Marcel Di Vece

List of Publications by Year
in descending order

75 papers	1,815 citations	304602 22 h-index	265120 42 g-index
77 all docs	77 docs citations	77 times ranked	2783 citing authors

#	Article	IF	Citations
1	Three-dimensional atomic-scale structure of size-selected gold nanoclusters. Nature, 2008, 451, 46-48.	13.7	409
2	Multipole plasmons and their disappearance in few-nanometre silver nanoparticles. Nature Communications, 2015, 6, 8788.	5.8	139
3	Oxidative Dehydrogenation of Cyclohexane on Cobalt Oxide (Co₃O₄) Nanoparticles: The Effect of Particle Size on Activity and Selectivity. ACS Catalysis, 2012, 2, 2409-2423.	5.5	113
4	SiC: A Photocathode for Water Splitting and Hydrogen Storage. Angewandte Chemie - International Edition, 2009, 48, 6085-6088.	7.2	73
5	Weighing Supported Nanoparticles: Size-Selected Clusters as Mass Standards in Nanometrology. Physical Review Letters, 2008, 101, 246103.	2.9	70
6	Pinning of size-selected gold and nickel nanoclusters on graphite. Physical Review B, 2005, 72, .	1.1	55
7	Modeling the pinning of Au and Ni clusters on graphite. Physical Review B, 2006, 73, .	1.1	51
8	Tunable reflectance Mgâ€“Niâ€“H films. Applied Physics Letters, 2002, 80, 2305-2307.	1.5	46
9	Hydrogen-Induced Ostwald Ripening at Room Temperature in a Pd Nanocluster Film. Physical Review Letters, 2008, 100, 236105.	2.9	46
10	Wavelength-Dependent Nonlinear Optical Properties of Ag Nanoparticles Dispersed in a Glass Host. Journal of Physical Chemistry C, 2017, 121, 27580-27589.	1.5	45
11	Elongated nanostructures for radial junction solar cells. Reports on Progress in Physics, 2013, 76, 106502.	8.1	43
12	3D-printed concentrator arrays for external light trapping on thin film solar cells. Solar Energy Materials and Solar Cells, 2015, 139, 19-26.	3.0	43
13	Oxidative dehydrogenation of cyclohexene on size selected subnanometer cobalt clusters: improved catalytic performance via evolution of cluster-assembled nanostructures. Physical Chemistry Chemical Physics, 2012, 14, 9336.	1.3	38
14	Combined TPRx, in situ GISAXS and GIXAS studies of model semiconductor-supported platinum catalysts in the hydrogenation of ethene. Physical Chemistry Chemical Physics, 2010, 12, 5585.	1.3	37
15	Pinning of size-selected Pd nanoclusters on graphite. Journal of Chemical Physics, 2006, 125, 084704.	1.2	33
16	Combining Theory and Experiment to Characterize the Atomic Structures of Surface-Deposited Au₃₀₉Clusters. Journal of Physical Chemistry C, 2007, 111, 17846-17851.	1.5	33
17	Supportâ€dependent Performance of Sizeâ€selected Subnanometer Cobalt Clusterâ€based Catalysts in the Dehydrogenation of Cyclohexene. ChemCatChem, 2012, 4, 1632-1637.	1.8	32
18	Compositional changes of Pd-Au bimetallic nanoclusters upon hydrogenation. Physical Review B, 2009, 80, .	1.1	30

