Simon N Chandler-Wilde

List of Publications by Year
in descending order

69 papers	2,095 citations	257450 24 h-index	243625 44 g-index
69 all docs	69 docs citations	69 times ranked	605 citing authors

#	Article	IF	Citations
1	The Complex-Scaled Half-Space Matching Method. SIAM Journal on Mathematical Analysis, 2022, 54, 512-557.	1.9	5
2	A high-frequency boundary element method for scattering by a class of multiple obstacles. IMA Journal of Numerical Analysis, 2021, 41, 1197-1239.	2.9	2
3	Computation of the Complex Error Function Using Modified Trapezoidal Rules. SIAM Journal on Numerical Analysis, 2021, 59, 2346-2367.	2.3	3
4	Boundary element methods for acoustic scattering by fractal screens. Numerische Mathematik, 2021, 147, 785-837.	1.9	10
5	Well-Posed PDE and Integral Equation Formulations for Scattering by Fractal Screens. SIAM Journal on Mathematical Analysis, 2018, 50, 677-717.	1.9	12
6	Coburn's lemma and the finite section method for random Jacobi operators. Journal of Functional Analysis, 2016, 270, 802-841.	1.4	5
7	Wavenumber-Explicit Continuity and Coercivity Estimates in Acoustic Scattering by Planar Screens. Integral Equations and Operator Theory, 2015, 82, 423-449.	0.8	13
8	INTERPOLATION OF HILBERT AND SOBOLEV SPACES: QUANTITATIVE ESTIMATES AND COUNTEREXAMPLES. Mathematika, 2015, 61, 414-443.	0.5	53
9	Computing Fresnel integrals via modified trapezium rules. Numerische Mathematik, 2014, 128, 635-661.	1.9	14
10	On the spectra and pseudospectra of a class of non-self-adjoint random matrices and operators. Operators and Matrices, 2013, , 739-775.	0.3	17
11	A High Frequency Boundary Element Method for Scattering by Convex Polygons with Impedance Boundary Conditions. Communications in Computational Physics, 2012, 11, 573-593.	1.7	13
12	Spectrum of a Feinbergâ€"Zee random hopping matrix. Journal of Spectral Theory, 2012, 2, 147-179.	0.8	17
13	Numerical-asymptotic boundary integral methods in high-frequency acoustic scattering. Acta Numerica, 2012, 21, 89-305.	10.7	165
14	Condition number estimates for combined potential integral operators in acoustics and their boundary element discretisation. Numerical Methods for Partial Differential Equations, 2011, 27, 31-69.	3.6	69
15	A new frequencyâ€‘uniform coercive boundary integral equation for acoustic scattering. Communications on Pure and Applied Mathematics, 2011, 64, 1384-1415.	3.1	37
16	A Nystrom method for a boundary value problem arising in unsteady water wave problems. IMA Journal of Numerical Analysis, 2011, 31, 1123-1153.	2.9	2
17	Limit operators, collective compactness, and the spectral theory of infinite matrices. Memoirs of the American Mathematical Society, 2011, 210, 0-0.	0.9	13
18	Eigenvalue problem meets Sierpinski triangle: computing the spectrum of a non-self-adjoint random operator. Operators and Matrices, 2011, , 633-648.	0.3	15

