Ruben Esteban

List of Publications by Year
in descending order

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62 papers	6,737 citations	136950 32 h-index	155660 55 g-index
62 all docs	62 docs citations	62 times ranked	6993 citing authors

#	Article	IF	Citations
1	Correction to â€œSecond-Harmonic Generation from a Quantum Emitter Coupled to a Metallic Nanoantennaâ€• ACS Photonics, 2022, 9, 1829-1829.	6.6	0
2	Quantum surface effects in the electromagnetic coupling between a quantum emitter and a plasmonic nanoantenna: time-dependent density functional theory vs. semiclassical Feibelman approach. Optics Express, 2022, 30, 21159.	3.4	7
3	Molecular Optomechanics Approach to Surface-Enhanced Raman Scattering. Accounts of Chemical Research, 2022, 55, 1889-1899.	15.6	17
4	Enhanced Lightâ€“Matter Interaction in ¹⁰B Monoisotopic Boron Nitride Infrared Nanoresonators. Advanced Optical Materials, 2021, 9, 2001958.	7.3	24
5	Addressing molecular optomechanical effects in nanocavity-enhanced Raman scattering beyond the single plasmonic mode. Nanoscale, 2021, 13, 1938-1954.	5.6	19
6	Complex plasmon-exciton dynamics revealed through quantum dot light emission in a nanocavity. Nature Communications, 2021, 12, 1310.	12.8	44
7	Electronic Excitonâ€“Plasmon Coupling in a Nanocavity Beyond the Electromagnetic Interaction Picture. Nano Letters, 2021, 21, 8466-8473.	9.1	8
8	Microcavity phonon polaritons from the weak to the ultrastrong phononâ€“photon coupling regime. Nature Communications, 2021, 12, 6206.	12.8	27
9	Quantum theory of surface-enhanced resonant Raman scattering (SERRS) of molecules in strongly coupled plasmonâ€“exciton systems. Nanophotonics, 2020, 9, 295-308.	6.0	23
10	Second-Harmonic Generation from a Quantum Emitter Coupled to a Metallic Nanoantenna. ACS Photonics, 2020, 7, 701-713.	6.6	12
11	Optomechanical Collective Effects in Surface-Enhanced Raman Scattering from Many Molecules. ACS Photonics, 2020, 7, 1676-1688.	6.6	25
12	Goldâ€•and Silverâ€Coated Barium Titanate Nanocomposites as Probes for Twoâ€Photon Multimodal Microspectroscopy. Advanced Functional Materials, 2019, 29, 1904289.	14.9	22
13	Quantum description of surface-enhanced resonant Raman scattering within a hybrid-optomechanical model. Physical Review A, 2019, 100, .	2.5	27
14	Coupling of Molecular Emitters and Plasmonic Cavities beyond the Point-Dipole Approximation. Nano Letters, 2018, 18, 2358-2364.	9.1	137
15	Roadmap on plasmonics. Journal of Optics (United Kingdom), 2018, 20, 043001.	2.2	240
16	Boron nitride nanoresonators for phonon-enhanced molecular vibrational spectroscopy at the strong coupling limit. Light: Science and Applications, 2018, 7, 17172-17172.	16.6	257
17	Controlling surface charge and spin density oscillations by Dirac plasmon interaction in thin topological insulators. Physical Review B, 2018, 97, .	3.2	8
18	Role of electron tunneling in the nonlinear response of plasmonic nanogaps. Physical Review B, 2018, 97, .	3.2	30

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19	Electric Field-Induced High Order Nonlinearity in Plasmonic Nanoparticles Retrieved with Time-Dependent Density Functional Theory. ACS Photonics, 2017, 4, 613-620.	6.6	5
20	Linking classical and molecular optomechanics descriptions of SERS. Faraday Discussions, 2017, 205, 31-65.	3.2	47
21	Sub-nanometre control of the coherent interaction between a single molecule and a plasmonic nanocavity. Nature Communications, 2017, 8, 15225.	12.8	158
22	Plasmonic photoluminescence for recovering native chemical information from surface-enhanced Raman scattering. Nature Communications, 2017, 8, 14891.	12.8	138
23	Self-assembled flat-faceted nanoparticles chains as a highly-tunable platform for plasmon-enhanced spectroscopy in the infrared. Optics Express, 2017, 25, 13760.	3.4	7
24	Molecular optomechanics in atomic-scale plasmonic hot spots. , 2017, , .		0
25	Strong coupling effects in hybrid plexitonic systems. , 2017, , .		0
26	Monitoring Earlyâ€Stage Nanoparticle Assembly in Microdroplets by Optical Spectroscopy and SERS. Small, 2016, 12, 1788-1796.	10.0	34
27	Quantum Mechanical Description of Raman Scattering from Molecules in Plasmonic Cavities. ACS Nano, 2016, 10, 6291-6298.	14.6	133
28	Optimizing SERS from Gold Nanoparticle Clusters: Addressing the Near Field by an Embedded Chain Plasmon Model. Journal of Physical Chemistry C, 2016, 120, 10512-10522.	3.1	46
29	Evolution of Plasmonic Metamolecule Modes in the Quantum Tunneling Regime. ACS Nano, 2016, 10, 1346-1354.	14.6	51
30	Single-molecule optomechanics in â€œpicocavitiesâ€. Science, 2016, 354, 726-729.	12.6	607
31	Quantum mechanical effects in plasmonic structures with subnanometre gaps. Nature Communications, 2016, 7, 11495.	12.8	605
32	Rabi Splitting in Photoluminescence Spectra of Hybrid Systems of Gold Nanorods and J-Aggregates. Journal of Physical Chemistry Letters, 2016, 7, 354-362.	4.6	132
33	Hybridization of plasmonic antenna and cavity modes: Extreme optics of nanoparticle-on-mirror nanogaps. Physical Review A, 2015, 92, .	2.5	113
34	The Morphology of Narrow Gaps Modifies the Plasmonic Response. ACS Photonics, 2015, 2, 295-305.	6.6	99
35	Atomistic Near-Field Nanoplasmonics: Reaching Atomic-Scale Resolution in Nanooptics. Nano Letters, 2015, 15, 3410-3419.	9.1	257
36	A classical treatment of optical tunneling in plasmonic gaps: extending the quantum corrected model to practical situations. Faraday Discussions, 2015, 178, 151-183.	3.2	151

