Hikmat Hilal

List of Publications by Year
in descending order

91 papers	1,848 citations	279798 23 h-index	315739 38 g-index
92 all docs	92 docs citations	92 times ranked	1977 citing authors

#	Article	IF	Citations
1	Nano-ZnO film photocatalysts in bench-scale continuous-flow mineralization of olive mill waste contaminants in water. International Journal of Environmental Science and Technology, 2022, 19, 4379-4392.	3.5	3
2	Effective and selective electroreduction of aqueous nitrate catalyzed by copper particles on multi-walled carbon nanotubes. Journal of Environmental Management, 2022, 305, 114420.	7.8	2
3	Optical properties and photoactivity of carbon nanodots synthesized from olive solid wastes at different carbonization temperatures. RSC Advances, 2022, 12, 4490-4500.	3.6	12
4	Cost-saving and performance-enhancement of CuInGaSe solar cells by adding CuZnSnSe as a second absorber. Solar Energy, 2022, 234, 64-80.	6.1	9
5	Spatial separation strategies to control charge recombination and dye regeneration in p-type dye sensitized solar cells. Solar Energy, 2022, 236, 107-152.	6.1	14
6	Fluorine tin oxide-supported copper nanofilms as effective and selective de-nitration electrocatalysts. Journal of Electroanalytical Chemistry, 2022, 911, 116249.	3.8	2
7	Multi-Layered Solâ€“Gel Spin-Coated CuO Nanofilm Characteristic Enhancement by Sn Doping Concentration. Processes, 2022, 10, 1277.	2.8	4
8	Effects of Sn Doping on Properties of Multilayered ZnO Films Deposited by Spin Coating/Solâ€“Gel Method. Jom, 2021, 73, 411-419.	1.9	6
9	ZnO-Based Catalyst for Photodegradation of 2-Chlorophenol in Aqueous Solution Under Simulated Solar Light Using a Continuous Flow Method. Jom, 2021, 73, 404-410.	1.9	5
10	Zinc Oxide in Photocatalytic Removal of Staphylococcus aureus and KlebsiellaÂpneumoniae from Water with Ultraviolet and Visible Solar Radiations. Jom, 2021, 73, 420-431.	1.9	4
11	Self-assembly of diclofenac prodrug into nanomicelles for enhancing the anti-inflammatory activity. RSC Advances, 2021, 11, 22433-22438.	3.6	6
12	Simulation of the Electrochemical Properties of Dye-Sensitized Solar Cells Based on Quinoxaline Dyes: Effects of Hydroxyl Group Numbers and Positions. Journal of Electronic Materials, 2021, 50, 5656-5663.	2.2	6
13	Simulation of electronic and optical properties of polyene-diphenylaniline-sensitizers for perovskite n-ZnTiO3 towards efficient dye sensitized solar cells. Materials Science in Semiconductor Processing, 2021, 134, 106037.	4.0	11
14	Optimization of Al-Doped ZnO Transparent Conducting Oxide and Emitter Layers for Enhanced Performance of Si Heterojunction Solar Cells. Journal of Electronic Materials, 2020, 49, 2179-2190.	2.2	7
15	Electrochemically and chemically deposited polycrystalline CdSe electrodes with high photoelectrochemical performance by recycling from waste films. Materials Science in Semiconductor Processing, 2020, 107, 104852.	4.0	6
16	Aqueous nitrate ion adsorption/desorption by olive solid waste-based carbon activated using ZnCl2. Sustainable Chemistry and Pharmacy, 2020, 18, 100335.	3.3	22
17	Removal of acetaminophen from water by simulated solar light photodegradation with ZnO and TiO2 nanoparticles: Catalytic efficiency assessment for future prospects. Journal of Environmental Chemical Engineering, 2020, 8, 104038.	6.7	46
18	Sub-chronic treatment with high doses of ascorbic acid reduces lead levels in hen eggs intentionally exposed to a concentrated source of lead: a pilot study. BMC Pharmacology & Toxicology, 2020, 21, 17.	2.4	4

