O Pea-Rodrguez

List of Publications by Citations

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	Femtosecond laser reshaping yields gold nanorods with ultranarrow surface plasmon resonances. *Science*, **2017**, 358, 640-644	33.3	176
71	Scattering of electromagnetic radiation by a multilayered sphere. *Computer Physics Communications*, **2009**, 180, 2348-2354	4.2	122
70	Protein-Assisted Assembly of Modular 3D Plasmonic Raspberry-like Core/Satellite Nanoclusters: Correlation of Structure and Optical Properties. *ACS Nano*, **2016**, 10, 5740-50	16.7	93
69	Femtosecond Laser-Controlled Tip-to-Tip Assembly and Welding of Gold Nanorods. *Nano Letters*, **2015**, 15, 8282-8	11.5	86
68	Enhanced Fano Resonance in Asymmetrical Au:Ag Heterodimers. *Journal of Physical Chemistry C*, **2011**, 115, 6410-6414	3.8	75
67	Au@Ag core-shell nanoparticles: efficient all-plasmonic Fano-resonance generators. *Nanoscale*, **2011**, 3, 3609-12	7.7	71
66	Tunable Fano resonance in symmetric multilayered gold nanoshells. *Nanoscale*, **2013**, 5, 209-16	7.7	61
65	Enhanced plasmonic behavior of bimetallic (Ag-Au) multilayered spheres. *Nanoscale Research Letters*, **2011**, 6, 279	5	60
64	Disconnecting Symmetry Breaking from Seeded Growth for the Reproducible Synthesis of High Quality Gold Nanorods. *ACS Nano*, **2019**, 13, 4424-4435	16.7	59
63	Linear optical response of metallic nanoshells in different dielectric media. *Journal of the Optical Society of America B: Optical Physics*, **2008**, 25, 1371	1.7	57
62	Optical properties of Au-Ag alloys: An ellipsometric study. *Optical Materials Express*, **2014**, 4, 403	2.6	56
61	MieLab: A Software Tool to Perform Calculations on the Scattering of Electromagnetic Waves by Multilayered Spheres. *International Journal of Spectroscopy*, **2011**, 2011, 1-10		49
60	Fabrication of Monodispersed Au@SiO2Nanoparticles with Highly Stable Silica Layers by Ultrasound-Assisted St?er Method. *Journal of Physical Chemistry C*, **2017**, 121, 9543-9551	3.8	39
59	Polyrotaxane-mediated self-assembly of gold nanospheres into fully reversible supercrystals. *Angewandte Chemie - International Edition*, **2014**, 53, 12751-5	16.4	32
58	Effects of surface oxidation on the linear optical properties of Cu nanoparticles. *Journal of the Optical Society of America B: Optical Physics*, **2011**, 28, 2735	1.7	32
57	Formation of Au?g Core?hell Nanostructures in Silica Matrix by Sequential Ion Implantation. *Journal of Physical Chemistry C*, **2009**, 113, 2296-2300	3.8	32
56	Geometrical Tunability of Linear Optical Response of Silica?old Double Concentric Nanoshells. *Journal of Physical Chemistry C*, **2010**, 114, 4414-4417	3.8	30

