Nikolaos Stefanou

List of Publications by Year
in descending order

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154	5,271	94433	95266
papers	citations	37 h-index	68 g-index

155	155	155	2990
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Heterostructures of photonic crystals: frequency bands and transmission coefficients. Computer Physics Communications, 1998, 113, 49-77.	7.5	382
2	MULTEM 2: A new version of the program for transmission and band-structure calculations of photonic crystals. Computer Physics Communications, 2000, 132, 189-196.	7.5	287
3	Scattering of elastic waves by periodic arrays of spherical bodies. Physical Review B, 2000, 62, 278-291.	3.2	275
4	Observation and tuning of hypersonic bandgaps in colloidal crystals. Nature Materials, 2006, 5, 830-836.	27.5	252
5	Impurity bands in photonic insulators. Physical Review B, 1998, 57, 12127-12133.	3.2	222
6	Scattering of electromagnetic waves by periodic structures. Journal of Physics Condensed Matter, 1992, 4, 7389-7400.	1.8	169
7	Electronic structure and magnetic properties of dilute Fe alloys with transition-metal impurities. Physical Review B, 1989, 40, 8203-8212.	3.2	159
8	Lattice distortion in Cu-based dilute alloys: A first-principles study by the KKR Green-function method. Physical Review B, 1997, 55, 4157-4167.	3.2	129
9	A layer-multiple-scattering method for phononic crystals and heterostructures of such. Computer Physics Communications, 2005, 166, 197-240.	7.5	121
10	Optical properties of metallodielectric photonic crystals. Physical Review B, 1999, 60, 5359-5365.	3.2	119
11	Simultaneous Occurrence of Structure-Directed and Particle-Resonance-Induced Phononic Gaps in Colloidal Films. Physical Review Letters, 2008, 100, 194301.	7.8	117
12	Phononic crystals with planar defects. Physical Review B, 2000, 62, 5536-5540.	3.2	113
13	Formation of absolute frequency gaps in three-dimensional solid phononic crystals. Physical Review B, 2002, 66, .	3.2	112
14	Enhanced acousto-optic interactions in a one-dimensional phoxonic cavity. Physical Review B, 2010, 82, .	3.2	96
15	Greenâ€™s function formalism for phononic crystals. Physical Review B, 2004, 69, .	3.2	81
16	Layer-multiple-scattering method for photonic crystals of nonspherical particles. Physical Review B, 2006, 73, .	3.2	75
17	An efficient numerical method to calculate shape truncation functions for Wigner-Seitz atomic polyhedra. Computer Physics Communications, 1990, 60, 231-238.	7.5	74
18	Effect of Stacking Faults on the Optical Properties of Inverted Opals. Physical Review Letters, 2001, 86, 4811-4814.	7.8	70

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19	Elastic Properties and Glass Transition of Supported Polymer Thin Films. Macromolecules, 2007, 40, 7283-7290.	4.8	70
20	Applications of the layer-KKR method to photonic crystals. Optics Express, 2001, 8, 197.	3.4	66
21	Acoustic properties of colloidal crystals. Physical Review B, 2002, 65, .	3.2	66
22	Vacancy-solute interactions in Cu, Ni, Ag, and Pd. Physical Review B, 1991, 43, 9487-9497.	3.2	58
23	Molecular fluorescence enhancement in plasmonic environments: exploring the role of nonlocal effects. Nanoscale, 2016, 8, 17532-17541.	5.6	54
24	First-principles calculations for vacancy formation energies in Cu and Al; non-local effect beyond the LSDA and lattice distortion. Computational Materials Science, 1999, 14, 56-61.	3.0	53
25	Guided and quasiguided elastic waves in phononic crystal slabs. Physical Review B, 2006, 73, .	3.2	53
26	Charge and magnetization perturbations around impurities in nickel. Physical Review B, 1987, 35, 6911-6922.	3.2	51
27	Giant Optical Activity of Helical Architectures of Plasmonic Nanorods. Journal of Physical Chemistry C, 2012, 116, 16674-16679.	3.1	50
28	Calculation of shape-truncation functions for Voronoi polyhedra. Journal of Physics Condensed Matter, 1991, 3, 7599-7606.	1.8	48
29	Anderson localization of light in inverted opals. Physical Review B, 2003, 68, .	3.2	48
30	Absolute spectral gaps for infrared light and hypersound in three-dimensional metallodielectric phoxonic crystals. Applied Physics Letters, 2010, 96, 231917.	3.3	46
31	Scattering and absorption of light by periodic and nearly periodic metallodielectric structures. Optical and Quantum Electronics, 2002, 34, 227-234.	3.3	43
32	Collective plasmonic modes in ordered assemblies of metallic nanoshells. Journal of Physics Condensed Matter, 2008, 20, 075232.	1.8	43
33	Understanding artificial optical magnetism of periodic metal-dielectric-metal layered structures. Physical Review B, 2008, 78, .	3.2	42
34	Slow-photon enhancement of dye sensitized TiO 2 photocatalysis. Materials Letters, 2017, 197, 123-126.	2.6	42
35	Point defects in ordered metallic compounds. I. Electronic-structure calculation by the linear-muffin-tinâ€“orbital method. Physical Review B, 1986, 33, 5307-5318.	3.2	41
36	Scattering of electromagnetic waves by nearly periodic structures. Physical Review B, 2000, 61, 8099-8107.	3.2	39

