Tsutomu Minegishi

List of Publications by Citations

188 papers	7,903 citations	47 h-index	83 g-index
200 ext. papers	8,818 ext. citations	8.8 avg, IF	5.99 L-index

#	Paper	IF	Citations
188	Surface Modification of CoO(x) Loaded BiVO Photoanodes with Ultrathin p-Type NiO Layers for Improved Solar Water Oxidation. *Journal of the American Chemical Society*, **2015**, 137, 5053-60	16.4	436
187	Vertically aligned Ta3N5 nanorod arrays for solar-driven photoelectrochemical water splitting. *Advanced Materials*, **2013**, 25, 125-31	24	334
186	A Particulate Photocatalyst Water-Splitting Panel for Large-Scale Solar Hydrogen Generation. *Joule* , **2018**, 2, 509-520	27.8	307
185	Stable hydrogen evolution from CdS-modified CuGaSe2 photoelectrode under visible-light irradiation. *Journal of the American Chemical Society*, **2013**, 135, 3733-5	16.4	255
184	Particulate Photocatalyst Sheets Based on Carbon Conductor Layer for Efficient Z-Scheme Pure-Water Splitting at Ambient Pressure. *Journal of the American Chemical Society*, **2017**, 139, 1675-1683	16.4	252
183	Photoelectrochemical properties of LaTiO2N electrodes prepared by particle transfer for sunlight-driven water splitting. *Chemical Science*, **2013**, 4, 1120	9.4	226
182	Pt/In2S3/CdS/Cu2ZnSnS4 Thin Film as an Efficient and Stable Photocathode for Water Reduction under Sunlight Radiation. *Journal of the American Chemical Society*, **2015**, 137, 13691-7	16.4	221
181	Ultrastable low-bias water splitting photoanodes via photocorrosion inhibition and in situ catalyst regeneration. *Nature Energy*, **2017**, 2,	62.3	206
180	Enhancement of solar hydrogen evolution from water by surface modification with CdS and TiO2 on porous CuInS2 photocathodes prepared by an electrodeposition-sulfurization method. *Angewandte Chemie - International Edition*, **2014**, 53, 11808-12	16.4	151
179	Mg-Zr Cosubstituted Ta3N5 Photoanode for Lower-Onset-Potential Solar-Driven Photoelectrochemical Water Splitting. *Journal of the American Chemical Society*, **2015**, 137, 12780-3	16.4	147
178	Photoelectrochemical water splitting using a Cu(In,Ga)Se2 thin film. *Electrochemistry Communications*, **2010**, 12, 851-853	5.1	144
177	Photoelectrochemical oxidation of water using BaTaO2N photoanodes prepared by particle transfer method. *Journal of the American Chemical Society*, **2015**, 137, 2227-30	16.4	140
176	Efficient solar hydrogen production from neutral electrolytes using surface-modified Cu(In,Ga)Se2 photocathodes. *Journal of Materials Chemistry A*, **2015**, 3, 8300-8307	13	139
175	H2Evolution from Water on Modified Cu2ZnSnS4Photoelectrode under Solar Light. *Applied Physics Express*, **2010**, 3, 101202	2.4	135
174	Ta3N5 photoanodes for water splitting prepared by sputtering. *Thin Solid Films*, **2011**, 519, 2087-2092	2.2	130
173	Efficient Photocatalytic Water Splitting Using Al-Doped SrTiO3 Coloaded with Molybdenum Oxide and Rhodium Chromium Oxide. *ACS Catalysis*, **2018**, 8, 2782-2788	13.1	126
172	Selective CO production by Au coupled ZnTe/ZnO in the photoelectrochemical CO2 reduction system. *Energy and Environmental Science*, **2015**, 8, 3597-3604	35.4	122

171	Photocatalytic Hydrogen Evolution from Water Using Copper Gallium Sulfide under Visible-Light Irradiation. *Journal of Physical Chemistry C*, **2010**, 114, 11215-11220	3.8	119
