

# O Pea-Rodrguez

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

72 papers	1,728 citations	23 h-index	39 g-index
74 ext. papers	2,006 ext. citations	4.9 avg, IF	4.83 L-index

#	Paper	IF	Citations
72	Controlled Alloying of Au@Ag Core-Shell Nanorods Induced by Femtosecond Laser Irradiation. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2002134	8.1	4
71	Rod-sphere cluster irradiation with femtosecond laser pulses: cut and paste at the nanoscale. <i>Nanophotonics</i> , <b>2021</b> , 10, 3153-3159	6.3	1
70	Hollow Gold Nanoparticles Produced by Femtosecond Laser Irradiation. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 5108-5114	6.4	10
69	Niobium oxide coatings increase the creep and wear resistance of glass. <i>Materials Letters</i> , <b>2020</b> , 277, 128308	3.3	2
68	Au@Ag Core-Shell Nanorods Support Plasmonic Fano Resonances. <i>Scientific Reports</i> , <b>2020</b> , 10, 5921	4.9	10
67	Highly porous tungsten for plasma-facing applications in nuclear fusion power plants: a computational analysis of hollow nanoparticles. <i>Nuclear Fusion</i> , <b>2020</b> , 60, 096017	3.3	3
66	Formation of Hollow Gold Nanocrystals by Nanosecond Laser Irradiation. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 670-677	6.4	13
65	Toughening of graphene oxide-epoxy nanocomposites by means of very high pressures and shear rates. <i>Composites Science and Technology</i> , <b>2020</b> , 199, 108354	8.6	4
64	On the Large Near-Field Enhancement on Nanocolumnar Gold Substrates. <i>Scientific Reports</i> , <b>2019</b> , 9, 13933	4.9	4
63	Disconnecting Symmetry Breaking from Seeded Growth for the Reproducible Synthesis of High Quality Gold Nanorods. <i>ACS Nano</i> , <b>2019</b> , 13, 4424-4435	16.7	59
62	Nanoparticle-Assembled Gold Microtubes Built on Fungi Templates for SERS-Based Molecular Sensing. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 2533-2541	5.6	5
61	Using Femtosecond Laser Irradiation To Grow the Belly of Gold Nanorods. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 19816-19822	3.8	8
60	Supramolecular Control over the Interparticle Distance in Gold Nanoparticle Arrays by Cyclodextrin Polyrotaxanes. <i>Nanomaterials</i> , <b>2018</b> , 8,	5.4	5
59	Near- and Far-Field Optical Response of Eccentric Nanoshells. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 16	5	7
58	Mie calculation of electromagnetic near-field for a multilayered sphere. <i>Computer Physics Communications</i> , <b>2017</b> , 214, 225-230	4.2	24
57	Fabrication of Monodispersed Au@SiO <sub>2</sub> Nanoparticles with Highly Stable Silica Layers by Ultrasound-Assisted Stober Method. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 9543-9551	3.8	39
56	Understanding the ion-induced elongation of silver nanoparticles embedded in silica. <i>Scientific Reports</i> , <b>2017</b> , 7, 922	4.9	26