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37	Treatment of lattice relaxations in dilute alloys within the Korringa-Kohn-Rostoker Greenâ€™s-function method. Physical Review B, 1987, 36, 6372-6382.	3.2	37
38	Optical properties of a periodic monolayer of metallic nanospheres on a dielectric waveguide. Journal of Physics Condensed Matter, 2005, 17, 1791-1802.	1.8	37
39	Optical transparency of mesoporous metals. Solid State Communications, 2001, 118, 69-73.	1.9	36
40	Optical properties of periodic structures of metallic nanodisks. Physical Review B, 2008, 77, .	3.2	36
41	Electronic structure of Pd alloys. Solid State Communications, 1987, 62, 735-738.	1.9	35
42	Local spin moments of transition-metal impurities in monovalent simple-metal hosts. Physical Review B, 1992, 46, 10858-10865.	3.2	35
43	Scattering of elastic waves by a periodic monolayer of spheres. Physical Review B, 2002, 66, .	3.2	35
44	Theoretical analysis of three-dimensional polaritonic photonic crystals. Physical Review B, 2005, 72, .	3.2	35
45	Photomagnonic nanocavities for strong lightâ€“spin-wave interaction. Physical Review B, 2017, 96, .	3.2	33
46	Optical properties of thin discontinuous metal films. Journal of Physics Condensed Matter, 1991, 3, 8149-8157.	1.8	31
47	On wave propagation in inhomogeneous systems. Physica B: Condensed Matter, 2001, 296, 167-173.	2.7	31
48	Optical excitation of coupled waveguide-particle plasmon modes:â€ƒA theoretical analysis. Physical Review B, 2004, 69, .	3.2	31
49	Widening of Phononic Transmission Gaps via Anderson Localization. Physical Review Letters, 2005, 94, 205503.	7.8	30
50	Linear chain of weakly coupled defects in a three-dimensional phononic crystal: A model acoustic waveguide. Physical Review B, 2006, 74, .	3.2	30
51	Optical Activity of Photonic Crystals. Journal of Modern Optics, 1995, 42, 619-626.	1.3	29
52	Tailoring plasmons with metallic nanorod arrays. Physical Review B, 2009, 80, .	3.2	29
53	Point defects in ordered metallic compounds. II. Self-consistent studies of vacancies in FeAl. Physical Review B, 1986, 33, 5319-5327.	3.2	27
54	Can 5dandspimpurities be magnetic?. Physical Review Letters, 1993, 71, 629-632.	7.8	27

