Antonio I Fernandez-Dominguez

List of Publications by Year
in descending order

105 papers	8,547 citations	61984 43 h-index	42399 92 g-index
110 all docs	110 docs citations	110 times ranked	8391 citing authors

#	Article	IF	Citations
1	Plasmonic Nanoantennas: Fundamentals and Their Use in Controlling the Radiative Properties of Nanoemitters. Chemical Reviews, 2011, 111, 3888-3912.	47.7	1,224
2	Probing the Ultimate Limits of Plasmonic Enhancement. Science, 2012, 337, 1072-1074.	12.6	981
3	Highly confined guiding of terahertz surface plasmon polaritons on structured metal surfaces. Nature Photonics, 2008, 2, 175-179.	31.4	553
4	Nanoplasmonics: Classical down to the Nanometer Scale. Nano Letters, 2012, 12, 1683-1689.	9.1	389
5	Plasmonic Light-Harvesting Devices over the Whole Visible Spectrum. Nano Letters, 2010, 10, 2574-2579.	9.1	345
6	High-Resolution Mapping of Electron-Beam-Excited Plasmon Modes in Lithographically Defined Gold Nanostructures. Nano Letters, 2011, 11, 1323-1330.	9.1	253
7	Collimation of sound assisted by acoustic surface waves. Nature Physics, 2007, 3, 851-852.	16.7	249
8	Domino plasmons for subwavelength terahertz circuitry. Optics Express, 2010, 18, 754.	3.4	244
9	Surface Plasmons and Nonlocality: A Simple Model. Physical Review Letters, 2013, 111, 093901.	7.8	223
10	Plasmon-exciton-polariton lasing. Optica, 2017, 4, 31.	9.3	198
11	Transformation-Optics Description of Nonlocal Effects in Plasmonic Nanostructures. Physical Review Letters, 2012, 108, 106802.	7.8	188
12	Revealing Plasmonic Gap Modes in Particle-on-Film Systems Using Dark-Field Spectroscopy. ACS Nano, 2012, 6, 1380-1386.	14.6	167
13	Spoof Plasmon Surfaces: A Novel Platform for THz Sensing. Advanced Optical Materials, 2013, 1, 543-548.	7.3	165
14	Controlling Light Localization and Lightâ€“Matter Interactions with Nanoplasmonics. Small, 2010, 6, 2498-2507.	10.0	163
15	Nonlocal Effects in the Nanofocusing Performance of Plasmonic Tips. Nano Letters, 2012, 12, 3308-3314.	9.1	131
16	Engineering the Phase Front of Light with Phase-Change Material Based Planar lenses. Scientific Reports, 2015, 5, 8660.	3.3	114
17	Terahertz wedge plasmon polaritons. Optics Letters, 2009, 34, 2063.	3.3	112
18	Guiding terahertz waves along subwavelength channels. Physical Review B, 2009, 79, .	3.2	104

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19	High-order localized spoof surface plasmon resonances and experimental verifications. Scientific Reports, 2015, 5, 9590.	3.3	104
20	Pronounced Photovoltaic Response from Multilayered Transition-Metal Dichalcogenides PN-Junctions. Nano Letters, 2015, 15, 7532-7538.	9.1	98
21	Broadband Terahertz Sensing on Spoof Plasmon Surfaces. ACS Photonics, 2014, 1, 1059-1067.	6.6	92
22	Capturing photons with transformation optics. Nature Physics, 2013, 9, 518-522.	16.7	90
23	Collection and Concentration of Light by Touching Spheres: A Transformation Optics Approach. Physical Review Letters, 2010, 105, 266807.	7.8	89
24	Spoof Surface Plasmon Polariton Modes Propagating Along Periodically Corrugated Wires. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1515-1521.	2.9	84
25	Transformation Optics Approach to Plasmon-Exciton Strong Coupling in Nanocavities. Physical Review Letters, 2016, 117, 107401.	7.8	84
26	Unrelenting plasmons. Nature Photonics, 2017, 11, 8-10.	31.4	66
27	Enhancing photon correlations through plasmonic strong coupling. Optica, 2017, 4, 1363.	9.3	66
28	Plasmon-Enhanced Generation of Nonclassical Light. ACS Photonics, 2018, 5, 3447-3451.	6.6	66
29	Spoof plasmon polaritons in slanted geometries. Physical Review B, 2012, 85, .	3.2	62
30	Electron-Energy Loss Study of Nonlocal Effects in Connected Plasmonic Nanoprisms. ACS Nano, 2013, 7, 6287-6296.	14.6	62
31	Spoof surface plasmon photonics. Reviews of Modern Physics, 2022, 94, .	45.6	60
32	Broadband Terahertz Plasmonic Response of Touching InSb Disks. Advanced Materials, 2012, 24, OP226-30.	21.0	59
33	Organic polaritons enable local vibrations to drive long-range energy transfer. Physical Review B, 2018, 97, .	3.2	59
34	Classical and ab Initio Plasmonics Meet at Sub-nanometric Noble Metal Rods. ACS Photonics, 2017, 4, 1484-1493.	6.6	57
35	Plasmon-assisted FÃ¶rster resonance energy transfer at the single-molecule level in the moderate quenching regime. Nanoscale, 2019, 11, 7674-7681.	5.6	56
36	Terahertz surface plasmon polaritons on a helically grooved wire. Applied Physics Letters, 2008, 93, .	3.3	54