55	Near-Electric-Field Tuned Plasmonic Au@SiO <sub>2</sub> and Ag@SiO <sub>2</sub> Nanoparticles for Efficient Utilization in Luminescence Enhancement and Surface-Enhanced Spectroscopy. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 23062-23071	3.8	24
54	Enzymatic Catalysis at Nanoscale: Enzyme-Coated Nanoparticles as Colloidal Biocatalysts for Polymerization Reactions. <i>ACS Omega</i> , <b>2017</b> , 2, 7305-7312	3.9	26
53	Femtosecond laser reshaping yields gold nanorods with ultranarrow surface plasmon resonances. <i>Science</i> , <b>2017</b> , 358, 640-644	33.3	176
52	Permanent modifications in silica produced by ion-induced high electronic excitation: experiments and atomistic simulations. <i>Scientific Reports</i> , <b>2017</b> , 7, 10641	4.9	11
51	Modelling the dielectric function of Au-Ag alloys. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 694, 857-863	5.7	9
50	Effect of Organic Stabilizers on Silver Nanoparticles Fabricated by Femtosecond Pulsed Laser Ablation. <i>Applied Sciences (Switzerland)</i> , <b>2017</b> , 7, 793	2.6	9
49	Size Characterisation Method and Detection Enhancement of Plasmonic Nanoparticles in a Pump-Probe System. <i>Applied Sciences (Switzerland)</i> , <b>2017</b> , 7, 819	2.6	3
48	Micro and nano-patterning of single-crystal diamond by swift heavy ion irradiation. <i>Diamond and Related Materials</i> , <b>2016</b> , 69, 1-7	3.5	6
47	Protein-Assisted Assembly of Modular 3D Plasmonic Raspberry-like Core/Satellite Nanoclusters: Correlation of Structure and Optical Properties. <i>ACS Nano</i> , <b>2016</b> , 10, 5740-50	16.7	93
46	In situ monitoring the optical properties of dielectric materials during ion irradiation. <i>Optical Materials Express</i> , <b>2016</b> , 6, 734	2.6	8
45	Optimizing the electric field around solid and core-shell alloy nanostructures for near-field applications. <i>Nanoscale</i> , <b>2016</b> , 8, 14836-45	7.7	13
44	Superabsorption of light by nanoparticles. <i>Nanoscale</i> , <b>2015</b> , 7, 18897-901	7.7	11
43	Structural damage on single-crystal diamond by swift heavy ion irradiation. <i>Diamond and Related Materials</i> , <b>2015</b> , 58, 226-229	3.5	11
42	Optical properties of crystalline and ion-beam amorphized Bi <sub>12</sub> GeO <sub>20</sub> : Relevance for waveguide applications. <i>Optical Materials</i> , <b>2015</b> , 47, 328-332	3.3	12
41	Mechanical response to swift ion irradiation-induced nano-tracks in silica. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2015</b> , 352, 145-147	1.2	6
40	Femtosecond Laser-Controlled Tip-to-Tip Assembly and Welding of Gold Nanorods. <i>Nano Letters</i> , <b>2015</b> , 15, 8282-8	11.5	86
39	Polyrotaxane-mediated self-assembly of gold nanospheres into fully reversible supercrystals. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 12751-5	16.4	32
38	Embedded silver nanoparticle multilayers fabricated by femtosecond pulsed laser deposition. <i>Optical Materials Express</i> , <b>2014</b> , 4, 1943	2.6	4

37	Reduction of scattering using thin all-dielectric shells designed by stochastic optimizer. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 184508	2.5	6
36	Optical properties of Au-Ag alloys: An ellipsometric study. <i>Optical Materials Express</i> , <b>2014</b> , 4, 403	2.6	56
35	Tunable Fano resonance in symmetric multilayered gold nanoshells. <i>Nanoscale</i> , <b>2013</b> , 5, 209-16	7.7	61
34	Optical properties of ceria/zirconia epitaxial films grown from chemical solutions. <i>Materials Chemistry and Physics</i> , <b>2013</b> , 138, 462-467	4.4	16
33	Ionoluminescence induced by 3 MeV He <sup>+</sup> ions on as-grown and pre-damaged BaMgF <sub>4</sub> crystals. <i>Journal of Luminescence</i> , <b>2013</b> , 136, 182-185	3.8	4
32	Exploiting the Tunable Optical Response of Metallic Nanoshells <b>2013</b> , 99-149		1
31	Determination of Thermal Transition Depth Profiles in Polymer Semiconductor Films with Ellipsometry. <i>Macromolecules</i> , <b>2013</b> , 46, 7325-7331	5.5	21
30	Effect of structure and interlayer diffusion in organic position sensitive photodetectors based on complementary wedge donor/acceptor layers. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2013</b> , 13, 5148-53	1.3	4
29	Refractive index changes in amorphous SiO <sub>2</sub> (silica) by swift ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2012</b> , 277, 126-130	1.2	13
28	Synthesis of nanocrystalline ceria thin films by low-temperature thermal decomposition of Ce-propionate. <i>Thin Solid Films</i> , <b>2012</b> , 520, 1949-1953	2.2	27
27	Ionoluminescence induced by swift heavy ions in silica and quartz: A comparative analysis. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2012</b> , 286, 282-286	1.2	14
26	Kinetics of amorphization induced by swift heavy ions in quartz. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 430, 125-131	3.3	17
25	Ionoluminescence as Sensor of Structural Disorder in Crystalline SiO <sub>2</sub> : Determination of Amorphization Threshold by Swift Heavy Ions. <i>Applied Physics Express</i> , <b>2012</b> , 5, 011101	2.4	11
24	Ion Implantation for the Fabrication of Plasmonic Nanocomposites: A Brief Review <b>2012</b> ,		3
23	Optical Waveguides Fabricated by Ion Implantation/Irradiation: A Review Optical Waveguides Fabricated by Ion Implantation/Irradiation: A Review <b>2012</b> ,		5
22	Kinetics of color center formation in silica irradiated with swift heavy ions: Thresholding and formation efficiency. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 154103	3.4	14
21	Enhanced Fano Resonance in Asymmetrical Au:Ag Heterodimers. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 6410-6414	3.8	75
20	Au@Ag core-shell nanoparticles: efficient all-plasmonic Fano-resonance generators. <i>Nanoscale</i> , <b>2011</b> , 3, 3609-12	7.7	71