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55	Theoretical analysis of the photonic band structure of face-centred cubic colloidal crystals. Journal of Physics Condensed Matter, 1997, 9, 10261-10270.	1.8	26
56	Waveguides of defect chains in photonic crystals. Physical Review B, 2002, 65, .	3.2	26
57	Metal-nanoparticle arrays on a magnetic garnet film for tunable plasmon-enhanced Faraday rotation. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 2609.	2.1	26
58	Nanographene oxideâ€“TiO₂ photonic films as plasmon-free substrates for surface-enhanced Raman scattering. Nanoscale, 2019, 11, 21542-21553.	5.6	26
59	Abinitioelectronic structure calculations for point defects in CoAl and CoGa. Physical Review B, 1987, 35, 2705-2713.	3.2	25
60	Cavity-plasmon waveguides: Multiple scattering calculations of dispersion in weakly coupled dielectric nanocavities in a metallic host material. Physical Review B, 2006, 74, .	3.2	25
61	Planar defects in photonic crystals. Journal of Physics Condensed Matter, 1994, 6, 6257-6264.	1.8	23
62	Breakdown of the linear acousto-optic interaction regime in phoxonic cavities. Optics Express, 2014, 22, 31595.	3.4	23
63	Light modulation in phoxonic nanocavities. Microelectronic Engineering, 2012, 90, 155-158.	2.4	21
64	Nonreciprocal optical response of helical periodic structures of plasma spheres in a static magnetic field. Physical Review B, 2013, 87, .	3.2	21
65	Spherical optomagnonic microresonators: Triple-resonant photon transitions between Zeeman-split Mie modes. Physical Review B, 2020, 101, .	3.2	21
66	Ab initio study of structural distortion and its influence on the magnetic properties of metallic dilute alloys. Computational Materials Science, 1997, 8, 131-135.	3.0	20
67	Collective Hypersonic Excitations in Strongly Multiple Scattering Colloids. Physical Review Letters, 2011, 106, 175505.	7.8	20
68	Enhanced Faraday rotation by crystals of core-shell magnetoplasmonic nanoparticles. Physical Review B, 2016, 93, .	3.2	20
69	Scattering of electromagnetic waves by a disordered two-dimensional array of spheres. Journal of Physics Condensed Matter, 1993, 5, 8859-8868.	1.8	19
70	Hyperfine Fields ofspImpurities on Ni and Fe Surfaces. Physical Review Letters, 1998, 81, 1505-1508.	7.8	19
71	The layer multiple-scattering method applied to phononic crystals. Zeitschrift Fur Kristallographie - Crystalline Materials, 2005, 220, 848-858.	0.8	19
72	Layered optomagnonic structures: Time Floquet scattering-matrix approach. Physical Review B, 2019, 99, .	3.2	19

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73	Hypersonic acoustic excitations in binary colloidal crystals: Big versus small hard sphere control. Journal of Chemical Physics, 2007, 126, 014707.	3.0	18
74	Electronic structure of 3d impurities in ferromagnetic iron. Journal De Physique, 1982, 43, 1497-1502.	1.8	18
75	First-principles calculations of the spin-orbit scattering cross section ofspimpurities in Mg. Physical Review Letters, 1992, 69, 2110-2113.	7.8	17
76	LAYER MULTIPLE SCATTERING CALCULATIONS FOR NONRECIPROCAL PHOTONIC STRUCTURES. International Journal of Modern Physics B, 2014, 28, 1441012.	2.0	17
77	Strong circular dichroism of core-shell magnetoplasmonic nanoparticles. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 1063.	2.1	17
78	Formation of local spin moments of 3d impurities diluted in noble and alkali metal hosts. Journal of Physics Condensed Matter, 1991, 3, 3777-3784.	1.8	16
79	Nonlinear interactions between high-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Q</mml:mi></mml:math>optical and acoustic modes in dielectric particles. Physical Review B, 2011, 84, .	3.2	16
80	Self-consistent electronic structure of dilute metallic alloys by the LMTO-ASA method. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1985, 51, 151-160.	0.6	15
81	Photonic crystals of chiral spheres. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1999, 16, 343.	1.5	14
82	Photonic surface states in plasmonic crystals of metallic nanoshells. Physical Review B, 2011, 84, .	3.2	14
83	Tuning the spontaneous light emission in phoxonic cavities. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 2567.	2.1	13
84	Periodic structures of magnetic garnet particles for strong Faraday rotation enhancement. Physical Review B, 2014, 89, .	3.2	13
85	Phononic crystals of poroelastic spheres. Physical Review B, 2016, 94, .	3.2	13
86	High-efficiency triple-resonant inelastic light scattering in planar optomagnonic cavities. New Journal of Physics, 2019, 21, 095001.	2.9	13
87	Multipolar interactions in Si sphere metagratings. Journal of Applied Physics, 2020, 128, .	2.5	13
88	Plasmonic excitations in ordered assemblies of metallic nanoshells. Proceedings of SPIE, 2008, , .	0.8	12
89	Retrieving local effective constitutive parameters for anisotropic photonic crystals. Physical Review B, 2010, 81, .	3.2	12
90	Green's function calculations of the hyperfine interaction for impurities in metals andfor metallic interfaces. Hyperfine Interactions, 1993, 78, 341-359.	0.5	11

