G R R A Kumara

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2300558/publications.pdf

Version: 2024-02-01

58 papers	3,527 citations	159585 30 h-index	144013 57 g-index
58 all docs	58 docs citations	58 times ranked	2960 citing authors

#	Article	IF	Citations
1	A dye-sensitized nano-porous solid-state photovoltaic cell. Semiconductor Science and Technology, 1995, 10, 1689-1693.	2.0	419
2	An efficient dye-sensitized photoelectrochemical solar cell made from oxides of tin and zinc. Chemical Communications, 1999, , 15-16.	4.1	288
3	Dye-sensitized solar cell with the hole collector p-CuSCN deposited from a solution in n-propyl sulphide. Solar Energy Materials and Solar Cells, 2001, 69, 195-199.	6.2	235
4	Dye-Sensitized Solid-State Solar Cells:Â Use of Crystal Growth Inhibitors for Deposition of the Hole Collector. Chemistry of Materials, 2002, 14, 954-955.	6.7	234
5	A solid-state photovoltaic cell sensitized with a ruthenium bipyridyl complex. Journal Physics D: Applied Physics, 1998, 31, 1492-1496.	2.8	191
6	Fabrication of Dye-Sensitized Solar Cells Using Triethylamine Hydrothiocyanate as a CuI Crystal Growth Inhibitor. Langmuir, 2002, 18, 10493-10495.	3.5	174
7	Shiso leaf pigments for dye-sensitized solid-state solar cell. Solar Energy Materials and Solar Cells, 2006, 90, 1220-1226.	6.2	151
8	Suppression of recombinations in a dye-sensitized photoelectrochemical cell made from a film of tin IV oxide crystallites coated with a thin layer of aluminium oxide. Journal Physics D: Applied Physics, 2001, 34, 868-873.	2.8	115
9	Stability of the SnO2/MgO dye-sensitized photoelectrochemical solar cell. Solar Energy Materials and Solar Cells, 2007, 91, 544-547.	6.2	106
10	TiO₂ Surface Treatment Effects by Mg²⁺, Ba²⁺, and Al³⁺ on Sb₂S₃ Extremely Thin Absorber Solar Cells. Journal of Physical Chemistry C, 2012, 116, 13465-13471.	3.1	103
11	Dye-sensitized solid state photovoltaic cell based on composite zinc oxide/tin (IV) oxide films. Journal Physics D: Applied Physics, 1999, 32, 374-379.	2.8	100
12	Dye-sensitized solid-state solar cells made from magnesiumoxide-coated nanocrystalline titanium dioxide films: enhancement of the efficiency. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 183-185.	3.9	97
13	Nanoporous n-/selenium/p-CuCNS photovoltaic cell. Journal Physics D: Applied Physics, 1998, 31, 2326-2330.	2.8	83
14	Graphite-type activated carbon from coconut shell: a natural source for eco-friendly non-volatile storage devices. RSC Advances, 2021, 11, 2854-2865.	3.6	78
15	Sensitization of nano-porous films of TiO2 with santalin (red sandalwood pigment) and construction of dye-sensitized solid-state photovoltaic cells. Journal of Photochemistry and Photobiology A: Chemistry, 1998, 117, 137-142.	3.9	77
16	Dye-sensitized composite semiconductor nanostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 190-196.	2.7	73
17	Porous TiO2 thin films prepared by spray pyrolysis deposition (SPD) technique and their application to UV sensors. Solid State Ionics, 2004, 172, 527-531.	2.7	60
18	Large area dye-sensitized solar cells: material aspects of fabrication. Progress in Photovoltaics: Research and Applications, 2006, 14, 643-651.	8.1	58

#	Article	IF	Citations
19	Preparation of structurally modified, conductivity enhanced-p-CuSCN and its application in dye-sensitized solid-state solar cells. Journal of Power Sources, 2012, 203, 288-296.	7.8	51
20	Tuning chemistry of CuSCN to enhance the performance of TiO2/N719/CuSCN all-solid-state dye-sensitized solar cell. Chemical Communications, 2010, 46, 3360.	4.1	50
21	Quasi-solid electrolyte based on polyacrylonitrile for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 217, 308-312.	3.9	49
22	Fabrication of dye-sensitized solar cells by spray pyrolysis deposition (SPD) technique. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 167-172.	3.9	48
23	Activated coconut shell charcoal based counter electrode for dye-sensitized solar cells. Organic Electronics, 2019, 71, 93-97.	2.6	46
24	The photostability of dye-sensitized solid state photovoltaic cells: factors determining the stability of the pigment in a nanoporous n-/cyanidin/p-CuI cell. Semiconductor Science and Technology, 1997, 12, 128-132.	2.0	44
25	Deposition of thin polycrystalline films of cuprous thiocyanate on conducting glass and photoelectrochemical dye-sensitization. Thin Solid Films, 1995, 261, 307-310.	1.8	43
26	The effect of particle size and conductivity of CuI layer on the performance of solid-state dye-sensitized photovoltaic cells. Current Applied Physics, 2005, 5, 149-151.	2.4	37
27	Efficient dye-sensitized photoelectrochemical cells made from nanocrystalline tin(IV) oxideÂzinc oxide composite films. Semiconductor Science and Technology, 2003, 18, 312-318.	2.0	36
28	Solid-state Solar Cells Sensitized with Indoline Dye. Chemistry Letters, 2007, 36, 716-717.	1.3	35
29	Preparation of Fluoride-Doped Tin Oxide Films on Sodaâ€“Lime Glass Substrates by Atomized Spray Pyrolysis Technique and Their Subsequent Use in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16479-16485.	3.1	34
30	Nano-porous solid-state photovoltaic cell sensitized with tannin. Semiconductor Science and Technology, 1998, 13, 134-138.	2.0	32
31	Highly efficient, optically semi-transparent, ZnO-based dye-sensitized solar cells with Indoline D-358 as the dye. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 229, 29-32.	3.9	28
32	Dye-sensitized solid-state photovoltaic cells: Suppression of electron-hole recombination by deposition of the dye on a thin insulating film in contact with a semiconductor. Journal of Electronic Materials, 2001, 30, 992-996.	2.2	26
33	The suppression of the recombination of photogenerated carriers in a dye-sensitized nano-porous solid-state photovoltaic cell. Semiconductor Science and Technology, 1996, 11, 1737-1739.	2.0	24
34	Use of lithium iodide and tetrapropylammonium iodide in gel electrolytes for improved performance of quasi-solid-state dye-sensitized solar cells: Recording an efficiency of 6.40%. Electrochimica Acta, 2016, 191, 1037-1043.	5.2	22
35	Dye-sensitized solar cell based on optically transparent TiO2 nanocrystalline electrode prepared by atomized spray pyrolysis technique. Electrochimica Acta, 2011, 56, 9159-9161.	5.2	21
36	Novel Method to Improve Performance of Dye-sensitized Solar Cells Based on Quasi-solid Gel-Polymer Electrolytes. Electrochimica Acta, 2015, 152, 360-367.	5.2	21