55	Synthesis of nanocrystalline ceria thin films by low-temperature thermal decomposition of Ce-propionate. *Thin Solid Films*, **2012**, 520, 1949-1953	2.2	27
54	Understanding the ion-induced elongation of silver nanoparticles embedded in silica. *Scientific Reports*, **2017**, 7, 922	4.9	26
53	Enzymatic Catalysis at Nanoscale: Enzyme-Coated Nanoparticles as Colloidal Biocatalysts for Polymerization Reactions. *ACS Omega*, **2017**, 2, 7305-7312	3.9	26
52	Mie calculation of electromagnetic near-field for a multilayered sphere. *Computer Physics Communications*, **2017**, 214, 225-230	4.2	24
51	Near-Electric-Field Tuned Plasmonic Au@SiO2and Ag@SiO2Nanoparticles for Efficient Utilization in Luminescence Enhancement and Surface-Enhanced Spectroscopy. *Journal of Physical Chemistry C* , **2017**, 121, 23062-23071	3.8	24
50	Elongated Gold Nanoparticles Obtained by Ion Implantation in Silica: Characterization and T-Matrix Simulations. *Journal of Physical Chemistry C*, **2010**, 114, 746-751	3.8	23
49	Determination of the size distribution of metallic nanoparticles by optical extinction spectroscopy. *Applied Optics*, **2009**, 48, 566-72	0.2	23
48	Determination of Thermal Transition Depth Profiles in Polymer Semiconductor Films with Ellipsometry. *Macromolecules*, **2013**, 46, 7325-7331	5.5	21
47	Enhanced Plasmonic Behavior of Incomplete Nanoshells: Effect of Local Field Irregularities on the Far-Field Optical Response. *Journal of Physical Chemistry C*, **2011**, 115, 22271-22275	3.8	21
46	Kinetics of amorphization induced by swift heavy ions in □quartz. *Journal of Nuclear Materials*, **2012**, 430, 125-131	3.3	17
45	Configuring Au and Ag nanorods for sensing applications. *Journal of the Optical Society of America B: Optical Physics*, **2011**, 28, 714	1.7	17
44	Optical properties of ceria□irconia epitaxial films grown from chemical solutions. *Materials Chemistry and Physics*, **2013**, 138, 462-467	4.4	16
43	Hydrogen plasma etching of silicon dioxide in a hollow cathode system. *Thin Solid Films*, **2010**, 518, 3156-3159	2.1	15
42	Ionoluminescence induced by swift heavy ions in silica and quartz: A comparative analysis. *Nuclear Instruments & Methods in Physics Research B*, **2012**, 286, 282-286	1.2	14
41	Tuning the aspect ratio of silver nanospheroids embedded in silica. *Optics Letters*, **2010**, 35, 703-5	3	14
40	Real-time studies during coating and post-deposition annealing in organic semiconductors. *Thin Solid Films*, **2011**, 519, 2678-2681	2.2	14
39	Organic position sensitive photodetectors based on lateral donor-acceptor concentration gradients. *Applied Physics Letters*, **2011**, 99, 103305	3.4	14
38	Kinetics of color center formation in silica irradiated with swift heavy ions: Thresholding and formation efficiency. *Applied Physics Letters*, **2012**, 101, 154103	3.4	14

37	Refractive index changes in amorphous SiO2 (silica) by swift ion irradiation. *Nuclear Instruments & Methods in Physics Research B*, **2012**, 277, 126-130	1.2	13
36	Formation of Hollow Gold Nanocrystals by Nanosecond Laser Irradiation. *Journal of Physical Chemistry Letters*, **2020**, 11, 670-677	6.4	13
35	Optimizing the electric field around solid and core-shell alloy nanostructures for near-field applications. *Nanoscale*, **2016**, 8, 14836-45	7.7	13
34	Optical properties of crystalline and ion-beam amorphized Bi12GeO20: Relevance for waveguide applications. *Optical Materials*, **2015**, 47, 328-332	3.3	12
33	Superabsorption of light by nanoparticles. *Nanoscale*, **2015**, 7, 18897-901	7.7	11
32	Structural damage on single-crystal diamond by swift heavy ion irradiation. *Diamond and Related Materials*, **2015**, 58, 226-229	3.5	11
31	Permanent modifications in silica produced by ion-induced high electronic excitation: experiments and atomistic simulations. *Scientific Reports*, **2017**, 7, 10641	4.9	11
30	Ionoluminescence as Sensor of Structural Disorder in Crystalline SiO$_{2}$: Determination of Amorphization Threshold by Swift Heavy Ions. *Applied Physics Express*, **2012**, 5, 011101	2.4	11
29	Hollow Gold Nanoparticles Produced by Femtosecond Laser Irradiation. *Journal of Physical Chemistry Letters*, **2020**, 11, 5108-5114	6.4	10
28	Au@Ag Core-Shell Nanorods Support Plasmonic Fano Resonances. *Scientific Reports*, **2020**, 10, 5921	4.9	10
27	Characterization of nanocluster formation in Cu-implanted silica: Influence of the annealing atmosphere and the ion fluence. *Journal of Non-Crystalline Solids*, **2006**, 352, 349-354	3.9	10
26	Modelling the dielectric function of Au-Ag alloys. *Journal of Alloys and Compounds*, **2017**, 694, 857-863	5.7	9
25	Effect of Organic Stabilizers on Silver Nanoparticles Fabricated by Femtosecond Pulsed Laser Ablation. *Applied Sciences (Switzerland)*, **2017**, 7, 793	2.6	9
24	Synthesis and characterization of silver□arbon nanoparticles produced by high-current pulsed arc. *Thin Solid Films*, **2009**, 518, 1484-1488	2.2	9
23	Using Femtosecond Laser Irradiation To Grow the Belly of Gold Nanorods. *Journal of Physical Chemistry C*, **2018**, 122, 19816-19822	3.8	8
22	In situ monitoring the optical properties of dielectric materials during ion irradiation. *Optical Materials Express*, **2016**, 6, 734	2.6	8
21	Near- and Far-Field Optical Response of Eccentric Nanoshells. *Nanoscale Research Letters*, **2017**, 12, 16	5	7
20	Micro and nano-patterning of single-crystal diamond by swift heavy ion irradiation. *Diamond and Related Materials*, **2016**, 69, 1-7	3.5	6

