

Oh-Shim Joo

List of Publications by Year in descending order

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80
papers

4,034
citations

147726

31
h-index

118793

62
g-index

82
all docs

82
docs citations

82
times ranked

5603
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent trends in development of hematite (α -Fe ₂ O ₃) as an efficient photoanode for enhancement of photoelectrochemical hydrogen production by solar water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 23334-23357.	3.8	48
2	Template-Free Hydrothermal Growth of Nickel Sulfide Nanorods as High-Performance Electroactive Materials for Oxygen Evolution Reaction and Supercapacitors. <i>Energy & Fuels</i> , 2021, 35, 6868-6879.	2.5	20
3	CuInS ₂ Photocathodes with Atomic Gradation-Controlled (Ta,Mo) _x (O,S) _y Passivation Layers for Efficient Photoelectrochemical H ₂ Production. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58447-58457.	4.0	14
4	A perspective on practical solar to carbon monoxide production devices with economic evaluation. <i>Sustainable Energy and Fuels</i> , 2020, 4, 199-212.	2.5	33
5	α -CuInS ₂ /n-Polymer Semiconductor Heterojunction for Photoelectrochemical Hydrogen Evolution. <i>ChemSusChem</i> , 2020, 13, 6651-6659.	3.6	8
6	Titelbild: Photoelectrochemical CO ₂ Reduction with a Rhenium Organometallic Redox Mediator at Semiconductor/Aqueous Liquid Junction Interfaces (<i>Angew. Chem.</i> 46/2019). <i>Angewandte Chemie</i> , 2019, 131, 16481-16481.	1.6	0
7	Photoelectrochemical CO ₂ Reduction with a Rhenium Organometallic Redox Mediator at Semiconductor/Aqueous Liquid Junction Interfaces. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16395-16399.	7.2	17
8	Photoelectrochemical CO ₂ Reduction with a Rhenium Organometallic Redox Mediator at Semiconductor/Aqueous Liquid Junction Interfaces. <i>Angewandte Chemie</i> , 2019, 131, 16547-16551.	1.6	8
9	Design of an amorphous TaO _x multifunctional interfacial layer on photocathodes for photoelectrochemical H ₂ evolution. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2041-2047.	5.2	15
10	Directly synthesized silver nanoparticles on gas diffusion layers by electrospray pyrolysis for electrochemical CO ₂ reduction. <i>Electrochimica Acta</i> , 2019, 303, 118-124.	2.6	21
11	Charge transportation at cascade energy structure interfaces of CuIn _x Ga _{1-x} Se _y S _{2-y} /CdS/ZnS for spontaneous water splitting. <i>Electrochimica Acta</i> , 2019, 297, 633-640.	2.6	11
12	Enhanced Water Oxidation Photoactivity of Nano-Architected α -Fe ₂ O ₃ @WO ₃ Composite Synthesized by Single-Step Hydrothermal Method. <i>Journal of Electronic Materials</i> , 2018, 47, 2359-2365.	1.0	5
13	Efficient hydrogen evolution performance of phase-pure NiS electrocatalysts grown on fluorine-doped tin oxide-coated glass by facile chemical bath deposition. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 13022-13031.	3.8	15
14	Insight into Charge Separation in WO ₃ /BiVO ₄ Heterojunction for Solar Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 19780-19790.	4.0	142
15	Electrochemical deposition of cadmium selenide films and their properties: a review. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 2517-2530.	1.2	19
16	Spontaneous solar water splitting by DSSC/CIGS tandem solar cells. <i>Solar Energy</i> , 2016, 135, 821-826.	2.9	11
17	Highly stable tandem solar cell monolithically integrating dye-sensitized and CIGS solar cells. <i>Scientific Reports</i> , 2016, 6, 30868.	1.6	25
18	D-sorbitol-induced phase control of TiO ₂ nanoparticles and its application for dye-sensitized solar cells. <i>Scientific Reports</i> , 2016, 6, 20103.	1.6	93

