

Hyun Suk Jung

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

213
papers

9,740
citations

51
h-index

92
g-index

224
ext. papers

11,309
ext. citations

8.9
avg, IF

6.7
L-index

#	Paper	IF	Citations
213	Effect of phosphate ions on the formation of iron oxide/hydroxide as a stabilizer. <i>Journal of Solid State Chemistry</i> , 2022 , 305, 122688	3.3	0
212	Natural bone-mimicking nanopore-incorporated hydroxyapatite scaffolds for enhanced bone tissue regeneration.. <i>Biomaterials Research</i> , 2022 , 26, 7	16.8	2
211	Sustainable Green Process for Environmentally Viable Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2022 , 7, 1154-1177	20.1	5
210	Defect Healing in FAPb(I 1- x Br x) 3 Perovskites: Multifunctional Fluorinated Sulfonate Surfactant Anchoring Enables >21% Modules with Improved Operation Stability (Adv. Energy Mater. 20/2022). <i>Advanced Energy Materials</i> , 2022 , 12, 2270083	21.8	
209	Room-Temperature-Grown Amorphous Indium-Tin-Silicon-Oxide Thin Film as a New Electron Transporting Layer for Perovskite Solar Cells. <i>Applied Surface Science</i> , 2021 , 151570	6.7	0
208	Tailoring of Ligand-Off Nanoparticles Inks for Thin p-Type Oxide Overlayers Formation with Maintaining Intact Halide Perovskite. <i>Advanced Functional Materials</i> , 2021 , 31, 2100863	15.6	6
207	Stable and Efficient Methylammonium-, Cesium-, and Bromide-Free Perovskite Solar Cells by In-Situ Interlayer Formation. <i>Advanced Functional Materials</i> , 2021 , 31, 2007520	15.6	19
206	Advanced Characterization Techniques for Overcoming Challenges of Perovskite Solar Cell Materials. <i>Advanced Energy Materials</i> , 2021 , 11, 2001753	21.8	13
205	High Efficiency Perovskite Solar Cells Exceeding 22% via a Photo-Assisted Two-Step Sequential Deposition. <i>Advanced Functional Materials</i> , 2021 , 31, 2006718	15.6	16
204	Recent cutting-edge strategies for flexible perovskite solar cells toward commercialization. <i>Chemical Communications</i> , 2021 , 57, 11604-11612	5.8	2
203	Dynamic structural property of organic-inorganic metal halide perovskite. <i>IScience</i> , 2021 , 24, 101959	6.1	12
202	Formamidine disulfide oxidant as a localised electron scavenger for >20% perovskite solar cell modules. <i>Energy and Environmental Science</i> , 2021 , 14, 4903-4914	35.4	20
201	Synthesis and adsorption properties of gelatin-conjugated hematite (FeO) nanoparticles for lead removal from wastewater. <i>Journal of Hazardous Materials</i> , 2021 , 416, 125696	12.8	10
200	Halide Perovskites: Tailoring of Ligand-Off Nanoparticles Inks for Thin p-Type Oxide Overlayers Formation with Maintaining Intact Halide Perovskite (Adv. Funct. Mater. 31/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170223	15.6	
199	Oxide Passivation of Halide Perovskite Resistive Memory Device: A Strategy for Overcoming Endurance Problem. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 44577-44584	9.5	3
198	ITO and electron transport layer-free planar perovskite solar cells on transparent Nb-doped anatase TiO _{2-x} electrodes. <i>Journal of Alloys and Compounds</i> , 2020 , 845, 155531	5.7	10
197	Enhanced ferroelectric photovoltaic effect in semiconducting single-wall carbon nanotube/BiFeO ₃ heterostructures enabled by wide-range light absorption and efficient charge separation. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 10377-10385	13	3

