JoaquÃ-n MartÃ-n-Calleja

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/365599/publications.pdf

Version: 2024-02-01

65 papers	1,585 citations	331670 21 h-index	302126 39 g-index
66 all docs	66 docs citations	66 times ranked	2720 citing authors

#	Article	IF	Citations
1	New insights into organicâ€“inorganic hybrid perovskite CH₃NH₃PbI₃nanoparticles. An experimental and theoretical study of doping in Pb²⁺sites with Sn²⁺, Sr²⁺, Cd²⁺and Ca²⁺. Nanoscale, 2015, 7, 6216-6229.	5.6	216
2	A route for the synthesis of Cu-doped TiO2 nanoparticles with a very low band gap. Chemical Physics Letters, 2013, 571, 49-53.	2.6	121
3	Experimental and theoretical study of the electronic properties of Cu-doped anatase TiO2. Physical Chemistry Chemical Physics, 2014, 16, 3835.	2.8	111
4	Introducing â€œUCA-FUKUIâ€•software: reactivity-index calculations. Journal of Molecular Modeling, 2014, 20, 2492.	1.8	96
5	Raman intensities of ethane and deuterated derivatives. Journal of Chemical Physics, 1984, 80, 4610-4619.	3.0	76
6	Photovoltaic performance of nanostructured zinc oxide sensitised with xanthene dyes. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 200, 364-370.	3.9	75
7	On the enhancement of heat transfer fluid for concentrating solar power using Cu and Ni nanofluids: An experimental and molecular dynamics study. Nano Energy, 2016, 27, 213-224.	16.0	66
8	Roman wall paintings characterization from Cripta del Museo and Alcazaba in MÃ©rida (Spain): chromatic, energy dispersive X-ray flurescence spectroscopic, X-ray diffraction and Fourier transform infrared spectroscopic analysis. Analytica Chimica Acta, 2001, 434, 331-345.	5.4	59
9	Improving openâ€circuit voltage in DSSCs using Cuâ€doped TiO₂ as a semiconductor. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 378-385.	1.8	54
10	Solvent-free ZnO dye-sensitised solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 1846-1852.	6.2	49
11	Spectroscopic analysis of roman wall paintings from Casa del Mitreo in Emerita Augusta, MÃ©rida, Spain. Talanta, 2003, 59, 1117-1139.	5.5	43
12	ZnO-based dye solar cell with pure ionic-liquid electrolyte and organic sensitizer: the relevance of the dyeâ€“oxide interaction in an ionic-liquid medium. Physical Chemistry Chemical Physics, 2011, 13, 207-213.	2.8	38
13	Revealing the role of Pb²⁺ in the stability of organicâ€“inorganic hybrid perovskite CH₃NH₃Pb_{1â^'x}Cd_xI₃: an experimental and theoretical study. Physical Chemistry Chemical Physics, 2015, 17, 23886-23896.	2.8	38
14	Direct Estimation of the Electron Diffusion Length in Dye-Sensitized Solar Cells. Journal of Physical Chemistry Letters, 2011, 2, 1045-1050.	4.6	34
15	Preparation of Au nanoparticles in a non-polar medium: obtaining high-efficiency nanofluids for concentrating solar power. An experimental and theoretical perspective. Journal of Materials Chemistry A, 2017, 5, 12483-12497.	10.3	34
16	Thermo-selective Tm_xTi_{1â^'x}O_{2â^'x/2}nanoparticles: from Tm-doped anatase TiO₂to a rutile/pyrochlore Tm₂Ti₂O₇mixture. An experimental and theoretical study with a photocatalytic application. Nanoscale, 2014, 6, 12740-12757.	5.6	32
17	Surface basicity of ceria-supported lanthana. Influence of the calcination temperature. Surface and Interface Analysis, 2006, 38, 229-233.	1.8	29
18	Electronic and Structural Properties of Highly Aluminum Ion Doped TiO₂ Nanoparticles: A Combined Experimental and Theoretical Study. ChemPhysChem, 2014, 15, 2267-2280.	2.1	29

