

Shigeru Ikeda

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152
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ext. citations

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avg, IF

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L-index

#	Paper	IF	Citations
144	Ligand-free platinum nanoparticles encapsulated in a hollow porous carbon shell as a highly active heterogeneous hydrogenation catalyst. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 7063-6	16.4	309
143	Photocatalytic degradation of organic compounds in aqueous systems by transition metal doped polycrystalline TiO ₂ . <i>Catalysis Today</i> , 2002 , 75, 87-93	5.3	269
142	Pt/In ₂ S ₃ /CdS/Cu ₂ ZnSnS ₄ Thin Film as an Efficient and Stable Photocathode for Water Reduction under Sunlight Radiation. <i>Journal of the American Chemical Society</i> , 2015 , 137, 13691-7	16.4	221
141	Quantitative analysis of defective sites in titanium(IV) oxide photocatalyst powders. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 778-783	3.6	200
140	Photocatalytic activity of transition-metal-loaded titanium(IV) oxide powders suspended in aqueous solutions: Correlation with electron-hole recombination kinetics. <i>Physical Chemistry Chemical Physics</i> , 2001 , 3, 267-273	3.6	177
139	Asymmetrically modified silica particles: a simple particulate surfactant for stabilization of oil droplets in water. <i>Journal of the American Chemical Society</i> , 2005 , 127, 6271-5	16.4	165
138	Plasmon-Enhanced Photocatalytic Activity of Cadmium Sulfide Nanoparticle Immobilized on Silica-Coated Gold Particles. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 2057-2062	6.4	163
137	Enhancement of solar hydrogen evolution from water by surface modification with CdS and TiO ₂ on porous CuInS ₂ photocathodes prepared by an electrodeposition-sulfurization method. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 11808-12	16.4	151
136	Pore formation in silicon by wet etching using micrometre-sized metal particles as catalysts. <i>Journal of Materials Chemistry</i> , 2008 , 18, 1015		146
135	Preparation of K ₂ La ₂ Ti ₃ O ₁₀ by Polymerized Complex Method and Photocatalytic Decomposition of Water. <i>Chemistry of Materials</i> , 1998 , 10, 72-77	9.6	145
134	Thin film solar cell based on CuSbS ₂ absorber fabricated from an electrochemically deposited metal stack. <i>Thin Solid Films</i> , 2014 , 550, 700-704	2.2	137
133	Pure Sulfide Cu ₂ ZnSnS ₄ Thin Film Solar Cells Fabricated by Preheating an Electrodeposited Metallic Stack. <i>Advanced Energy Materials</i> , 2014 , 4, 1301381	21.8	135
132	Determination of oxygen sources for oxidation of benzene on TiO ₂ photocatalysts in aqueous solutions containing molecular oxygen. <i>Journal of the American Chemical Society</i> , 2010 , 132, 8453-8	16.4	128
131	Mechano-catalytic overall water splitting. <i>Chemical Communications</i> , 1998 , 2185-2186	5.8	121
130	Fabrication of Hollow Carbon Nanospheres Encapsulating Platinum Nanoparticles Using a Photocatalytic Reaction. <i>Advanced Materials</i> , 2007 , 19, 597-601	24	120
129	Discrimination of the active crystalline phases in anatase-rutile mixed titanium(IV) oxide photocatalysts through action spectrum analyses. <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 5910-5914	3.6	120
128	Selective Adsorption of Glucose-Derived Carbon Precursor on Amino-Functionalized Porous Silica for Fabrication of Hollow Carbon Spheres with Porous Walls. <i>Chemistry of Materials</i> , 2007 , 19, 4335-4340	9.6	119