170	Photocatalytic oxygen evolution using BaNbO2N modified with cobalt oxide under photoexcitation up to 740 nm. *Energy and Environmental Science*, **2013**, 6, 3595	35.4	108
169	Behavior and Energy States of Photogenerated Charge Carriers on Pt- or CoOx-Loaded LaTiO2N Photocatalysts: Time-Resolved Visible to Mid-Infrared Absorption Study. *Journal of Physical Chemistry C*, **2014**, 118, 23897-23906	3.8	102
168	Structural variation of cubic and hexagonal MgxZn1□O layers grown on MgO(111)□-sapphire. *Journal of Applied Physics*, **2005**, 98, 054911	2.5	98
167	An Al-doped SrTiO photocatalyst maintaining sunlight-driven overall water splitting activity for over 1000□h of constant illumination. *Chemical Science*, **2019**, 10, 3196-3201	9.4	96
166	Overall Photoelectrochemical Water Splitting using Tandem Cell under Simulated Sunlight. *ChemSusChem*, **2016**, 9, 61-6	8.3	96
165	Photoelectrochemical hydrogen production on Cu2ZnSnS4/Mo-mesh thin-film electrodes prepared by electroplating. *Chemical Physics Letters*, **2011**, 501, 619-622	2.5	93
164	A Novel Photocathode Material for Sunlight-Driven Overall Water Splitting: Solid Solution of ZnSe and Cu(In,Ga)Se2. *Advanced Functional Materials*, **2016**, 26, 4570-4577	15.6	91
163	Efficient Redox-Mediator-Free Z-Scheme Water Splitting Employing Oxysulfide Photocatalysts under Visible Light. *ACS Catalysis*, **2018**, 8, 1690-1696	13.1	90
162	Platinum and indium sulfide-modified CuInS2 as efficient photocathodes for photoelectrochemical water splitting. *Chemical Communications*, **2014**, 50, 8941-8943	5.8	88
161	Development of highly efficient CuIn0.5Ga0.5Se2-based photocathode and application to overall solar driven water splitting. *Energy and Environmental Science*, **2018**, 11, 3003-3009	35.4	85
160	Structural and optical properties of non-polar A-plane ZnO films grown on R-plane sapphire substrates by plasma-assisted molecular-beam epitaxy. *Journal of Crystal Growth*, **2007**, 309, 121-127	1.6	85
159	Durable hydrogen evolution from water driven by sunlight using (Ag,Cu)GaSe photocathodes modified with CdS and CuGaSe. *Chemical Science*, **2015**, 6, 894-901	9.4	80
158	Photoelectrochemical Hydrogen Evolution from Water Using Copper Gallium Selenide Electrodes Prepared by a Particle Transfer Method. *Journal of Physical Chemistry C*, **2014**, 118, 16386-16392	3.8	79
157	Visible Light-Driven Z-Scheme Water Splitting Using Oxysulfide H Evolution Photocatalysts. *Journal of Physical Chemistry Letters*, **2016**, 7, 3892-3896	6.4	78
156	Solution-Processed Cd-Substituted CZTS Photocathode for Efficient Solar Hydrogen Evolution from Neutral Water. *Joule*, **2018**, 2, 537-548	27.8	74
155	Photocatalyst Sheets Composed of Particulate LaMg1/3Ta2/3O2N and Mo-Doped BiVO4 for Z-Scheme Water Splitting under Visible Light. *ACS Catalysis*, **2016**, 6, 7188-7196	13.1	68
154	Trapped state sensitive kinetics in LaTiO2N solid photocatalyst with and without cocatalyst loading. *Journal of the American Chemical Society*, **2014**, 136, 17324-31	16.4	63

153	Photoreduction of water by using modified CuInS2 electrodes. *ChemSusChem*, **2011**, 4, 262-8	8.3	63
152	Hydrogen evolution from water using Ag(x)Cu(1-x)GaSe2 photocathodes under visible light. *Physical Chemistry Chemical Physics*, **2014**, 16, 6167-74	3.6	59
151	Ordered arrays of ZnO nanorods grown on periodically polarity-inverted surfaces. *Nano Letters*, **2008**, 8, 2419-22	11.5	58
