Sang Hyuk Im

List of Publications by Year in Descending Order

264 papers	22,394 citations	57 h-index	147 g-index
278 ext. papers	24,478 ext. citations	8.4 avg, IF	7.17 L-index

#	Paper	IF	Citations
264	Fully Scalable and Stable CsPbIBr Solar Cells Realized by an All-Spray-Coating Process.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	4
263	Neutral-Colored Semitransparent Perovskite Solar Cells with Aperture Ratios Controlled via Laser Patterning. *ACS Applied Energy Materials*, **2022**, 5, 3660-3667	6.1	1
262	Spray-coated nanocrystalline CsPbBr3 perovskite thin-films for large area and efficient rigid and flexible light emitting diodes. *Journal of Alloys and Compounds*, **2022**, 918, 165560	5.7	1
261	Synthesis of Au□Cu Alloy Nanoparticles as Peroxidase Mimetics for H2O2 and Glucose Colorimetric Detection. *Catalysts*, **2021**, 11, 343	4	6
260	Waterproof Light-Emitting Metal Halide Perovskite□Polymer Composite Microparticles Prepared via Microfluidic Device. *Particle and Particle Systems Characterization*, **2021**, 38, 2100006	3.1	4
259	Development of a Healable Bulk Heterojunction Using Conjugated Donor Polymers Based on Thymine-Functionalized Side Chains. *Macromolecules*, **2021**, 54, 3478-3488	5.5	
258	Enhanced Weak-Light Detection of Perovskite Photodetectors through Perovskite/Hole-Transport Material Interface Treatment. *ACS Applied Materials & Interfaces*, **2021**, 13, 16775-16783	9.5	5
257	Morphology controlled nanocrystalline CsPbBr3 thin-film for metal halide perovskite light emitting diodes. *Journal of Industrial and Engineering Chemistry*, **2021**, 97, 417-425	6.3	5
256	Advances in carbon-based thermoelectric materials for high-performance, flexible thermoelectric devices **2021**, 3, 667		7
255	Ni,Ti-co-doped MoO2 nanoparticles with high stability and improved conductivity for hole transporting material in planar metal halide perovskite solar cells. *Journal of Industrial and Engineering Chemistry*, **2021**, 94, 376-383	6.3	2
254	Efficient and Stable Graded CsPbI3□Brx Perovskite Solar Cells and Submodules by Orthogonal Processable Spray Coating. *Joule*, **2021**, 5, 481-494	27.8	34
253	Alkyl-Side-Chain Engineering of Nonfused Nonfullerene Acceptors with Simultaneously Improved Material Solubility and Device Performance for Organic Solar Cells. *ACS Omega*, **2021**, 6, 4562-4573	3.9	4
252	Self-powered flexible all-perovskite X-ray detectors with high sensitivity and fast response. *IScience* , **2021**, 24, 102927	6.1	4
251	Enhancing the Phase Stability of Formamidinium Lead Triiodide by Addition of Calcium Chloride. *ECS Journal of Solid State Science and Technology*, **2021**, 10, 085002	2	
250	CuInS Photocathodes with Atomic Gradation-Controlled (Ta,Mo)(O,S) Passivation Layers for Efficient Photoelectrochemical H Production. *ACS Applied Materials & Interfaces*, **2021**,	9.5	3
249	Graphene quantum dot-embedded perovskite photodetectors with fast response and enhanced sensitivity through bulk defect passivation. *Journal of Industrial and Engineering Chemistry*, **2021**, 100, 383-389	6.3	0
248	Fabrication of kinetically stable micropolymofoam particles and the spontaneous induction of morphological transformation. *Chemical Engineering Journal*, **2021**, 424, 130505	14.7	0

247	Phase Selection of Cesium Lead Triiodides through Surface Ligand Engineering. *Journal of Physical Chemistry Letters*, **2020**, 11, 4232-4238	6.4	2
246	Dual-site mixed layer-structured FA Cs SbICl Pb-free metal halide perovskite solar cells.. *RSC Advances*, **2020**, 10, 17724-17730	3.7	6