127	A perspective on fabricating carbon-based nanomaterials by photocatalysis and their applications. <i>Energy and Environmental Science</i> , 2012 , 5, 9307	35.4	112
126	Rhodium Nanoparticle Encapsulated in a Porous Carbon Shell as an Active Heterogeneous Catalyst for Aromatic Hydrogenation. <i>Advanced Functional Materials</i> , 2008 , 18, 2190-2196	15.6	105
125	Catalytic activity and regeneration property of a Pd nanoparticle encapsulated in a hollow porous carbon sphere for aerobic alcohol oxidation. <i>Langmuir</i> , 2010 , 26, 17720-5	4	104
124	Photocatalytic activity of hydrothermally synthesized tantalate pyrochlores for overall water splitting. <i>Applied Catalysis A: General</i> , 2006 , 300, 186-190	5.1	100
123	Potentiostatic electrodeposition of cuprous oxide thin films for photovoltaic applications. <i>Electrochimica Acta</i> , 2011 , 56, 4882-4888	6.7	93
122	Overall Water Splitting on Tungsten-Based Photocatalysts with Defect Pyrochlore Structure. <i>Catalysis Letters</i> , 2004 , 98, 229-233	2.8	92
121	Platinum and indium sulfide-modified CuInS ₂ as efficient photocathodes for photoelectrochemical water splitting. <i>Chemical Communications</i> , 2014 , 50, 8941-8943	5.8	88
120	A simple method for preparing highly active palladium catalysts loaded on various carbon supports for liquid-phase oxidation and hydrogenation reactions. <i>Journal of Molecular Catalysis A</i> , 2007 , 268, 59-64		85
119	Effect of the particle size for photocatalytic decomposition of water on Ni-loaded K ₄ Nb ₆ O ₁₇ . <i>Microporous Materials</i> , 1997 , 9, 253-258		84
118	Origin of Visible Light Absorption in GaN-Rich (Ga _{1-x} Zn _x)(N _{1-x} O _x) Photocatalysts. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 18853-18855	3.8	79
117	Photochemical hydrogen evolution from aqueous triethanolamine solutions sensitized by binaphthol-modified titanium(IV) oxide under visible-light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003 , 160, 61-67	4.7	72
116	Mechano-catalysis: a novel method for overall water splitting. <i>Physical Chemistry Chemical Physics</i> , 1999 , 1, 4485-4491	3.6	71
115	Photosplitting of Water from Wide-Gap Cu(In,Ga)S ₂ Thin Films Modified with a CdS Layer and Pt Nanoparticles for a High-Onset-Potential Photocathode. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 8576-8583	3.8	68
114	An efficient and reusable carbon-supported platinum catalyst for aerobic oxidation of alcohols in water. <i>Chemical Communications</i> , 2008 , 3181-3	5.8	66
113	Encapsulation of titanium(IV) oxide particles in hollow silica for size-selective photocatalytic reactions. <i>Chemical Communications</i> , 2007 , 3753-5	5.8	64
112	Photoreduction of water by using modified CuInS ₂ electrodes. <i>ChemSusChem</i> , 2011 , 4, 262-8	8.3	63
111	Mechanistic aspects of preheating effects of electrodeposited metallic precursors on structural and photovoltaic properties of Cu ₂ ZnSnS ₄ thin films. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 120, 218-225	6.4	60
110	Multicomponent sulfides as narrow gap hydrogen evolution photocatalysts. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 13943-9	3.6	57

