Michael J Bluck

List of Publications by Year
in descending order

45	659	623574	552653
papers	citations	14	26
		h-index	g-index

46	46	46	490
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Adsorption kinetics, capacity and mechanism of arsenate and phosphate on a bifunctional TiO2â€"Fe2O3 bi-composite. Journal of Colloid and Interface Science, 2011, 364, 205-212.	5.0	111
2	Time-domain BIE analysis of large three-dimensional electromagnetic scattering problems. IEEE Transactions on Antennas and Propagation, 1997, 45, 894-901.	3.1	107
3	ANALYSIS OF THREE-DIMENSIONAL TRANSIENT ACOUSTIC WAVE PROPAGATION USING THE BOUNDARY INTEGRAL EQUATION METHOD. International Journal for Numerical Methods in Engineering, 1996, 39, 1419-1431.	1.5	50
4	Costs and cost scaling in time-domain integral-equation analysis of electromagnetic scattering. IEEE Antennas and Propagation Magazine, 1998, 40, 12-21.	1.2	45
5	CFD simulation of turbulent flow in a rod bundle with spacer grids (MATIS-H) using STAR-CCM+. Nuclear Engineering and Design, 2014, 279, 37-49.	0.8	37
6	Electromagnetic scattering from 3-D curved dielectric bodies using time-domain integral equations. IEEE Transactions on Antennas and Propagation, 1998, 46, 1212-1219.	3.1	34
7	Modelling heat transfer and dissolved species concentrations within PWR crud. Nuclear Engineering and Design, 2011, 241, 155-162.	0.8	33
8	The stability of integral equation time-domain scattering computations for three-dimensional scattering; similarities and differences between electrodynamic and elastodynamic computations. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2002, 15, 459-474.	1.2	31
9	An analytical solution to electromagnetically coupled duct flow in MHD. Journal of Fluid Mechanics, 2015, 771, 595-623.	1.4	27
10	A hybrid reduced order method for modelling turbulent heat transfer problems. Computers and Fluids, 2020, 208, 104615.	1.3	27
11	An accurate method for the calculation of singular integrals arising in time-domain integral equation analysis of electromagnetic scattering. IEEE Transactions on Antennas and Propagation, 1997, 45, 1793-1798.	3.1	26
12	The effective thermal conductivity of crud and heat transfer from crud-coated PWR fuel. Nuclear Engineering and Design, 2011, 241, 792-798.	0.8	24
13	Using a Gaussian process regression inspired method to measure agreement between the experiment and CFD simulations. International Journal of Heat and Fluid Flow, 2019, 80, 108497.	1.1	20
14	An assessment of eddy viscosity models on predicting performance parameters of valves. Nuclear Engineering and Design, 2019, 342, 60-77.	0.8	17
15	Polynomial basis functions on pyramidal elements. Communications in Numerical Methods in Engineering, 2008, 24, 1827-1837.	1.3	8
16	A coupled systems code-CFD MHD solver for fusion blanket design. Fusion Engineering and Design, 2015, 98-99, 1902-1906.	1.0	8
17	The extension of time-domain integral equation analysis to scattering from imperfectly conducting bodies. IEEE Transactions on Antennas and Propagation, 2001, 49, 875-879.	3.1	7
18	Conforming Hierarchical Basis Functions. Communications in Computational Physics, 2012, 12, 1215-1256.	0.7	6

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19	Applications of Differential Forms to Boundary Integral Equations. IEEE Transactions on Antennas and Propagation, 2006, 54, 1781-1796.	3.1	5
20	An analytical solution to the heat transfer problem in thick-walled hunt flow. International Journal of Heat and Fluid Flow, 2017, 64, 103-111.	1.1	5
21	Modelling Microlayer Formation in Boiling Sodium. Fluids, 2020, 5, 213.	0.8	5
22	Parallelisation issues for high speed time domain integral equation analysis. Parallel Computing, 1999, 25, 925-942.	1.3	4
23	High-Order Discrete Helmholtz Decompositions for the Electric Field Integral Equation. IEEE Transactions on Antennas and Propagation, 2007, 55, 1338-1347.	3.1	4
24	An analytical solution to the heat transfer problem in Shercliff flow. International Journal of Heat and Mass Transfer, 2015, 86, 542-549.	2.5	3
25	Fixed inducing points online Bayesian calibration for computer models with an application to a scale-resolving CFD simulation. Journal of Computational Physics, 2021, 434, 110243.	1.9	3
26	Extending integral equation time domain acoustic scattering analysis to larger problems. International Journal for Numerical Methods in Engineering, 1999, 46, 1997-2010.	1.5	2
27	Quantification of the uncertainty within a SAS-SST simulation caused by the unknown high-wavenumber damping factor. Nuclear Engineering and Design, 2021, 381, 111307.	0.8	2
28	Transient Near Field Analysis of Optical Modes in Sub-wavelength Arrays. , 2007, , .		1
29	A multilevel hierarchical preconditioner for the electric field integral equation. , 2011, , .		1
30	Assessments of Different Turbulence Models in Predicting the Performance of a Butterfly Valve. , 2018, , .		1
31	A Validation of CFD Methods on Predicting Valve Performance Parameters. , 2018, , .		1
32	Isogeometric Analysis of the Steady-State Incompressible MHD Equations. SIAM Journal of Scientific Computing, 2019, 41, B396-B424.	1.3	1
33	Analytical Solutions to Nonuniform Surface Heat Transfer With Volumetric Sources in Magnetohydrodynamic Duct Flow. Journal of Heat Transfer, 2019, 141, .	1.2	1
34	Isogeometric analysis of the time-dependent incompressible MHD equations. International Journal of Computational Fluid Dynamics, 2020, 34, 226-248.	0.5	1
35	Non-intrusive semi-analytical uncertainty quantification using Bayesian quadrature with application to CFD simulations. International Journal of Heat and Fluid Flow, 2022, 93, 108917.	1.1	1
36	Modelling of sub-wavelength optical apertures in thin metal sheets via 3D transient Maxwell's equations. , 2005, , .		0

#	Article	IF	Citations
37	Integral Equation Time Domain Analysis of Frequency-dependent Transmission through Aperture Arrays. , 2007, , .		0
38	Integral equation transient analysis of experiments on electromagnetic scattering from sub-wavelength apertures. , 2009, , .		0
39	Time-domain bie analysis of large electromagnetic scattering problems with Impedance Boundary Condition. , 2011, , .		0
40	Application of time-domain BIE to sub-wavelength scattering bodies with finite conductivity. , 2012, , .		0
41	A p-MUS Preconditioner for the EFIE. IEEE Transactions on Antennas and Propagation, 2013, 61, 5547-5552.	3.1	0
42	A multilevel hierarchical preconditioner technique for multiscale and complex EM scattering bodies. , 2013, , .		0
43	A Multilevel Hierarchical Preconditioning Method for Multiscale scattering bodies. , 2014, , .		0
44	A Multilevel Hierarchical Preconditioner for Multiscale EM scattering. , 2014, , .		0
45	CFD Analysis of the Flow in Crud-Coated Nuclear Rod Bundles. , 2014, , .		0