#	Article	IF	Citations
19	High frequency scattering by convex curvilinear polygons. Journal of Computational and Applied Mathematics, 2010, 234, 2020-2026.	2.0	11
20	Variational Approach in Weighted Sobolev Spaces to Scattering by Unbounded Rough Surfaces. SIAM Journal on Mathematical Analysis, 2010, 42, 2554-2580.	1.9	51
21	The PML for rough surface scattering. Applied Numerical Mathematics, 2009, 59, 2131-2154.	2.1	19
22	Sufficiency of Favard's condition for a class of band-dominated operators on the axis. Journal of Functional Analysis, 2008, 254, 1146-1159.	1.4	18
23	Existence and uniqueness of solutions for acoustic scattering over infinite obstacles. Journal of Mathematical Analysis and Applications, 2008, 345, 305-321.	1.0	0
24	Wave-Number-Explicit Bounds in Time-Harmonic Scattering. SIAM Journal on Mathematical Analysis, 2008, 39, 1428-1455.	1.9	78
25	A Galerkin Boundary Element Method for High Frequency Scattering by Convex Polygons. SIAM Journal on Numerical Analysis, 2007, 45, 610-640.	2.3	79
26	The mathematics of scattering by unbounded, rough, inhomogeneous layers. Journal of Computational and Applied Mathematics, 2007, 204, 549-559.	2.0	26
27	A collocation method for high-frequency scattering by convex polygons. Journal of Computational and Applied Mathematics, 2007, 204, 334-343.	2.0	17
28	Acoustic Scattering by Mildly Rough Unbounded Surfaces in Three Dimensions. SIAM Journal on Applied Mathematics, 2006, 66, 1002-1026.	1.8	29
29	A Wavenumber Independent Boundary Element Method for an Acoustic Scattering Problem. SIAM Journal on Numerical Analysis, 2006, 43, 2450-2477.	2.3	59
30	A well-posed integral equation formulation for three-dimensional rough surface scattering. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 3683-3705.	2.1	25
31	Solvability and Fredholm Properties of Integral Equations on the Half-Line in Weighted Spaces. Integral Equations and Operator Theory, 2005, 51, 5-34.	0.8	1
32	A Time Domain Point Source Method for Inverse Scattering by Rough Surfaces. Computing (Vienna/New) Tj ETQq0 0 0 rgBT /Overlock 10	4.8	38
33	Existence, Uniqueness, and Variational Methods for Scattering by Unbounded Rough Surfaces. SIAM Journal on Mathematical Analysis, 2005, 37, 598-618.	1.9	91
34	Integral equation methods for scattering by infinite rough surfaces. Mathematical Methods in the Applied Sciences, 2003, 26, 463-488.	2.3	60
35	Solvability and Spectral Properties of Integral Equations on the Real Line: II. L^p-Spaces and Applications. Journal of Integral Equations and Applications, 2003, 15, 1.	0.6	17
36	Efficient calculation of two-dimensional periodic and waveguide acoustic Green's functions. Journal of the Acoustical Society of America, 2002, 111, 1610-1622.	1.1	9

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37	A fast two-grid and finite section method for a class of integral equations on the real line with application to an acoustic scattering problem in the half-plane. Numerische Mathematik, 2002, 93, 1-51.	1.9	21
38	Title is missing!. Numerische Mathematik, 2002, 93, 1-51.	1.9	7
39	Solvability and spectral properties of integral equations on the real line: I. Weighted spaces of continuous functions. Journal of Mathematical Analysis and Applications, 2002, 272, 276-302.	1.0	12
40	A Generalized Collectively Compact Operator Theory with An Application to Integral Equations on Unbounded Domains. Journal of Integral Equations and Applications, 2002, 14, .	0.6	10
41	On the stability and convergence of the finite section method for integral equation formulations of rough surface scattering. Mathematical Methods in the Applied Sciences, 2001, 24, 209-232.	2.3	17
42	A Nyström Method for a Class of Integral Equations on the Real Line with Applications to Scattering by Diffraction Gratings and Rough Surfaces. Journal of Integral Equations and Applications, 2000, 12, 281.	0.6	41
43	On the Solvability of Second Kind Integral Equations on the Real Line. Journal of Mathematical Analysis and Applications, 2000, 245, 28-51.	1.0	23
44	Scattering of Electromagnetic Waves by Rough Interfaces and Inhomogeneous Layers. SIAM Journal on Mathematical Analysis, 1999, 30, 559-583.	1.9	46
45	A Uniqueness Result for Scattering by Infinite Rough Surfaces. SIAM Journal on Applied Mathematics, 1998, 58, 1774-1790.	1.8	80
46	Acoustic Scattering by an Inhomogeneous Layer on a Rigid Plate. SIAM Journal on Applied Mathematics, 1998, 58, 1931-1950.	1.8	47
47	Electromagnetic scattering by an inhomogeneous conducting or dielectric layer on a perfectly conducting plate. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1998, 454, 519-542.	2.1	68
48	Padé approximants for the acoustical properties of rigid frame porous media with pore size distributions. Journal of the Acoustical Society of America, 1998, 104, 1198-1209.	1.1	46
49	On the Solvability of a Class of Second Kind Integral Equations on Unbounded Domains. Journal of Mathematical Analysis and Applications, 1997, 214, 482-502.	1.0	21
50	Scattering by Rough Surfaces: the Dirichlet Problem for the Helmholtz Equation in a Non-locally Perturbed Half-plane. Mathematical Methods in the Applied Sciences, 1996, 19, 959-976.	2.3	42
51	A DEPTH-INTEGRATED 2D COASTAL AND ESTUARINE MODEL WITH CONFORMAL BOUNDARY-FITTED MESH GENERATION. International Journal for Numerical Methods in Fluids, 1996, 23, 819-846.	1.6	11
52	Asymptotic Behavior at Infinity of Solutions of Multidimensional Second Kind Integral Equations. Journal of Integral Equations and Applications, 1995, 7, 303.	0.6	9
53	Efficient calculation of the green function for acoustic propagation above a homogeneous impedance plane. Journal of Sound and Vibration, 1995, 180, 705-724.	3.9	88
54	A uniformly valid far field asymptotic expansion of the green function for two-dimensional propagation above a homogeneous impedance plane. Journal of Sound and Vibration, 1995, 182, 665-675.	3.9	12