109	Phase-Boundary Catalysis of Alkene Epoxidation with Aqueous Hydrogen Peroxide Using Amphiphilic Zeolite Particles Loaded with Titanium Oxide. <i>Journal of Catalysis</i> , 2001 , 204, 402-408	7.3	57
108	Photocatalytic Organic Syntheses: Selective Cyclization of Amino Acids in Aqueous Suspensions. <i>Catalysis Surveys From Asia</i> , 2003 , 7, 165-176	2.8	55
107	Investigating relation of photovoltaic factors with properties of perovskite films based on various solvents. <i>Nano Energy</i> , 2016 , 21, 51-61	17.1	54
106	Over 1% Efficient Unbiased Stable Solar Water Splitting Based on a Sprayed Cu ₂ ZnSnS ₄ Photocathode Protected by a HfO ₂ Photocorrosion-Resistant Film. <i>ACS Energy Letters</i> , 2018 , 3, 1875-1881	20.1	54
105	Single-step electrodeposition of a microcrystalline Cu ₂ ZnSnSe ₄ thin film with a kesterite structure. <i>Electrochimica Acta</i> , 2013 , 88, 436-442	6.7	52
104	Phase-boundary catalysis: a new approach in alkene epoxidation with hydrogen peroxide by zeolite loaded with alkylsilane-covered titanium oxide. <i>Chemical Communications</i> , 2000 , 2235-2236	5.8	51
103	Fabrication of CuInS ₂ and Cu(In,Ga)S ₂ thin films by a facile spray pyrolysis and their photovoltaic and photoelectrochemical properties. <i>Catalysis Science and Technology</i> , 2013 , 3, 1849	5.5	50
102	Preparation of a high active photocatalyst, K ₂ La ₂ Ti ₃ O ₁₀ , by polymerized complex method and its photocatalytic activity of water splitting. <i>Journal of Materials Research</i> , 1998 , 13, 852-855	2.5	50
101	Investigation of the Electric Structures of Heterointerfaces in Pt- and InSb-Modified CuInS ₂ Photocathodes Used for Sunlight-Induced Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 16086-92	9.5	48
100	Cu ₂ ZnSnS ₄ thin film solar cells with 5.8% conversion efficiency obtained by a facile spray pyrolysis technique. <i>RSC Advances</i> , 2015 , 5, 77565-77571	3.7	46
99	Synthesis of NiO-loaded KTiNbO ₅ photocatalysts by a novel polymerizable complex method. <i>Journal of Alloys and Compounds</i> , 1999 , 285, 77-81	5.7	46
98	Light intensity dependence of the action spectra of photocatalytic reactions with anatase titanium(IV) oxide. <i>Chemical Physics Letters</i> , 2004 , 392, 220-224	2.5	45
97	Cu(In,Ga)(S,Se) ₂ thin film solar cell with 10.7% conversion efficiency obtained by selenization of the Na-doped spray-pyrolyzed sulfide precursor film. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 6472-9	9.5	44
96	Structural and Solar Cell Properties of a Ag-Containing CuZnSnS Thin Film Derived from Spray Pyrolysis. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 5455-5463	9.5	44
95	Evaluation of electron-hole recombination properties of titanium (IV) oxide particles with high photocatalytic activity. <i>Research on Chemical Intermediates</i> , 2007 , 33, 285-296	2.8	44
94	Selective production of CuSbS ₂ , Cu ₃ SbS ₃ , and Cu ₃ SbS ₄ nanoparticles using a hot injection protocol. <i>RSC Advances</i> , 2014 , 4, 40969-40972	3.7	42
93	Fabrication of CuInS ₂ films from electrodeposited Cu/In bilayers: effects of preheat treatment on their structural, photoelectrochemical and solar cell properties. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 6662-9	3.6	37
92	Preparation of platinized strontium titanate covered with hollow silica and its activity for overall water splitting in a novel phase-boundary photocatalytic system. <i>Catalysis Today</i> , 2006 , 117, 343-349	5.3	37