150	Kinetic Assessment and Numerical Modeling of Photocatalytic Water Splitting toward Efficient Solar Hydrogen Production. *Bulletin of the Chemical Society of Japan*, **2012**, 85, 647-655	5.1	56
149	Synthesis of Nanostructured BaTaO2N Thin Films as Photoanodes for Solar Water Splitting. *Journal of Physical Chemistry C*, **2016**, 120, 15758-15764	3.8	55
148	Photoelectrochemical Water Splitting on Particulate ANbO2N (A = Ba, Sr) Photoanodes Prepared from Perovskite-Type ANbO3. *Chemistry of Materials*, **2016**, 28, 6869-6876	9.6	53
147	Band engineering of perovskite-type transition metal oxynitrides for photocatalytic overall water splitting. *Journal of Materials Chemistry A*, **2016**, 4, 4544-4552	13	52
146	Enhanced photoelectrochemical properties of CuGa3Se5 thin films for water splitting by the hydrogen mediated co-evaporation method. *Energy and Environmental Science*, **2012**, 5, 6368-6374	35.4	51
145	A role of insulin-like growth factor I for follicle-stimulating hormone receptor expression in rat granulosa cells. *Biology of Reproduction*, **2000**, 62, 325-33	3.9	51
144	Improving the photoelectrochemical activity of La5Ti2CuS5O7 for hydrogen evolution by particle transfer and doping. *Energy and Environmental Science*, **2014**, 7, 2239-2242	35.4	50
143	Photoelectrochemical conversion of toluene to methylcyclohexane as an organic hydride by Cu2ZnSnS4-based photoelectrode assemblies. *Journal of the American Chemical Society*, **2012**, 134, 2469-72	16.4	49
142	Transparent Ta N Photoanodes for Efficient Oxygen Evolution toward the Development of Tandem Cells. *Angewandte Chemie - International Edition*, **2019**, 58, 2300-2304	16.4	48
141	Photoreduced Graphene Oxide as a Conductive Binder to Improve the Water Splitting Activity of Photocatalyst Sheets. *Advanced Functional Materials*, **2016**, 26, 7011-7019	15.6	47
140	Efficient Solar-Driven Water Oxidation over Perovskite-Type BaNbO2N Photoanodes Absorbing Visible Light up to 740 nm. *Advanced Energy Materials*, **2018**, 8, 1800094	21.8	47
139	Metal selenide photocatalysts for visible-light-driven Z-scheme pure water splitting. *Journal of Materials Chemistry A*, **2019**, 7, 7415-7422	13	46
138	La5Ti2Cu1−xAgxS5O7 photocathodes operating at positive potentials during photoelectrochemical hydrogen evolution under irradiation of up to 710 nm. *Energy and Environmental Science*, **2015**, 8, 3354-3362	35.4	44
137	Photoelectrochemical properties of SrNbO2N photoanodes for water oxidation fabricated by the particle transfer method. *Faraday Discussions*, **2014**, 176, 213-23	3.6	44
136	Polarity control of ZnO films on (0001) Al2O3 by Cr-compound intermediate layers. *Applied Physics Letters*, **2007**, 90, 201907	3.4	44

135	Lattice relaxation mechanism of ZnO thin films grown on c-Al2O3 substrates by plasma-assisted molecular-beam epitaxy. *Applied Physics Letters*, **2007**, 91, 231904	3.4	43
134	Ta3N5-Nanorods enabling highly efficient water oxidation via advantageous light harvesting and charge collection. *Energy and Environmental Science*, **2020**, 13, 1519-1530	35.4	42
133	Photoelectrochemical hydrogen evolution from water on a surface modified CdTe thin film electrode under simulated sunlight. *Journal of Materials Chemistry A*, **2017**, 5, 4486-4492	13	41
