Luis Landesa

List of Publications by Year
in descending order

98 papers	1,062 citations
471371 17 h-index	434063 31 g-index
98 all docs	98 docs citations
98 times ranked	586 citing authors

#	Article	IF	Citations
1	The generalized forward-backward method for analyzing the scattering from targets on ocean-like rough surfaces. IEEE Transactions on Antennas and Propagation, 1999, 47, 961-969.	3.1	153
2	MLFMA-FFT PARALLEL ALGORITHM FOR THE SOLUTION OF LARGE-SCALE PROBLEMS IN ELECTROMAGNETICS. Progress in Electromagnetics Research, 2010, 105, 15-30.	1.6	92
3	Method-of-moments formulation for the analysis of plasmonic nano-optical antennas. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 1341.	0.8	86
4	Comparison of surface integral equation formulations for electromagnetic analysis of plasmonic nanoscatterers. Optics Express, 2012, 20, 9161.	1.7	62
5	Optimization of an optical wireless nanolink using directive nanoantennas. Optics Express, 2013, 21, 2369.	1.7	59
6	MLFMA-FFT Parallel Algorithm for the Solution of Extremely Large Problems in Electromagnetics. Proceedings of the IEEE, 2013, 101, 350-363.	16.4	47
7	High Scalability FMM-FFT Electromagnetic Solver for Supercomputer Systems. IEEE Antennas and Propagation Magazine, 2009, 51, 20-28.	1.2	45
8	Surface integral equation formulation for the analysis of left-handed metamaterials. Optics Express, 2010, 18, 15876.	1.7	45
9	SUPERCOMPUTER AWARE APPROACH FOR THE SOLUTION OF CHALLENGING ELECTROMAGNETIC PROBLEMS. Progress in Electromagnetics Research, 2010, 101, 241-256.	1.6	31
10	On the Use of the Singular Value Decomposition in the Fast Multipole Method. IEEE Transactions on Antennas and Propagation, 2008, 56, 2325-2334.	3.1	27
11	Pattern synthesis of array antennas with additional isolation of near field arbitrary objects. Electronics Letters, 1998, 34, 1540.	0.5	25
12	Synthesis of onboard array antennas including interaction with the mounting platform and mutual coupling effects. IEEE Antennas and Propagation Magazine, 2001, 43, 76-82.	1.2	25
13	Pattern synthesis of array antennas with arbitrary elements by simulated annealing and adaptive array theory. Microwave and Optical Technology Letters, 1999, 20, 48-50.	0.9	22
14	Incorporation of linear-phase progression in RWG basis functions. Microwave and Optical Technology Letters, 2005, 44, 106-112.	0.9	20
15	A dependent complex degrading system with non-periodic inspection times. Computers and Industrial Engineering, 2019, 133, 241-252.	3.4	20
16	MLFMA-MoM for Solving the Scattering of Densely Packed Plasmonic Nanoparticle Assemblies. IEEE Photonics Journal, 2015, 7, 1-9.	1.0	19
17	Pattern synthesis of array antennas in presence of conducting bodies of arbitrary shape. Electronics Letters, 1997, 33, 1512.	0.5	19
18	Directivity optimisation of an array antenna with obstacles within its near field region. Electronics Letters, 1997, 33, 2087.	0.5	18