91	Photocatalytic redox-combined synthesis of l-pipecolic acid from l-lysine by suspended titania particles: effect of noble metal loading on the selectivity and optical purity of the product. <i>Journal of Catalysis</i> , 2003 , 217, 152-152	7.3	36
90	Transition metal Schiff-base complexes chemically anchored on Y-zeolite: their preparation and catalytic epoxidation of 1-octene in the suspension and phase boundary systems. <i>Journal of Molecular Catalysis A</i> , 2005 , 225, 181-188		36
89	Two routes for mineralizing benzene by TiO ₂ -photocatalyzed reaction. <i>Applied Catalysis B: Environmental</i> , 2011 , 107, 119-127	21.8	35
88	Effect of Indium Doping on Surface Optoelectrical Properties of Cu ₂ ZnSnS ₄ Photoabsorber and Interfacial/Photovoltaic Performance of Cadmium Free In ₂ S ₃ /Cu ₂ ZnSnS ₄ Heterojunction Thin Film Solar Cell. <i>Chemistry of Materials</i> , 2016 , 28, 3283-3291	9.6	35
87	Size-selective photocatalytic reactions by titanium(IV) oxide coated with a hollow silica shell in aqueous solutions. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 6319-26	3.6	34
86	Promising GeSe Nanosheet-Based Thin-Film Photocathode for Efficient and Stable Overall Solar Water Splitting. <i>ACS Catalysis</i> , 2019 , 9, 3090-3097	13.1	32
85	Photooxidation of organic compounds in a solution containing hydrogen peroxide and TiO ₂ particles under visible light. <i>Journal of Applied Electrochemistry</i> , 2005 , 35, 793-797	2.6	32
84	Mechano-catalytic overall water splitting on some mixed oxides. <i>Catalysis Today</i> , 2000 , 63, 175-181	5.3	32
83	Homogeneous electrochemical deposition of in on a Cu-covered Mo substrate for fabrication of efficient solar cells with a CuInS ₂ photoabsorber. <i>Electrochimica Acta</i> , 2012 , 79, 189-196	6.7	31
82	High sintering resistance of platinum nanoparticles embedded in a microporous hollow carbon shell fabricated through a photocatalytic reaction. <i>Langmuir</i> , 2008 , 24, 6307-12	4	31
81	Impact of alloying duration of an electrodeposited Cu/Sn/Zn metallic stack on properties of Cu ₂ ZnSnS ₄ absorbers for thin-film solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2015 , 23, 1884-1895	6.8	30
80	Photocatalytic Route for Synthesis of Hollow Porous Carbon/Pt Nanocomposites with Controllable Density and Porosity. <i>Chemistry of Materials</i> , 2008 , 20, 1154-1160	9.6	29
79	3.17% efficient Cu ₂ ZnSnS ₄ BiVO ₄ integrated tandem cell for standalone overall solar water splitting. <i>Energy and Environmental Science</i> , 2021 , 14, 1480-1489	35.4	29
78	Mechano-catalytic overall water-splitting into hydrogen and oxygen on some metal oxides. <i>Applied Energy</i> , 2000 , 67, 159-179	10.7	28
77	Direct Observation of Bimodal Amphiphilic Surface Structures of Zeolite Particles for a Novel Liquid-Liquid Phase Boundary Catalysis. <i>Langmuir</i> , 2001 , 17, 7976-7979	4	28
76	Impact of Precursor Compositions on the Structural and Photovoltaic Properties of Spray-Deposited Cu ₂ ZnSnS ₄ Thin Films. <i>ChemSusChem</i> , 2016 , 9, 2414-20	8.3	28
75	Asymmetrically modified titanium(IV) oxide particles having both hydrophobic and hydrophilic parts of their surfaces for liquid-liquid dual-phase photocatalytic reactions. <i>Applied Catalysis A: General</i> , 2004 , 265, 69-74	5.1	26
74	Photoinduced chemical reactions on natural single crystals and synthesized crystallites of mercury(II) sulfide in aqueous solution containing naturally occurring amino acids. <i>Inorganic Chemistry</i> , 2003 , 42, 1518-24	5.1	23

73	Mechano-catalytic overall water splitting on some oxides (II). <i>Applied Catalysis A: General</i> , 2000 , 200, 255-262	5.1	22
72	Environmentally friendly CuZnSnS-based photocathode modified with a ZnS protection layer for efficient solar water splitting. <i>Journal of Colloid and Interface Science</i> , 2019 , 536, 9-16	9.3	22
71	Effects of Zirconium Doping Into a Monoclinic Scheelite BiVO Crystal on Its Structural, Photocatalytic, and Photoelectrochemical Properties. <i>Frontiers in Chemistry</i> , 2018 , 6, 266	5	20
70	Electrochemical Synthesis of CuIn(Se,S) ₂ Layer for Thin-Film Solar Cell with a Superstrate Configuration. <i>Journal of the Electrochemical Society</i> , 2010 , 157, B99	3.9	20
69	Efficient photodecomposition of gaseous organics catalyzed by titanium(IV) oxide encapsulated in a hollow silica shell with high porosity. <i>Applied Catalysis A: General</i> , 2009 , 363, 216-220	5.1	20
68	Photocathode Characteristics of a Spray-Deposited Cu ₂ ZnGeS ₄ Thin Film for CO ₂ Reduction in a CO ₂ -Saturated Aqueous Solution. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6911-6918	6.1	19
67	Origin of the High Activity of Porous Carbon-Coated Platinum Nanoparticles for Aerobic Oxidation of Alcohols. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 12799-12805	3.8	19
66	Development of a novel photocatalytic reaction system for oxidative decomposition of volatile organic compounds in water with enhanced aeration. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003 , 160, 121-126	4.7	19
65	Novel methods for preparation of ion-exchangeable thin films. <i>Thin Solid Films</i> , 1999 , 343-344, 156-159	2.2	19
64	Tailored Photoluminescence Properties of Ag(In,Ga)Se ₂ Quantum Dots for Near-Infrared In Vivo Imaging. <i>ACS Applied Nano Materials</i> , 2020 , 3, 3275-3287	5.6	18
63	Lowering of photocatalytic activity of TiO ₂ particles during oxidative decomposition of benzene in aerated liquid. <i>Applied Catalysis B: Environmental</i> , 2010 , 94, 186-191	21.8	18
62	Visible Light-induced Hydrogen Evolution from Aqueous Suspensions of Titanium(IV) Oxide Modified with Binaphthol. <i>Electrochemistry</i> , 2002 , 70, 442-445	1.2	18
61	Effects of Porosity and Amount of Surface Hydroxyl Groups of a Porous TiO ₂ Layer on the Performance of a CH ₃ NH ₃ PbI ₃ Perovskite Photovoltaic Cell. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 22304-22309	3.8	17
60	Photoelectrochemical water reduction over wide gap (Ag,Cu)(In,Ga)S thin film photocathodes. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 12502-12508	3.6	16
59	Fabrication of pores in a silicon carbide wafer by electrochemical etching with a glassy-carbon needle electrode. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 2580-4	9.5	16
58	Effects of TiCl ₄ treatment on the structural and electrochemical properties of a porous TiO ₂ layer in CH ₃ NH ₃ PbI ₃ perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 26898-26905	3.6	16
57	Elucidation of the local structure of active titanium(IV) sites on silica-based phase-boundary catalysts for alkene epoxidation with aqueous hydrogen peroxide. <i>Physical Chemistry Chemical Physics</i> , 2004 , 6, 2523	3.6	16
56	Structural regulation of electrochemically deposited copper layers for fabrication of thin film solar cells with a CuInS ₂ photoabsorber. <i>Journal of Non-Crystalline Solids</i> , 2012 , 358, 2424-2427	3.9	15