#	Article	IF	Citations
19	Highly Al-doped TiO2 nanoparticles produced by Ball Mill Method: structural and electronic characterization. Materials Research Bulletin, 2015, 70, 704-711.	5.2	28
20	The impact of Pd on the light harvesting in hybrid organic-inorganic perovskite for solar cells. Nano Energy, 2017, 34, 141-154.	16.0	28
21	A versatile computer-controlled high-resolution LBIC system. Progress in Photovoltaics: Research and Applications, 2004, 12, 283-295.	8.1	23
22	Spectroscopic Study of Egyptian Blue Mixed with Other Pigments. Helvetica Chimica Acta, 2003, 86, 29-49.	1.6	22
23	Tm-doped TiO₂ and Tm₂Ti₂O₇ pyrochlore nanoparticles: enhancing the photocatalytic activity of rutile with a pyrochlore phase. Beilstein Journal of Nanotechnology, 2015, 6, 605-616.	2.8	20
24	Application of physicalâ€“chemical analytical techniques in the study of ancient ceramics. Analytica Chimica Acta, 2004, 502, 241-250.	5.4	17
25	A precision method for laser focusing on laser beam induced current experiments. Review of Scientific Instruments, 2002, 73, 3895-3900.	1.3	16
26	A methodology for improving laser beam induced current images of dye sensitized solar cells. Review of Scientific Instruments, 2009, 80, 063102.	1.3	15
27	Synthesis and Raman spectroscopy study of TiO₂ nanoparticles. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1970-1973.	0.8	13
28	Multi-technique analysis of high quality HPHT diamond crystal. Journal of Crystal Growth, 2012, 353, 115-119.	1.5	13
29	Study of thulium doping effect and enhancement of photocatalytic activity of rutile TiO2 nanoparticles. Materials Chemistry and Physics, 2015, 161, 175-184.	4.0	12
30	TiO2and pyrochlore Tm2Ti2O7based semiconductor as a photoelectrode for dye-sensitized solar cells. Journal Physics D: Applied Physics, 2015, 48, 145102.	2.8	12
31	Evaluation of decay photocurrent measurements in dye-sensitized solar cells: Application to laser beam-induced current technique. International Journal of Energy Research, 2012, 36, 193-203.	4.5	11
32	Raman intensities of propane in the gas phase. Journal of Raman Spectroscopy, 1985, 16, 139-142.	2.5	10
33	Hydrogen passivation of boron acceptors in as-grown boron-doped CVD diamond epilayers. Diamond and Related Materials, 2010, 19, 904-907.	3.9	9
34	Convergent study of Ruâ€“ligand interactions through QTAIM, ELF, NBO molecular descriptors and TDDFT analysis of organometallic dyes. Molecular Physics, 2014, 112, 2063-2077.	1.7	9
35	High resolution laser beam induced current images under trichromatic laser radiation: Approximation to the solar irradiation. Review of Scientific Instruments, 2010, 81, 035108.	1.3	8
36	Micro-Raman Spectroscopy for the Determination of Local Temperature Increases in TiO2 Thin Films due to the Effect of Radiation. Applied Spectroscopy, 2016, 70, 1128-1136.	2.2	8