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37	Geometry Dependence of Surface Plasmon Polariton Lifetimes in Nanohole Arrays. ACS Nano, 2010, 4, 432-438.	14.6	54
38	Theory of Extraordinary Transmission of Light through Quasiperiodic Arrays of Subwavelength Holes. Physical Review Letters, 2007, 99, 203905.	7.8	53
39	Toward Cavity Quantum Electrodynamics with Hybrid Photon Gap-Plasmon States. ACS Nano, 2016, 10, 11360-11368.	14.6	53
40	Homogenous Metamaterial Description of Localized Spoof Plasmons in Spiral Geometries. ACS Photonics, 2016, 3, 1768-1775.	6.6	53
41	On the applicability of quantum-optical concepts in strong-coupling nanophotonics. Reports on Progress in Physics, 2020, 83, 082401.	20.1	51
42	Super- and Subradiant Lattice Resonances in Bipartite Nanoparticle Arrays. ACS Nano, 2020, 14, 11876-11887.	14.6	50
43	Transformation-optics insight into nonlocal effects in separated nanowires. Physical Review B, 2012, 86, .	3.2	48
44	Macroscopic QED for quantum nanophotonics: emitter-centered modes as a minimal basis for multiemitter problems. Nanophotonics, 2020, 10, 477-489.	6.0	45
45	Few-Mode Field Quantization of Arbitrary Electromagnetic Spectral Densities. Physical Review Letters, 2021, 126, 093601.	7.8	44
46	Theory of Three-Dimensional Nanocrescent Light Harvesters. Nano Letters, 2012, 12, 5946-5953.	9.1	42
47	Light-Forbidden Transitions in Plasmon-Emitter Interactions beyond the Weak Coupling Regime. ACS Photonics, 2018, 5, 3415-3420.	6.6	40
48	Quasichiral Interactions between Quantum Emitters at the Nanoscale. Physical Review Letters, 2019, 122, 057401.	7.8	40
49	Excitonâ€“Plasmon Coupling Enhancement via Metal Oxidation. ACS Nano, 2015, 9, 9691-9699.	14.6	39
50	Resonant transmission of light through finite arrays of slits. Physical Review B, 2007, 76, .	3.2	38
51	Super-Planckian far-field radiative heat transfer. Physical Review B, 2018, 97, .	3.2	36
52	Description of Bow-Tie Nanoantennas Excited by Localized Emitters Using Conformal Transformation. ACS Photonics, 2016, 3, 1223-1232.	6.6	34
53	Resonant Transmission of Cold Atoms through Subwavelength Apertures. Physical Review Letters, 2005, 95, 170406.	7.8	31
54	Subwavelength chiral surface plasmons that carry tuneable orbital angular momentum. Physical Review B, 2012, 86, .	3.2	31

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55	Photon statistics in collective strong coupling: Nanocavities and microcavities. Physical Review A, 2018, 98, .	2.5	31
56	Coherent Four-Fold Super-Resolution Imaging with Composite Photonicâ€“Plasmonic Structured Illumination. ACS Photonics, 2015, 2, 341-348.	6.6	29
57	Unveiling the radiative local density of optical states of a plasmonic nanocavity by STM. Nature Communications, 2020, 11, 1021.	12.8	29
58	Strong Plasmonâ€“Exciton Interactions on Nanoantenna Arrayâ€“Monolayer WS₂ Hybrid System. Advanced Optical Materials, 2020, 8, 1901002.	7.3	28
59	Nanoscale mapping of optically inaccessible bound-states-in-the-continuum. Light: Science and Applications, 2022, 11, 20.	16.6	28
60	Plasmon-Exciton Coupling in Symmetry-Broken Nanocavities. ACS Photonics, 2018, 5, 177-185.	6.6	27
61	Design considerations for near-field enhancement in optical antennas. Contemporary Physics, 2014, 55, 1-11.	1.8	26
62	Mimicking Localized Surface Plasmons with Structural Dispersion. Advanced Optical Materials, 2019, 7, 1900118.	7.3	25
63	Revisiting the boundary conditions for second-harmonic generation at metal-dielectric interfaces. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1824.	2.1	24
64	Geometrically induced modification of surface plasmons in the optical and telecom regimes. Optics Letters, 2010, 35, 423.	3.3	22
65	Strong plasmonic enhancement of single molecule photostability in silver dimer optical antennas. Nanophotonics, 2018, 7, 643-649.	6.0	22
66	A Theoretical Perspective on Molecular Polaritonics. ACS Photonics, 2022, 9, 1830-1841.	6.6	22
67	Description of van der Waals Interactions Using Transformation Optics. Physical Review Letters, 2013, 111, 033602.	7.8	21
68	Dipolar and quadrupolar excitons coupled to a nanoparticle-on-mirror cavity. Physical Review B, 2020, 101, .	3.2	21
69	Harvesting light with transformation optics. Science China Information Sciences, 2013, 56, 1-13.	4.3	20
70	Dispersion Anisotropy of Plasmonâ€“Excitonâ€“Polaritons in Lattices of Metallic Nanoparticles. ACS Photonics, 2018, 5, 233-239.	6.6	20
71	Impact of Vibrational Modes in the Plasmonic Purcell Effect of Organic Molecules. ACS Photonics, 2020, 7, 3369-3375.	6.6	19
72	Bragg reflection of terahertz waves in plasmonic crystals. Optics Express, 2009, 17, 9212.	3.4	18