55	Formation of 100 nm Deep Vertical Pores in Si Wafers by Wet Etching and Cu Electrodeposition. <i>Journal of the Electrochemical Society</i> , 2009 , 156, D543	3.9	15
54	Electrochemical Grooving of Si Wafers Using Catalytic Wire Electrodes in HF Solution. <i>Journal of the Electrochemical Society</i> , 2009 , 156, H134	3.9	15
53	A superstrate solar cell based on In ₂ (Se,S) ₃ and CuIn ₂ (Se,S) ₂ thin films fabricated by electrodeposition combined with annealing. <i>Solar Energy Materials and Solar Cells</i> , 2011 , 95, 1446-1451	6.4	14
52	Oxidation of hydrophobic alcohols using aqueous hydrogen peroxide over amphiphilic silica particles loaded with titanium(IV) oxide as a liquid-liquid phase-boundary catalyst. <i>Applied Catalysis A: General</i> , 2005 , 278, 269-274	5.1	14
51	Co-Electrodeposited Cu ₂ ZnSnS ₄ Thin Film Solar Cell and Cu ₂ ZnSnS ₄ Solar Cell/BiVO ₄ Tandem Device for Unbiased Solar Water Splitting. <i>Solar Rrl</i> , 2018 , 2, 1700205	7.1	13
50	Formation of through-holes in Si wafers by using anodically polarized needle electrodes in HF solution. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 2417-24	9.5	13
49	Electrochemical method for slicing Si blocks into wafers using platinum wire electrodes. <i>Solar Energy Materials and Solar Cells</i> , 2011 , 95, 716-720	6.4	13
48	Enhancement of Solar Hydrogen Evolution from Water by Surface Modification with CdS and TiO ₂ on Porous CuInS ₂ Photocathodes Prepared by an Electrodeposition/Sulfurization Method. <i>Angewandte Chemie</i> , 2014 , 126, 12002-12006	3.6	12
47	Fabrication of Cu ₂ ZnSnSe ₄ thin films from an electrodeposited Cu-Zn-Sn-Se/Cu-Sn-Se bilayer. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013 , 10, 1062-1066		12
46	Acceleration of groove formation in silicon using catalytic wire electrodes for development of a slicing technique. <i>Journal of Materials Processing Technology</i> , 2010 , 210, 330-334	5.3	12
45	Shape- and size-selective photocatalytic reactions by layered titanate powder suspended in deaerated aqueous alcohol solutions. <i>Physical Chemistry Chemical Physics</i> , 2000 , 2, 5308-5313	3.6	12
44	Phase-boundary catalysts for acid-catalyzed reactions: the role of bimodal amphiphilic structure and location of active sites. <i>Journal of the Brazilian Chemical Society</i> , 2004 , 15, 719-724	1.5	12
43	Structural effects of titanium(IV) oxide encapsulated in a hollow silica shell on photocatalytic activity for gas-phase decomposition of organics. <i>Applied Catalysis A: General</i> , 2009 , 369, 113-118	5.1	11
42	Photoelectrochemical Reduction of CO ₂ to CO Using a CuGaS ₂ Thin-film Photocathode Prepared by a Spray Pyrolysis Method. <i>Chemistry Letters</i> , 2018 , 47, 1424-1427	1.7	10
41	Fabrication of an efficient electrodeposited Cu ₂ ZnSnS ₄ -based solar cells with more than 6% conversion efficiency using a sprayed Ga-doped ZnO window layer. <i>RSC Advances</i> , 2014 , 4, 24351-24355	3.7	9
40	Fabrication of Cu(In,Ga)(S,Se) ₂ thin film solar cells via spray pyrolysis of thiourea and 1-methylthiourea-based aqueous precursor solution. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 091203	1.4	9
39	Porous polystyrene microspheres having dimpled surface structures prepared within micellar assemblies of amphiphilic silica particles in water. <i>Chemical Communications</i> , 2005 , 4205-7	5.8	9
38	Overall water splitting on Cu(I)-containing ternary oxides, CuMO ₂ (M=Fe, Ga, Al) with delafossite structure. <i>Studies in Surface Science and Catalysis</i> , 1999 , 301-304	1.8	9