19	Mechanical response to swift ion irradiation-induced nano-tracks in silica. *Nuclear Instruments & Methods in Physics Research B*, **2015**, 352, 145-147	1.2	6
18	Reduction of scattering using thin all-dielectric shells designed by stochastic optimizer. *Journal of Applied Physics*, **2014**, 116, 184508	2.5	6
17	Nanoparticle-Assembled Gold Microtubes Built on Fungi Templates for SERS-Based Molecular Sensing. *ACS Applied Nano Materials*, **2019**, 2, 2533-2541	5.6	5
16	Optical Waveguides Fabricated by Ion Implantation/Irradiation: A Review Optical Waveguides Fabricated by Ion Implantation/Irradiation: A Review **2012**,		5
15	Supramolecular Control over the Interparticle Distance in Gold Nanoparticle Arrays by Cyclodextrin Polyrotaxanes. *Nanomaterials*, **2018**, 8,	5.4	5
14	On the Large Near-Field Enhancement on Nanocolumnar Gold Substrates. *Scientific Reports*, **2019**, 9, 13933	4.9	4
13	Ionoluminescence induced by 3 MeV He+ ions on as-grown and pre-damaged BaMgF4 crystals. *Journal of Luminescence*, **2013**, 136, 182-185	3.8	4
12	Embedded silver nanoparticle multilayers fabricated by femtosecond pulsed laser deposition. *Optical Materials Express*, **2014**, 4, 1943	2.6	4
11	Effect of structure and interlayer diffusion in organic position sensitive photodetectors based on complementary wedge donor/acceptor layers. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 5148-53	1.3	4
10	Toughening of graphene oxide-epoxy nanocomposites by means of very high pressures and shear rates. *Composites Science and Technology*, **2020**, 199, 108354	8.6	4
9	Controlled Alloying of Au@Ag Core–Shell Nanorods Induced by Femtosecond Laser Irradiation. *Advanced Optical Materials*, **2021**, 9, 2002134	8.1	4
8	Size Characterisation Method and Detection Enhancement of Plasmonic Nanoparticles in a Pump–Probe System. *Applied Sciences (Switzerland)*, **2017**, 7, 819	2.6	3
7	Ion Implantation for the Fabrication of Plasmonic Nanocomposites: A Brief Review **2012**,		3
6	Highly porous tungsten for plasma-facing applications in nuclear fusion power plants: a computational analysis of hollow nanoparticles. *Nuclear Fusion*, **2020**, 60, 096017	3.3	3
5	Niobium oxide coatings increase the creep and wear resistance of glass. *Materials Letters*, **2020**, 277, 128308	3.3	2
4	Exploiting the Tunable Optical Response of Metallic Nanoshells **2013**, 99-149		1
3	Metal and metal oxide nanoparticles produced by ion implantation in silica: A microstructural study using HRTEM. *Nuclear Instruments & Methods in Physics Research B*, **2007**, 257, 99-103	1.2	1
2	Rod–sphere cluster irradiation with femtosecond laser pulses: cut and paste at the nanoscale. *Nanophotonics*, **2021**, 10, 3153-3159	6.3	1

1 Direct observation of hydrogen permeation through grain boundaries in tungsten. *Emergent Materials*,1 3.5 0