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19	Bias of the Maximum Likelihood Doa Estimation from Inaccurate Knowledge of the Antenna Array Response. Journal of Electromagnetic Waves and Applications, 2007, 21, 1205-1217.	1.0	17
20	Improving condition number and convergence of the surface integral-equation method of moments for penetrable bodies. Optics Express, 2012, 20, 17237.	1.7	17
21	Design of on-board array antennas by pattern optimization. Microwave and Optical Technology Letters, 1999, 21, 446-448.	0.9	16
22	A Discontinuous Galerkin Combined Field Integral Equation Formulation for Electromagnetic Modeling of Piecewise Homogeneous Objects of Arbitrary Shape. IEEE Transactions on Antennas and Propagation, 2022, 70, 487-498.	3.1	13
23	Condition-based maintenance for a system subject to multiple degradation processes with stochastic arrival intensity. European Journal of Operational Research, 2022, 302, 560-574.	3.5	13
24	SQUEEZING MAXWELL'S EQUATIONS INTO THE NANOSCALE (Invited Paper). Progress in Electromagnetics Research, 2015, 154, 35-50.	1.6	12
25	Application of the fast multipole method to the generalized forward-backward iterative algorithm. Microwave and Optical Technology Letters, 2000, 26, 78-83.	0.9	11
26	Modeling the Energy Harvested by an RF Energy Harvesting System Using Gamma Processes. Mathematical Problems in Engineering, 2019, 2019, 1-12.	0.6	10
27	Synthesis of an array antenna for hyperthermia applications. IEEE Transactions on Magnetics, 2000, 36, 1696-1699.	1.2	9
28	Solution of very large integral-equation problems with single-level FMM. Microwave and Optical Technology Letters, 2009, 51, 2451-2453.	0.9	9
29	Electromagnetic Analysis of Metamaterials and Plasmonic Nanostructures with the Method of Moments. IEEE Antennas and Propagation Magazine, 2012, 54, 81-91.	1.2	9
30	Pattern synthesis of array antennas in presence of dielectric bodies. IEEE Transactions on Magnetics, 1999, 35, 1522-1525.	1.2	8
31	THE SYNTHESIS OF COMPLEX-ANGLE ZEROS FOR ON-BOARD ANTENNA ARRAYS. Progress in Electromagnetics Research, 2008, 80, 369-380.	1.6	7
32	Tear-and-Interconnect Domain Decomposition Scheme for Solving Multiscale Composite Penetrable Objects. IEEE Access, 2020, 8, 107345-107352.	2.6	7
33	Synthesis of array antennas onboard complex platforms considering coupling effects by means of a hybrid MM-PO technique. Microwave and Optical Technology Letters, 2002, 33, 207-212.	0.9	6
34	Efficient asymptotic-phase modeling of the induced currents in the fast multipole method. Microwave and Optical Technology Letters, 2006, 48, 1594-1599.	0.9	6
35	Localized iterative generalized multipole technique for large two-dimensional scattering problems. IEEE Transactions on Antennas and Propagation, 2001, 49, 961-970.	3.1	5
36	GEOMETRY BASED PRECONDITIONER FOR RADIATION PROBLEMS INVOLVING WIRE AND SURFACE BASIS FUNCTIONS. Progress in Electromagnetics Research, 2009, 93, 29-40.	1.6	5

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37	Estimating correlation functions for dipoles in correlated Rician-fading scenarios. Journal of Electromagnetic Waves and Applications, 2012, 26, 2176-2184.	1.0	5
38	Multilayer homogeneous dielectric filler for electromagnetic invisibility. Scientific Reports, 2018, 8, 13923.	1.6	5
39	Fast two-dimensional reconstruction of impenetrable objects using multipolar equivalent sources. IEEE Transactions on Magnetics, 1999, 35, 1570-1573.	1.2	4
40	High scalability multipole method. Solving half billion of unknowns. Computer Science - Research and Development, 2009, 23, 169-175.	2.7	4
41	Evaluation of True Polarization Diversity in Rician-Fading Environments. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 775-778.	2.4	4
42	Fast and accurate electromagnetic solutions of finite periodic optical structures. Optics Express, 2017, 25, 18031.	1.7	4
43	Inverse scattering of impenetrable objects using the generalized multipole technique. Microwave and Optical Technology Letters, 1998, 18, 429-432.	0.9	3
44	Stable Solution of the GMT-MOM Method by TIKHONOV Regularization. Progress in Electromagnetics Research, 1998, 20, 45-61.	1.6	3
45	A method-of-moments-based algorithm to synthesize a conformal onboard array antenna. Microwave and Optical Technology Letters, 2001, 29, 324-328.	0.9	3
46	Including near-field constraints for the synthesis of onboard array antennas. Microwave and Optical Technology Letters, 2002, 34, 188-191.	0.9	3
47	Extended near field preconditioner for the analysis of large problems using the nestedâ€FMMâ€FFT algorithm. Microwave and Optical Technology Letters, 2011, 53, 430-433.	0.9	3
48	Deepening True Polarization Diversity for MIMO System. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 933-936.	2.4	3
49	Stable Solution of the Gmt-Mom mEthod By Tikhonov Regularization - Abstract *. Journal of Electromagnetic Waves and Applications, 1998, 12, 1447-1448.	1.0	2
50	Design of a microwave array hyperthermia applicator with a semicircular reflector. Medical and Biological Engineering and Computing, 1999, 37, 612-617.	1.6	2
51	High-frequency approximation for cone-tip backscattering at arbitrary aspects from bodies of revolution. IEEE Transactions on Magnetics, 1999, 35, 1514-1517.	1.2	2
52	The Cramer-Rao bound for the estimation of angles of arrival in on-board array antennas. Microwave and Optical Technology Letters, 2002, 33, 119-123.	0.9	2
53	Analysis of 0.5 billion unknowns using a parallel FMM-FFT solver. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	2
54	Maintenance cost assessment for heterogeneous multi-component systems incorporating perfect inspections and waiting time to maintenance. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 0, , 1748006X2110388.	0.6	2