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55	Multiple-edge noise barriers. Applied Acoustics, 1995, 44, 353-367.	3.3	49
56	PadÃ© approximants for the acoustical characteristics of rigid frame porous media. Journal of the Acoustical Society of America, 1995, 98, 1119-1129.	1.1	12
57	Evaluation of a boundary integral representation for the conformal mapping of the unit disk onto a simply-connected domain. Advances in Computational Mathematics, 1995, 3, 115-135.	1.6	2
58	Approximate Solution of Second Kind Integral Equations on Infinite Cylindrical Surfaces. SIAM Journal on Numerical Analysis, 1995, 32, 594-609.	2.3	8
59	A Chebyshev collocation method for solving Symm's integral equation for conformal mapping: a partial error analysis. IMA Journal of Numerical Analysis, 1994, 14, 57-79.	2.9	7
60	Acoustic Scattering By a Near-Surface Obstacle in a Rigid Porous Medium. Journal of Sound and Vibration, 1994, 170, 161-179.	3.9	6
61	On Asymptotic Behavior at Infinity and the Finite Section Method for Integral Equations on the Half-Line. Journal of Integral Equations and Applications, 1994, 6, .	0.6	8
62	Numerical conformal mapping via Chebyshev weighted solutions of Symm's integral equation. Journal of Computational and Applied Mathematics, 1993, 46, 29-48.	2.0	7
63	Some uniform stability and convergence results for integral equations on the real line and projection methods for their solution. IMA Journal of Numerical Analysis, 1993, 13, 509-535.	2.9	15
64	Long-distance sound propagation over an impedance discontinuity. Journal of Sound and Vibration, 1991, 148, 365-380.	3.9	7
65	Efficiency of single noise barriers. Journal of Sound and Vibration, 1991, 146, 303-322.	3.9	125
66	The performance of t-profile and associated noise barriers. Applied Acoustics, 1991, 32, 269-287.	3.3	66
67	On the Application of a Generalization of Toeplitz Matrices to the Numerical Solution of Integral Equations with Weakly Singular Convolution Kernels. IMA Journal of Numerical Analysis, 1989, 9, 525-544.	2.9	9
68	Prediction of the attenuation of road traffic noise with distance. Journal of Sound and Vibration, 1987, 115, 459-472.	3.9	23
69	Sound propagation above an inhomogeneous impedance plane. Journal of Sound and Vibration, 1985, 98, 475-491.	3.9	57