Jose Maria Saiz

List of Publications by Year in descending order

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86 papers	1,667 citations	331259 21 h-index	301761 39 g-index
86 all docs	86 docs citations	86 times ranked	1873 citing authors

#	Article	IF	Citations
1	A label-free optical system with a nanohole array biosensor for discriminating live single cancer cells from normal cells. Nanophotonics, 2022, 11, 315-328.	2.9	3
2	Broadband Unidirectional Forward Scattering with High Refractive Index Nanostructures: Application in Solar Cells. Molecules, 2021, 26, 4421.	1.7	4
3	Design of Switchable On/Off Subpixels for Primary Color Generation Based on Molybdenum Oxide Gratings. Physics, 2021, 3, 655-663.	0.5	2
4	The extended Kubelkaâ€“Munk theory and its application to spectroscopy. ChemTexts, 2020, 6, 1.	1.0	43
5	Non-Absorbing Dielectric Materials for Surface-Enhanced Spectroscopies and Chiral Sensing in the UV. Nanomaterials, 2020, 10, 2078.	1.9	6
6	Nanoplasmonic Photothermal Heating and Near-Field Enhancements: A Comparative Survey of 19 Metals. Journal of Physical Chemistry C, 2020, 124, 7386-7395.	1.5	31
7	Sustainable and Tunable Mg/MgO Plasmon-Catalytic Platform for the Grand Challenge of SF₆ Environmental Remediation. Nano Letters, 2020, 20, 3352-3360.	4.5	14
8	Metals and dielectrics for UV plasmonics. , 2020, , .		0
9	Industrial research on evolution and prediction of hardwood color. Applied Optics, 2020, 59, 9681.	0.9	0
10	Polarimetric Detection of Chemotherapy-Induced Cancer Cell Death. Applied Sciences (Switzerland), 2019, 9, 2886.	1.3	4
11	Electromagnetic Effective Medium Modelling of Composites with Metal-Semiconductor Core-Shell Type Inclusions. Catalysts, 2019, 9, 626.	1.6	14
12	Gallium Polymorphs: Phaseâ€Dependent Plasmonics. Advanced Optical Materials, 2019, 7, 1900307.	3.6	25
13	Recent advances in high refractive index dielectric nanoantennas: Basics and applications. AIP Advances, 2019, 9, .	0.6	57
14	The UV Plasmonic Behavior of Rhodium Tetrahedronsâ€”A Numerical Analysis. Applied Sciences (Switzerland), 2019, 9, 3947.	1.3	7
15	Physically meaningful Monte Carlo approach to the four-flux solution of a dense multilayered system. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 292.	0.8	3
16	The Quest for Low Loss High Refractive Index Dielectric Materials for UV Photonic Applications. Applied Sciences (Switzerland), 2018, 8, 2065.	1.3	7
17	Plasmonics in the Ultraviolet with Aluminum, Gallium, Magnesium and Rhodium. Applied Sciences (Switzerland), 2018, 8, 64.	1.3	75
18	On the scattering directionality of a dielectric particle dimer of High Refractive Index. Scientific Reports, 2018, 8, 7976.	1.6	19