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73	Exploring the Limits of Super-Planckian Far-Field Radiative Heat Transfer Using 2D Materials. ACS Photonics, 2018, 5, 3082-3088.	6.6	18
74	Cavity-Modified Exciton Dynamics in Photosynthetic Units. Journal of Physical Chemistry Letters, 2019, 10, 4252-4258.	4.6	17
75	Efficient interlayer exciton transport in two-dimensional metal-halide perovskites. Materials Horizons, 2021, 8, 639-644.	12.2	15
76	Asymmetric coupling between two quantum emitters. Physical Review A, 2020, 102, .	2.5	14
77	Aluminum Nanotripods for Lightâ€Matter Coupling Robust to Nanoemitter Orientation. Laser and Photonics Reviews, 2017, 11, 1700051.	8.7	13
78	Nonlocal propagation and tunnelling of surface plasmons in metallic hourglass waveguides. Optics Express, 2013, 21, 27509.	3.4	12
79	Surface second-harmonic generation from metallic-nanoparticle configurations: A transformation-optics approach. Physical Review B, 2019, 99, .	3.2	12
80	Green Tensor Analysis of Lattice Resonances in Periodic Arrays of Nanoparticles. ACS Photonics, 2022, 9, 540-550.	6.6	12
81	Beaming matter waves from a subwavelength aperture. Physical Review A, 2006, 74, .	2.5	11
82	Transformation optics description of touching metal nanospheres. Physical Review B, 2012, 85, .	3.2	11
83	Plexcitonic Quantum Light Emission from Nanoparticle-on-Mirror Cavities. Nano Letters, 2022, 22, 2365-2373.	9.1	9
84	Transmission Resonances Through a Fibonacci Array of Subwavelength Slits. Electromagnetics, 2008, 28, 186-197.	0.7	6
85	Optical properties of carbon nanofiber photonic crystals. Nanotechnology, 2010, 21, 465203.	2.6	6
86	Magnetic-field controlled anomalous refraction in doped semiconductors. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 935.	2.1	6
87	Resonant transmission and beaming of cold atoms assisted by surface matter waves. Physical Review A, 2008, 78, .	2.5	5
88	Optimization of second-harmonic generation from touching plasmonic wires. Physical Review B, 2021, 103, .	3.2	5
89	Surface electromagnetic waves on structured perfectly conducting surfaces. , 0, , 232-268.		4
90	Diffraction from carbon nanofiber arrays. Optics Letters, 2012, 37, 100.	3.3	4

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91	LuoetÂal.Reply. Physical Review Letters, 2015, 115, 239402.	7.8	4
92	Theory of Energy Transfer in Organic Nanocrystals. Advanced Optical Materials, 2020, 8, 2001447.	7.3	4
93	Distortion of the local density of states in a plasmonic cavity by a quantum emitter. New Journal of Physics, 2021, 23, 073011.	2.9	4
94	New Design Principles for Nanoplasmonics. IEEE Photonics Journal, 2011, 3, 284-287.	2.0	3
95	Transformation optics for plasmonics: from metasurfaces to excitonic strong coupling. Comptes Rendus Physique, 2020, 21, 389-408.	0.9	3
96	Thresholdless coherent light scattering from subband polaritons in a strongly coupled microcavity. Physical Review B, 2010, 82, .	3.2	2
97	Fluorescence Triggered by Radioactive Î² Decay in Optimized Hyperbolic Cavities. Physical Review Applied, 2020, 14, .	3.8	1
98	Nanoplasmonics: New design concepts for nanoscale optical cavities. , 2011, , .		0
99	Localized emitters close to nano-bowties: Insight via conformal transformation. , 2015, , .		0
100	Nonlinear wave mixing in plasmonic structures: A transformation optics approach. , 2015, , .		0
101	Plasmonics and Transformation Optics. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 147-196.	0.1	0
102	Understanding bowtie nanoantennas excited by a localized emitter. , 2017, , .		0
103	Correction to Plasmon-Exciton Coupling in Symmetry-Broken Nanocavities. ACS Photonics, 2018, 5, 5119-5119.	6.6	0
104	Theory for Polar Dielectrics Goes Nonlocal. Physics Magazine, 2020, 13, .	0.1	0
105	Vanishing polaritons at the nonlocal limit. Nature Photonics, 2021, 15, 640-641.	31.4	0