196	Measurement of Quantum Yields of Monolayer TMDs Using Dye-Dispersed PMMA Thin Films. <i>Nanomaterials</i> , 2020 , 10,	5.4	17
195	Tailored 2D/3D Halide Perovskite Heterointerface for Substantially Enhanced Endurance in Conducting Bridge Resistive Switching Memory. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 17039-17045 ³¹	9.5	13
194	Highly Efficient Photo-Induced Charge Separation Enabled by Metal-Chalcogenide Interfaces in Quantum-Dot/Metal-Oxide Hybrid Phototransistors. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 16620-16629	9.5	13
193	Revisiting Effects of Ligand-Capped Nanocrystals in Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 1032-1034	20.1	16
192	High-Efficiency Flexible Perovskite Solar Cells Enabled by an Ultrafast Room-Temperature Reactive Ion Etching Process. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 7125-7134	9.5	6
191	Electrochemically controlled CdS@CdSe nanoparticles on ITO@TiO ₂ dual core-shell nanowires for enhanced photoelectrochemical hydrogen production. <i>Applied Surface Science</i> , 2020 , 505, 144569	6.7	6
190	Chlorine-modified SnO ₂ electron transport layer for high-efficiency perovskite solar cells. <i>Information Materials</i> , 2020 , 2, 401-408	23.1	30
189	Sustainable lead management in halide perovskite solar cells. <i>Nature Sustainability</i> , 2020 , 3, 1044-1051	22.1	40
188	High-Efficiency Perovskite Solar Cells. <i>Chemical Reviews</i> , 2020 , 120, 7867-7918	68.1	587
187	Photo-annealed amorphous titanium oxide for perovskite solar cells. <i>Nanoscale</i> , 2019 , 11, 19488-19496	7.7	9
186	Enhanced stability of guanidinium-based organic-inorganic hybrid lead triiodides in resistance switching. <i>APL Materials</i> , 2019 , 7, 081107	5.7	10
185	Flexible Perovskite Solar Cells. <i>Joule</i> , 2019 , 3, 1850-1880	27.8	146
184	Hot Scientific Debate on Halide Perovskites: Fundamentals, Photovoltaics, and Optoelectronics at Eighth Sungkyun International Solar Forum 2019 (SISF 2019). <i>ACS Energy Letters</i> , 2019 , 4, 2475-2479	20.1	3
183	Sintering Behavior of Copper Nanoparticle Ink by Laser in Air. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 1261-1268	1.3	4
182	Spin-Coating Process for 10 cm × 10 cm Perovskite Solar Modules Enabled by Self-Assembly of SnO ₂ Nanocolloids. <i>ACS Energy Letters</i> , 2019 , 4, 1845-1851	20.1	34
181	Chemical Bath Deposition of Co-Doped TiO ₂ Electron Transport Layer for Hysteresis-Suppressed High-Efficiency Planar Perovskite Solar Cells. <i>Solar Rrl</i> , 2019 , 3, 1900176	7.1	28
180	Degradation of CH ₃ NH ₃ PbI ₃ perovskite materials by localized charges and its polarity dependency. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12075-12085	13	14
179	A Zn:BiVO ₄ /Mo:BiVO ₄ homojunction as an efficient photoanode for photoelectrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 9019-9024	13	43

178	Single-Solution Bar-Coated Halide Perovskite Films via Mediating Crystallization for Scalable Solar Cell Fabrication. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 11537-11544	9.5	14
177	Point defect-reduced colloidal SnO electron transport layers for stable and almost hysteresis-free perovskite solar cells.. <i>RSC Advances</i> , 2019 , 9, 7334-7337	3.7	7
176	Rapid Flame-Annealed CuFe2O4 as Efficient Photocathode for Photoelectrochemical Hydrogen Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 5867-5874	8.3	34
175	Selective and Efficient Gd-Doped BiVO4 Photoanode for Two-Electron Water Oxidation to H2O2. <i>ACS Energy Letters</i> , 2019 , 4, 720-728	20.1	76
174	Ultimate Charge Extraction of Monolayer PbS Quantum Dot for Observation of Multiple Exciton Generation. <i>ChemPhysChem</i> , 2019 , 20, 2657-2661	3.2	
173	Safety and efficacy of tacrolimus-coated silicone plates as an alternative to mitomycin C in a rabbit model of conjunctival fibrosis. <i>PLoS ONE</i> , 2019 , 14, e0219194	3.7	0
172	Effect of bidentate and tridentate additives on the photovoltaic performance and stability of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 4977-4987	13	83
171	Ultra-flexible perovskite solar cells with crumpling durability: toward a wearable power source. <i>Energy and Environmental Science</i> , 2019 , 12, 3182-3191	35.4	78
170	Effect of Metal Electrodes on Aging-Induced Performance Recovery in Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 48497-48504	9.5	10
169	CaSnO3: An Electrocatalyst for Two-Electron Water Oxidation Reaction to Form H2O2. <i>ACS Energy Letters</i> , 2019 , 4, 352-357	20.1	77
168	Size and shape control of monoclinic vanadium dioxide thermochromic particles for smart window applications. <i>Ceramics International</i> , 2019 , 45, 4123-4127	5.1	12
167	Conducting Bridge Resistive Switching Behaviors in Cubic MAPbI3, Orthorhombic RbPbI3, and Their Mixtures. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800586	6.4	20
166	Effect of TiO2 particle size and layer thickness on mesoscopic perovskite solar cells. <i>Applied Surface Science</i> , 2019 , 477, 131-136	6.7	38
165	Insulated Interlayer for Efficient and Photostable Electron-Transport-Layer-Free Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 10132-10140	9.5	28
164	Fabrication of a Stable New Polymorph Gold Nanowire with Sixfold Rotational Symmetry. <i>Advanced Materials</i> , 2018 , 30, e1706261	24	11
163	Passivation in perovskite solar cells: A review. <i>Materials Today Energy</i> , 2018 , 7, 267-286	7	111
162	Enthusiastic Discussions on Halide Perovskite Materials beyond Photovoltaics at Sungkyun International Solar Forum 2017 (SISF2017). <i>ACS Energy Letters</i> , 2018 , 3, 199-203	20.1	1
161	Design of orange-emitting CsPb0.77Mn0.23Cl3 perovskite film for application in optoelectronic device. <i>Chemical Engineering Journal</i> , 2018 , 331, 803-808	14.7	4