#	Article	IF	Citations
19	Increasing the optical absorption in a-Si thin films by embedding gold nanoparticles. Optical Materials, 2018, 75, 204-210.	1.7	28
20	3Dâ€printed external light trap for solar cells. Progress in Photovoltaics: Research and Applications, 2016, 24, 623-633.	4.4	26
21	Plasmonic nano-antenna a-Si:H solar cell. Optics Express, 2012, 20, 27327.	1.7	24
22	Plasmonic Scattering Back Reflector for Light Trapping in Flat Nano-Crystalline Silicon Solar Cells. ACS Photonics, 2016, 3, 685-691.	3.2	24
23	Optical switching properties from isotherms of Gd and GdMg hydride mirrors. Applied Physics Letters, 2002, 81, 1213-1215.	1.5	22
24	Mechanical-optical-electro modulation by stretching a polymer-metal nanocomposite. Nanotechnology, 2017, 28, 355702.	1.3	21
25	Co-deposition of Atomic Clusters of Different Size and Composition. Small, 2006, 2, 1270-1272.	5.2	19
26	Using a Neural Network to Improve the Optical Absorption in Halide Perovskite Layers Containing Core-Shells Silver Nanoparticles. Nanomaterials, 2019, 9, 437.	1.9	19
27	Structure of the Mg2Ni switchable mirror: an EXAFS investigation. Materials Chemistry and Physics, 2005, 91, 1-9.	2.0	17
28	2022 roadmap on 3D printing for energy. JPhys Energy, 2022, 4, 011501.	2.3	17
29	Formation and Photoluminescence of â€œCauliflowerâ€•Silicon Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 11042-11047.	1.5	16
30	Understanding the Thermal Stability of Silver Nanoparticles Embedded in a-Si. Journal of Physical Chemistry C, 2015, 119, 23767-23773.	1.5	16
31	X-ray absorption fine structure study of the structural and electronic properties of the GdMg hydride switchable mirror. Physical Review B, 2003, 67, .	1.1	15
32	Using Nanoparticles as a Bottom-up Approach to Increase Solar Cell Efficiency. KONA Powder and Particle Journal, 2019, 36, 72-87.	0.9	15
33	Fabrication and characterization of nanorod solar cells with an ultrathin a-Si:H absorber layer. Journal of Non-Crystalline Solids, 2012, 358, 2209-2213.	1.5	13
34	Shifting the aluminum nanoparticle plasmon resonance to the visible with SiN and a-Si thin films. Thin Solid Films, 2016, 603, 404-407.	0.8	13
35	Quenching of TiO2 photo catalysis by silver nanoparticles. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 230, 10-14.	2.0	11
36	Octahedral Growth of PtPd Nanocrystals. Catalysts, 2021, 11, 718.	1.6	11

#	Article	IF	Citations
37	Electrochemical study of hydrogen diffusion in yttrium hydride switchable mirrors. Journal of Alloys and Compounds, 2003, 356-357, 156-159.	2.8	10
38	Electrochemical kinetics of hydrogen intercalation in gadolinium switchable mirrors. Journal of Applied Physics, 2003, 94, 4659-4664.	1.1	9
39	<title>Electrochromism of Mg-Ni hydride switchable mirrors</title>. , 2001, 4458, 128.		8
40	Thermochromic effect in YH3â˘Î´ and Mg0.1Y0.9H2.9â˘Î´. Applied Physics Letters, 2002, 80, 1343-1345.	1.5	8
41	DEVELOPMENT OF MAGNETIC MATERIALS FOR PHOTONIC APPLICATIONS. Journal of Nonlinear Optical Physics and Materials, 2007, 16, 281-294.	1.1	8
42	Angular Dependence of Fluorescence Emission from Quantum Dots inside a Photonic Crystal. Research Letters in Nanotechnology, 2008, 2008, 1-4.	0.3	8
43	Silver nanoparticles from a gas aggregation nanoparticle source for plasmonic efficiency enhancement in a-Si solar cells. Materials Research Express, 2019, 6, 045012.	0.8	8
44	Quantum Confinement in the Spectral Response of n-Doped Germanium Quantum Dots Embedded in an Amorphous Si Layer for Quantum Dot-Based Solar Cells. ACS Applied Nano Materials, 2020, 3, 2813-2821.	2.4	8
45	Exploration of external light trapping for photovoltaic modules. Optics Express, 2016, 24, A1158.	1.7	7
46	Changing the three-dimensional magnetization exchange coupling of mixed Fe and V nanoclusters with hydrogen. Journal of Applied Physics, 2009, 105, .	1.1	6
47	Improving optical absorption in a-Si thin films with TiO2 Mie scatterers. European Physical Journal D, 2017, 71, 1.	0.6	6
48	Quantifying the plasmonic orthogonalisation of light for Si, a-Si, and perovskite solar cells. Journal of Optics (United Kingdom), 2018, 20, 085901.	1.0	6
49	Electrochemical study of hydrogen diffusion in a vanadium thin film. Electrochemistry Communications, 2004, 6, 17-21.	2.3	5
50	Germanium Quantum Dot GrÃtzelâ€Type Solar Cell. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800570.	0.8	5
51	A Photoelectrochemical Study of the GdMg Hydride Switchable Mirror. Journal of the Electrochemical Society, 2001, 148, G576.	1.3	4
52	Controlling the photoluminescence of CdSe/ZnS quantum dots with a magnetic field. Nanotechnology, 2009, 20, 135203.	1.3	4
53	Passivation of cobalt nanocluster assembled thin films with hydrogen. Thin Solid Films, 2012, 520, 5584-5588.	0.8	4
54	Concepts for external light trapping and its utilization in colored and image displaying photovoltaic modules. Progress in Photovoltaics: Research and Applications, 2017, 25, 553-568.	4.4	4