132	Issues in ZnO homoepitaxy. *Superlattices and Microstructures*, **2005**, 38, 349-363	2.8	41
131	Recent Progress in the Surface Modification of Photoelectrodes toward Efficient and Stable Overall Water Splitting. *Chemistry - A European Journal*, **2018**, 24, 5697-5706	4.8	39
130	Adrenomedullin and atrial natriuretic peptide concentrations in normal pregnancy and pre-eclampsia. *Molecular Human Reproduction*, **1999**, 5, 767-70	4.4	39
129	The cross-substitution effect of tantalum on the visible-light-driven water oxidation activity of BaNbO2N crystals grown directly by an NH3-assisted flux method. *Journal of Materials Chemistry A*, **2016**, 4, 12807-12817	13	39
128	Overall water splitting by photoelectrochemical cells consisting of (ZnSe)(CuInGaSe) photocathodes and BiVO photoanodes. *Chemical Communications*, **2017**, 53, 11674-11677	5.8	38
127	A SrTiO3 photoanode prepared by the particle transfer method for oxygen evolution from water with high quantum efficiencies. *Chemical Communications*, **2016**, 52, 5011-4	5.8	38
126	Effects of flux synthesis on SrNbO2N particles for photoelectrochemical water splitting. *Journal of Materials Chemistry A*, **2016**, 4, 7658-7664	13	37
125	Bulky crystalline BiVO4 thin films for efficient solar water splitting. *Journal of Materials Chemistry A* , **2016**, 4, 9858-9864	13	36
124	Enhanced Hydrogen Evolution under Simulated Sunlight from Neutral Electrolytes on (ZnSe) (CuIn Ga Se) Photocathodes Prepared by a Bilayer Method. *Angewandte Chemie - International Edition*, **2016**, 55, 15329-15333	16.4	35
123	The effects of preparation conditions for a BaNbO2 N photocatalyst on its physical properties. *ChemSusChem*, **2014**, 7, 2016-21	8.3	35
122	Particulate photocatalyst sheets for Z-scheme water splitting: advantages over powder suspension and photoelectrochemical systems and future challenges. *Faraday Discussions*, **2017**, 197, 491-504	3.6	34
121	Surgery for endometrial cancers with suspected cervical involvement: is radical hysterectomy needed (a GOTIC study)?. *British Journal of Cancer*, **2013**, 109, 1760-5	8.7	34
120	Highly Efficient Water Oxidation Photoanode Made of Surface Modified LaTiO N Particles. *Small*, **2016**, 12, 5468-5476	11	33
119	Site-selective photodeposition of Pt on a particulate Sc-La5Ti2CuS5O7 photocathode: evidence for one-dimensional charge transfer. *Chemical Communications*, **2015**, 51, 4302-5	5.8	33
118	A CoO-modified SnNbO photoelectrode for highly efficient oxygen evolution from water. *Chemical Communications*, **2017**, 53, 629-632	5.8	32

117	Regulation of midkine messenger ribonucleic acid levels in cultured rat granulosa cells. *Biochemical and Biophysical Research Communications*, **1996**, 229, 799-805	3.4	30
116	Photoanodic and photocathodic behaviour of LaTiCuSO electrodes in the water splitting reaction. *Chemical Science*, **2015**, 6, 4513-4518	9.4	29
115	Development of a Core□Shell Heterojunction Ta3N5-Nanorods/BaTaO2N Photoanode for Solar Water Splitting. *ACS Energy Letters*, **2020**, 5, 2492-2497	20.1	29
114	High-Quality p-Type ZnO Films Grown by Co-Doping of N and Te on Zn-Face ZnO Substrates. *Applied Physics Express*, **2010**, 3, 031103	2.4	28
113	Efficient hydrogen evolution from water using CdTe photocathodes under simulated sunlight. *Journal of Materials Chemistry A*, **2017**, 5, 13154-13160	13	28
