André Nicolet

List of Publications by Year
in descending order

69 papers	1,518 citations	21 h-index	37 g-index
70 all docs	70 docs citations	70 times ranked	957 citing authors

331670

330143

#	Article	IF	Citations
1	Electromagnetic analysis of cylindrical invisibility cloaks and the mirage effect. Optics Letters, 2007, 32, 1069.	3.3	232
2	Electromagnetic analysis of cylindrical cloaks of an arbitrary cross section. Optics Letters, 2008, 33, 1584.	3.3	93
3	Quasimodal expansion of electromagnetic fields in open two-dimensional structures. Physical Review A, 2014, 89, .	2.5	87
4	Coupling of local and global quantities in various finite element formulations and its application to electrostatics, magnetostatics and magnetodynamics. IEEE Transactions on Magnetics, 1998, 34, 3078-3081.	2.1	68
5	Mixed finite elements associated with a collection of tetrahedra, hexahedra and prisms. IEEE Transactions on Magnetics, 1994, 30, 2980-2983.	2.1	62
6	Transformation methods in computational electromagnetism. Journal of Applied Physics, 1994, 75, 6036-6038.	2.5	58
7	Modelling of electromagnetic waves in periodic media with finite elements. Journal of Computational and Applied Mathematics, 2004, 168, 321-329.	2.0	53
8	Implicit Runge-Kutta methods for transient magnetic field computation. IEEE Transactions on Magnetics, 1996, 32, 1405-1408.	2.1	52
9	The finite element method as applied to the diffraction by an anisotropic grating. Optics Express, 2007, 15, 18089.	3.4	49
10	An energyâ€based vector hysteresis model for ferromagnetic materials. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 71-80.	0.9	47
11	A homogenization route towards square cylindrical acoustic cloaks. New Journal of Physics, 2008, 10, 115030.	2.9	46
12	All-purpose finite element formulation for arbitrarily shaped crossed-gratings embedded in a multilayered stack. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 878.	1.5	37
13	Finite-Element Analysis of Cylindrical Invisibility Cloaks of Elliptical Cross Section. IEEE Transactions on Magnetics, 2008, 44, 1150-1153.	2.1	35
14	Modelling of electromechanical relays taking into account movement and electric circuits. IEEE Transactions on Magnetics, 1994, 30, 3236-3239.	2.1	34
15	Modeling of ferromagnetic materials in 20 finite element problems using Preisach's model. IEEE Transactions on Magnetics, 1992, 28, 2614-2616.	2.1	32
16	A discrete sequence associated with mixed finite elements and its gauge condition for vector potentials. IEEE Transactions on Magnetics, 1995, 31, 1356-1359.	2.1	30
17	Finite element analysis of helicoidal waveguides. IET Science, Measurement and Technology, 2007, 1, 67-70.	1.6	30
18	A coupling between electric circuits and 2D magnetic field modeling. IEEE Transactions on Magnetics, 1993, 29, 1697-1700.	2.1	28

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19	Versatile full-vectorial finite element model for crossed gratings. Optics Letters, 2009, 34, 2216.	3.3	26
20	Photonics in highly dispersive media: the exact modal expansion. Optics Letters, 2018, 43, 5813.	3.3	26
21	Modeling of photonic crystal optical fibers with finite elements. IEEE Transactions on Magnetics, 2002, 38, 1261-1264.	2.1	22
22	Resonant metamaterial absorbers for infrared spectral filtering: quasimodal analysis, design, fabrication, and characterization. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1339.	2.1	20
23	Numerical computation of the magnetostriction effect in ferromagnetic materials. Journal of Applied Physics, 1991, 69, 5794-5796.	2.5	18
24	Transformation Optics, Generalized Cloaking and Superlenses. IEEE Transactions on Magnetics, 2010, 46, 2975-2981.	2.1	15
25	Elastodynamic behavior of mechanical cloaks designed by direct lattice transformations. Wave Motion, 2020, 92, 102419.	2.0	15
26	Asymptotic modelling of weakly twisted electrostatic problems. Comptes Rendus - Mecanique, 2006, 334, 91-97.	2.1	12
27	Tessellated and stellated invisibility. Optics Express, 2009, 17, 13389.	3.4	12
28	Revolution analysis of three-dimensional arbitrary cloaks. Optics Express, 2009, 17, 22603.	3.4	12
29	Influence of hysteresis on the behaviour of coupled finite element-electric circuit models. IEEE Transactions on Magnetics, 1994, 30, 3383-3386.	2.1	11
30	Cloaking with Curved Spaces. Science, 2009, 323, 46-47.	12.6	11
31	Non-linear eigenvalue problems with GetDP and SLEPc: Eigenmode computations of frequency-dispersive photonic open structures. Computer Physics Communications, 2020, 257, 107509.	7.5	11
32	Finite elements-boundary elements coupling for the movement modeling in two-dimensional structures. Journal De Physique III, 1992, 2, 2035-2044.	0.3	11
33	Skin effect and proximity effect in multiconductor systems with applied currents and voltages. Journal of Applied Physics, 1991, 69, 5035-5037.	2.5	10
34	Electromagnetic forces on a discrete spherical invisibility cloak under time-harmonic illumination. Physical Review E, 2012, 85, 056602.	2.1	10
35	Acoustic band gaps in arrays of neutral inclusions. Journal of Computational and Applied Mathematics, 2010, 234, 1962-1969.	2.0	9
36	Design, fabrication and characterization of resonant metamaterial filters for infrared multispectral imaging. Thin Solid Films, 2015, 592, 296-304.	1.8	9

