Thomas Rylander

List of Publications by Year
in descending order

29 papers	567 citations	1307594 7 h-index	794594 19 g-index
31 all docs	31 docs citations	31 times ranked	352 citing authors

#	Article	IF	Citations
1	Neural Networks for the Estimation of Low-Order Statistical Moments of a Stochastic Dielectric. , 2021, , .		0
2	Cavity resonator sensor and temporal signals analysis for object detection in granular flows. Measurement: Journal of the International Measurement Confederation, 2020, 150, 107027.	5.0	4
3	Compressed Sensing for the Detection and Positioning of Dielectric Objects Inside Metal Enclosures by Means of Microwave Measurements. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 462-476.	4.6	6
4	Matched filter for microwave-based detection of dielectric objects in powders. , 2017, , .		4
5	Microwave Measurement System for Detection of Dielectric Objects in Powders. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3851-3863.	4.6	14
6	Higher-order brick-tetrahedron hybrid method for Maxwell's equations in time domain. Journal of Computational Physics, 2016, 321, 698-707.	3.8	6
7	Global monitoring of fluidized-bed processes by means of microwave cavity resonances. Measurement: Journal of the International Measurement Confederation, 2014, 55, 520-535.	5.0	6
8	The Finite Element Method. Texts in Applied Mathematics, 2013, , 93-184.	0.4	1
9	Computational Electromagnetics. Texts in Applied Mathematics, 2013, , .	0.4	34
10	The Finite-Difference Time-Domain Method. Texts in Applied Mathematics, 2013, , 63-92.	0.4	1
11	Eigenvalue Problems. Texts in Applied Mathematics, 2013, , 43-61.	0.4	0
12	Finite Differences. Texts in Applied Mathematics, 2013, , 19-42.	0.4	0
13	The Method of Moments. Texts in Applied Mathematics, 2013, , 185-221.	0.4	0
14	Summary and Overview. Texts in Applied Mathematics, 2013, , 223-231.	0.4	0
15	A linear nonconforming finite element method for Maxwellâ€™s equations in two dimensions. Part I: Frequency domain. Journal of Computational Physics, 2010, 229, 6534-6547.	3.8	5
16	A Finite Element Method Approach to the Finite-Difference Time-Domain Scheme with Cut Cells. Electromagnetics, 2010, 30, 82-93.	0.7	0
17	Shape optimization of the total scattering cross section for cylindrical scatterers. Radio Science, 2009, 44, .	1.6	3
18	Electric and magnetic losses modeled by a stable hybrid with explicitâ€"implicit time-stepping for Maxwellâ€™s equations. Journal of Computational Physics, 2008, 227, 4499-4511.	3.8	3

#	Article	IF	Citations
19	Scattering Analysis by a Stable Hybridization of the Finite Element Method and the Finite-Difference Time-Domain Scheme with a Brick-Tetrahedron Interface. Electromagnetics, 2008, 28, 3-17.	0.7	47
20	Shape optimization of total radar cross section for antenna struts. , 2008, , .		0
21	Modeling of electric and magnetic losses by a stable hybrid with explicit-implicit time-stepping. , 2007, , .		1
22	A quasi-planar incident wave excitation for time-domain scattering analysis of periodic structures. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2006, 19, 409-419.	1.9	0
23	Stable coaxial waveguide-port algorithm for the time-domain finite-element method. Microwave and Optical Technology Letters, 2004, 42, 115-119.	1.4	7
24	Perfectly matched layer for the time domain finite element method. Journal of Computational Physics, 2004, 200, 238-250.	3.8	38
25	Accurate extrapolation to zero cell size by PadÃ© approximation. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2003, 16, 287-298.	1.9	3
26	Estimation of resonant frequencies and quality factors from time domain computations. Journal of Computational Physics, 2003, 192, 523-545.	3.8	11
27	Estimation of damped and undamped sinusoids with application to analysis of electromagnetic FDTD simulation data 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1351-1356.	0.4	2
28	Stability of Explicitâ€"Implicit Hybrid Time-Stepping Schemes for Maxwell's Equations. Journal of Computational Physics, 2002, 179, 426-438.	3.8	177
29	Stable FEM-FDTD hybrid method for Maxwell's equations. Computer Physics Communications, 2000, 125, 75-82.	7.5	193