak convergence of spectral shift functions and applications to multi-dimensional Schrödinger operators. <i>Journal of Spectral Theory</i> , 2012, 2, 225-266.	0.8	5
54	On a question of A. E. Nussbaum on measurability of families of closed linear operators in a Hilbert space. <i>Israel Journal of Mathematics</i> , 2012, 188, 195-219.	0.8	5

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55	On Factorizations of Analytic Operator-Valued Functions and Eigenvalue Multiplicity Questions. <i>Integral Equations and Operator Theory</i> , 2015, 82, 61-94.	0.8	5
56	Spectral shift functions and Dirichlet-to-Neumann maps. <i>Mathematische Annalen</i> , 2018, 371, 1255-1300.	1.4	5
57	Weak convergence of spectral shift functions for one-dimensional Schrödinger operators. <i>Mathematische Nachrichten</i> , 2012, 285, 1799-1838.	0.8	4
58	A bound for the eigenvalue counting function for Krein-von Neumann and Friedrichs extensions. <i>Advances in Mathematics</i> , 2017, 304, 1108-1155.	1.1	4
59	Donoghue-type $m$ -functions for Schrödinger operators with operator-valued potentials. <i>Journal D'Analyse Mathématique</i> , 2019, 137, 373-427.	0.8	4
60	A Sequence of Weighted Birman-Hardy-Rellich Inequalities with Logarithmic Refinements. <i>Integral Equations and Operator Theory</i> , 2022, 94, 1.	0.8	4
61	Connectedness of the Isospectral Manifold for One-Dimensional Half-Line Schrödinger Operators. <i>Journal of Statistical Physics</i> , 2004, 116, 361-365.	1.2	3
62	ON STABILITY OF SQUARE ROOT DOMAINS FOR NON-SELF-ADJOINT OPERATORS UNDER ADDITIVE PERTURBATIONS. <i>Mathematika</i> , 2016, 62, 111-182.	0.5	3
63	A Survey of Some Norm Inequalities. <i>Complex Analysis and Operator Theory</i> , 2021, 15, 1.	0.6	3
64	The Krein-von Neumann extension revisited. <i>Applicable Analysis</i> , 0, , 1-24.	1.3	3
65	On a class of model Hilbert spaces. <i>Discrete and Continuous Dynamical Systems</i> , 2013, 33, 5067-5088.	0.9	2
66	Spectral $\zeta$ -functions and $\zeta$ -regularized functional determinants for regular Sturm-Liouville operators. <i>Research in Mathematical Sciences</i> , 2021, 8, 1.	1.0	2
67	Coupling of symmetric operators and the third Green identity. <i>Bulletin of Mathematical Sciences</i> , 2018, 8, 49-80.	0.7	1
68	On Dirichlet-to-Neumann Maps, Nonlocal Interactions, and Some Applications to Fredholm Determinants. <i>Few-Body Systems</i> , 2010, 47, 49-64.	1.5	0
69	Trace Formulas Applied to the Riemann $\zeta$ -Function. , 2019, , 231-253.		0
70	Computing Traces, Determinants, and $\zeta$ -Functions for Sturm-Liouville Operators: A Survey. <i>Springer Optimization and Its Applications</i> , 2019, , 93-148.	0.9	0
71	Eigenvectors from eigenvalues: the case of one-dimensional Schrödinger operators. <i>Annals of Functional Analysis</i> , 2021, 12, 1.	0.8	0
72	On critical dipoles in dimensions $n \in \{2, 3\}$ . <i>Journal of Differential Equations</i> , 2021, 300, 881-924.	2.2	0