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19	Raw clay supported ZnO nanoparticles in photodegradation of 2-chlorophenol under direct solar radiations. Journal of Environmental Chemical Engineering, 2020, 8, 104227.	6.7	26
20	Charge transfer catalysis at solid/liquid interface in photoelectrochemical processes: Enhancement of polycrystalline film electrode stability and performance. Solar Energy, 2020, 197, 443-454.	6.1	6
21	Effect of metal (Ag and Cd) substitution on methylammonium lead iodideperovskiteMAPbI3optoelectronic properties for photovoltaic applications. Organic Electronics, 2019, 75, 105393.	2.6	2
22	Kaolin-supported ZnO nanoparticle catalysts in self-sensitized tetracycline photodegradation: Zero-point charge and pH effects. Applied Clay Science, 2019, 182, 105294.	5.2	97
23	Effect of annealing temperature on physical characteristics of CuO films deposited by sol-gel spin coating. Materials Research Express, 2019, 6, 116405.	1.6	15
24	Enhancement of electrochemically deposited pristine CdTe film electrode photoelectrochemical characteristics by annealing temperature and cooling rate. Optik, 2019, 197, 163220.	2.9	4
25	Solar light-driven complete mineralization of aqueous gram-positive and gram-negative bacteria with ZnO photocatalyst. Solar Energy, 2019, 180, 351-359.	6.1	14
26	Exploring N3 ruthenium dye adsorption onto ZnTiO3 (101) and (110) surfaces for dye sensitized solar cell applications: Full computational study. Materials Today Energy, 2019, 13, 109-118.	4.7	22
27	Extremely Low-Loss Broadband Thermal Infrared Absorber Based on Tungsten Metamaterial. Journal of Electronic Materials, 2019, 48, 3304-3310.	2.2	2
28	Effects of annealing temperature and cooling rate on photo-electrochemical performance of pristine polycrystalline metal-chalcogenide film electrodes. Solar Energy, 2019, 183, 704-715.	6.1	10
29	Direct sunlight-driven degradation of 2-chlorophenol catalyzed by kaolinite-supported ZnO. International Journal of Environmental Science and Technology, 2019, 16, 6267-6276.	3.5	17
30	Optimized opto-electronic and mechanical properties of orthorhombic methylamunium lead halides (MAPbX3) (Xâ€¯=â€¯I, Br and Cl) for photovoltaic applications. Solar Energy, 2019, 182, 9-15.	6.1	24
31	Experimental study of a novel filter structure designed for MEMSâ€based sensors in electric vehicles. IET Power Electronics, 2019, 12, 4063-4069.	2.1	1
32	Effect of ZnOâ€based TCO on the performance of aâ€Si H(n)/aâ€Si H(i)/câ€Si H(p)/Al BSF(p+)/Al heterojunction solar cells. Environmental Progress and Sustainable Energy, 2019, 38, 13114.	2.3	6
33	Physical and chemical behaviour of Nabali Mohassan singleâ€cultivar olive oil during prolonged storage. Journal of the Science of Food and Agriculture, 2019, 99, 2757-2762.	3.5	4
34	Photocatalytic degradation of phenazopyridine contaminant in soil with direct solar light. Environmental Technology (United Kingdom), 2019, 40, 2928-2939.	2.2	8
35	Efficiency improvement of single-junction InGaP solar cells by advanced photovoltaic device modeling. Optik, 2018, 163, 8-15.	2.9	14
36	Effect of carbon nano tube working electrode thickness on charge transport kinetics and photo-electrochemical characteristics of dye-sensitized solar cells. Materials Research Express, 2018, 5, 025513.	1.6	1