160	Interface Design of Hybrid Electron Extraction Layer for Relieving Hysteresis and Retarding Charge Recombination in Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800993	4.6	23
159	Antisolvent with an Ultrawide Processing Window for the One-Step Fabrication of Efficient and Large-Area Perovskite Solar Cells. <i>Advanced Materials</i> , 2018 , 30, e1802763	24	91
158	Simultaneous Ligand Exchange Fabrication of Flexible Perovskite Solar Cells using Newly Synthesized Uniform Tin Oxide Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 5460-5467	6.4	25
157	Recent progressive efforts in perovskite solar cells toward commercialization. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 12215-12236	13	47
156	Fabrication of in vitro 3D mineralized tissue by fusion of composite spheroids incorporating biomineral-coated nanofibers and human adipose-derived stem cells. <i>Acta Biomaterialia</i> , 2018 , 74, 464-477	10.8	30
155	Efficient and stable green-emitting CsPbBr ₃ perovskite nanocrystals in a microcapsule for light emitting diodes. <i>Chemical Engineering Journal</i> , 2018 , 352, 957-963	14.7	28
154	Correlation between photoactivity of TiO ₂ and diffusion of Na ⁺ ions from soda lime glass. <i>Materials Letters</i> , 2018 , 228, 351-355	3.3	4
153	Dual function of a high-contrast hydrophobic/hydrophilic coating for enhanced stability of perovskite solar cells in extremely humid environments. <i>Nano Research</i> , 2017 , 10, 3885-3895	10	18
152	Improved carriers injection capacity in perovskite solar cells by introducing A-site interstitial defects. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 7905-7911	13	80
151	Design of long-term stable red-emitting CsPb(Br _{0.4} , I _{0.6}) ₃ perovskite quantum dot film for generation of warm white light. <i>Chemical Engineering Journal</i> , 2017 , 313, 461-465	14.7	32
150	BiVO ₄ /WO ₃ /SnO ₂ Double-Heterojunction Photoanode with Enhanced Charge Separation and Visible-Transparency for Bias-Free Solar Water-Splitting with a Perovskite Solar Cell. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 1479-1487	9.5	121
149	A highly efficient and stable green-emitting mesoporous silica (MP)@Cs _{0.4} Rb _{0.6} PbBr ₃ perovskite composite for application in optoelectronic devices. <i>New Journal of Chemistry</i> , 2017 , 41, 14076-14079	3.6	7
148	Graded functionalization of biomaterial surfaces using mussel-inspired adhesive coating of polydopamine. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017 , 159, 546-556	6	19
147	Trapping charges at grain boundaries and degradation of CH ₃ NH ₃ Pb(I Br) perovskite solar cells. <i>Nanotechnology</i> , 2017 , 28, 315402	3.4	20
146	Nanodome Structured BiVO ₄ /GaOxN _{1-x} Photoanode for Solar Water Oxidation. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700323	4.6	22
145	Origin of Hysteresis in CH ₃ NH ₃ PbI ₃ Perovskite Thin Films. <i>Advanced Functional Materials</i> , 2017 , 27, 1701924	5.4	66
144	Osteoinductive superparamagnetic Fe nanocrystal/calcium phosphate heterostructured microspheres. <i>Nanoscale</i> , 2017 , 9, 19145-19153	7.7	10
143	Superflexible, high-efficiency perovskite solar cells utilizing graphene electrodes: towards future foldable power sources. <i>Energy and Environmental Science</i> , 2017 , 10, 337-345	35.4	307

