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	2022 roadmap on 3D printing for energy. JPhys Energy, 2022, 4, 011501.	2.3	17
2	Octahedral Growth of PtPd Nanocrystals. Catalysts, 2021, 11, 718.	1.6	11
3	The importance of Mie resonances in ultra-black dragonfish skin pigment particles. Journal of Nanoparticle Research, 2021, 23, 1.	0.8	0
4	Inserting Hydrogen into Germanium Quantum Dots. Journal of Physical Chemistry C, 2021, 125, 24640-24647.	1.5	1
5	Nanoscale-Induced Formation of Silicide around Gold Nanoparticles Encapsulated in a-Si. Langmuir, 2020, 36, 939-947.	1.6	3
6	Virtual Designer Metals for Enhancement of Plasmonic Nanoparticles Which Improve the Light Absorption in Silicon. Advanced Optical Materials, 2020, 8, 2001011.	3.6	0
7	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
8	Cluster-assembled devices for solar energy conversion. Frontiers of Nanoscience, 2020, 15, 59-86.	0.3	2
9	Using Nanoparticles as a Bottom-up Approach to Increase Solar Cell Efficiency. KONA Powder and Particle Journal, 2019, 36, 72-87.	0.9	15
10	The effect of the refractive index profile on the optical response of plasmonic nanostructures inside semiconductors. Optical Materials, 2019, 96, 109314.	1.7	4
11	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
12	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
13	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
14	â€˜Planetaryâ€™ silver nanoparticles originating from a magnetron sputter plasma. Journal Physics D: Applied Physics, 2019, 52, 095301.	1.3	4
15	Very Long Plasmon Oscillation Lifetimes in the Gap Between Two Gold Particles. Plasmonics, 2018, 13, 1367-1371.	1.8	4
16	Increasing the optical absorption in a-Si thin films by embedding gold nanoparticles. Optical Materials, 2018, 75, 204-210.	1.7	28
17	Germanium Quantum Dot GrÃ¤tzelâ€Type Solar Cell. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800570.	0.8	5
18	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

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19	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
20	Improving optical absorption in a-Si thin films with TiO2 Mie scatterers. European Physical Journal D, 2017, 71, 1.	0.6	6
21	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
22	Mechanical-optical-electro modulation by stretching a polymer-metal nanocomposite. Nanotechnology, 2017, 28, 355702.	1.3	21
23	Charging gold nanoparticles in ZnO by electric fields. Journal of Physics Condensed Matter, 2016, 28, 035303.	0.7	2
24	3Dâ€printed external light trap for solar cells. Progress in Photovoltaics: Research and Applications, 2016, 24, 623-633.	4.4	26
25	Exploration of external light trapping for photovoltaic modules. Optics Express, 2016, 24, A1158.	1.7	7
26	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
27	Plasmonic Scattering Back Reflector for Light Trapping in Flat Nano-Crystalline Silicon Solar Cells. ACS Photonics, 2016, 3, 685-691.	3.2	24
28	Elongated Nanostructured Solar Cells with a Plasmonic Core. International Journal of Behavioral and Consultation Therapy, 2016, , 225-248.	0.4	0
29	Luminescent tracks of high-energy photoemitted electrons accelerated by plasmonic fields. Nanophotonics, 2015, 4, 511-519.	2.9	0
30	3D-printed external light traps for solar cells. , 2015, , .		0
31	Photoluminescence as a Probe of the Electrical Charge Dependence of Gold Nanoparticles. Journal of Nanoscience and Nanotechnology, 2015, 15, 9766-9771.	0.9	0
32	Formation and Photoluminescence of â€œCauliflowerâ€• Silicon Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 11042-11047.	1.5	16
33	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
34	Optical Response of Silver Nanoneedles on a Mirror. Plasmonics, 2015, 10, 1089-1096.	1.8	2
35	Understanding the Thermal Stability of Silver Nanoparticles Embedded in a-Si. Journal of Physical Chemistry C, 2015, 119, 23767-23773.	1.5	16
36	Multipole plasmons and their disappearance in few-nanometre silver nanoparticles. Nature Communications, 2015, 6, 8788.	5.8	139