37	PhotocARRIER Recombination Dynamics in BiVO ₄ for Visible Light-Driven Water Oxidation. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 3962-3972	3.8	9
36	The Effect of Annealing Temperature and KCN Etching on the Photovoltaic Properties of Cu(In,Ga)(S,Se) ₂ Solar Cells Using Nanoparticles. <i>International Journal of Photoenergy</i> , 2013 , 2013, 1-7	2.1	8
35	Mechanism of Incorporation of Zirconium into BiVO ₄ Visible-Light Photocatalyst. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 3320-3326	3.8	8
34	Hydrolysis of crystalline cellulose to glucose in an autoclave containing both gaseous and liquid water. <i>RSC Advances</i> , 2014 , 4, 26838	3.7	7
33	Direct Observation of Amphiphilic Silica Particles Assembled at an Oil/Water Interface. <i>Chemistry Letters</i> , 2005 , 34, 1386-1387	1.7	6
32	Pore formation in a p-type silicon wafer using a platinum needle electrode with application of square-wave potential pulses in HF solution. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 1262-8	9.5	5
31	Efficient Reductive Alkylation of Aniline with Acetone over Pt Nanoparticles Encapsulated in Hollow Porous Carbon. <i>Chemistry Letters</i> , 2008 , 37, 948-949	1.7	5
30	Effect of titanium active site location on activity of phase boundary catalyst particles for alkene epoxidation with aqueous hydrogen peroxide. <i>Studies in Surface Science and Catalysis</i> , 2003 , 251-254	1.8	5
29	Photocatalytic Preparation of Encapsulated Gold Nanoparticles by Jingle-bell-shaped Cadmium Sulfide/Silica Nanoparticles. <i>Topics in Catalysis</i> , 2005 , 35, 321-325	2.3	5
28	Cu ₂ ZnSnS ₄ -based thin film solar cells with more than 8% conversion efficiency obtained by using a spray pyrolysis technique 2016 ,		5
27	Growth of CuSbS ₂ Single Crystal as an Environmentally Friendly Thermoelectric Material. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1800861	1.6	5
26	Enhancement of the photoelectrochemical properties of a CuGaSe ₂ -based photocathode for water reduction induced by loading of a Cu-deficient layer at the p/n heterointerface. <i>Applied Physics Letters</i> , 2021 , 119, 083902	3.4	5
25	Isotope tracing study on oxidation of water on photoirradiated TiO ₂ particles. <i>Applied Catalysis B: Environmental</i> , 2012 , 126, 86-89	21.8	4
24	Preparation of a CuGaSe single crystal and its photocathodic properties.. <i>RSC Advances</i> , 2020 , 10, 40310-40315	3.7	4
23	Synthesis of nano-sized tungsten oxide particles encapsulated in a hollow silica sphere and their photocatalytic properties for decomposition of acetic acid using Pt as a co-catalyst.. <i>RSC Advances</i> , 2020 , 10, 15360-15365	3.7	4
22	Light-driven CO ₂ Reduction to Formic Acid with a Hybrid System of Biocatalyst and Semiconductor Based Photocatalyst. <i>Chemistry Letters</i> , 2018 , 47, 1505-1508	1.7	4
21	An inorganic/organic hybrid solar cell consisting of Cu ₂ O and a fullerene derivative. <i>Thin Solid Films</i> , 2012 , 526, 191-194	2.2	3
20	Amphiphilic NaY zeolite particles loaded with niobic acid: Materials with applications for catalysis in immiscible liquid-liquid system. <i>Reaction Kinetics and Catalysis Letters</i> , 2004 , 82, 255-261		3