142	Selective dissolution of halide perovskites as a step towards recycling solar cells. <i>Nature Communications</i> , 2016 , 7, 11735	17.4	92
141	Long-term stable stacked CsPbBr quantum dot films for highly efficient white light generation in LEDs. <i>Nanoscale</i> , 2016 , 8, 19523-19526	7.7	54
140	Organolead Halide Perovskites for Low Operating Voltage Multilevel Resistive Switching. <i>Advanced Materials</i> , 2016 , 28, 6562-7	24	219
139	Indium Tin Oxide Nanowire Array Based CdSe/CdS/TiO ₂ One-Dimensional Heterojunction Photoelectrode for Enhanced Solar Hydrogen Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 1161-1168	8.3	30
138	Facile fabrication of three-dimensional TiO ₂ structures for highly efficient perovskite solar cells. <i>Nano Energy</i> , 2016 , 22, 499-506	17.1	34
137	Fully solution-processed transparent electrodes based on silver nanowire composites for perovskite solar cells. <i>Nanoscale</i> , 2016 , 8, 6308-16	7.7	82
136	Aspartic Acid-Assisted Synthesis of Multifunctional Strontium-Substituted Hydroxyapatite Microspheres. <i>Crystal Growth and Design</i> , 2016 , 16, 4318-4326	3.5	34
135	Effective passivation of Ag nanowire-based flexible transparent conducting electrode by TiO nanoshell. <i>Nano Convergence</i> , 2016 , 3, 20	9.2	16
134	Epitaxial Anatase TiO ₂ Nanorods Array with Reduced Interfacial Charge Recombination for Solar Water Splitting. <i>Journal of the Electrochemical Society</i> , 2016 , 163, H469-H473	3.9	7
133	Influence of annealing atmosphere on the electrical conductivity of copper nanoparticle films. <i>Electronic Materials Letters</i> , 2016 , 12, 338-342	2.9	1
132	An ultra-thin, un-doped NiO hole transporting layer of highly efficient (16.4%) organic-inorganic hybrid perovskite solar cells. <i>Nanoscale</i> , 2016 , 8, 11403-12	7.7	242
131	Fine tuning of emission property of white light-emitting diodes by quantum-dot-coating on YAG:Ce nanophosphors. <i>Applied Surface Science</i> , 2016 , 379, 467-473	6.7	16
130	Design of water stable green-emitting CH ₃ NH ₃ PbBr ₃ perovskite luminescence materials with encapsulation for applications in optoelectronic device. <i>Chemical Engineering Journal</i> , 2016 , 306, 791-795	14.7	12
129	Observation of Enhanced Hole Extraction in Br Concentration Gradient Perovskite Materials. <i>Nano Letters</i> , 2016 , 16, 5756-63	11.5	80
128	A Sharp Focus on Perovskite Solar Cells at Sungkyun International Solar Forum (SISF). <i>ACS Energy Letters</i> , 2016 , 1, 500-502	20.1	4
127	Flexible Perovskite Solar Cell 2016 , 325-341		1
126	Green-emitting Lu ₃ Al ₅ O ₁₂ :Ce ³⁺ phosphor as a visible light amplifier for dye-sensitized solar cells. <i>RSC Advances</i> , 2015 , 5, 24737-24741	3.7	15
125	Facile transfer fabrication of transparent, conductive and flexible In ₂ O ₃ :Sn (ITO) nanowire arrays electrode via selective wet-etching ZnO sacrificial layer. <i>Materials Letters</i> , 2015 , 158, 304-308	3.3	6

124	The novel design of a remote phosphor ceramic plate for white light generation in high power LEDs. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 6148-6152	7.1	26
123	Ferroelectric Polarization in CH ₃ NH ₃ PbI ₃ Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 17296-17301	6.3	165
122	Niobium Doping Effects on TiO ₂ Mesoscopic Electron Transport Layer-Based Perovskite Solar Cells. <i>ChemSusChem</i> , 2015 , 8, 2392-8	8.3	123
121	Understanding the role of the dye/oxide interface via SnO ₂ -based MK-2 dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 15193-200	3.6	15
120	Ultrarapid and ultrasensitive electrical detection of proteins in a three-dimensional biosensor with high capture efficiency. <i>Nanoscale</i> , 2015 , 7, 9844-51	7.7	17
119	Direct Low-Temperature Growth of Single-Crystalline Anatase TiO ₂ Nanorod Arrays on Transparent Conducting Oxide Substrates for Use in PbS Quantum-Dot Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 10324-30	9.5	12
118	Enhanced stabilisation of tetragonal (t)-ZrO ₂ in the controlled nanotubular geometry. <i>RSC Advances</i> , 2015 , 5, 80472-80479	3.7	5
117	Reduced Graphene Oxide/Mesoporous TiO ₂ Nanocomposite Based Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 23521-6	9.5	153
116	Epitaxial 1D electron transport layers for high-performance perovskite solar cells. <i>Nanoscale</i> , 2015 , 7, 15284-90	7.7	44
115	Observation of anatase nanograins crystallizing from anodic amorphous TiO ₂ nanotubes. <i>CrystEngComm</i> , 2015 , 17, 7346-7353	3.3	12
114	Screening effect on photovoltaic performance in ferroelectric CH ₃ NH ₃ PbI ₃ perovskite thin films. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 20352-20358	13	21
113	Electro-spray deposition of a mesoporous TiO ₂ charge collection layer: toward large scale and continuous production of high efficiency perovskite solar cells. <i>Nanoscale</i> , 2015 , 7, 20725-33	7.7	33
112	Perovskite solar cells: from materials to devices. <i>Small</i> , 2015 , 11, 10-25	11	967
111	Design of a thermally stable rGO-embedded remote phosphor for applications in white LEDs. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 235-238	7.1	11
110	Retarding charge recombination in perovskite solar cells using ultrathin MgO-coated TiO ₂ nanoparticulate films. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 9160-9164	13	142
109	Highly efficient and bending durable perovskite solar cells: toward a wearable power source. <i>Energy and Environmental Science</i> , 2015 , 8, 916-921	35.4	518
108	Low Temperature Synthesis of Rutile TiO ₂ Nanocrystals and Their Photovoltaic and Photocatalytic Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 4516-21	1.3	11
107	Synthesis of carbon-incorporated titanium oxide nanocrystals by pulsed solution plasma: electrical, optical investigation and nanocrystals analysis. <i>RSC Advances</i> , 2015 , 5, 9497-9502	3.7	3