#	Article	IF	Citations
55	Very Long Plasmon Oscillation Lifetimes in the Gap Between Two Gold Particles. Plasmonics, 2018, 13, 1367-1371.	1.8	4
56	The effect of the refractive index profile on the optical response of plasmonic nanostructures inside semiconductors. Optical Materials, 2019, 96, 109314.	1.7	4
57	â€˜Planetaryâ€™ silver nanoparticles originating from a magnetron sputter plasma. Journal Physics D: Applied Physics, 2019, 52, 095301.	1.3	4
58	Possible deviations from AM1.5 illumination in coherent light simulations on plasmonic nanostructures in Perovskite solar cells. Solar Energy, 2019, 181, 452-455.	2.9	3
59	Nanoscale-Induced Formation of Silicide around Gold Nanoparticles Encapsulated in a-Si. Langmuir, 2020, 36, 939-947.	1.6	3
60	Hydrogen-induced Ostwald ripening of cobalt nanoparticles on carbon nanotubes. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	2
61	Optical Response of Silver Nanoneedles on a Mirror. Plasmonics, 2015, 10, 1089-1096.	1.8	2
62	Charging gold nanoparticles in ZnO by electric fields. Journal of Physics Condensed Matter, 2016, 28, 035303.	0.7	2
63	Cluster-assembled devices for solar energy conversion. Frontiers of Nanoscience, 2020, 15, 59-86.	0.3	2
64	Synthesis and characterization of Pd nano-pillar arrays in the metal hydride switchable mirror. Materials Research Society Symposia Proceedings, 2003, 776, 1171.	0.1	1
65	Inhomogeneous Phase Transition upon Hydrogenation of Nanocluster Pd Films. ChemPhysChem, 2009, 10, 512-515.	1.0	1
66	Design and photovoltaic performance of nanorod solar cells with amorphous silicon absorber layer thickness of only 25 nm. , 2013, , .		1
67	Inserting Hydrogen into Germanium Quantum Dots. Journal of Physical Chemistry C, 2021, 125, 24640-24647.	1.5	1
68	Design and photovoltaic performance of nanorod solar cells with amorphous silicon absorber layer thickness of only 25 nm. , 2011, , .		0
69	Switching CdSe quantum dot luminescence with a-Si:H. Nanotechnology, 2013, 24, 315202.	1.3	0
70	Luminescent tracks of high-energy photoemitted electrons accelerated by plasmonic fields. Nanophotonics, 2015, 4, 511-519.	2.9	0
71	3D-printed external light traps for solar cells. , 2015, , .		0
72	Photoluminescence as a Probe of the Electrical Charge Dependence of Gold Nanoparticles. Journal of Nanoscience and Nanotechnology, 2015, 15, 9766-9771.	0.9	0

#	Article	IF	Citations
73	Elongated Nanostructured Solar Cells with a Plasmonic Core. International Journal of Behavioral and Consultation Therapy, 2016, , 225-248.	0.4	0
74	Virtual Designer Metals for Enhancement of Plasmonic Nanoparticles Which Improve the Light Absorption in Silicon. Advanced Optical Materials, 2020, 8, 2001011.	3.6	0
75	The importance of Mie resonances in ultra-black dragonfish skin pigment particles. Journal of Nanoparticle Research, 2021, 23, 1.	0.8	0