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91	Spiral-staircase photonic structures of metallic nanorods. Physical Review B, 2011, 84, .	3.2	11
92	Nonreciprocal photonic surface states in periodic structures of magnetized plasma nanospheres. Physical Review B, 2013, 88, .	3.2	11
93	Plasmon-driven large Hall photon currents in light scattering by a coreâ€“shell magnetoplasmonic nanosphere. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1286.	2.1	11
94	Light scattering by a spherical particle with a time-periodic refractive index. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 407.	2.1	11
95	Calculation of the residual resistivity and the low-field Hall coefficient of 3dand 4spimpurities in aluminum. Physical Review B, 1994, 49, 16117-16122.	3.2	10
96	Extraordinary refractive properties of photonic crystals of metallic nanorods. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 2620.	2.1	10
97	Calculation of waveguide modes in linear chains of metallic nanorods. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 827.	2.1	10
98	Electronic structure of antistructure Co atoms and Co-vacancies in CoAl. Solid State Communications, 1986, 59, 429-432.	1.9	9
99	Multiple-scattering calculations for layered phononic structures of nonspherical particles. Physical Review B, 2011, 83, .	3.2	9
100	Tailoring coupling between light and spin waves with dual photonicâ€“magnonic resonant layered structures. Journal of Optics (United Kingdom), 2019, 21, 015603.	2.2	9
101	EBCM for Electromagnetic Modeling of Gyrotropic BoRs. IEEE Transactions on Antennas and Propagation, 2021, 69, 6134-6139.	5.1	9
102	Magnetic behavior of transition-metal impurities in alkali-earth metals. Physical Review B, 1995, 51, 11473-11478.	3.2	8
103	Multiple-scattering calculations for plasmonic nanostructures. International Journal of Nanotechnology, 2009, 6, 137.	0.2	8
104	Diffractive chains of plasmonic nanolenses: combining near-field focusing and collective enhancement mechanisms. Optics Letters, 2012, 37, 4624.	3.3	8
105	Silver-coated metallic and dielectric magnetic nanospheres: Localized surface plasmons and circular dichroism. Optics Communications, 2016, 360, 40-45.	2.1	8
106	A birefringent etalon enhances the Faraday rotation of thin magneto-optical films. Journal of Optics (United Kingdom), 2017, 19, 075102.	2.2	8
107	Propagation of electromagnetic waves through microstructured polar materials. Physical Review B, 2007, 75, .	3.2	7
108	Strong magnetochiral dichroism of helical structures of garnet particles. Optics Letters, 2013, 38, 4629.	3.3	7

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109	Metal-coated magnetic nanoparticles in an optically active medium: A nonreciprocal metamaterial. Physical Review B, 2018, 97, .	3.2	7
110	Low-temperature thermopower of Al-based dilute alloys. Journal of Physics Condensed Matter, 1995, 7, 4665-4671.	1.8	6
111	Planar optomagnonic cavities driven by surface spin waves. Physical Review B, 2020, 101, .	3.2	6
112	Optical Properties of a Two-Dimensional Array of Metallic Spheres on a Substrate. Acta Physica Polonica A, 1992, 81, 91-99.	0.5	6
113	On the electronic structure of rare earth and actinide beryllides. Journal of Physics F: Metal Physics, 1986, 16, 837-843.	1.6	5
114	Solute-vacancy interactions in Cu and Ag. Journal of Physics Condensed Matter, 1991, 3, 8793-8801.	1.8	4
115	The formation of localized moments in dilute alloys: a critical behaviour. Journal of Physics Condensed Matter, 1993, 5, 5663-5666.	1.8	4
116	Hyperfine fields of probe atoms on the (001) surface of Ni. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1998, 78, 435-440.	0.6	4
117	Photonic eigenmodes and light propagation in periodic structures of chiral nanoparticles. Physical Review B, 2011, 83, .	3.2	4
118	Photonic structures of metal-coated chiral spheres. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1165.	2.1	4
119	Multiple scattering calculations for nonreciprocal planar magnetoplasmonic nanostructures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 146, 34-40.	2.3	4
120	Acoustic properties of double-porosity granular polymers. Physical Review B, 2017, 95, .	3.2	4
121	Tight-binding description of single-mode cavity-plasmon waveguides in the frequency and time domain. Journal of Physics Condensed Matter, 2008, 20, 015202.	1.8	3
122	Plasmonic nanostructures and optical metamaterials: Studies by the layer-multiple-scattering method. Physica B: Condensed Matter, 2010, 405, 2967-2971.	2.7	3
123	Effective optical parameters of thin-film and bulk metamaterials ofmetallodielectric nanosandwiches. Optics Communications, 2010, 283, 4074-4077.	2.1	3
124	Uniaxial crystals of metallodielectric nanosandwiches: effective optical parameters and negative refraction. Journal of Optics (United Kingdom), 2010, 12, 115103.	2.2	3
125	Nonreciprocal guided modes in photonic crystals of magnetic garnet particles with a planar defect. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2104.	2.1	3
126	Nonspherical optomagnonic resonators for enhanced magnon-mediated optical transitions. Physical Review B, 2021, 104, .	3.2	3