245	Non-halogenated solvent-processed ternary-blend solar cells via alkyl-side-chain engineering of a non-fullerene acceptor and their application in large-area devices. *Journal of Materials Chemistry A*, **2020**, 8, 10318-10330	13	23
244	Alkyl side-chain dependent self-organization of small molecule and its application in high-performance organic and perovskite solar cells. *Nano Energy*, **2020**, 72, 104708	17.1	10
243	Strategic Halogen Substitution to Enable High-Performance Small-Molecule-Based Tandem Solar Cell with over 15% Efficiency. *Advanced Energy Materials*, **2020**, 10, 1903846	21.8	8
242	Reproducible Dry Stamping Transfer of PEDOT:PSS Transparent Top Electrode for Flexible Semitransparent Metal Halide Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 10527-10534	9.5	25
241	Large-Scale Synthesis of Uniform PbI(DMSO) Complex Powder by Solvent Extraction Method for Efficient Metal Halide Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 8233-8239	9.5	12
240	Chiral Stereoisomer Engineering of Electron Transporting Materials for Efficient and Stable Perovskite Solar Cells. *Advanced Functional Materials*, **2020**, 30, 1905951	15.6	15
239	Synthesis of lustering two-dimensional □MoO3 van der Waals crystals by TiO2 assisted selective facet passivation. *Journal of Industrial and Engineering Chemistry*, **2020**, 84, 358-365	6.3	2
238	Understanding the Performance of Organic Photovoltaics under Indoor and Outdoor Conditions: Effects of Chlorination of Donor Polymers. *ACS Applied Materials & Interfaces*, **2020**, 12, 23181-23189	9.5	17
237	Efficient Metal Halide Perovskite Solar Cells Prepared by Reproducible Electrospray Coating on Vertically Aligned TiO Nanorod Electrodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 886-892	9.5	5
236	Structure engineering of small molecules for organic solar cells. *Molecular Crystals and Liquid Crystals*, **2020**, 705, 35-40	0.5	2
235	Full-Color Spectrum Coverage by High-Color-Purity Perovskite Nanocrystal Light-Emitting Diodes. *Cell Reports Physical Science*, **2020**, 1, 100177	6.1	12
234	Effects of Electron-Donating and Electron-Accepting Substitution on Photovoltaic Performance in Benzothiadiazole-Based A□A?□A-Type Small-Molecule Acceptor Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 12327-12337	6.1	7
233	Synthesis of post-processable metal halide perovskite nanocrystals via modified ligand-assisted re-precipitation method and their applications to self-powered panchromatic photodetectors. *Journal of Industrial and Engineering Chemistry*, **2020**, 92, 167-173	6.3	8
232	Interstitial Engineering toward Stable Tin Halide Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 2000513	7.1	5
231	Wetting-induced formation of void-free metal halide perovskite films by green ultrasonic spray coating for large-area mesoscopic perovskite solar cells.. *RSC Advances*, **2020**, 10, 33651-33661	3.7	5
230	Recent Progress in Metal Halide Perovskite-Based Tandem Solar Cells. *Advanced Materials*, **2020**, 32, e2002228	24	19

229	High-Performance and Stable Nonfullerene Acceptor-Based Organic Solar Cells for Indoor to Outdoor Light. *ACS Energy Letters*, **2020**, 5, 170-179	20.1	51
228	Present Status and Research Prospects of Tin-based Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 1900310	7.1	34
227	Chiral Stereoisomer Engineering: Chiral Stereoisomer Engineering of Electron Transporting Materials for Efficient and Stable Perovskite Solar Cells (Adv. Funct. Mater. 13/2020). *Advanced Functional Materials*, **2020**, 30, 2070087	15.6	1