112	The mechanisms of retinoic acid-induced regulation on the follicle-stimulating hormone receptor in rat granulosa cells. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2000**, 1495, 203-11	4.9	26
111	Kinetics of Distance-Dependent Recombination between Geminate Charge Carriers by Diffusion under Coulomb Interaction. *Journal of Physical Chemistry C*, **2015**, 119, 5364-5373	3.8	25
110	Effects of interfacial layer structures on crystal structural properties of ZnO films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2008**, 26, 90-96	2.9	25
109	Effect of particle size of La5Ti2CuS5O7 on photoelectrochemical properties in solar hydrogen evolution. *Journal of Materials Chemistry A*, **2016**, 4, 4848-4854	13	23
108	Solar-Driven Water Splitting over a BaTaO2N Photoanode Enhanced by Annealing in Argon. *ACS Applied Energy Materials*, **2019**, 2, 5777-5784	6.1	23
107	A miniature solar device for overall water splitting consisting of series-connected spherical silicon solar cells. *Scientific Reports*, **2016**, 6, 24633	4.9	22
106	Structural characterization of MgxZn1□O/ZnO heterostructures. *Journal of Crystal Growth*, **2007**, 306, 269-275	1.6	22
105	Strain-free GaN thick films grown on single crystalline ZnO buffer layer with in situ lift-off technique. *Applied Physics Letters*, **2007**, 90, 061907	3.4	22
104	Selective growth of Zn- and O-polar ZnO layers by plasma-assisted molecular beam epitaxy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2005**, 23, 1286		22
103	A particulate (ZnSe)0.85(CuIn0.7Ga0.3Se2)0.15 photocathode modified with CdS and ZnS for sunlight-driven overall water splitting. *Journal of Materials Chemistry A*, **2017**, 5, 21242-21248	13	21
102	Powder-based (CuGa1□Iny)1□Zn2xS2 solid solution photocathodes with a largely positive onset potential for solar water splitting. *Sustainable Energy and Fuels*, **2018**, 2, 2016-2024	5.8	21
101	Sunlight-Driven Overall Water Splitting by the Combination of Surface-Modified La5Ti2Cu0.9Ag0.1S5O7 and BaTaO2N Photoelectrodes. *ChemPhotoChem*, **2017**, 1, 167-172	3.3	21
100	Thin film transfer for the fabrication of tantalum nitride photoelectrodes with controllable layered structures for water splitting. *Chemical Science*, **2016**, 7, 5821-5826	9.4	21

99	Crystal Structure, Electronic Structure, and Photocatalytic Activity of Oxysulfides: La2Ta2ZrS2O8, La2Ta2TiS2O8, and La2Nb2TiS2O8. *Inorganic Chemistry*, **2016**, 55, 3674-9	5.1	20
98	Chalcopyrite Thin Film Materials for Photoelectrochemical Hydrogen Evolution from Water under Sunlight. *Coatings*, **2015**, 5, 293-311	2.9	20
97	A novel flux coating method for the fabrication of layers of visible-light-responsive Ta3N5 crystals on tantalum substrates. *Journal of Materials Chemistry A*, **2015**, 3, 13946-13952	13	20
96	Investigation of the crystallinity of N and Te codoped Zn-polar ZnO films grown by plasma-assisted molecular-beam epitaxy. *Journal of Applied Physics*, **2010**, 108, 093518	2.5	20
95	Efficient photocatalytic oxygen evolution using BaTaO2N obtained from nitridation of perovskite-type oxide. *Journal of Materials Chemistry A*, **2020**, 8, 1127-1130	13	20
94	Expression of gonadotropin and activin receptor messenger ribonucleic acid in human ovarian epithelial neoplasms. *Clinical Cancer Research*, **2000**, 6, 2764-70	12.9	20
