

Alex Barnett

List of Publications by Year in descending order

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Version: 2024-02-01

17
papers

365
citations

759233

12
h-index

888059

17
g-index

17
all docs

17
docs citations

17
times ranked

242
citing authors

#	ARTICLE	IF	CITATIONS
1	A new integral representation for quasi-periodic scattering problems in two dimensions. BIT Numerical Mathematics, 2011, 51, 67-90.	2.0	52
2	A new integral representation for quasi-periodic fields and its application to two-dimensional band structure calculations. Journal of Computational Physics, 2010, 229, 6898-6914.	3.8	48
3	Spectrally Accurate Quadratures for Evaluation of Layer Potentials Close to the Boundary for the 2D Stokes and Laplace Equations. SIAM Journal of Scientific Computing, 2015, 37, B519-B542.	2.8	39
4	A Fast Algorithm for Simulating Multiphase Flows Through Periodic Geometries of Arbitrary Shape. SIAM Journal of Scientific Computing, 2016, 38, B740-B772.	2.8	31
5	Rapid Solution of the Cryo-EM Reconstruction Problem by Frequency Marching. SIAM Journal on Imaging Sciences, 2017, 10, 1170-1195.	2.2	30
6	Deformations and Dilations of Chaotic Billiards: Dissipation Rate, and Quasiorthogonality of the Boundary Wave Functions. Physical Review Letters, 2000, 85, 1412-1415.	7.8	26
7	A fast and robust solver for the scattering from a layered periodic structure containing multi-particle inclusions. Journal of Computational Physics, 2015, 298, 194-208.	3.8	25
8	Fast Computation of High-Frequency Dirichlet Eigenmodes via Spectral Flow of the Interior Neumann-Dirichlet Map. Communications on Pure and Applied Mathematics, 2014, 67, 351-407.	3.1	19
9	Rate of energy absorption for a driven chaotic cavity. Journal of Physics A, 2001, 34, 413-437.	1.6	18
10	Parametric evolution for a deformed cavity. Physical Review E, 2001, 63, 046207.	2.1	18
11	Solution of Stokes flow in complex nonsmooth 2D geometries via a linear-scaling high-order adaptive integral equation scheme. Journal of Computational Physics, 2020, 410, 109361.	3.8	14
12	Ubiquitous evaluation of layer potentials using Quadrature by Kernel-Independent Expansion. BIT Numerical Mathematics, 2018, 58, 423-456.	2.0	13
13	Robust and Efficient Solution of the Drum Problem via Nyström Approximation of the Fredholm Determinant. SIAM Journal on Numerical Analysis, 2015, 53, 1984-2007.	2.3	12
14	A few more words about James Tenney: dissonant counterpoint and statistical feedback. Journal of Mathematics and Music, 2011, 5, 63-82.	0.4	6
15	A High-Order Integral Equation-Based Solver for the Time-Dependent Schrödinger Equation. Communications on Pure and Applied Mathematics, 2020, , .	3.1	5
16	An integral equation method for the simulation of doubly-periodic suspensions of rigid bodies in a shearing viscous flow. Journal of Computational Physics, 2021, 424, 109809.	3.8	5
17	Factorization of the translation kernel for fast rigid image alignment. Inverse Problems, 2020, 36, 024001.	2.0	4