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19	Scattering Directionality in the UV. , 2018, , .		0
20	Multimodal imaging Mueller polarimetric microscope to study polarimetric properties of spheroidal microparticles. , 2018, , .		0
21	Electromagnetic polarization-controlled perfect switching effect with high-refractive-index dimers and the beam-splitter configuration. Nature Communications, 2017, 8, 13910.	5.8	32
22	Light guiding and switching using eccentric core-shell geometries. Scientific Reports, 2017, 7, 11189.	1.6	18
23	The UV Plasmonic Behavior of Distorted Rhodium Nanocubes. Nanomaterials, 2017, 7, 425.	1.9	12
24	The extended Kubelka-Munk theory and its application to colloidal systems. , 2017, , .		1
25	Modelling metal-dielectric core-shell nanoparticles with effective medium theories. , 2017, , .		2
26	Recent advances in metals for plasmonics applications in the UV range. , 2017, , .		0
27	Extension of the Kubelkaâ€“Munk theory to an arbitrary substrate: a Monte Carlo approach. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 2053.	0.8	8
28	Plasmonics in the UV range with Rhodium nanocubes. Proceedings of SPIE, 2016, , .	0.8	3
29	Using linear polarization for sensing and monitoring nanoparticle purity. Proceedings of SPIE, 2016, , .	0.8	0
30	How an oxide shell affects the ultraviolet plasmonic behavior of Ga, Mg, and Al nanostructures. Optics Express, 2016, 24, 20621.	1.7	62
31	Polarimetric techniques for determining morphology and optical features of high refractive index dielectric nanoparticle size. , 2016, , .		0
32	Near- and far-field scattering resonance frequency shift in dielectric and perfect electric conducting cylinders. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 391.	0.8	2
33	Size-tunable rhodium nanostructures for wavelength-tunable ultraviolet plasmonics. Nanoscale Horizons, 2016, 1, 75-80.	4.1	62
34	Using linear polarization to monitor nanoparticle purity. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 162, 190-196.	1.1	15
35	Enhanced Magneto-Optical Edge Excitation in Nanoscale Magnetic Disks. Physical Review Letters, 2015, 115, 187403.	2.9	18
36	Rhodium Nanoparticles for Ultraviolet Plasmonics. Nano Letters, 2015, 15, 1095-1100.	4.5	119

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37	Rhodium Tripod Stars for UV Plasmonics. Journal of Physical Chemistry C, 2015, 119, 12572-12580.	1.5	35
38	Frequency shift between near- and far-field scattering resonances in dielectric particles. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 1638.	0.8	5
39	Influence of pollutants in the magneto-dielectric response of silicon nanoparticles. Optics Letters, 2014, 39, 3142.	1.7	19
40	Development of a Mueller matrix imaging system for detecting objects embedded in turbid media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 146, 199-206.	1.1	14
41	Metals for UV Plasmonics. , 2014, , .		3
42	UV Plasmonic Behavior of Various Metal Nanoparticles in the Near- and Far-Field Regimes: Geometry and Substrate Effects. Journal of Physical Chemistry C, 2013, 117, 19606-19615.	1.5	263
43	Comprehensive polarimetric analysis of Spectralon white reflectance standard in a wide visible range. Applied Optics, 2013, 52, 6051.	0.9	15
44	Quantum optical response of metallic nanoparticles and dimers. Optics Letters, 2012, 37, 5015.	1.7	15
45	Transverse magneto-optical effects in nanoscale disks. Physical Review B, 2012, 85, .	1.1	11
46	Emission curves vs charging conditions in phosphorescent pigments embedded in sintered glass: Is there a reciprocity law?. Optics Communications, 2012, 285, 4413-4419.	1.0	0
47	Shape Matters: Plasmonic Nanoparticle Shape Enhances Interaction with Dielectric Substrate. Nano Letters, 2011, 11, 3531-3537.	4.5	122
48	Polar decomposition of the Mueller matrix: a polarimetric rule of thumb for square-profile surface structure recognition. Applied Optics, 2011, 50, 3781.	2.1	13
49	Directionality in scattering by nanoparticles: Kerkerâ€™s null-scattering conditions revisited. Optics Letters, 2011, 36, 728.	1.7	59
50	Surface monitoring based on light scattering by metal nanosensors. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2046-2058.	1.1	3
51	Polar decomposition applied to light scattering by structured 2D surfaces. , 2010, , .		0
52	Nanoparticles with unconventional scattering properties: Size effects. Optics Communications, 2010, 283, 490-496.	1.0	22
53	Distance limit of the directionality conditions for the scattering of nanoparticles. Metamaterials, 2010, 4, 15-23.	2.2	6
54	Spectral behavior of the linear polarization degree at right-angle scattering configuration for nanoparticle systems. New Journal of Physics, 2010, 12, 103031.	1.2	12