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19	Enhanced Photocurrents with ZnS Passivated Cu(In,Ga)(Se,S) ₂ Photocathodes Synthesized Using a Nonvacuum Process for Solar Water Splitting. <i>Journal of the American Chemical Society</i> , 2016, 138, 15673-15681.	6.6	72
20	Electrocatalytic behavior of glassy carbon electrode modified with ruthenium nanoparticles and ruthenium film. <i>Journal of Applied Electrochemistry</i> , 2016, 46, 459-468.	1.5	10
21	High-Performance Platinum-Free Dye-Sensitized Solar Cells with Molybdenum Disulfide Films as Counter Electrodes. <i>ChemPhysChem</i> , 2015, 16, 3959-3965.	1.0	27
22	Effect of the Si/TiO ₂ /BiVO ₄ Heterojunction on the Onset Potential of Photocurrents for Solar Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 5788-5796.	4.0	60
23	La ₂ O ₃ -encapsulated SnO ₂ nanocrystallite-based photoanodes for enhanced DSSCs performance. <i>Dalton Transactions</i> , 2015, 44, 3075-3081.	1.6	12
24	Calcium carbonate electronic-insulating layers improve the charge collection efficiency of tin oxide photoelectrodes in dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2015, 167, 379-387.	2.6	7
25	Sputtering and sulfurization-combined synthesis of a transparent WS ₂ counter electrode and its application to dye-sensitized solar cells. <i>RSC Advances</i> , 2015, 5, 103567-103572.	1.7	32
26	Highly stable RuO ₂ /SnO ₂ nanocomposites as anode electrocatalysts in a PEM water electrolysis cell. <i>International Journal of Energy Research</i> , 2014, 38, 875-883.	2.2	45
27	Spraying distance and titanium chloride surface treatment effects on DSSC performance of electro sprayed SnO ₂ photoanodes. <i>RSC Advances</i> , 2014, 4, 35919.	1.7	15
28	Synthesis of Bi ₂ WO ₆ photoanode on transparent conducting oxide substrate with low onset potential for solar water splitting. <i>RSC Advances</i> , 2014, 4, 24032-24037.	1.7	13
29	Morphology control of one-dimensional heterojunctions for highly efficient photoanodes used for solar water splitting. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11408.	5.2	52
30	Mass scale sugar-mediated green synthesis and DSSCs application of tin oxide nanostructured photoanode: Effect of zinc sulphide layering on charge collection efficiency. <i>Electrochimica Acta</i> , 2014, 147, 408-417.	2.6	13
31	Role of HA additive in quantum dot solar cell with Co[(bpy) ₃] ^{2+/3+} -based electrolyte. <i>RSC Advances</i> , 2014, 4, 26907-26911.	1.7	21
32	Influence of TiO ₂ nanotube morphology and TiCl ₄ treatment on the charge transfer in dye-sensitized solar cells. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 112, 733-737.	1.1	10
33	Cobalt sulfide thin films for counter electrodes of dye-sensitized solar cells with cobalt complex based electrolytes. <i>Electrochimica Acta</i> , 2013, 114, 745-749.	2.6	20
34	Construction of efficient CdS/TiO ₂ heterojunction for enhanced photocurrent, photostability, and photoelectron lifetimes. <i>Journal of Colloid and Interface Science</i> , 2013, 402, 94-99.	5.0	35
35	Bismuth oxide nanoplates-based efficient DSSCs: Influence of ZnO surface passivation layer. <i>Electrochimica Acta</i> , 2013, 111, 593-600.	2.6	42
36	Low temperature chemically synthesized rutile TiO ₂ photoanodes with high electron lifetime for organic dye-sensitized solar cells. <i>Chemical Communications</i> , 2013, 49, 2921.	2.2	37