19	Mechano-catalytic overall water-splitting into hydrogen and oxygen on some metal oxides 2000 , 159-179		3
18	Three-Dimensional GeSe Microstructured Air Brick Photocathode for Advanced Solar Water Splitting. <i>Solar Rrl</i> , 2020 , 4, 1900559	7.1	2
17	Synthesis of Nickel Nanoparticles Encapsulated in a Hollow Silica Shell. <i>Applied Mechanics and Materials</i> , 2013 , 372, 132-135	0.3	2
16	Investigation of Cu ₂ SnSe ₃ preparation by simultaneous electrodeposition as precursor of Cu ₂ ZnSnSe ₄ thin film solar cell 2017 ,		2
15	Photoelectrochemical Characterizations of CuInS ₂ and Cu(In,Ga)S ₂ Thin Films Fabricated by a Spray Pyrolysis Method. <i>Advanced Materials Research</i> , 2014 , 894, 427-431	0.5	2
14	CuSbS ₂ -based thin film solar cells prepared from electrodeposited metallic stacks composed of Cu and Sb layers 2013 ,		2
13	Electron spin resonance study on polymerization of alkyl acrylates with n-butyl titanate(IV)triethylaluminum catalyst. <i>Journal of Polymer Science: Polymer Chemistry Edition</i> , 1979 , 17, 2363-2369		2
12	Effects of incorporation of Ag into a kesterite CuZnSnS thin film on its photoelectrochemical properties for water reduction.. <i>Physical Chemistry Chemical Physics</i> , 2021 , 24, 468-476	3.6	2
11	Three-Dimensional GeSe Microstructured Air Brick Photocathode for Advanced Solar Water Splitting. <i>Solar Rrl</i> , 2020 , 4, 2070055	7.1	1
10	Structural and electric properties of CuSbS ₂ compound semiconductor bulk crystals. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RC09	1.4	1
9	Efficiency evaluation in solar cell by chemically processed hierarchically stacked debundled pristine carbon nanotubes. <i>Electrochimica Acta</i> , 2014 , 130, 406-411	6.7	1
8	Morphological Control of Carbon Carrier in PtCarbon Nanocomposites Derived from Photocatalytic Reactions on Titanium(IV) Oxide Powders. <i>Topics in Catalysis</i> , 2009 , 52, 627-633	2.3	1
7	Emission spectroscopy of divalent-cation-doped GaN photocatalysts. <i>Journal of Applied Physics</i> , 2011 , 110, 113526	2.5	1
6	Effects of TiO ₂ Properties on Performance of CH ₃ NH ₃ PbI ₃ Perovskite Photovoltaic Cells. <i>MRS Advances</i> , 2016 , 1, 3185-3190	0.7	1
5	Copper-based kesterite thin films for photoelectrochemical water splitting. <i>High Temperature Materials and Processes</i> , 2021 , 40, 446-460	0.9	0
4	Effect of Radio-Frequency Power on the Composition of BiVO ₄ Thin-Film Photoanodes Sputtered from a Single Target. <i>Energies</i> , 2021 , 14, 2122	3.1	0
3	Non-Vacuum Processes for Fabrication of CIGS and CZTS Solar Cells. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2015 , 66, 126-130	0.1	
2	Development of New Methods for Fine-Wiring in Si Using a Wet Catalytic Reaction. <i>Key Engineering Materials</i> , 2011 , 470, 129-134	0.4	

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