93	The effects of annealing barium niobium oxynitride in argon on photoelectrochemical water oxidation activity. *Journal of Materials Chemistry A*, **2019**, 7, 493-502	13	19
92	CdTe-Based Photoanode for Oxygen Evolution from Water under Simulated Sunlight. *Journal of Physical Chemistry Letters*, **2017**, 8, 5712-5717	6.4	19
91	Relation between interdiffusion and polarity for MBE growth of GaN epilayers on ZnO substrates. *Current Applied Physics*, **2004**, 4, 643-646	2.6	19
90	p-type conductivity control of heteroepitaxially grown ZnO films by N and Te codoping and thermal annealing. *Journal of Crystal Growth*, **2013**, 363, 190-194	1.6	18
89	Enhancement of the H2 evolution activity of La5Ti2Cu(S1⊠Sex)5O7 photocatalysts by coloading Pt and NiS cocatalysts. *Journal of Materials Chemistry A*, **2017**, 5, 6106-6112	13	17
88	Particulate photocatalyst sheets based on non-oxide semiconductor materials for water splitting under visible light irradiation. *Catalysis Science and Technology*, **2018**, 8, 3918-3925	5.5	17
87	Investigation of Cu-Deficient Copper Gallium Selenide Thin Film as a Photocathode for Photoelectrochemical Water Splitting. *Japanese Journal of Applied Physics*, **2012**, 51, 015802	1.4	17
86	Efficient hydrogen evolution on (CuInS)(ZnS) solid solution-based photocathodes under simulated sunlight. *Chemical Communications*, **2019**, 55, 470-473	5.8	16
85	Lattice deformation of ZnO films with high nitrogen concentration. *Applied Surface Science*, **2008**, 254, 7972-7975	6.7	16
84	Expression of steroidogenic acute regulatory protein (StAR) in rat granulosa cells. *Life Sciences*, **2000**, 67, 1015-24	6.8	16
83	Synthesis and Photocatalytic Activity of La5Ti2Cu(S1⊠Sex)5O7 Solid Solutions for H2 Production under Visible Light Irradiation. *ChemPhotoChem*, **2017**, 1, 265-272	3.3	15
82	Particulate photocathode composed of (ZnSe)0.85(CuIn0.7Ga0.3Se2)0.15 synthesized with Na2S for enhanced sunlight-driven hydrogen evolution. *Sustainable Energy and Fuels*, **2018**, 2, 1957-1965	5.8	15

81	Investigation on the ZnO:N films grown on (0 0 0 1) and (0 0 0 1̄) ZnO templates by plasma-assisted molecular beam epitaxy. *Journal of Crystal Growth*, **2009**, 311, 2167-2171	1.6	15
80	Enhancement of Charge Separation and Hydrogen Evolution on Particulate LaTiCuSO Photocathodes by Surface Modification. *Journal of Physical Chemistry Letters*, **2017**, 8, 375-379	6.4	14
79	Stable Hydrogen Production from Water on an NIR-Responsive Photocathode under Harsh Conditions. *Small Methods*, **2018**, 2, 1800018	12.8	14
78	Effects of Se Incorporation in LaTiCuSO by Annealing on Physical Properties and Photocatalytic H Evolution Activity. *ACS Applied Materials & Interfaces*, **2019**, 11, 5595-5601	9.5	14
77	Growth mechanism of ZnO low-temperature homoepitaxy. *Journal of Applied Physics*, **2011**, 110, 053520	2.5	14
76	Retinoic acid (RA) represses follicle stimulating hormone (FSH)-induced luteinizing hormone (LH) receptor in rat granulosa cells. *Archives of Biochemistry and Biophysics*, **2000**, 373, 203-10	4.1	14
75	Activation of a particulate Ta3N5 water-oxidation photoanode with a GaN hole-blocking layer. *Sustainable Energy and Fuels*, **2018**, 2, 73-78	5.8	13
74	Effects of flux treatment on morphology of single-crystalline BaNbO2N particles. *CrystEngComm*, **2016**, 18, 3186-3190	3.3	13
