Raphael Kastner

List of Publications by Year
in descending order

38 papers	**116** citations	1684188 **5** h-index	1474206 **9** g-index
38 all docs	**38** docs citations	**38** times ranked	**65** citing authors

#	Article	IF	Citations
1	Self-Dual Power Splitters for Wide-Scan, Wideband Phased Array Applications. , 2022, , .		0
2	Inherently Matched Waveguide-Fed Wideband Arrays with Self-Dual Elements. , 2021, , .		0
3	Consolidation of the 6X6 TD Vector Wave Equation into a 3X3 Complex Set on a Single FD Grid. , 2021, , .		0
4	Self-Duality: From Symmetry Protected Transmission to Extreme Wave Funneling and Zero Backscattering. , 2021, , .		1
5	Replacement of the TD Wave Equation by a First Order Equation with Alternative Field Constituents. , 2021, , .		0
6	Half-Way Duality in Electromagnetics Using an Explicit Expression for the Half-Curl Operator. IEEE Transactions on Antennas and Propagation, 2020, 68, 3747-3750.	5.1	4
7	Reactive Surfaces as Half-Duals of PECs/PMCs. , 2019, , .		0
8	Half-Order Three-Dimensional Curl Operator. , 2019, , .		0
9	Balanced Electric-Magnetic Absorber Green's Function Method for MoM Matrix Thinning and Conditioning. IEEE Transactions on Antennas and Propagation, 2018, 66, 2996-3001.	5.1	3
10	Wide Scan, Wide band Arrays with Self-Dual Point-Like Elements. , 2018, , .		1
11	Deep Thinning of MoM Matrices with the Balanced Electromagnetic Absorber Method in 3 Dimensions. , 2018, , .		0
12	Self-Dual Wideband Absorbers. , 2018, , .		1
13	Deep Thinning of MoM Matrices with the Balanced Electromagnetic Absorber Method in 3 Dimensions. , 2018, , .		0
14	Wideband, Periodically Arranged Self-Dual Subwavelength Waveguides. , 2018, , .		0
15	On the Incident Power on a Receiving Slender Antenna and the Optical Theorem in the Near Field. IEEE Transactions on Antennas and Propagation, 2017, 65, 2421-2427.	5.1	1
16	Time-Domain dynamics and spectrums of Rabi-Bloch oscillations in nano-circuits and nano-antennas. , 2017, , .		0
17	On the admitting area of slender antennas. , 2017, , .		0
18	Constructing nonstandard and high order FDTD schemes in cylindrical coordinates using spectral domain and modified equation methodologies â€" 1-D case. Journal of Electromagnetic Waves and Applications, 2016, 30, 2293-2310.	1.6	0

#	Article	IF	Citations
19	Balanced electric-magnetic absorber green's function method for MoM matrix thinning. , 2016, , .		2
20	Dispersivity of Balanced Near-Zero Permittivity and Permeability (EMNZ) Medium. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3108-3112.	4.6	16
21	Source decomposition as a global absorbing boundary condition for multi-region problems. , 2015, , .		0
22	Characterization of a perfect absorber. , 2015, , .		3
23	Scattering properties of the ideal antenna in receive mode. , 2015, , .		1
24	An ultra wideband, high directivity 3 dB coupler. , 2014, , .		3
25	Reduced Integral Equations for Coupled Resonators Related Directly to the Lumped Equivalent Circuit. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 4021-4028.	4.6	1
26	High Electromagnetic Conductance Media. IEEE Transactions on Antennas and Propagation, 2013, 61, 775-778.	5.1	9
27	Waveguide E-plane folded cross-coupled filters. , 2013, , .		1
28	An often overlooked term in the application of the Poynting theorem around a receiving antenna. , 2013, , .		0
29	High electromagnetic conductance media. , 2013, , .		1
30	Cylindrical FDTD grid-compatible Green's functions. , 2012, , .		0
31	Finite-difference time-domain diakoptic strategies. , 2011, , .		0
32	Source Decomposition as a Diakoptic Boundary Condition in FDTD With Reflecting External Regions. IEEE Transactions on Antennas and Propagation, 2010, 58, 3602-3609.	5.1	11
33	Multimode harmonic power meter for circular overmoded waveguide at second and third harmonics. , 2010, , .		0
34	Mode matching analysis and design of waveguide E-plane filters and diplexers. , 2010, , .		1
35	Microstrip bandpass filters based on coupling matrix with second harmonic suppression. , 2010, , .		0
36	A Comprehensive New Methodology for Formulating FDTD Schemes With Controlled Order of Accuracy and Dispersion. IEEE Transactions on Antennas and Propagation, 2008, 56, 3516-3525.	5.1	41

#	Article	IF	Citations
37	A comprehensive new methodology for formulating FDTD schemes with controlled order of accuracy and dispersion. , 2007, , .		0
38	Hybrid absorbing boundary conditions based on fast nonuniform grid integration for nonconvex scatterers. Microwave and Optical Technology Letters, 2004, 43, 102-106.	1.4	15