#	ARTICLE	IF	CITATIONS
37	The Role of Surfactants in the Stability of NiO Nanofluids: An Experimental and DFT Study. ChemPhysChem, 2017, 18, 346-356.	2.1	8
38	Cu(II)-Doped TiO₂ Nanoparticles as Photoelectrode in Dye-Sensitized Solar Cells: Improvement of Open-Circuit Voltage and a Light Scattering Effect. Science of Advanced Materials, 2014, 6, 473-482.	0.7	8
39	The Detection of Salting-out. A Comparative Study. Crystal Research and Technology, 1991, 26, 35-42.	1.3	7
40	A Photochemical Reactor for the Study of Kinetics and Adsorption Phenomena. Journal of Chemical Education, 2004, 81, 537.	2.3	7
41	Study of various interventions in the faÃ§ades of a historical buildingâ€"Methodology proposal, chromatic and material analysis. Color Research and Application, 2005, 30, 382-390.	1.6	7
42	Laser texturization to improve absorption and weld penetration of aluminum alloys. Journal of Laser Applications, 2012, 24, .	1.7	6
43	Surface thulium-doped TiO2 nanoparticles used as photoelectrodes in dye-sensitized solar cells: improving the open-circuit voltage. Applied Physics A: Materials Science and Processing, 2015, 121, 1261-1269.	2.3	6
44	Experimental and theoretical analysis of nanofluids based on high temperature-heat transfer fluid with enhanced thermal properties. EPJ Applied Physics, 2017, 78, 10901.	0.7	6
45	M(Al,Ni)-TiO₂-Based Photoanode for Photoelectrochemical Solar Cells. Zeitschrift Fur Physikalische Chemie, 2018, 232, 559-577.	2.8	6
46	On-line thermal dependence study of the main solar cell electrical photoconversion parameters using low thermal emission lamps. Review of Scientific Instruments, 2012, 83, 063105.	1.3	5
47	Incorporation of Al-(hydr)oxide species onto the surface of TiO 2 nanoparticles: Improving the open-circuit voltage in dye-sensitized solar cells. Thin Solid Films, 2015, 578, 167-173.	1.8	5
48	Synthesis and Characterization of Gel-Derived, Highly Al-Doped TiO₂(Al<I>_x</I>Ti_{1â€“<I>x</I>}O<SUB Advanced Materials, 2014, 6, 2134-2145.	0.7	5
49	Pure rotational Raman spectra of deuteriated ethylenes: Molecular polarizability parameters. Journal of Raman Spectroscopy, 1986, 17, 39-43.	2.5	4
50	Evolution of Optical Transmittance in Precipitants Solutions. A Computer Simulation. Crystal Research and Technology, 1992, 27, 799-808.	1.3	4
51	High resolution laser beam induced current focusing for photoactive surface characterization. Applied Surface Science, 2006, 253, 2179-2188.	6.1	4
52	Evaluation method for pore size distribution by using capillary liquid suction tests. Journal of Porous Materials, 2010, 17, 207-215.	2.6	4
53	Experimental analysis and computer simulation of a methodology for laser focusing in the solar cell characterization by laser beam induced current. Review of Scientific Instruments, 2012, 83, 043102.	1.3	4
54	Raman intensities of cyclohexane in the gas phase. Journal of Raman Spectroscopy, 1989, 20, 291-296.	2.5	3

#	Article	IF	Citations
55	Instrumental development for measuring sorption properties of porous materials. Review of Scientific Instruments, 2006, 77, 065107.	1.3	3
56	Pore Characterization Methodology by Means of Capillary Sorption Tests. Transport in Porous Media, 2011, 86, 333-351.	2.6	3
57	Study on Shape Characterization of Crystalline Particles:â€‰ Analysis of the Standard Deviation of the Angular Projection Function. Journal of Physical Chemistry A, 2002, 106, 6334-6338.	2.5	2
58	Estimating the temperature of the active layer of dye sensitised solar cells by using a â€œsecond-order lumped parameter mathematical modelâ€• Solar Energy, 2016, 137, 80-89.	6.1	2
59	Experimental study of precipitating systems; computerised analysis of the optical transmittance and associated noise. Computers & Chemistry, 2001, 25, 447-457.	1.2	1
60	Improving photoresponse characterization of dye-sensitized solar cells: application to the laser beam-induced current technique. Measurement Science and Technology, 2010, 21, 075702.	2.6	1
61	Study of precipitant systems by computerised simulation. Influence of optical elements on the noise associated with the transmittance. Computers & Chemistry, 2001, 25, 499-508.	1.2	0
62	Theoretical study of the morphologically originated noise associated with the transmittance of a precipitation system. Computers & Chemistry, 2002, 26, 131-140.	1.2	0
63	Instrumental development attachable to high magnification microscopes for obtaining totally focalized images. Review of Scientific Instruments, 2008, 79, 113703.	1.3	0
64	The influence of chromatic components on extended depth of field imaging. Microscopy Research and Technique, 2009, 72, 403-410.	2.2	0
65	A Study of Overheating of Thermostatically Controlled TiO₂ Thin Films by Using Raman Spectroscopy. ChemPhysChem, 2015, 16, 3949-3958.	2.1	0