73	Growth of Polarity-Controlled ZnO Films on (0001) Al2O3. *Journal of Electronic Materials*, **2008**, 37, 736-742	1.9	13
72	Investigation of charge separation in particulate oxysulfide and oxynitride photoelectrodes by surface photovoltage spectroscopy. *Chemical Physics Letters*, **2017**, 683, 140-144	2.5	12
71	Enhancement of Solar Hydrogen Evolution from Water by Surface Modification with CdS and TiO2 on Porous CuInS2 Photocathodes Prepared by an Electrodeposition–Sulfurization Method. *Angewandte Chemie*, **2014**, 126, 12002-12006	3.6	12
70	Follicle-stimulating hormone regulation on its receptor messenger ribonucleic acid levels in cultured rat granulosa cells. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1997**, 1359, 165-73	4.9	12
69	Investigation on nitridation processes of SrNbO and SrNbO to SrNbON for photoelectrochemical water splitting. *Scientific Reports*, **2018**, 8, 15849	4.9	12
68	Efficient Water Oxidation Using Ta N Thin Film Photoelectrodes Prepared on Insulating Transparent Substrates. *ChemSusChem*, **2020**, 13, 1974-1978	8.3	11
67	Surface Protective and Catalytic Layer Consisting of RuO and Pt for Stable Production of Methylcyclohexane Using Solar Energy. *ACS Applied Materials & Interfaces*, **2018**, 10, 44396-44402	9.5	11
66	La Ti Cu Ag S O Modified with a Molecular Ni Catalyst for Photoelectrochemical H Generation. *Chemistry - A European Journal*, **2018**, 24, 18393-18397	4.8	10
65	A Photoelectrochemical Solar Cell Consisting of a Cadmium Sulfide Photoanode and a Ruthenium-2,2SBipyridine Redox Shuttle in a Non-aqueous Electrolyte. *Angewandte Chemie - International Edition*, **2015**, 54, 7877-81	16.4	10
64	Structural and optical investigations of periodically polarity inverted ZnO heterostructures on (0001) Al2O3. *Applied Physics Letters*, **2009**, 94, 141904	3.4	10

63	Effects of interfacial layers on the photoelectrochemical properties of tantalum nitride photoanodes for solar water splitting. *Journal of Materials Chemistry A*, **2016**, 4, 13837-13843	13	10
62	Suppression of poisoning of photocathode catalysts in photoelectrochemical cells for highly stable sunlight-driven overall water splitting. *Journal of Chemical Physics*, **2019**, 150, 041713	3.9	10
61	Synthesis of Concentrated Methylcyclohexane as Hydrogen Carrier through Photoelectrochemical Conversion of Toluene and Water. *ChemSusChem*, **2017**, 10, 659-663	8.3	9
60	Electrochemical Evaluation for Multiple Functions of Pt-loaded TiO2 Nanoparticles Deposited on a Photocathode. *ChemElectroChem*, **2019**, 6, 4859-4866	4.3	9
59	Plate-like Sm2Ti2S2O5 Particles Prepared by a Flux-Assisted One-Step Synthesis for the Evolution of O2 from Aqueous Solutions by Both Photocatalytic and Photoelectrochemical Reactions. *Journal of Physical Chemistry C*, **2018**, 122, 13492-13499	3.8	9
58	Probing fundamental losses in nanostructured Ta3N5 photoanodes: design principles for efficient water oxidation. *Energy and Environmental Science*, **2021**, 14, 4038-4047	35.4	9
57	A Semitransparent Nitride Photoanode Responsive up to ⊟600 nm Based on a Carbon Nanotube Thin Film Electrode. *ChemPhotoChem*, **2019**, 3, 521-524	3.3	8
56	Effects of Calcination Temperature on the Physical Properties and Hydrogen Evolution Activities of La5Ti2Cu(S1-xSex)5O7 Photocatalysts. *Particle and Particle Systems Characterization*, **2018**, 35, 1700275	3.1	8