226	Enhanced efficiency and stability of PTB7-Th-based multi-non-fullerene solar cells enabled by the working mechanism of the coexisting alloy-like structure and energy transfer model. *Journal of Materials Chemistry A*, **2019**, 7, 22044-22053	13	16
225	Multi-amine-assisted crystal growth of large-sized □MoO elongated nano-plates. *Nanoscale*, **2019**, 11, 18037-18045	7.7	3
224	Hysteresis-Less CsPbIBr Mesoscopic Perovskite Solar Cells with a High Open-Circuit Voltage Exceeding 1.3 V and 14.86% of Power Conversion Efficiency. *ACS Applied Materials & Interfaces*, **2019**, 11, 19123-19131	9.5	31
223	High performance solid-state PbS/CuS hetero-nanostructured quantum dots-sensitized solar cells. *Journal of Industrial and Engineering Chemistry*, **2019**, 75, 164-170	6.3	7
222	Enhancing performance and stability of perovskite solar cells using hole transport layer of small molecule and conjugated polymer blend. *Journal of Power Sources*, **2019**, 418, 167-175	8.9	22
221	Low temperature solution processable TiO2 nano-sol for electron transporting layer of flexible perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2019**, 194, 1-6	6.4	23
220	High-performance CH3NH3PbI3 inverted planar perovskite solar cells via ammonium halide additives. *Journal of Industrial and Engineering Chemistry*, **2019**, 80, 265-272	6.3	11
219	Synthesis of Single-Crystalline Hexagonal Graphene Quantum Dots from Solution Chemistry. *Nano Letters*, **2019**, 19, 5437-5442	11.5	35
218	Uniform Ag Nanocubes Prepared by AgCl Particle-Mediated Heterogeneous Nucleation and Disassembly and Their Mechanism Study by DFT Calculation. *Small*, **2019**, 15, e1904031	11	2
217	Thermally Stable Inorganic CsPbIBr Mesoscopic Metal Halide Perovskite Solar Submodules. *ACS Applied Materials & Interfaces*, **2019**, 11, 43066-43074	9.5	13
216	Performance data of CHNHPbI inverted planar perovskite solar cells via ammonium halide additives. *Data in Brief*, **2019**, 27, 104817	1.2	4
215	Direct measurement of electrostatic interactions between poly(methyl methacrylate) microspheres with optical laser tweezers. *Soft Matter*, **2019**, 15, 8051-8058	3.6	4
214	High-efficiency non-halogenated solvent processable polymer/PCBM solar cells via fluorination-enabled optimized nanoscale morphology. *Journal of Materials Chemistry A*, **2019**, 7, 24992-25002	13	14
213	Recent advancements in and perspectives on flexible hybrid perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 888-900	13	46
212	Homochiral Asymmetric-Shaped Electron-Transporting Materials for Efficient Non-Fullerene Perovskite Solar Cells. *ChemSusChem*, **2019**, 12, 224-230	8.3	24

211	Semitransparent FAPbI3-xBrx Perovskite Solar Cells Stable under Simultaneous Damp Heat (85 °C/85%) and 1 Sun Light Soaking. *Advanced Materials Technologies*, **2019**, 4, 1800390	6.8	17
210	Super-flexible bis(trifluoromethanesulfonyl)-amide doped graphene transparent conductive electrodes for photo-stable perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 8251-8258	13	64
209	Three-Dimensional Structures Based on the Fusion of Chrysene and Spirobifluorene Chromophores for the Development of Blue OLEDs. *Journal of Organic Chemistry*, **2018**, 83, 2640-2646	4.2	17
208	Heterogeneous Capillary Interactions of Interface-Trapped Ellipsoid Particles Using the Trap-Release Method. *Langmuir*, **2018**, 34, 384-394	4	14
207	One-step production of highly anisotropic particles via a microfluidic method. *Journal of Industrial and Engineering Chemistry*, **2018**, 64, 328-336	6.3	6