106	Efficient Carrier Separation and Intriguing Switching of Bound Charges in Inorganic-Organic Lead Halide Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2355-62	6.4	52
105	Electrical behavior of laser-sintered Cu based metal-organic decomposition ink in air environment and application as current collectors in supercapacitor. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2015 , 2, 333-337	3.8	25
104	New Hybrid Hole Extraction Layer of Perovskite Solar Cells with a Planar p π Geometry. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 27285-27290	3.8	68
103	Calcined MnO ₂ /rO ₂ /BiO ₂ sintering aid for a non-reducible (Ca _{0.7} Sr _{0.3}) _{1.03} (Ti _{0.1} Zr _{0.9})O ₂ dielectric material. <i>Ceramics International</i> , 2015 , 41, 3910-3917	5.1	1
102	Cerium-doped yttrium aluminum garnet hollow shell phosphors synthesized via the Kirkendall effect. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 1145-51	9.5	14
101	Study on the enhanced and stable field emission behavior of a novel electrospayed Al-doped ZnO bilayer film. <i>RSC Advances</i> , 2014 , 4, 9072	3.7	18
100	Transparent-conducting-oxide nanowire arrays for efficient photoelectrochemical energy conversion. <i>Nanoscale</i> , 2014 , 6, 8649-55	7.7	5
99	Controlling the surface nanostructure of ZnO and Al-doped ZnO thin films using electrostatic spraying for their application in 12% efficient perovskite solar cells. <i>Nanoscale</i> , 2014 , 6, 9127-38	7.7	136
98	Polyethylenimine-assisted growth of high-aspect-ratio nitrogen-doped ZnO (NZO) nanorod arrays and their effect on performance of dye-sensitized solar cells. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 10028-43	9.5	21
97	Preparation and luminescence characteristics of single-phase rod-like BaSi ₂ O ₂ N ₂ :Eu ²⁺ phosphor with new synthetic route for white light generation. <i>Materials Letters</i> , 2014 , 129, 178-181	3.3	10
96	A Hierarchically Organized Photoelectrode Architecture for Highly Efficient CdS/CdSe-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1300395	21.8	10
95	In ₂ O ₃ :Sn/TiO ₂ /CdS heterojunction nanowire array photoanode in photoelectrochemical cells. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 17473-17480	6.7	13
94	3-D TiO ₂ nanoparticle/ITO nanowire nanocomposite antenna for efficient charge collection in solid state dye-sensitized solar cells. <i>Nanoscale</i> , 2014 , 6, 6127-32	7.7	29
93	Sintering and Dielectric Properties of Li ₂ O/B ₂ O ₃ /Al ₂ O ₃ /BiO ₂ Glass-Added (Ca _{0.7} Sr _{0.3}) _{1.03} (Ti _{0.1} Zr _{0.9})O ₂ for Copper Electrode. <i>International Journal of Applied Ceramic Technology</i> , 2013 , 10, 716-722	2	6
92	A Simple Method To Control Morphology of Hydroxyapatite Nano- and Microcrystals by Altering Phase Transition Route. <i>Crystal Growth and Design</i> , 2013 , 13, 3414-3418	3.5	36
91	A simple self-assembly route to single crystalline SnO ₂ nanorod growth by oriented attachment for dye sensitized solar cells. <i>Nanoscale</i> , 2013 , 5, 1188-94	7.7	71
90	Anatase TiO ₂ nanorod-decoration for highly efficient photoenergy conversion. <i>Nanoscale</i> , 2013 , 5, 11725-32	7.7	43
89	Functionalization of nanomaterials by non-thermal large area atmospheric pressure plasmas: application to flexible dye-sensitized solar cells. <i>Nanoscale</i> , 2013 , 5, 7825-30	7.7	27

88	Confined crystallization of anatase TiO ₂ nanotubes and their implications on transport properties. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14080	13	26
87	Surface hydroxylation of TiO ₂ yields notable visible-light photocatalytic activity to decompose rhodamine B in aqueous solution. <i>Journal of Physics and Chemistry of Solids</i> , 2013 , 74, 1136-1142	3.9	12
86	BaSnO ₃ perovskite nanoparticles for high efficiency dye-sensitized solar cells. <i>ChemSusChem</i> , 2013 , 6, 449-54	8.3	63
85	Dye Sensitized Solar Cells for Economically Viable Photovoltaic Systems. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 1682-93	6.4	137
84	TiO ₂ nanocrystals shell layer on highly conducting indium tin oxide nanowire for photovoltaic devices. <i>Nanoscale</i> , 2013 , 5, 3520-6	7.7	11
83	Direct patterning of metal oxides by hard templates and atomic layer deposition. <i>International Journal of Nanotechnology</i> , 2013 , 10, 692	1.5	0
82	Improved spectral response of sensitized photoelectrodes with the optical modulation layer. <i>Electrochemistry Communications</i> , 2012 , 15, 29-33	5.1	7
81	Mesoporous TiO ₂ nanowires as bi-functional materials for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2012 , 74, 83-86	6.7	11
80	Nanoscale size effect of titania (anatase) nanotubes with uniform wall thickness as high performance anode for lithium-ion secondary battery. <i>Journal of Power Sources</i> , 2012 , 204, 162-167	8.9	57
79	Aligned Photoelectrodes with Large Surface Area Prepared by Pulsed Laser Deposition. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 8102-8110	3.8	28
78	Crystallographically preferred oriented TiO ₂ nanotube arrays for efficient photovoltaic energy conversion. <i>Energy and Environmental Science</i> , 2012 , 5, 7989	35.4	82
77	Synthesis and photovoltaic property of fine and uniform Zn ₂ SnO ₄ nanoparticles. <i>Nanoscale</i> , 2012 , 4, 557-62	7.7	60
76	Visible-light photocatalytic activity of NH ₃ -heat-treated Ta ₂ O ₅ to decompose rhodamine B in aqueous solution. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2012 , 106, 67-81	1.6	19
75	Tin doped indium oxide core/TiO ₂ shell nanowires on stainless steel mesh for flexible photoelectrochemical cells. <i>Applied Physics Letters</i> , 2012 , 100, 084104	3.4	23
74	Ion-irradiation enhanced epitaxial growth of sol-gel TiO ₂ films. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 103, 179-184	2.6	2
73	Surface-Plasmon Assisted Energy Conversion in Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2011 , 1, 415-421	21.8	85
72	A Quasi-Inverse Opal Layer Based on Highly Crystalline TiO ₂ Nanoparticles: A New Light-Scattering Layer in Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2011 , 1, 546-550	21.8	69
71	Nanowire-Based Three-Dimensional Transparent Conducting Oxide Electrodes for Extremely Fast Charge Collection. <i>Advanced Energy Materials</i> , 2011 , 1, 829-835	21.8	48

