

# 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	UV Plasmonic Behavior of Various Metal Nanoparticles in the Near- and Far-Field Regimes: Geometry and Substrate Effects. <i>Journal of Physical Chemistry C</i> , 2013, 117, 19606-19615.	1.5	263
2	Shape Matters: Plasmonic Nanoparticle Shape Enhances Interaction with Dielectric Substrate. <i>Nano Letters</i> , 2011, 11, 3531-3537.	4.5	122
3	Rhodium Nanoparticles for Ultraviolet Plasmonics. <i>Nano Letters</i> , 2015, 15, 1095-1100.	4.5	119
4	Plasmonics in the Ultraviolet with Aluminum, Gallium, Magnesium and Rhodium. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 64.	1.3	75
5	How an oxide shell affects the ultraviolet plasmonic behavior of Ga, Mg, and Al nanostructures. <i>Optics Express</i> , 2016, 24, 20621.	1.7	62
6	Size-tunable rhodium nanostructures for wavelength-tunable ultraviolet plasmonics. <i>Nanoscale Horizons</i> , 2016, 1, 75-80.	4.1	62
7	Directionality in scattering by nanoparticles: Kerker's null-scattering conditions revisited. <i>Optics Letters</i> , 2011, 36, 728.	1.7	59
8	Recent advances in high refractive index dielectric nanoantennas: Basics and applications. <i>AIP Advances</i> , 2019, 9, .	0.6	57
9	Light scattering by an ensemble of interacting dipolar particles with both electric and magnetic polarizabilities. <i>Physical Review A</i> , 2007, 76, .	1.0	56
10	Light scattering resonances in small particles with electric and magnetic properties. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2008, 25, 327.	0.8	49
11	The extended Kubelka-Munk theory and its application to spectroscopy. <i>ChemTexts</i> , 2020, 6, 1.	1.0	43
12	Rhodium Tripod Stars for UV Plasmonics. <i>Journal of Physical Chemistry C</i> , 2015, 119, 12572-12580.	1.5	35
13	Interaction of nanoparticles with substrates: effects on the dipolar behaviour of the particles. <i>Optics Express</i> , 2008, 16, 12487.	1.7	32
14	Electromagnetic polarization-controlled perfect switching effect with high-refractive-index dimers and the beam-splitter configuration. <i>Nature Communications</i> , 2017, 8, 13910.	5.8	32
15	Nanoplasmonic Photothermal Heating and Near-Field Enhancements: A Comparative Survey of 19 Metals. <i>Journal of Physical Chemistry C</i> , 2020, 124, 7386-7395.	1.5	31
16	Gallium Polymorphs: Phase-Dependent Plasmonics. <i>Advanced Optical Materials</i> , 2019, 7, 1900307.	3.6	25
17	Near-field scattering from subwavelength metallic protuberances on conducting flat substrates. <i>Physical Review B</i> , 1995, 51, 13681-13690.	1.1	24
18	Plasmon spectroscopy of metallic nanoparticles above flat dielectric substrates. <i>Optics Letters</i> , 2006, 31, 1902.	1.7	23