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127	Localized electromagnetic modes in nonlinear superlattices. Physical Review B, 1996, 54, 16452-16455.	3.2	2
128	Negative refraction in plasmonic crystals of metallic nanoshells. Metamaterials, 2011, 5, 169-177.	2.2	2
129	PhoXonic architectures for tailoring the acousto-optic interaction. , 2011, , .		2
130	Electronic Structure and Magnetic Properties of Impurities in Metals. , 1989, , 377-420.		2
131	Tunable multidispersive bands of inductive origin in piezoelectric phononic plates. Journal of Applied Physics, 2021, 130, .	2.5	2
132	Optical properties of layers and crystals of spherical particles. Applied Surface Science, 1993, 65-66, 13-17.	6.1	1
133	Observation of a resonance in the spin-orbit scattering of 5(s, p) impurities in Mg and Cu. Solid State Communications, 1993, 87, 471-474.	1.9	1
134	Magnetic impurities in simple metals. Physica Scripta, 1994, 50, 445-448.	2.5	1
135	Electronic structure of 4d impurities in Rb: a local-spin-density approximation +U density-functional study. Journal of Physics Condensed Matter, 1994, 6, 11221-11228.	1.8	1
136	Low-field galvanomagnetic properties of aluminium-based dilute alloys. Journal of Physics Condensed Matter, 1997, 9, 8997-9006.	1.8	1
137	Magnetic impurity states in simple metals: A study of the spin-polarization energy. Physical Review B, 1998, 58, 1096-1099.	3.2	1
138	Calculations of the optical response of metallodielectric nanostructures of nonspherical particles by a layer-multiple-scattering method. , 2008, , .		1
139	Helical assemblies of plasmonic nanorods as chiral metamaterials. , 2012, , .		1
140	Optical modes of chiral photonic composites. Microelectronic Engineering, 2012, 90, 152-154.	2.4	1
141	Nonreciprocal acoustic transmission through dynamic multilayer structures. Physical Review B, 2022, 106, .	3.2	1
142	Low-field Hall coefficient of Al-4d dilute alloys: The role of the anisotropic impurity scattering. Solid State Communications, 1998, 106, 405-408.	1.9	0
143	Scattering of light by a periodic array of metallic nanoparticles on a waveguide. Journal of Physics: Conference Series, 2005, 10, 131-134.	0.4	0
144	Frequency and time domain analysis of cavity plasmon waveguides. , 2007, , .		0

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145	Optical properties of two-dimensional periodic arrays of metallodielectric nanosandwiches. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3701-3703.	0.8	0
146	Negative effective permeability of multilayers of ordered arrays of metal-dielectric nanosandwiches. Proceedings of SPIE, 2009, , .	0.8	0
147	Acousto-optic interaction enhancement in dual photonic-phononic cavities. , 2012, , .		0
148	Dual photonicâ€“phononic nanocavities for tailoring the acousto-optic interaction. Microelectronic Engineering, 2016, 159, 80-83.	2.4	0
149	Scattering by a Magnetized Cold Plasma Body. , 2019, , .		0
150	Tailoring the Interaction of Light with Static and Dynamic Magnetization Fields in Stratified Nanostructures. , 2021, , 1-77.		0
151	Effect of Moderate Disorder on the Absorbance of Plasma Spheres Distributed in a Host Dielectric Medium. , 2001, , 383-387.		0
152	Band-Structure and Transmittance Calculations for Phononic Crystals by the LKKR Method. , 2001, , 519-525.		0
153	Layer-by-Layer Methods in the Study of Photonic Crystals and Related Problems. , 1996, , 229-251.		0
154	Ab-Initio Calculation of the Lattice Relaxation in Dilute Alloys. NATO ASI Series Series B: Physics, 1996, , 419-424.	0.2	0