206	Nonfullerene Electron Transporting Material Based on Naphthalene Diimide Small Molecule for Highly Stable Perovskite Solar Cells with Efficiency Exceeding 20%. *Advanced Functional Materials*, **2018**, 28, 1800346	15.6	64
205	High Yield Synthesis of Polystyrene Microspheres by Continuous Long Tubular Reactor and Their Application to Antiglare Film for High Resolution Displays. *Macromolecular Research*, **2018**, 26, 1095-1098	1.9	
204	High-Performance Next-Generation Perovskite Nanocrystal Scintillator for Nondestructive X-Ray Imaging. *Advanced Materials*, **2018**, 30, e1801743	24	185
203	Efficient Organic-Inorganic Hybrid Flexible Perovskite Solar Cells Prepared by Lamination of Polytriarylamine/CHNHPbI/Anodized Ti Metal Substrate and Graphene/PDMS Transparent Electrode Substrate. *ACS Applied Materials & Interfaces*, **2018**, 10, 31413-31421	9.5	31
202	Highly Stable All-Inorganic Pb-Free Perovskite Solar Cells. *Journal of Nanoelectronics and Optoelectronics*, **2018**, 13, 1764-1768	1.3	5
201	Planar Type Trivalent Bismuth Based Pb-Free Perovskite Solar Cells. *Nanoscience and Nanotechnology Letters*, **2018**, 10, 591-595	0.8	7
200	Semi-transparent plastic solar cell based on oxide-metal-oxide multilayer electrodes. *Progress in Photovoltaics: Research and Applications*, **2018**, 26, 188-195	6.8	26
199	Long-term stable hydrophilic surface modification of poly(ether ether ketone) via the multilayered chemical grafting method. *Journal of Applied Polymer Science*, **2018**, 135, 46042	2.9	9
198	Non-Fullerene Organic Electron-Transporting Materials for Perovskite Solar Cells. *ChemSusChem*, **2018**, 11, 3835-3835	8.3	
197	Roles of SnX (X = F, Cl, Br) Additives in Tin-Based Halide Perovskites toward Highly Efficient and Stable Lead-Free Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2018**, 9, 6024-6031	6.4	88
196	Flexible ITO films with atomically flat surfaces for high performance flexible perovskite solar cells. *Nanoscale*, **2018**, 10, 20587-20598	7.7	34
195	Non-Fullerene Organic Electron-Transporting Materials for Perovskite Solar Cells. *ChemSusChem*, **2018**, 11, 3882-3892	8.3	19
194	Impacts of cation ordering on bandgap dispersion of double perovskites. *APL Materials*, **2018**, 6, 084903	5.7	10

193	Development of Mixed-Cation CsxRb1−xPbX3 Perovskite Quantum Dots and Their Full-Color Film with High Stability and Wide Color Gamut. *Advanced Optical Materials*, **2018**, 6, 1800295	8.1	30
192	Formation of uniform PbS quantum dots by a spin-assisted successive precipitation and anion exchange reaction process using PbX2 (X = Br, I) and Na2S precursors. *RSC Advances*, **2017**, 7, 3072-3077	3.7	9
191	Inverted CH3NH3PbI3 perovskite hybrid solar cells with improved flexibility by introducing a polymeric electron conductor. *Journal of Materials Chemistry C*, **2017**, 5, 2883-2891	7.1	19
190	Highly efficient CH3NH3PbI3 perovskite solar cells prepared by AuCl3-doped graphene transparent conducting electrodes. *Chemical Engineering Journal*, **2017**, 323, 153-159	14.7	42
189	Synthesis of uniform silica particles with controlled size by organic amine base catalysts via one-step process. *Journal of Industrial and Engineering Chemistry*, **2017**, 52, 376-381	6.3	6
188	Uniform Microgels Containing Agglomerates of Silver Nanocubes for Molecular Size-Selectivity and High SERS Activity. *Small*, **2017**, 13, 1604048	11	16
187	Highly Efficient Light-Emitting Diodes of Colloidal Metal-Halide Perovskite Nanocrystals beyond Quantum Size. *ACS Nano*, **2017**, 11, 6586-6593	16.7	233