#	ARTICLE	IF	CITATIONS
19	Nanoparticles with unconventional scattering properties: Size effects. Optics Communications, 2010, 283, 490-496.	1.0	22
20	Metallic particle sizing on flat surfaces: Application to conducting substrates. Applied Physics Letters, 1996, 68, 3087-3089.	1.5	21
21	Sizing particles on substrates. A general method for oblique incidence. Journal of Applied Physics, 1999, 85, 432-438.	1.1	21
22	Surface inspection by monitoring spectral shifts of localized plasmon resonances. Optics Express, 2008, 16, 12872.	1.7	20
23	Extended discrete dipole approximation and its application to bianisotropic media. Optics Express, 2010, 18, 23865.	1.7	20
24	Influence of pollutants in the magneto-dielectric response of silicon nanoparticles. Optics Letters, 2014, 39, 3142.	1.7	19
25	On the scattering directionality of a dielectric particle dimer of High Refractive Index. Scientific Reports, 2018, 8, 7976.	1.6	19
26	Enhanced Magneto-Optical Edge Excitation in Nanoscale Magnetic Disks. Physical Review Letters, 2015, 115, 187403.	2.9	18
27	Light guiding and switching using eccentric core-shell geometries. Scientific Reports, 2017, 7, 11189.	1.6	18
28	Quantum optical response of metallic nanoparticles and dimers. Optics Letters, 2012, 37, 5015.	1.7	15
29	Comprehensive polarimetric analysis of Spectralon white reflectance standard in a wide visible range. Applied Optics, 2013, 52, 6051.	0.9	15
30	Using linear polarization to monitor nanoparticle purity. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 162, 190-196.	1.1	15
31	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
32	Electromagnetic Effective Medium Modelling of Composites with Metal-Semiconductor Core-Shell Type Inclusions. Catalysts, 2019, 9, 626.	1.6	14
33	Sustainable and Tunable Mg/MgO Plasmon-Catalytic Platform for the Grand Challenge of SF <sub>6</sub> Environmental Remediation. Nano Letters, 2020, 20, 3352-3360.	4.5	14
34	Comment on "Experimental Evidence of Zero Forward Scattering by Magnetic Spheres". Physical Review Letters, 2007, 98, .	2.9	13
35	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
36	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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37	The UV Plasmonic Behavior of Distorted Rhodium Nanocubes. <i>Nanomaterials</i> , 2017, 7, 425.	1.9	12
38	Application of a ray-tracing model to the study of back scattering from surfaces with particles. <i>Journal Physics D: Applied Physics</i> , 1995, 28, 1040-1046.	1.3	11
39	On the multiple scattering effects for small metallic particles on flat conducting substrates. <i>Waves in Random and Complex Media</i> , 1995, 5, 73-88.	1.5	11
40	Transverse magneto-optical effects in nanoscale disks. <i>Physical Review B</i> , 2012, 85, .	1.1	11
41	Tracking Scattering Minima to Size Metallic Particles on Flat Substrates. <i>Particle and Particle Systems Characterization</i> , 1999, 16, 113-118.	1.2	9
42	Scattering from particles on surfaces: visibility factor and polydispersity. <i>Optics Letters</i> , 1999, 24, 1451.	1.7	9
43	Profile of a fiber from backscattering measurements. <i>Optics Letters</i> , 2000, 25, 1699.	1.7	9
44	Extension of the Kubelka-Munk theory to an arbitrary substrate: a Monte Carlo approach. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2016, 33, 2053.	0.8	8
45	Application of a Laplace transform method to binary mixtures of spherical particles in solution for low scattered intensity. <i>Journal Physics D: Applied Physics</i> , 1992, 25, 357-361.	1.3	7
46	Backscattering of metallic microstructures with small defects located on flat substrates. <i>Optics Express</i> , 2007, 15, 6857.	1.7	7
47	The Quest for Low Loss High Refractive Index Dielectric Materials for UV Photonic Applications. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2065.	1.3	7
48	The UV Plasmonic Behavior of Rhodium Tetrahedrons—A Numerical Analysis. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3947.	1.3	7
49	Two-particle model to study fluctuations of scattered radiation: multiple-scattering effects. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2005, 22, 497.	0.8	6
50	Distance limit of the directionality conditions for the scattering of nanoparticles. <i>Metamaterials</i> , 2010, 4, 15-23.	2.2	6
51	Non-Absorbing Dielectric Materials for Surface-Enhanced Spectroscopies and Chiral Sensing in the UV. <i>Nanomaterials</i> , 2020, 10, 2078.	1.9	6
52	A detailed study of the scattered near field of nanoprotuberances on flat surfaces. <i>Journal Physics D: Applied Physics</i> , 1998, 31, 3009-3019.	1.3	5
53	Detection and recognition of local defects in 1D structures. <i>Optics Communications</i> , 2001, 196, 33-39.	1.0	5
54	Monitoring small defects on surface microstructures through backscattering measurements. <i>Optics Letters</i> , 2006, 31, 1744.	1.7	5

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55	Nanosopic surface inspection by analyzing the linear polarization degree of the scattered light. Optics Letters, 2009, 34, 1906.	1.7	5
56	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
57	Influence of local inhomogeneities induced in corneal ablation on the evolution of contrast sensitivity. Optics Letters, 2004, 29, 739.	1.7	4
58	Polarimetric Detection of Chemotherapy-Induced Cancer Cell Death. Applied Sciences (Switzerland), 2019, 9, 2886.	1.3	4
59	Broadband Unidirectional Forward Scattering with High Refractive Index Nanostructures: Application in Solar Cells. Molecules, 2021, 26, 4421.	1.7	4
60	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
61	Light Scattering by Particles on Substrates. Theory and Experiments. Nanostructure Science and Technology, 2007, , 305-340.	0.1	3
62	Surface monitoring based on light scattering by metal nanosensors. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2046-2058.	1.1	3
63	Plasmonics in the UV range with Rhodium nanocubes. Proceedings of SPIE, 2016, , .	0.8	3
64	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
65	Metals for UV Plasmonics. , 2014, , .		3
66	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
67	Design and optimization of a collimating optical system for high divergence LED light sources. , 2009, , .		2
68	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
69	Design of Switchable On/Off Subpixels for Primary Color Generation Based on Molybdenum Oxide Gratings. Physics, 2021, 3, 655-663.	0.5	2
70	Modelling metal-dielectric core-shell nanoparticles with effective medium theories. , 2017, , .		2
71	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
72	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

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73	The extended Kubelka-Munk theory and its application to colloidal systems. , 2017, , .		1
74	Dynamic depolarized light-scattering analysis of rodlike particles by means of a Laplace transform method. , 1990, , .		0
75	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
76	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
77	Nanosopic inspection of surfaces based on Plasmonic Resonances. , 2009, , .		0
78	Polar decomposition applied to light scattering by structured 2D surfaces. , 2010, , .		0
79	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
80	Using linear polarization for sensing and monitoring nanoparticle purity. Proceedings of SPIE, 2016, , .	0.8	0
81	Polarimetric techniques for determining morphology and optical features of high refractive index dielectric nanoparticle size. , 2016, , .		0
82	Recent advances in metals for plasmonics applications in the UV range. , 2017, , .		0
83	Scattering Directionality in the UV. , 2018, , .		0
84	Multimodal imaging Mueller polarimetric microscope to study polarimetric properties of spheroidal microparticles. , 2018, , .		0
85	Metals and dielectrics for UV plasmonics. , 2020, , .		0
86	Industrial research on evolution and prediction of hardwood color. Applied Optics, 2020, 59, 9681.	0.9	0