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55	A regularized solution for the generalized multipole technique. , 0, , .		1
56	Practical improvement of array antennas in the presence of environmental objects using genetic algorithms. Microwave and Optical Technology Letters, 1999, 23, 324-325.	0.9	1
57	An efficient solution based on the forward-backward method to analyze the scattering from electrically large targets placed on oceanic rough surfaces. , 0, , .		1
58	Maximising directivity of array antennas mounted over complex environments with near-field null constraints. Electronics Letters, 2001, 37, 74.	0.5	1
59	Parallel FMM-FFT solver for the analysis of hundreds of millions of unknowns. , 2009, , .		1
60	Optimization of invisibility cloaks by surface integral equation method. , 2012, , .		1
61	Looking in complex angles for improving the accuracy of antenna array DoA estimation. Journal of Electromagnetic Waves and Applications, 2013, 27, 345-354.	1.0	1
62	Novel surface integral equation formulation for penetrable bodies. , 2013, , .		1
63	Successes and frustrations in the solution of large electromagnetic problems in supercomputers. , 2017, , .		1
64	Distributed macrobasis decomposition for the electromagnetic solution of large periodic structures. , 2017, , .		1
65	Fast solution of electromagnetic scattering problems using Xeon Phi coprocessors. Journal of Supercomputing, 2019, 75, 370-383.	2.4	1
66	An iterative algorithm to extend the applicability of the hybrid GMT-MoM method to composite scattering problems. Microwave and Optical Technology Letters, 1997, 16, 267-271.	0.9	0
67	Directive beam expansions for the generalized multipole technique. Microwave and Optical Technology Letters, 1999, 22, 382-387.	0.9	0
68	Automatic wire-grid generation for electromagnetic analysis of arbitrary-shaped conducting bodies by NEC. Computer Applications in Engineering Education, 1999, 7, 31-43.	2.2	0
69	Synthesis of linear aperture antennas using wavelets as basis functions. International Journal of Electronics, 1999, 86, 1385-1393.	0.9	0
70	Far-Field Decoupled Basis for the Method of Moments-2d cAse - Abstract. Journal of Electromagnetic Waves and Applications, 1999, 13, 1529-1530.	1.0	0
71	Compression of the fast multipole method using the singular value decomposition. , 2007, , .		0
72	High scalability codes for the fast multipole method. , 2007, , .		0

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73	Geometrically based preconditioner for the Fast Multipole Method using rooftop basis functions and Galerkin testing procedure. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	0
74	Power decomposition method for compression of the electric-field integral equation. , 2009, , .		0
75	MLFMA-FFT algorithm for the solution of challenging problems in electromagnetics. , 2010, , .		0
76	Integral equation formulations for the analysis of left-handed metamaterials. , 2010, , .		0
77	Computational electromagnetic solutions for large-scale conductors, left-handed metamaterials and plasmonic nanostructures. , 2011, , .		0
78	Large-scale plasmonic problems solved with the multilevel fast multipole algorithm. , 2012, , .		0
79	Comparative of surface integral equation formulations when applied to plasmonic problems. , 2012, , .		0
80	Design of optical nanoantennas with the surface integral equation method of moments. , 2012, , .		0
81	Fast surface integral equation formulations for large-scale conductors, metamaterials, and plasmonic problems. , 2012, , .		0
82	Design of broadband nano-optical antennas with the surface method of moments. , 2012, , .		0
83	Directive nanoantennas for optical wireless links. , 2013, , .		0
84	Fast surface integral equation methods for the optimization of nanoantennas. , 2013, , .		0
85	Preconditioning the surface integral equation formulations for the fast solution of penetrable bodies composed of arbitrary materials. , 2013, , .		0
86	Coupling of plasmonic gap waveguides with directive antennas. , 2014, , .		0
87	Boundary element method for the electromagnetic analysis of metamaterials. , 2015, , .		0
88	Boundary element methods for the scattering retrieval of metamaterials. , 2015, , .		0
89	Large-scale nanoplasmonic modeling: Improving convergence. , 2016, , .		0
90	Impact of the evaluation precision of the reaction integrals of the method of moments on the solution of plasmonic problems near the quasi-static regime. , 2016, , .		0

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91	Surface integral equation-domain decomposition scheme for solving multi-scale radiation and scattering problems. , 2017, , .		0
92	SlotFFT techniques for fast computation of large and periodic electromagnetics problems. , 2017, , .		0
93	Acceleration of Finite Periodic Structures Analysis through Full-Domain Basis for Matrix Compression. , 2019, , .		0
94	Fast Maxwell's Simulation of New Real-World Problems at the Nanoscale. , 2019, , .		0
95	Electromagnetic analysis of finite arrays with aperiodical element-wise materials. , 2019, , .		0
96	Solving Realistic Multiscale and Composite Problems using an Integral Equation Domain Decomposition Approach. , 2019, , .		0
97	Hybrid GMT-MoM Method. , 1999, , 205-227.		0
98	Correction to â€œTear-and-Interconnect Domain Decomposition Scheme for Solving Multiscale Composite Penetrable Objectsâ€. IEEE Access, 2020, 8, 220921-220921.	2.6	0