#	ARTICLE	IF	CITATIONS
37	Hydrogen-induced Ostwald ripening of cobalt nanoparticles on carbon nanotubes. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	2
38	Switching CdSe quantum dot luminescence with a-Si:H. Nanotechnology, 2013, 24, 315202.	1.3	0
39	Elongated nanostructures for radial junction solar cells. Reports on Progress in Physics, 2013, 76, 106502.	8.1	43
40	Design and photovoltaic performance of nanorod solar cells with amorphous silicon absorber layer thickness of only 25 nm. , 2013, , .		1
41	Plasmonic nano-antenna a-Si:H solar cell. Optics Express, 2012, 20, 27327.	1.7	24
42	Supportâ€dependent Performance of Sizeâ€selected Subnanometer Cobalt Clusterâ€based Catalysts in the Dehydrogenation of Cyclohexene. ChemCatChem, 2012, 4, 1632-1637.	1.8	32
43	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
44	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
45	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
46	Quenching of TiO2 photo catalysis by silver nanoparticles. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 230, 10-14.	2.0	11
47	Passivation of cobalt nanocluster assembled thin films with hydrogen. Thin Solid Films, 2012, 520, 5584-5588.	0.8	4
48	Design and photovoltaic performance of nanorod solar cells with amorphous silicon absorber layer thickness of only 25 nm. , 2011, , .		0
49	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
50	Changing the three-dimensional magnetization exchange coupling of mixed Fe and V nanoclusters with hydrogen. Journal of Applied Physics, 2009, 105, .	1.1	6
51	Inhomogeneous Phase Transition upon Hydrogenation of Nanocluster Pd Films. ChemPhysChem, 2009, 10, 512-515.	1.0	1
52	SiC: A Photocathode for Water Splitting and Hydrogen Storage. Angewandte Chemie - International Edition, 2009, 48, 6085-6088.	7.2	73
53	Compositional changes of Pd-Au bimetallic nanoclusters upon hydrogenation. Physical Review B, 2009, 80, .	1.1	30
54	Controlling the photoluminescence of CdSe/ZnS quantum dots with a magnetic field. Nanotechnology, 2009, 20, 135203.	1.3	4

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55	Three-dimensional atomic-scale structure of size-selected gold nanoclusters. Nature, 2008, 451, 46-48.	13.7	409
56	Weighing Supported Nanoparticles: Size-Selected Clusters as Mass Standards in Nanometrology. Physical Review Letters, 2008, 101, 246103.	2.9	70
57	Hydrogen-Induced Ostwald Ripening at Room Temperature in a Pd Nanocluster Film. Physical Review Letters, 2008, 100, 236105.	2.9	46
58	Angular Dependence of Fluorescence Emission from Quantum Dots inside a Photonic Crystal. Research Letters in Nanotechnology, 2008, 2008, 1-4.	0.3	8
59	DEVELOPMENT OF MAGNETIC MATERIALS FOR PHOTONIC APPLICATIONS. Journal of Nonlinear Optical Physics and Materials, 2007, 16, 281-294.	1.1	8
60	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
61	Modeling the pinning of Au and Ni clusters on graphite. Physical Review B, 2006, 73, .	1.1	51
62	Co-deposition of Atomic Clusters of Different Size and Composition. Small, 2006, 2, 1270-1272.	5.2	19
63	Pinning of size-selected Pd nanoclusters on graphite. Journal of Chemical Physics, 2006, 125, 084704.	1.2	33
64	Structure of the Mg2Ni switchable mirror: an EXAFS investigation. Materials Chemistry and Physics, 2005, 91, 1-9.	2.0	17
65	Pinning of size-selected gold and nickel nanoclusters on graphite. Physical Review B, 2005, 72, .	1.1	55
66	Electrochemical study of hydrogen diffusion in a vanadium thin film. Electrochemistry Communications, 2004, 6, 17-21.	2.3	5
67	Electrochemical study of hydrogen diffusion in yttrium hydride switchable mirrors. Journal of Alloys and Compounds, 2003, 356-357, 156-159.	2.8	10
68	Electrochemical kinetics of hydrogen intercalation in gadolinium switchable mirrors. Journal of Applied Physics, 2003, 94, 4659-4664.	1.1	9
69	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
70	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
71	Optical switching properties from isotherms of Gd and GdMg hydride mirrors. Applied Physics Letters, 2002, 81, 1213-1215.	1.5	22
72	Tunable reflectance Mgâ€“Niâ€“H films. Applied Physics Letters, 2002, 80, 2305-2307.	1.5	46

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73	Thermochromic effect in YH3â˘Î´ and Mg0.1Y0.9H2.9â˘Î´. Applied Physics Letters, 2002, 80, 1343-1345.	1.5	8
74	<title>Electrochromism of Mg-Ni hydride switchable mirrors</title>. , 2001, 4458, 128.		8
75	A Photoelectrochemical Study of the GdMg Hydride Switchable Mirror. Journal of the Electrochemical Society, 2001, 148, G576.	1.3	4