186	Growth of Silver Nanowires from Controlled Silver Chloride Seeds and Their Application for Fluorescence Enhancement Based on Localized Surface Plasmon Resonance. *Small*, **2017**, 13, 1603392	11	24
185	Synthesis and Characterization of a Soluble A-D-A Molecule Containing a 2D Conjugated Selenophene-Based Side Group for Organic Solar Cells. *Macromolecular Rapid Communications*, **2017**, 38, 1700016	4.8	6
184	Band Gap Engineering of Cs3Bi2I9 Perovskites with Trivalent Atoms Using a Dual Metal Cation. *Journal of Physical Chemistry C*, **2017**, 121, 969-974	3.8	31
183	Highly flexible InSnO electrodes on thin colourless polyimide substrate for high-performance flexible CH3NH3PbI3 perovskite solar cells. *Journal of Power Sources*, **2017**, 341, 340-347	8.9	69
182	High-Performance CHNHPbI-Inverted Planar Perovskite Solar Cells with Fill Factor Over 83% via Excess Organic/Inorganic Halide. *ACS Applied Materials & Interfaces*, **2017**, 9, 35871-35879	9.5	32
181	Highly flexible, high-performance perovskite solar cells with adhesion promoted AuCl3-doped graphene electrodes. *Journal of Materials Chemistry A*, **2017**, 5, 21146-21152	13	66
180	Development of Dopant-Free Donor-Acceptor-type Hole Transporting Material for Highly Efficient and Stable Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 39511-39518	9.5	38
179	Efficient and thermally stable inverted perovskite solar cells by introduction of non-fullerene electron transporting materials. *Journal of Materials Chemistry A*, **2017**, 5, 20615-20622	13	62
178	Electrostatic interactions between particles through heterogeneous fluid phases. *Soft Matter*, **2017**, 13, 6647-6658	3.6	2
177	Highly stable semi-transparent CH 3 NH 3 PbI 3 sandwich type perovskite solar sub-module with neutral color. *Materials Today Energy*, **2017**, 5, 280-286	7	10
176	Scalable synthesis of Ti-doped MoO2 nanoparticle-hole-transporting-material with high moisture stability for CH3NH3PbI3 perovskite solar cells. *Chemical Engineering Journal*, **2017**, 330, 698-705	14.7	24

175	Enhanced Efficiency and Long-Term Stability of Perovskite Solar Cells by Synergistic Effect of Nonhygroscopic Doping in Conjugated Polymer-Based Hole-Transporting Layer. *ACS Applied Materials & Interfaces*, **2017**, 9, 43846-43854	9.5	31
174	Memory effect behavior with respect to the crystal grain size in the organic-inorganic hybrid perovskite nonvolatile resistive random access memory. *Scientific Reports*, **2017**, 7, 16586	4.9	41
173	High-Performance Solid-State PbS Quantum Dot-Sensitized Solar Cells Prepared by Introduction of Hybrid Perovskite Interlayer. *ACS Applied Materials & Interfaces*, **2017**, 9, 41104-41110	9.5	20
172	Effects of morphology evolution on solution-processed small molecule photovoltaics via a solvent additive. *Journal of Materials Chemistry C*, **2017**, 5, 7837-7844	7.1	9
171	Facile scalable synthesis of MoO2 nanoparticles by new solvothermal cracking process and their application to hole transporting layer for CH3NH3PbI3 planar perovskite solar cells. *Chemical Engineering Journal*, **2017**, 310, 179-186	14.7	26
170	Mesoscopic CH3NH3PbI3 perovskite solar cells using TiO2 inverse opal electron-conducting scaffolds. *Journal of Materials Chemistry A*, **2017**, 5, 1972-1977	13	31
169	Highly reproducible polyol synthesis for silver nanocubes. *Journal of Crystal Growth*, **2017**, 469, 48-53	1.6	14
168	Facile aqueous-phase synthesis of copper sulfide nanofibers. *Journal of Crystal Growth*, **2017**, 469, 172-175	1.6	3
167	Recent advances of flexible hybrid perovskite solar cells. *Journal of the Korean Physical Society*, **2017**, 71, 593-607	0.6	14