70	3D Transparent Conducting Oxides: Nanowire-Based Three-Dimensional Transparent Conducting Oxide Electrodes for Extremely Fast Charge Collection (Adv. Energy Mater. 5/2011). <i>Advanced Energy Materials</i> , 2011 , 1, 702-702	21.8	
69	Electronic band structures and photovoltaic properties of MWO ₄ (M=Zn, Mg, Ca, Sr) compounds. <i>Journal of Solid State Chemistry</i> , 2011 , 184, 2103-2107	3.3	62
68	Enhancing the Densification of Nanocrystalline TiO ₂ by Reduction in Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 993-997	3.8	11
67	Photophysical and Photocatalytic Properties of Ag ₂ M ₂ O ₇ (M=Mo, W). <i>Journal of the American Ceramic Society</i> , 2010 , 93, 3867-3872	3.8	37
66	Two-Step Sol-Gel Method-Based TiO ₂ Nanoparticles with Uniform Morphology and Size for Efficient Photo-Energy Conversion Devices. <i>Chemistry of Materials</i> , 2010 , 22, 1958-1965	9.6	153
65	Simple large-scale synthesis of hydroxyapatite nanoparticles: in situ observation of crystallization process. <i>Langmuir</i> , 2010 , 26, 384-8	4	40
64	A Newly Designed Nb-Doped TiO ₂ /Al-Doped ZnO Transparent Conducting Oxide Multilayer for Electrochemical Photoenergy Conversion Devices. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 13867-13871	3.8	28
63	Facile Hydrothermal Synthesis of SrNb ₂ O ₆ Nanotubes with Rhombic Cross Sections. <i>Crystal Growth and Design</i> , 2010 , 10, 2447-2450	3.5	9
62	SrNb ₂ O ₆ nanotubes with enhanced photocatalytic activity. <i>Journal of Materials Chemistry</i> , 2010 , 20, 3979		26
61	Al-Doped ZnO Thin Film: A New Transparent Conducting Layer for ZnO Nanowire-Based Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 7185-7189	3.8	119
60	Control of osteogenic differentiation and mineralization of human mesenchymal stem cells on composite nanofibers containing poly[lactic-co-(glycolic acid)] and hydroxyapatite. <i>Macromolecular Bioscience</i> , 2010 , 10, 173-82	5.5	95
59	Aminosilane monolayer-assisted patterning of conductive poly(3,4-ethylenedioxythiophene) source/drain electrodes for bottom contact pentacene thin film transistors. <i>Organic Electronics</i> , 2010 , 11, 338-343	3.5	15
58	Influence of nitrogen chemical states on photocatalytic activities of nitrogen-doped TiO ₂ nanoparticles under visible light. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2010 , 213, 129-135	4.7	56
57	Correlation of anatase particle size with photocatalytic properties. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 2288-2291	1.6	14
56	Structure and dielectric properties of cubic Bi ₂ (Zn _{1-β} Ta _{2β}) ₂ O ₇ thin films. <i>Journal of Applied Physics</i> , 2009 , 106, 084103	2.5	
55	Enhanced photovoltaic properties of overlayer-coated nanocrystalline TiO ₂ dye-sensitized solar cells (DSSCs). <i>Journal of Electroceramics</i> , 2009 , 23, 422-425	1.5	29
54	Electrical and optical properties of epitaxial and polycrystalline undoped and Al-doped ZnO thin films grown by pulsed laser deposition. <i>Journal of Electroceramics</i> , 2009 , 23, 497-501	1.5	5
53	Photoluminescence and electrical properties of epitaxial Al-doped ZnO transparent conducting thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009 , 206, 2133-2138	1.6	14