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37	Thermally switchable meta-material absorber involving vanadium dioxide semiconductorâ€“metal transition for thermo photovoltaic conversion. Materials Research Express, 2018, 5, 015803.	1.6	8
38	Blood zinc levels in nursing women from different regions of the West Bank of Palestine. Women and Health, 2018, 58, 822-833.	1.0	6
39	Copper selenide film electrodes prepared by combined electrochemical/chemical bath depositions with high photo-electrochemical conversion efficiency and stability. Solid State Sciences, 2018, 75, 53-62.	3.2	23
40	A broad-band polarization-insensitive absorber with a wide angle range metamaterial for thermo-photovoltaic conversion. Optical and Quantum Electronics, 2018, 50, 1.	3.3	12
41	Recycled polycrystalline CdS film electrodes with enhanced photo-electrochemical characteristics. Materials Science in Semiconductor Processing, 2018, 74, 277-283.	4.0	13
42	Enhanced low-gap thermophotovoltaic cell efficiency for a wide temperature range based on a selective meta-material emitter. Solar Energy, 2018, 174, 1053-1057.	6.1	31
43	Combined electrochemical-chemical bath deposited metal selenide nano-film electrodes with high photo-electrochemical characteristics. , 2018, , .		1
44	Lead in breastmilk samples from women living in the West Bank: a cross-sectional study. Lancet, The, 2018, 391, S29.	13.7	0
45	Anthocyanin-Sensitized TiO₂ Nanoparticles for Phenazopyridine Photodegradation under Solar Simulated Light. Journal of Nanomaterials, 2018, 2018, 1-14.	2.7	19
46	Effect of under nitrogen annealing on photo-electrochemical characteristics of films deposited from authentic Cu 2 SnSe 3 sources by thermal vacuum under argon gas condensation. International Journal of Hydrogen Energy, 2017, 42, 9003-9010.	7.1	7
47	ZnO nanoparticles in complete photo-mineralization of aqueous gram negative bacteria and their organic content with direct solar light. Solar Energy Materials and Solar Cells, 2017, 168, 30-37.	6.2	19
48	Self-sensitization of tetracycline degradation with simulated solar light catalyzed by ZnO@montmorillonite. Solid State Sciences, 2017, 74, 131-143.	3.2	39
49	Natural dye-sensitized ZnO nano-particles as photo-catalysts in complete degradation of E. coli bacteria and their organic content. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 328, 207-216.	3.9	42
50	Enhanced PEC characteristics for CdSe polycrystalline film electrodes prepared by combined electrochemical/chemical bath depositions. Journal of Electroanalytical Chemistry, 2016, 774, 7-13.	3.8	18
51	Modes of tetra(4-pyridyl)porphyrinatomanganese(III) ion intercalation inside natural clays. Chemistry Central Journal, 2016, 10, 12.	2.6	8
52	Breast Milk Lead Levels in 3 Major Regions of the West Bank of Palestine. Journal of Human Lactation, 2016, 32, 455-461.	1.6	22
53	Highly active and selective catalysts for olefin hydrosilylation reactions using metalloporphyrins intercalated in natural clays. Reaction Chemistry and Engineering, 2016, 1, 194-203.	3.7	17
54	Enhanced PEC characteristics of pre-annealed CuS film electrodes by metalloporphyrin/polymer matrices. Solar Energy Materials and Solar Cells, 2016, 144, 429-437.	6.2	16

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55	Optimizing photo-mineralization of aqueous methyl orange by nano-ZnO catalyst under simulated natural conditions. Journal of Environmental Health Science & Engineering, 2015, 13, 46.	3.0	62
56	Solid olive waste in environmental cleanup: Enhanced nitrite ion removal by ZnCl2-activated carbon. Journal of Environmental Management, 2015, 152, 27-35.	7.8	26
57	High PEC conversion efficiencies from CuSe film electrodes modified with metalloporphyrin/polyethylene matrices. Electrochimica Acta, 2015, 174, 472-479.	5.2	20
58	SnSe Thin Film Electrodes Prepared by Vacuum Evaporation: Enhancement of Photoelectrochemical Efficiency by Argon Gas Condensation Method. Electrochemistry, 2014, 82, 25-30.	1.4	10
59	Film electrodes deposited from Cu2SnSe3 source in comparison with those deposited from SnSe and Cu2ZnSnSe4 sources by thermal vacuum evaporation: Effect of argon gas flow rate. Electrochimica Acta, 2014, 139, 238-243.	5.2	7
60	Enhancement of CdSe film electrode PEC characteristics by metalloporphyrin/polysiloxane matrices. Electrochimica Acta, 2014, 136, 138-145.	5.2	21
61	Curcumin-sensitized anatase TiO<inf>2</inf> nanoparticles for photodegradation of methyl orange with solar radiation. , 2013, , .		4
62	Combined electrochemical/chemical bath depositions to prepare CdS film electrodes with enhanced PEC characteristics. Journal of Electroanalytical Chemistry, 2013, 707, 117-121.	3.8	25
63	Simulation and modelling of charge transport in dye-sensitized solar cells based on carbon nano-tube electrodes. Physica Scripta, 2013, 87, 035703.	2.5	14
64	CdS/FTO thin film electrodes deposited by chemical bath deposition and by electrochemical deposition: A comparative assessment of photo-electrochemical characteristics. Solid State Sciences, 2013, 18, 83-90.	3.2	45
65	CuZnSnSe Thin Film Electrodes Prepared by Vacuum Evaporation: Enhancement of Surface Morphology and Photoelectrochemical Characteristics by Argon Gas. Materials Science Forum, 2013, 756, 273-280.	0.3	12
66	Alternative natural dyes in water purification: Anthocyanin as TiO2-sensitizer inÂmethyl orange photo-degradation. Solid State Sciences, 2011, 13, 1268-1275.	3.2	81
67	Measurement of neutral gas temperatures in nitrogen-corona discharges. Indian Journal of Physics, 2011, 85, 1433-1443.	1.8	2
68	CdS-sensitized TiO2 in phenazopyridine photo-degradation: Catalyst efficiency, stability and feasibility assessment. Journal of Hazardous Materials, 2010, 173, 318-325.	12.4	144
69	Pristine and supported ZnO-based catalysts for phenazopyridine degradation with direct solar light. Solid State Sciences, 2010, 12, 578-586.	3.2	42
70	Effect of cooling rate of pre-annealed CdS thin film electrodes prepared by chemical bath deposition: Enhancement of photoelectrochemical characteristics. Electrochimica Acta, 2009, 54, 3433-3440.	5.2	33
71	An equivalent circuit approach to organic solar cell modelling. Microelectronics Journal, 2008, 39, 1173-1180.	2.0	83
72	Solid olive waste in environmental cleanup: Oil recovery and carbon production for water purification. Journal of Environmental Management, 2007, 84, 83-92.	7.8	34