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37	Facile preparation of nanostructured γ -Fe ₂ O ₃ thin films with enhanced photoelectrochemical water splitting activity. <i>Journal of Materials Chemistry A</i> , 2013, 1, 5554.	5.2	42
38	Enhanced photoanode properties of CdS nanoparticle sensitized TiO ₂ nanotube arrays by solvothermal synthesis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2013, 259, 1-9.	2.0	47
39	Template-free electrochemical synthesis and electrochemical supercapacitors application of polyaniline nanobuds. <i>Journal of Applied Polymer Science</i> , 2013, 128, 3660-3664.	1.3	15
40	Monoclinic WO ₃ nanorods@rutile TiO ₂ nanoparticles core-shell interface for efficient DSSCs. <i>Dalton Transactions</i> , 2013, 42, 10085.	1.6	23
41	Electrospray deposited Pt film for hydrogen evolution reaction: Effect of solvent solution. <i>Applied Surface Science</i> , 2013, 265, 222-225.	3.1	6
42	Photoelectrochemical water splitting at nanostructured γ -Fe ₂ O ₃ electrodes. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 13989-13997.	3.8	83
43	Electrospray-deposited nickel ferrite thin film electrode for hydrogen production in PV-assisted water electrolysis system. <i>International Journal of Energy Research</i> , 2012, 36, 1044-1050.	2.2	10
44	Structural analysis and dye-sensitized solar cell application of electrodeposited tin oxide nanoparticles. <i>Materials Letters</i> , 2012, 79, 29-31.	1.3	21
45	Spray pyrolytic deposition of polycrystalline Cu ₂ S thin films. <i>Materials Chemistry and Physics</i> , 2011, 131, 525-528.	2.0	12
46	Recent status of chemical bath deposited metal chalcogenide and metal oxide thin films. <i>Current Applied Physics</i> , 2011, 11, 117-161.	1.1	309
47	Metal oxide thin film based supercapacitors. <i>Current Applied Physics</i> , 2011, 11, 255-270.	1.1	758
48	Durability study of electrospray deposited Pt film electrode for hydrogen production in PV assisted water electrolysis system. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 3347-3353.	3.8	10
49	Cobalt Ferrite Nanocrystallites for Sustainable Hydrogen Production Application. <i>International Journal of Electrochemistry</i> , 2011, 2011, 1-6.	2.4	37
50	Low Pt loading, wide area electrospray deposition technique for highly efficient hydrogen evolving electrode in photoelectrochemical cell. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 6541-6548.	3.8	29
51	NAD ⁺ hydrogenation on Au electrode deposited on modified glassy carbon. <i>Electrochemistry Communications</i> , 2010, 12, 1371-1374.	2.3	13
52	Electrodeposited porous and amorphous copper oxide film for application in supercapacitor. <i>Materials Chemistry and Physics</i> , 2009, 114, 6-9.	2.0	193
53	Synthesis of cobalt oxide interconnected flacks and nano-worms structures using low temperature chemical bath deposition. <i>Journal of Alloys and Compounds</i> , 2009, 478, 594-598.	2.8	54
54	Synthesis of photosensitive nanograined TiO ₂ thin films by SILAR method. <i>Journal of Alloys and Compounds</i> , 2009, 478, 711-715.	2.8	48