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37	Modelling of inductive effects in thin wire coils. IEEE Transactions on Magnetics, 1992, 28, 1190-1192.	2.1	8
38	A new method for axisymmetrical linear and nonlinear problems. IEEE Transactions on Magnetics, 1993, 29, 1352-1355.	2.1	8
39	Analysis of ferroresonance with a finite element method taking hysteresis into account. Journal of Magnetism and Magnetic Materials, 1994, 133, 557-560.	2.3	8
40	A sinusoidal magnetic field computation in nonlinear materials. IEEE Transactions on Magnetics, 1995, 31, 3527-3529.	2.1	8
41	High order asymptotic analysis of twisted electrostatic problems. Physica B: Condensed Matter, 2007, 394, 335-338.	2.7	8
42	Optical force on a discrete invisibility cloak in time-dependent fields. Physical Review A, 2011, 84, .	2.5	8
43	Continuous family of exact Dispersive Quasi-Normal Modal (DQNM) expansions for dispersive photonic structures. Optics Express, 2020, 28, 29016.	3.4	8
44	Transmission enhancement through square coaxial aperture arrays in metallic film: when leaky modes filter infrared light for multispectral imaging. Optics Letters, 2014, 39, 4723.	3.3	7
45	Numerical computation of eddy currents in thin plates. IEEE Transactions on Magnetics, 1990, 26, 2376-2378.	2.1	6
46	Vector potential boundary element method for three dimensional magnetostatic. IEEE Transactions on Magnetics, 1991, 27, 3808-3810.	2.1	6
47	Boundary elements and singular integrals in 3D magnetostatics. Engineering Analysis With Boundary Elements, 1994, 13, 193-200.	3.7	4
48	Adaptive perfectly matched layer for Wood's anomalies in diffraction gratings. Optics Express, 2012, 20, 28094.	3.4	4
49	Numerical modelization of transient current in relay. IEEE Transactions on Magnetics, 1989, 25, 3593-3595.	2.1	3
50	Line integrals for the computation of global parameters from 2D eddy current numerical computations. IEEE Transactions on Magnetics, 1991, 27, 4987-4991.	2.1	3
51	Comparison of various methods for the modeling of thin magnetic plates. Journal of Applied Physics, 1991, 69, 5047-5049.	2.5	3
52	Graphical language interpreter and meshing tool for electromagnetic computations. IEEE Transactions on Magnetics, 1992, 28, 1771-1773.	2.1	3
53	Coupling between edge finite elements, nodal finite elements and boundary elements for the calculation of 3-D eddy currents. IEEE Transactions on Magnetics, 1993, 29, 1470-1474.	2.1	2
54	Corner modelization for FEM-BEM coupling. IEEE Transactions on Magnetics, 1991, 27, 4110-4113.	2.1	1

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55	On the definition of energy in general electromagnetic media. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2006, 25, 55-63.	0.9	1
56	An all-purpose three-dimensional finite element model for crossed-gratings. , 2009, , .		1
57	Scattering by a twoâ€dimensional doped photonic crystal presenting an optical Kerr effect. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 656-667.	0.9	1
58	Resonances determination in microstructured films embedded in multilayered stacks. Proceedings of SPIE, 2011, , .	0.8	1
59	Analysis of diffraction gratings via their resonances. , 2011, , .		1
60	The Finite Element Method as applied to the calculation of the quantum efficiency in optoelectronic imaging devices. Proceedings of SPIE, 2008, , .	0.8	0
61	Geometrical Transformations for Numerical Modelling and for New Material Design in Photonics. NATO Science for Peace and Security Series B: Physics and Biophysics, 2009, , 49-61.	0.3	0
62	Finite element modelling of induced gratings in nonlinear optics. , 2011, , .		0
63	Invisibility cloaks, superlenses, and optical remote scattering. , 2011, , .		0
64	Transformation optics PML and quasi-mode analysis: Application to diffraction gratings. , 2012, , .		0
65	1D model for low power soliton hybridized with a plasmon in realistic nonlinear planar structures. , 2012, , .		0
66	Focus on NumÃ©lec 2012. EPJ Applied Physics, 2013, 64, 24501.	0.7	0
67	Quasimode computation in structures including several dispersive materials. Proceedings of SPIE, 2017, , .	0.8	0
68	Finite element modeling of microstructured optical fibers: leaky modes, twisted geometries, and spatial Kerr solitons. , 2008, , .		0
69	2D electrostatic modeling of twisted pairs. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2021, ahead-of-print, .	0.9	0