55	Investigation of Cu-Deficient Copper Gallium Selenide Thin Film as a Photocathode for Photoelectrochemical Water Splitting. *Japanese Journal of Applied Physics*, **2012**, 51, 015802	1.4	8
54	Low-temperature growth of high-quality ZnO layers by surfactant-mediated molecular-beam epitaxy. *Journal of Crystal Growth*, **2007**, 309, 158-163	1.6	8
53	Defect and interface studies of ZnO/MgxZn1⊠O heterostructures. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 497-500	3.9	8
52	Effects of annealing conditions on the oxygen evolution activity of a BaTaO2N photocatalyst loaded with cobalt species. *Catalysis Today*, **2020**, 354, 204-210	5.3	8
51	Sunlight-Driven Production of Methylcyclohexane from Water and Toluene Using ZnSe : Cu(In,Ga)Se2-Based Photocathode. *ChemCatChem*, **2019**, 11, 4266-4271	5.2	7
50	Enhanced Hydrogen Evolution under Simulated Sunlight from Neutral Electrolytes on (ZnSe)0.85(CuIn0.7Ga0.3Se2)0.15 Photocathodes Prepared by a Bilayer Method. *Angewandte Chemie*, **2016**, 128, 15555-15559	3.6	7
49	Conversion of toluene and water to methylcyclohexane and oxygen using niobium-doped strontium titanate photoelectrodes. *ChemSusChem*, **2014**, 7, 2690-4	8.3	7
48	Structural investigation of nitrided c-sapphire substrate by grazing incidence x-ray diffraction and transmission electron microscopy. *Applied Physics Letters*, **2007**, 91, 202116	3.4	7
47	The high quality ZnO growth on c-Al2O3 substrate with Cr2O3 buffer layer using plasma-assisted molecular beam epitaxy. *Applied Surface Science*, **2008**, 254, 7786-7789	6.7	7
46	Control of crystal polarity in oxide and nitride semiconductors by interface engineering. *Journal of Electroceramics*, **2006**, 17, 255-261	1.5	7

45	Reduction of dislocation density and improvement of optical quality in ZnO layers by MgO-buffer annealing. *Current Applied Physics*, **2004**, 4, 637-639	2.6	7
44	Photoelectrochemical Solar Cells Consisting of a Pt-Modified CdS Photoanode and an Fe(ClO4)2/Fe(ClO4)3 Redox Shuttle in a Nonaqueous Electrolyte. *Journal of Physical Chemistry C*, **2016**, 120, 10781-10790	3.8	7
43	Enhanced Photoelectrochemical Water Oxidation from CdTe Photoanodes Annealed with CdCl. *Angewandte Chemie - International Edition*, **2020**, 59, 13800-13806	16.4	6
42	Conversion Reaction in the Binder-Free Anode for Fast-Charging Li-Ion Batteries Based on WO3 Nanorods. *ACS Applied Energy Materials*, **2020**, 3, 6700-6708	6.1	6
41	Influence of Isoelectronic Te Doping on the Physical Properties of ZnO Films Grown by Molecular-Beam Epitaxy. *Japanese Journal of Applied Physics*, **2013**, 52, 055501	1.4	6
40	Stress dependence on N/Ga ratio in GaN epitaxial films grown on ZnO substrates. *Current Applied Physics*, **2004**, 4, 685-687	2.6	6
39	ZnTe-based photocathode for hydrogen evolution from water under sunlight. *APL Materials*, **2020**, 8, 041101	5.7	5
38	Lateral arrays of vertical ZnO nanowalls on a periodically polarity-inverted ZnO template. *Nanotechnology*, **2009**, 20, 235304	3.4	5
37	The effect of growth temperature on nitrogen incorporation into ZnO film grown on Al2O3 substrate. *Journal of Crystal Growth*, **2009**, 311, 466-469	1.6	5
36	A surface sensitive optical method for the evaluation of processed ZnO: exploitation of LO phonon interaction. *Current Applied Physics*, **2004**, 4, 633-636	2.6	5
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