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55	Extended discrete dipole approximation and its application to bianisotropic media. Optics Express, 2010, 18, 23865.	1.7	20
56	Nanoscopic inspection of surfaces based on Plasmonic Resonances. , 2009, , .		0
57	Nanoscopic surface inspection by analyzing the linear polarization degree of the scattered light. Optics Letters, 2009, 34, 1906.	1.7	5
58	Design and optimization of a collimating optical system for high divergence LED light sources. , 2009, , .		2
59	Light scattering resonances in small particles with electric and magnetic properties. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 327.	0.8	49
60	Interaction of nanoparticles with substrates: effects on the dipolar behaviour of the particles. Optics Express, 2008, 16, 12487.	1.7	32
61	Surface inspection by monitoring spectral shifts of localized plasmon resonances. Optics Express, 2008, 16, 12872.	1.7	20
62	Comment on â€œExperimental Evidence of Zero Forward Scattering by Magnetic Spheresâ€• Physical Review Letters, 2007, 98, .	2.9	13
63	Backscattering of metallic microstructures with small defects located on flat substrates. Optics Express, 2007, 15, 6857.	1.7	7
64	Light scattering by an ensemble of interacting dipolar particles with both electric and magnetic polarizabilities. Physical Review A, 2007, 76, .	1.0	56
65	Light Scattering by Particles on Substrates. Theory and Experiments. Nanostructure Science and Technology, 2007, , 305-340.	0.1	3
66	Monitoring small defects on surface microstructures through backscattering measurements. Optics Letters, 2006, 31, 1744.	1.7	5
67	Plasmon spectroscopy of metallic nanoparticles above flat dielectric substrates. Optics Letters, 2006, 31, 1902.	1.7	23
68	Corneal changes induced by laser ablation: study of the visual-quality evolution by a customized eye model. Journal of Modern Optics, 2006, 53, 1605-1618.	0.6	3
69	Two-particle model to study fluctuations of scattered radiation: multiple-scattering effects. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2005, 22, 497.	0.8	6
70	Influence of local inhomogeneities induced in corneal ablation on the evolution of contrast sensitivity. Optics Letters, 2004, 29, 739.	1.7	4
71	Detection and recognition of local defects in 1D structures. Optics Communications, 2001, 196, 33-39.	1.0	5
72	Profile of a fiber from backscattering measurements. Optics Letters, 2000, 25, 1699.	1.7	9

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73	Sizing particles on substrates. A general method for oblique incidence. Journal of Applied Physics, 1999, 85, 432-438.	1.1	21
74	Tracking Scattering Minima to Size Metallic Particles on Flat Substrates. Particle and Particle Systems Characterization, 1999, 16, 113-118.	1.2	9
75	Scattering from particles on surfaces:?visibility factor and polydispersity. Optics Letters, 1999, 24, 1451.	1.7	9
76	A detailed study of the scattered near field of nanoprotuberances on flat surfaces. Journal Physics D: Applied Physics, 1998, 31, 3009-3019.	1.3	5
77	Metallic particle sizing on flat surfaces: Application to conducting substrates. Applied Physics Letters, 1996, 68, 3087-3089.	1.5	21
78	Near-field scattering from subwavelength metallic protuberances on conducting flat substrates. Physical Review B, 1995, 51, 13681-13690.	1.1	24
79	Application of a ray-tracing model to the study of back scattering from surfaces with particles. Journal Physics D: Applied Physics, 1995, 28, 1040-1046.	1.3	11
80	On the multiple scattering effects for small metallic particles on flat conducting substrates. Waves in Random and Complex Media, 1995, 5, 73-88.	1.5	11
81	Application of a Laplace Transform Method to the Study of Binary Mixtures of Spherical and Rod-Like Particles for Low Intensity Levels.. Spectroscopy Letters, 1994, 27, 903-919.	0.5	0
82	Experimental Study of Periodically Modulated Light Beams by Measuring the Moment Generating Function of the Number of photopulses. Spectroscopy Letters, 1993, 26, 733-744.	0.5	0
83	Signal-to-noise ratio improvement by measuring the moment generating function of the number of photopulses for low intensity periodical signals. Journal of Optics, 1992, 1, 281-288.	0.5	1
84	Application of a Laplace transform method to binary mixtures of spherical particles in solution for low scattered intensity. Journal Physics D: Applied Physics, 1992, 25, 357-361.	1.3	7
85	Analysis of Depolarized Light Scattering from a Solution of Rod-Like Macromolecules Through A Laplace Transform Method. Spectroscopy Letters, 1991, 24, 1247-1263.	0.5	1
86	Dynamic depolarized light-scattering analysis of rodlike particles by means of a Laplace transform method. , 1990, , .		0