Michael O'Neil

List of Publications by Year
in descending order

22 papers	733 citations	840776 11 h-index	677142 22 g-index
23 all docs	23 docs citations	23 times ranked	1437 citing authors

#	Article	IF	Citations
1	Fast Direct Methods for Gaussian Processes. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2016, 38, 252-265.	13.9	397
2	An algorithm for the rapid evaluation of special function transforms. Applied and Computational Harmonic Analysis, 2010, 28, 203-226.	2.2	60
3	Debye Sources and the Numerical Solution of the Time Harmonic Maxwell Equations II. Communications on Pure and Applied Mathematics, 2013, 66, 753-789.	3.1	38
4	A fast, high-order solver for the Grad–Shafranov equation. Journal of Computational Physics, 2013, 243, 28-45.	3.8	29
5	On the efficient representation of the half-space impedance Green's function for the Helmholtz equation. Wave Motion, 2014, 51, 1-13.	2.0	26
6	Fast algorithms for Quadrature by Expansion I: Globally valid expansions. Journal of Computational Physics, 2017, 345, 706-731.	3.8	24
7	Taylor states in stellarators: A fast high-order boundary integral solver. Journal of Computational Physics, 2019, 397, 108791.	3.8	15
8	A high-order wideband direct solver for electromagnetic scattering from bodies of revolution. Journal of Computational Physics, 2019, 387, 205-229.	3.8	14
9	Robust integral formulations for electromagnetic scattering from three-dimensional cavities. Journal of Computational Physics, 2017, 345, 1-16.	3.8	13
10	An FFT-accelerated direct solver for electromagnetic scattering from penetrable axisymmetric objects. Journal of Computational Physics, 2019, 390, 152-174.	3.8	13
11	Second-kind integral equations for the Laplace-Beltrami problem on surfaces in three dimensions. Advances in Computational Mathematics, 2018, 44, 1385-1409.	1.6	12
12	An integral equation-based numerical solver for Taylor states in toroidal geometries. Journal of Computational Physics, 2018, 359, 263-282.	3.8	11
13	A Consistency Condition for the Vector Potential in Multiply-Connected Domains. IEEE Transactions on Magnetics, 2013, 49, 1072-1076.	2.1	10
14	Debye Sources, Beltrami Fields, and a Complex Structure on Maxwell Fields. Communications on Pure and Applied Mathematics, 2015, 68, 2237-2280.	3.1	10
15	Accurate and efficient numerical calculation of stable densities via optimized quadrature and asymptotics. Statistics and Computing, 2018, 28, 171-185.	1.5	10
16	Smoothed Corners and Scattered Waves. SIAM Journal of Scientific Computing, 2016, 38, A2665-A2698.	2.8	9
17	A new hybrid integral representation for frequency domain scattering in layered media. Applied and Computational Harmonic Analysis, 2018, 45, 359-378.	2.2	9
18	Efficient high-order singular quadrature schemes in magnetic fusion. Plasma Physics and Controlled Fusion, 2020, 62, 024004.	2.1	7

#	Article	IF	Citations
19	Exact axisymmetric Taylor states for shaped plasmas. Physics of Plasmas, 2014, 21, 064501.	1.9	5
20	Fast multipole methods for the evaluation of layer potentials with locally-corrected quadratures. Journal of Computational Physics: X, 2021, 10, 100092.	0.7	5
21	A generalized Debye source approach to electromagnetic scattering in layered media. Journal of Mathematical Physics, 2014, 55, .	1.1	4
22	A Fast Boundary Integral Method for High-Order Multiscale Mesh Generation. SIAM Journal of Scientific Computing, 2020, 42, A1380-A1401.	2.8	3