166	Formation of uniform TiO2 nanoshell on □alumina nanoplates for effective metallic luster pigments. *Korean Journal of Chemical Engineering*, **2016**, 33, 2732-2737	2.8	3
165	Highly efficient CH3NH3PbI3□Clx mixed halide perovskite solar cells prepared by re-dissolution and crystal grain growth via spray coating. *Journal of Materials Chemistry A*, **2016**, 4, 17636-17642	13	178
164	Enhancement of charge transport properties of small molecule semiconductors by controlling fluorine substitution and effects on photovoltaic properties of organic solar cells and perovskite solar cells. *Chemical Science*, **2016**, 7, 6649-6661	9.4	47
163	Electrically bistable Ag nanocrystal-embedded metal□rganic framework microneedles. *RSC Advances*, **2016**, 6, 64885-64889	3.7	13
162	Highly efficient metal halide substituted CH3NH3I(PbI2)1□(CuBr2)X planar perovskite solar cells. *Nano Energy*, **2016**, 27, 330-339	17.1	85
161	A discussion on the origin and solutions of hysteresis in perovskite hybrid solar cells. *Journal Physics D: Applied Physics*, **2016**, 49, 473001	3	28
160	High-Performance Small Molecule via Tailoring Intermolecular Interactions and its Application in Large-Area Organic Photovoltaic Modules. *Advanced Energy Materials*, **2016**, 6, 1600228	21.8	61
159	Effects of thermal treatment on organic-inorganic hybrid perovskite films and luminous efficiency of light-emitting diodes. *Current Applied Physics*, **2016**, 16, 1069-1074	2.6	20
158	Cross-linkable polymers containing a triple bond backbone and their application in photovoltaic devices. *RSC Advances*, **2016**, 6, 61284-61291	3.7	0

157	Highly Efficient Organic Hole Transporting Materials for Perovskite and Organic Solar Cells with Long-Term Stability. *Advanced Materials*, **2016**, 28, 686-93	24	151
156	Enhanced electronic properties in mesoporous TiO2 via lithium doping for high-efficiency perovskite solar cells. *Nature Communications*, **2016**, 7, 10379	17.4	626
155	Synthesis, Characterization and Optoelectronic Properties of Benzodithiophene Based Copolymers for Application in Solar Cells. *Journal of Fluorescence*, **2016**, 26, 371-6	2.4	11
154	A facile one-step approach to hierarchically assembled core□shell-like MnO2@MnO2 nanoarchitectures on carbon fibers: An efficient and flexible electrode material to enhance energy storage. *Nano Research*, **2016**, 9, 1507-1522	10	74
153	Reproducible formation of uniform CH3NH3PbI3□Clx mixed halide perovskite film by separation of the powder formation and spin-coating process. *Journal of Power Sources*, **2016**, 310, 130-136	8.9	17
152	Size-controlled gold nano-tetradecapods with tunable optical and electromagnetic properties. *Journal of Materials Chemistry C*, **2016**, 4, 3149-3156	7.1	7
151	Low band gap diketopyrrolopyrrole-based small molecule bulk heterojunction solar cells: influence of terminal side chain on morphology and photovoltaic performance. *RSC Advances*, **2016**, 6, 28658-28665	3.7	8
150	Highly reproducible, efficient hysteresis-less CH3NH3PbI(3-x)Cl(x) planar hybrid solar cells without requiring heat-treatment. *Nanoscale*, **2016**, 8, 2554-60	7.7	65
149	Efficient hysteresis-less bilayer type CH□NH□PbI□perovskite hybrid solar cells. *Nanotechnology*, **2016**, 27, 024004	3.4	13
148	Enhanced photoresponse in dye-sensitized solar cells via localized surface plasmon resonance through highly stable nickel nanoparticles. *Nanoscale*, **2016**, 8, 5884-91	7.7	29