19	Configuring Au and Ag nanorods for sensing applications. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2011</b> , 28, 714	1.7	17
18	Effects of surface oxidation on the linear optical properties of Cu nanoparticles. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2011</b> , 28, 2735	1.7	32
17	Enhanced plasmonic behavior of bimetallic (Ag-Au) multilayered spheres. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 279	5	60
16	Enhanced Plasmonic Behavior of Incomplete Nanoshells: Effect of Local Field Irregularities on the Far-Field Optical Response. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 22271-22275	3.8	21
15	Real-time studies during coating and post-deposition annealing in organic semiconductors. <i>Thin Solid Films</i> , <b>2011</b> , 519, 2678-2681	2.2	14
14	Organic position sensitive photodetectors based on lateral donor-acceptor concentration gradients. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 103305	3.4	14
13	MieLab: A Software Tool to Perform Calculations on the Scattering of Electromagnetic Waves by Multilayered Spheres. <i>International Journal of Spectroscopy</i> , <b>2011</b> , 2011, 1-10		49
12	Geometrical Tunability of Linear Optical Response of Silica-Gold Double Concentric Nanoshells. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 4414-4417	3.8	30
11	Elongated Gold Nanoparticles Obtained by Ion Implantation in Silica: Characterization and T-Matrix Simulations. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 746-751	3.8	23
10	Tuning the aspect ratio of silver nanospheroids embedded in silica. <i>Optics Letters</i> , <b>2010</b> , 35, 703-5	3	14
9	Hydrogen plasma etching of silicon dioxide in a hollow cathode system. <i>Thin Solid Films</i> , <b>2010</b> , 518, 3156-3159	2.1	15
8	Scattering of electromagnetic radiation by a multilayered sphere. <i>Computer Physics Communications</i> , <b>2009</b> , 180, 2348-2354	4.2	122
7	Synthesis and characterization of silver-carbon nanoparticles produced by high-current pulsed arc. <i>Thin Solid Films</i> , <b>2009</b> , 518, 1484-1488	2.2	9
6	Determination of the size distribution of metallic nanoparticles by optical extinction spectroscopy. <i>Applied Optics</i> , <b>2009</b> , 48, 566-72	0.2	23
5	Formation of Au-Ag Core-Shell Nanostructures in Silica Matrix by Sequential Ion Implantation. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 2296-2300	3.8	32
4	Linear optical response of metallic nanoshells in different dielectric media. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2008</b> , 25, 1371	1.7	57
3	Metal and metal oxide nanoparticles produced by ion implantation in silica: A microstructural study using HRTEM. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 257, 99-103	1.2	1
2	Characterization of nanocluster formation in Cu-implanted silica: Influence of the annealing atmosphere and the ion fluence. <i>Journal of Non-Crystalline Solids</i> , <b>2006</b> , 352, 349-354	3.9	10

1	Direct observation of hydrogen permeation through grain boundaries in tungsten. <i>Emergent Materials</i> ,1	3.5	o
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