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73	Synthesis ofÂaÂnew series ofÂheterocyclic scaffolds forÂmedicinal purposes. European Journal of Medicinal Chemistry, 2006, 41, 1017-1024.	5.5	28
74	Size fractionation and characterization of natural colloids by flow-field flow fractionation coupled to multi-angle laser light scattering. Journal of Chromatography A, 2006, 1104, 272-281.	3.7	98
75	Controlling charge-transfer processes at semiconductor/liquid junctions. Electrochimica Acta, 2006, 51, 6487-6497.	5.2	33
76	Effect of Annealing and of Effect of Annealing and of Cooling Rates onn-GaAs Electrode Photoelectrochemical Characteristics. Active and Passive Electronic Components, 2004, 27, 69-80.	0.3	7
77	Enhancement of n-GaAs characteristics by combined heating, cooling rate and metalloporphyrin modification techniques. Solid State Sciences, 2004, 6, 139-146.	3.2	13
78	Thermodynamic correlations and band gap calculations in metal oxides. Progress in Solid State Chemistry, 2004, 32, 207-217.	7.2	73
79	Modification of n-Si Characteristics by Annealing and Cooling at Different Rates. Active and Passive Electronic Components, 2003, 26, 213-230.	0.3	8
80	n-GaAs Band-Edge Repositioning by Modification with Metalloporphyrin/Polysiloxane Matrices. Active and Passive Electronic Components, 2003, 26, 11-21.	0.3	8
81	Metalloporphyrin/polysiloxane modified n-GaAs surfaces: effect on photoelectrochemical efficiency and surface stability. Journal of Electroanalytical Chemistry, 2002, 527, 47-55.	3.8	16
82	Title is missing!. Transition Metal Chemistry, 2002, 27, 223-227.	1.4	4
83	Poly(siloxane)-supported decacarbonyldimanganese(0) catalyst for terminal olefin hydrosilylation reactions: the effect of the support on the catalyst selectivity, activity and stability. Journal of Molecular Catalysis A, 1999, 144, 47-59.	4.8	30
84	The catalytic activity of poly(siloxane)-supported metalloporphyrins in olefin oxidation reactions: the effect of the support on the catalytic activity and selectivity. Journal of Molecular Catalysis A, 1996, 113, 35-44.	4.8	18
85	Investigation of the catalytic activity of poly (siloxane)-supported tetra (4-pyridyl) porphyrinatomanganese (III) in olefin oxidation reactions. Journal of Molecular Catalysis, 1993, 81, 157-165.	1.2	13
86	Cluster versus non-cluster catalysis in olefin thermal isomerization and hydrosilylation in the presence of Ru3(CO)12. Journal of Organometallic Chemistry, 1993, 452, 167-173.	1.8	39
87	Hydrosilylation reactions catalysed by decacarbonyldimanganese(O). Journal of Molecular Catalysis, 1987, 39, 1-11.	1.2	39
88	Homogeneous catalysis of the reaction of silanes with alcohols using decacarbonyl dimanganese (0). Journal of Molecular Catalysis, 1986, 35, 137-142.	1.2	8
89	Homogeneous catalysis of O-silylation reactions using octacarbonyldicobalt(O). Microchemical Journal, 1986, 33, 392-398.	4.5	1
90	Effect of Annealing on the Properties of SnSe Film Prepared by Thermal Vacuum Evaporation in the Presence of Argon Gas. Advanced Materials Research, 0, 1024, 323-326.	0.3	2

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91	Fungusâ€based bioremediation of olive mill wastewater and potential use in horticulture. Water and Environment Journal, 0, , .	2.2	2