52	Synthesis of Titanium Carbide Nanoparticles with a High Specific Surface Area from a TiO ₂ Core-Bucrose Shell Precursor. <i>Journal of the American Ceramic Society</i> , 2009 , 92, 2512-2516	3.8	16
51	Role of Liquid Phase in Achieving a Fine Microstructure and Diffusive Phase Transition of MgO-Doped BaTiO ₃ . <i>International Journal of Applied Ceramic Technology</i> , 2009 , 6, 679-686	2	2
50	Origin of low photocatalytic activity of rutile TiO ₂ . <i>Electronic Materials Letters</i> , 2009 , 5, 73-76	2.9	41
49	Indium-Tin-Oxide-Based Transparent Conducting Layers for Highly Efficient Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 7443-7447	3.8	33
48	Functional Multilayered Transparent Conducting Oxide Thin Films for Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 1083-1087	3.8	56
47	Nb-Doped TiO ₂ : A New Compact Layer Material for TiO ₂ Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6878-6882	3.8	197
46	Roles of MgO Coating Layer on Mesoporous TiO ₂ /ITO Electrode in a Photoelectrochemical Cell for Water Splitting. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 9937-9942	3.8	26
45	Visible-Light-Induced Photocatalytic Activity in FeNbO ₄ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 18393-18398	3.8	38
44	Acid Adsorption on TiO ₂ Nanoparticles: An Electrochemical Properties Study. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 8476-8480	3.8	53
43	Strain Relaxation in Sol-Gel Grown Epitaxial Anatase Thin Films. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 4205-4208	3.8	11
42	Mobility enhanced photoactivity in sol-gel grown epitaxial anatase TiO ₂ films. <i>Langmuir</i> , 2008 , 24, 2695-8	4	24
41	Surfactant-assisted shape evolution of thermally synthesized TiO ₂ nanocrystals and their applications to efficient photoelectrodes. <i>Langmuir</i> , 2008 , 24, 4316-9	4	21
40	Reversible change in electrical and optical properties in epitaxially grown Al-doped ZnO thin films. <i>Journal of Applied Physics</i> , 2008 , 104, 073706	2.5	27
39	Synthesis of Cu ₂ PO ₄ OH Hierarchical Superstructures with Photocatalytic Activity in Visible Light. <i>Advanced Functional Materials</i> , 2008 , 18, 2154-2162	15.6	123
38	Effects of defects generated in ALD TiO ₂ films on electrical properties and interfacial reaction in TiO ₂ /SiO ₂ /Si system upon annealing in vacuum. <i>Metals and Materials International</i> , 2008 , 14, 759-765	2.4	16
37	Effect of Glass Composition on the Dielectric Properties of a Liquid-Phase-Sintered MgO-Doped BaTiO ₃ . <i>Journal of the American Ceramic Society</i> , 2008 , 91, 2205-2210	3.8	7
36	Effects of defects generated in ALD TiO ₂ films on electrical properties and interfacial reaction in TiO ₂ /SiO ₂ /Si system upon annealing in vacuum. <i>Metals and Materials International</i> , 2008 , 14, 759-765	2.4	
35	Microwave dielectric properties of nanocrystalline TiO ₂ prepared using spark plasma sintering. <i>Journal of the European Ceramic Society</i> , 2007 , 27, 2937-2940	6	27

34	Physical origin of residual thermal stresses in a multilayer ceramic capacitor. <i>Journal of Applied Physics</i> , 2007 , 101, 063527	2.5	8
33	Seed-layer mediated orientation evolution in dielectric Bi ₂ N ₂ Ti ₂ Nb ₂ O ₁₅ thin films. <i>Applied Physics Letters</i> , 2007 , 91, 232903	3.4	3
32	Preparation of a nanoporous CaCO ₃ -coated TiO ₂ electrode and its application to a dye-sensitized solar cell. <i>Langmuir</i> , 2007 , 23, 11907-10	4	56
31	Effect of margin widths on the residual stress in a multi-layer ceramic capacitor. <i>Microelectronic Engineering</i> , 2006 , 83, 2558-2563	2.5	8
30	Role of lithium borosilicate glass in the decomposition of MgTiO ₃ -based dielectric ceramic during sintering. <i>Materials Research Bulletin</i> , 2006 , 41, 1206-1214	5.1	13
29	Role of submicron residual fillers in improving optical reflectance of barrier rib glasses for plasma display panels. <i>Journal of Materials Research</i> , 2006 , 21, 1753-1758	2.5	10
28	Role of strain in the blistering of hydrogen-implanted silicon. <i>Applied Physics Letters</i> , 2006 , 89, 101901	3.4	18
27	Enhancing photocatalytic activity by using TiO ₂ /MgO core-shell-structured nanoparticles. <i>Applied Physics Letters</i> , 2006 , 88, 013107	3.4	26
26	Low-temperature sintering and microwave dielectric properties of Ba ₅ Nb ₄ O ₁₅ with ZnB ₂ O ₄ glass. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 2105-2109	6	35
25	Influence of strain on the dielectric properties of Bi ₂ N ₂ Ti ₂ Nb ₂ O ₁₅ solid solution thin films. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 2161-2164	6	2
24	Enhancement of the photoelectric performance of dye-sensitized solar cells by using a CaCO ₃ -coated TiO ₂ nanoparticle film as an electrode. <i>Solar Energy Materials and Solar Cells</i> , 2006 , 90, 2405-2412	6.4	41
23	Dielectric properties of nanocrystalline TiO ₂ prepared using spark plasma sintering. <i>Journal of Electroceramics</i> , 2006 , 17, 913-917	1.5	8
22	Dielectric properties of ZnNb ₂ O ₆ -TiO ₂ mixture thin films. <i>Journal of Electroceramics</i> , 2006 , 17, 179-183	1.5	5
21	Influence of anatase-rutile phase transformation on dielectric properties of sol-gel derived TiO ₂ thin films. <i>Journal of Electroceramics</i> , 2006 , 16, 447-451	1.5	76
20	Preparation of nanoporous MgO-coated TiO ₂ nanoparticles and their application to the electrode of dye-sensitized solar cells. <i>Langmuir</i> , 2005 , 21, 10332-5	4	181
19	Crystal phase evolution of TiO ₂ nanoparticles with reaction time in acidic solutions studied via freeze-drying method. <i>Journal of Solid State Chemistry</i> , 2005 , 178, 15-21	3.3	53
18	Investigation of useful or deleterious residual thermal stress component to the capacitance of a multilayer ceramic capacitor. <i>Microelectronic Engineering</i> , 2005 , 77, 270-276	2.5	22
17	Effects of Acetic Acid on the Crystallization Temperature of Sol-Gel-Derived MgO Nano-Powders and Thin Films. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 784-787	3.8	20