#	Article	IF	Citations
37	Investigations on the photo catalytic activity of calcium doped TiO2 photo electrode for enhanced efficiency of anthocyanins based dye sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 377, 43-57.	3.9	21
38	Quasi-solid Polymer Electrolytes Based on Polyacrylonitrile and Plasticizers for Indoline Dye Sensitized Solar Cells of Efficiency 5.3%. Chemistry Letters, 2008, 37, 36-37.	1.3	19
39	The interconnected CaCO3 coated SnO2 nanocrystalline dye-sensitized solar cell with superior performance. Electrochimica Acta, 2011, 56, 4135-4138.	5.2	18
40	SnO2/ZnO composite dye-sensitized solar cells with graphene-based counter electrodes. Organic Electronics, 2018, 56, 159-162.	2.6	18
41	Shorter nanotubes and finer nanoparticles of TiO2 for increased performance in dye-sensitized solar cells. Electrochimica Acta, 2012, 63, 375-380.	5.2	17
42	Large area dye-sensitized solar cells with titanium based counter electrode. Thin Solid Films, 2012, 520, 4119-4121.	1.8	16
43	An enhancement of efficiency of a solid-state dye-sensitized solar cell due to cocktail effect of N719 and black dye. Optik, 2014, 125, 813-815.	2.9	16
44	Electrochemical impedance and X-ray photoelectron spectroscopic analysis of dye-sensitized liquid electrolyte based SnO2/ZnO solar cell. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 215, 1-10.	3.9	15
45	Vein graphite-based counter electrodes for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 344, 78-83.	3.9	15
46	Efficient solid-state dye-sensitized n-ZnO/D-358 dye/p-CuI solar cell. Electrochimica Acta, 2013, 94, 34-37.	5.2	13
47	Chlorophyll-sensitized microporous cuprous iodide photocathode. Journal of Photochemistry and Photobiology A: Chemistry, 1995, 91, 59-61.	3.9	12
48	Tin oxide based dye-sensitized solid-state solar cells: surface passivation for suppression of recombination. Materials Science in Semiconductor Processing, 2015, 40, 890-895.	4.0	12
49	Ni/N co-doped P25 TiO2 photoelectrodes for efficient Dye-Sensitized Solar Cells. Materials Science in Semiconductor Processing, 2021, 135, 106062.	4.0	12
50	A Study of the Efficiency Enhancement of the Gel Electrolyte-based SnO2 Dye-sensitized Solar Cells Through the Use of Thin Insulating Layers. Electrochimica Acta, 2016, 210, 138-146.	5.2	9
51	Photoelectrochemical solar cells made from SnO2/ZnO films sensitized with an indoline dye. Journal of Materials Research, 2010, 25, 1838-1841.	2.6	6
52	Dye-sensitized Solar Cells with an Extremely Thin Liquid Film as the Redox Electron Mediator. Chemistry Letters, 2005, 34, 572-573.	1.3	5
53	Donor-Ï€-Conjugated Spacer-Acceptor Dye-Sensitized Solid-State Solar Cell Using CuI as the Hole Collector. International Journal of Photoenergy, 2019, 2019, 1-5.	2.5	5
54	Development of Dye-Sensitized Solid-State ZnO/D149/CuSCN Solar Cell. International Journal of Nanoscience, 2014, 13, 1440007.	0.7	3

#	Article	IF	Citations
55	Highly Efficient SnO₂/MgO Composite Film-Based Dye-Sensitized Solar Cells Sensitized with N719 and D358 Dyes. International Journal of Nanoscience, 2014, 13, 1440006.	0.7	3
56	A Novel Method to Enhance the Performance of Quasi-solid-state Dye-sensitized Solar Cells Based on Polyacrylonitrile Gel Electrolyte and Nanoparticles of ZnO with Indoline D-358 as the Dye. Chemistry Letters, 2014, 43, 681-683.	1.3	2
57	Hybrid dye-sensitized solar cells with grapheneâ€"A convenient method to seal liquid state devices. Journal of Renewable and Sustainable Energy, 2018, 10, .	2.0	1
58	Al-Doped ZnO Film as a Transparent Conductive Substrate in Indoline-Sensitized Nanoporous ZnO Solar Cell.. Materials Research Society Symposia Proceedings, 2012, 1494, 345-350.	0.1	0