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55	Cu-Zn-Cr ₂ O ₃ Catalysts for Dimethyl Ether Synthesis: Structure and Activity Relationship. <i>Catalysis Letters</i> , 2008, 123, 142-149.	1.4	27
56	Simple chemical method for nanoporous network of In ₂ S ₃ platelets for buffer layer in CIS solar cells. <i>Journal of Materials Processing Technology</i> , 2008, 201, 775-779.	3.1	51
57	Electrodeposition of photoactive 1D gallium selenide quantum dots. <i>Electrochimica Acta</i> , 2008, 54, 829-834.	2.6	18
58	Growth of TiO ₂ nanorods by chemical bath deposition method. <i>Applied Surface Science</i> , 2008, 255, 2682-2687.	3.1	56
59	Porous Weblike Network of InSe on a Compact Layer by Electrodeposition. <i>Journal of the Electrochemical Society</i> , 2008, 155, E57.	1.3	3
60	Spray deposited amorphous RuO ₂ for an effective use in electrochemical supercapacitor. <i>Electrochemistry Communications</i> , 2007, 9, 504-510.	2.3	205
61	Unprecedented coloration of rutile titanium dioxide nanocrystalline thin films. <i>Micron</i> , 2007, 38, 85-90.	1.1	16
62	Electrosynthesis of molybdenum oxide thin films onto stainless substrates. <i>Electrochemistry Communications</i> , 2006, 8, 273-278.	2.3	24
63	Formation of self-assembled quantum dots of iron oxide thin films by spray pyrolysis from non-aqueous medium. <i>Applied Surface Science</i> , 2006, 252, 8039-8042.	3.1	10
64	A simple and low temperature process for super-hydrophilic rutile TiO ₂ thin films growth. <i>Applied Surface Science</i> , 2006, 253, 581-585.	3.1	14
65	Spray pyrolytic synthesis of large area NiO x thin films from aqueous nickel acetate solutions. <i>Applied Surface Science</i> , 2006, 253, 1781-1786.	3.1	94
66	Preparation and characterization of titanium dioxide thin films by SILAR method. <i>Materials Chemistry and Physics</i> , 2006, 97, 5-9.	2.0	29
67	Improved performance of dense TiO ₂ /CdSe coupled thin films by low temperature process. <i>Electrochimica Acta</i> , 2005, 50, 2453-2459.	2.6	61
68	Electrodeposition of TiO ₂ and RuO ₂ thin films for morphology-dependent applications. <i>Ultramicroscopy</i> , 2005, 105, 267-274.	0.8	37
69	A chemical route to room-temperature synthesis of nanocrystalline TiO ₂ thin films. <i>Applied Surface Science</i> , 2005, 246, 72-76.	3.1	16
70	Rapid growth of nanocrystalline CuInS ₂ thin films in alkaline medium at room temperature. <i>Applied Surface Science</i> , 2005, 252, 1981-1987.	3.1	10
71	A simple electrosynthesis route for preparation of nanocrystalline titanium sulphide film. <i>Journal of Materials Science</i> , 2005, 40, 5771-5774.	1.7	1
72	Cathodic electrodeposition of amorphous titanium oxide films from an alkaline solution bath. <i>Journal of Materials Science</i> , 2005, 40, 491-494.	1.7	5

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73	Room temperature chemical deposition of amorphous TiO ₂ thin films from Ti(III) chloride solution. Journal of Materials Science, 2004, 39, 2915-2918.	1.7	43
74	Cathodic electrodeposition of amorphous titanium oxide films from an alkaline solution bath. Journal of Materials Science, 2004, 39, 6607-6610.	1.7	27
75	Performance of supercapacitor with electrodeposited ruthenium oxide film electrodes effect of film thickness. Journal of Power Sources, 2004, 134, 148-152.	4.0	163
76	Structural change of Cu/ZnO by reduction of ZnO in Cu/ZnO with methanol. Catalysis Letters, 2000, 68, 49-54.	1.4	42
77	ZnO/Cr ₂ O ₃ catalyst for reverse-water-gas-shift reaction of CAMERE process. Korean Journal of Chemical Engineering, 2000, 17, 719-722.	1.2	33
78	Carbon Dioxide Hydrogenation To Form Methanol via a Reverse-Water-Gas-Shift Reaction (the CAMERE) Tj ETQq0 0.0 rgBT / Overlock 10	1.8	240
79	Migration and reduction of formate to form methanol on CuZnO catalysts. Applied Catalysis A: General, 1996, 135, 273-286.	2.2	40
80	Deactivation of Cu/ZnO catalyst during dehydrogenation of methanol. Catalysis Letters, 1995, 35, 303-311.	1.4	29