16	In situ observation of hydroxyapatite nanocrystal formation from amorphous calcium phosphate in calcium-rich solutions. <i>Materials Chemistry and Physics</i> , 2005 , 91, 500-506	4.4	71
15	Phase evolution and dielectric properties of MgTi ₂ O ₅ ceramic sintered with lithium borosilicate glass. <i>Materials Research Bulletin</i> , 2005 , 40, 2021-2028	5.1	47
14	Voltage-Tunable Dielectric Properties of Pyrochlore Bi ₂ ZnNb ₂ TiO ₁₀ Solid-Solution Thin Films. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 6648-6653	1.4	19
13	Residual stress evolution in multilayer ceramic capacitors corresponding to layer increase and its correlation to the dielectric constant. <i>Journal of Applied Physics</i> , 2005 , 97, 094504	2.5	21
12	Influence of Anatase/Rutile Phase Transformation on Dielectric Properties of Sol-Gel Derived TiO ₂ Thin Films. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 6148-6151	1.4	31
11	Ferroelectric Properties of Highly (111) Oriented Pb(Zr _{0.4} Ti _{0.6})O ₃ Thin Films Fabricated Using Sol-Gel Process. <i>Integrated Ferroelectrics</i> , 2004 , 67, 181-190	0.8	
10	Influence of Ca/P ratios of starting solutions on the crystallization of amorphous calcium phosphate to hydroxyapatite. <i>Metals and Materials International</i> , 2004 , 10, 171-175	2.4	33
9	Correlation between dispersion properties of TiO ₂ colloidal sols and photoelectric characteristics of TiO ₂ films. <i>Journal of Colloid and Interface Science</i> , 2004 , 279, 479-83	9.3	8
8	In situ observation of the stability of anatase nanoparticles and their transformation to rutile in an acidic solution. <i>Langmuir</i> , 2004 , 20, 11732-7	4	56
7	Direct Observation of Hydroxyapatite Nucleation from Amorphous Phase in a Stoichiometric Calcium/Phosphate Aqueous Solution. <i>Chemistry Letters</i> , 2004 , 33, 1292-1293	1.7	13
6	Crystallization behaviors of nanosized MgO particles from magnesium alkoxides. <i>Journal of Colloid and Interface Science</i> , 2003 , 259, 127-32	9.3	57
5	Synthesis of nano-sized MgO particle and thin film from diethanolamine-stabilized magnesium-methoxide. <i>Journal of Solid State Chemistry</i> , 2003 , 175, 278-283	3.3	16
4	Ion-induced secondary electron emission behavior of sol-gel-derived MgO thin films used for protective layers in alternating current plasma display panels. <i>Journal of Applied Physics</i> , 2002 , 92, 2855-2860	2.5	27
3	All-in-One Lewis Base for Enhanced Precursor and Device Stability in Highly Efficient Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 3425-3434	20.1	9
2	Defect Healing in FAPb(I 1- x Br x) 3 Perovskites: Multifunctional Fluorinated Sulfonate Surfactant Anchoring Enables >21% Modules with Improved Operation Stability. <i>Advanced Energy Materials</i> , 2020 , 10, 200632	21.8	5
1	Combinatorial Physical Vapor Deposition : A New Methodology for Exploring Eco-friendly Composition for Halide-based Resistive Switching Memory. <i>Advanced Materials Interfaces</i> , 2020 , 13, 200662	4.6	