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37	Optical Response of Metallic Nanoparticle Heteroaggregates with Subnanometric Gaps. Particle and Particle Systems Characterization, 2014, 31, 152-160.	2.3	36
38	Strong coupling of single emitters interacting with phononic infrared antennae. New Journal of Physics, 2014, 16, 013052.	2.9	48
39	Gold Nanorods with Subâ€Nanometer Separation using Cucurbit[n]uril for SERS Applications. Small, 2014, 10, 4298-4303.	10.0	50
40	Dielectric antennas - a suitable platform for controlling magnetic dipolar emission: errata. Optics Express, 2012, 20, 18609.	3.4	15
41	Simple Composite Dipole Model for the Optical Modes of Strongly-Coupled Plasmonic Nanoparticle Aggregates. Journal of Physical Chemistry C, 2012, 116, 25044-25051.	3.1	35
42	Revealing the quantum regime in tunnelling plasmonics. Nature, 2012, 491, 574-577.	27.8	939
43	How Chain Plasmons Govern the Optical Response in Strongly Interacting Self-Assembled Metallic Clusters of Nanoparticles. Langmuir, 2012, 28, 8881-8890.	3.5	77
44	Hot Carrier Solar Cells: Controlling Thermalization in Ultrathin Devices. IEEE Journal of Photovoltaics, 2012, 2, 506-511.	2.5	19
45	Bridging quantum and classical plasmonics with a quantum-corrected model. Nature Communications, 2012, 3, 825.	12.8	797
46	Dielectric antennas - a suitable platform for controlling magnetic dipolar emission. Optics Express, 2012, 20, 13636.	3.4	169
47	Quantum effects in subnanometric-gap plasmonic antennas. , 2012, , .		0
48	Precise Subnanometer Plasmonic Junctions for SERS within Gold Nanoparticle Assemblies Using Cucurbit[n]uril â€œGlueâ€• ACS Nano, 2011, 5, 3878-3887.	14.6	322
49	Apertureless near-field optical microscopy: Differences between heterodyne interferometric and non-interferometric images. Ultramicroscopy, 2011, 111, 1469-1474.	1.9	9
50	Excitation of thin metallic disks and patch antennas by quantum emitters for single photon sources. Proceedings of SPIE, 2010, , .	0.8	0
51	Optical Patch Antennas for Single Photon Emission Using Surface Plasmon Resonances. Physical Review Letters, 2010, 104, 026802.	7.8	207
52	Dielectric gratings for wide-angle, broadband absorption by thin film photovoltaic cells. Applied Physics Letters, 2010, 97, 221111.	3.3	25
53	Large scale simulations in the realm of nanooptics. , 2010, , .		1
54	Full simulations of the apertureless scanning near field optical microscopy signal: achievable resolution and contrast. Optics Express, 2009, 17, 2518.	3.4	35

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55	Influence of metallic nanoparticles on upconversion processes. Journal of Applied Physics, 2009, 105, .	2.5	62
56	Plasmonic nanostructures in apertureâ€less scanning nearâ€field optical microscopy (aSNOM). Physica Status Solidi (B): Basic Research, 2008, 245, 2255-2260.	1.5	20
57	Beyond lock-in analysis for volumetric imaging in apertureless scanning near-field optical microscopy. Journal of Microscopy, 2008, 229, 365-370.	1.8	6
58	Direct Near-Field Optical Imaging of Higher Order Plasmonic Resonances. Nano Letters, 2008, 8, 3155-3159.	9.1	201
59	Simulation of optical near and far fields of dielectric apertureless scanning probes. Nanotechnology, 2008, 19, 169801-169801.	2.6	0
60	Tip-substrate interaction in optical near-field microscopy. Physical Review B, 2007, 75, .	3.2	47
61	Simulation of optical near and far fields of dielectric apertureless scanning probes. Nanotechnology, 2006, 17, 475-482.	2.6	31
62	Kinetic origin of island intermixing during the growth of Ge on Si(001). Physical Review B, 2005, 72, .	3.2	76