147	Highly efficient low temperature solution processable planar type CH3NH3PbI3 perovskite flexible solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 1572-1578	13	191
146	Highly efficient solid-state mesoscopic PbS with embedded CuS quantum dot-sensitized solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 785-790	13	35
145	CH3 NH3 PbBr3 -CH3 NH3 PbI3 Perovskite-Perovskite Tandem Solar Cells with Exceeding 2.2 V Open Circuit Voltage. *Advanced Materials*, **2016**, 28, 5121-5	24	164
144	Synthesis and characterization of new low band-gap polymers containing electron-accepting acenaphtho[1,2-c]thiophene-S,S-dioxide groups. *Journal of Polymer Science Part A*, **2016**, 54, 498-506	2.5	2
143	Solar Cells: Highly Efficient Organic Hole Transporting Materials for Perovskite and Organic Solar Cells with Long-Term Stability (Adv. Mater. 4/2016). *Advanced Materials*, **2016**, 28, 685-685	24	
142	Effect of multi-armed triphenylamine-based hole transporting materials for high performance perovskite solar cells. *Chemical Science*, **2016**, 7, 5517-5522	9.4	63
141	Synthesis and Photophysical Studies of Thiadiazole[3,4-c]pyridine Copolymer Based Organic Field-Effect Transistors. *Journal of Fluorescence*, **2016**, 26, 1045-52	2.4	7
140	CH3NH3PbI3 planar perovskite solar cells with antireflection and self-cleaning function layers. *Journal of Materials Chemistry A*, **2016**, 4, 7573-7579	13	62

139	Efficiency enhancement of semi-transparent sandwich type CH3NH3PbI3 perovskite solar cells with island morphology perovskite film by introduction of polystyrene passivation layer. *Journal of Materials Chemistry A*, **2016**, 4, 16324-16329	13	39
138	Non-corroding □alumina@TiO2 core□shell nanoplates appearing metallic gold in colour. *RSC Advances*, **2015**, 5, 56954-56958	3.7	4
137	Planar CH3NH3PbI3 Perovskite Solar Cells with Constant 17.2% Average Power Conversion Efficiency Irrespective of the Scan Rate. *Advanced Materials*, **2015**, 27, 3424-30	24	401
136	Formation of compositional gradient profiles by using shear-induced polymer migration phenomenon under Couette flow field. *Korean Journal of Chemical Engineering*, **2015**, 32, 1422-1426	2.8	
135	Exceptional stability of Mg-implemented PbS quantum dot solar cells realized by galvanic corrosion protection. *Journal of Materials Chemistry A*, **2015**, 3, 8433-8437	13	5
134	Recent Progress of Innovative Perovskite Hybrid Solar Cells. *Israel Journal of Chemistry*, **2015**, 55, 966-977	3.4	30
133	Hysteresis-less inverted CH3NH3PbI3 planar perovskite hybrid solar cells with 18.1% power conversion efficiency. *Energy and Environmental Science*, **2015**, 8, 1602-1608	35.4	973
132	Oxide-free Sb2S3 sensitized solar cells fabricated by spin and heat-treatment of Sb(III)(thioacetamide)2Cl3. *Organic Electronics*, **2015**, 21, 155-159	3.5	25
131	A [2,2]paracyclophane triarylamine-based hole-transporting material for high performance perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 24215-24220	13	76
130	Stable semi-transparent CH3NH3PbI3 planar sandwich solar cells. *Energy and Environmental Science* , **2015**, 8, 2922-2927	35.4	94
129	Synthesis and characterization of thieno[3,4-c]pyrrole-4,6-dione-based copolymers for polymer solar cells. *Journal of the Korean Physical Society*, **2015**, 67, 1023-1027	0.6	1
128	Scalable continuous solvo-jet process for ZIF-8 nanoparticles. *Chemical Engineering Journal*, **2015**, 266, 56-63	14.7	22
127	Multicolored organic/inorganic hybrid perovskite light-emitting diodes. *Advanced Materials*, **2015**, 27, 1248-54	24	938
126	Solar Cells: Planar CH3NH3PbI3 Perovskite Solar Cells with Constant 17.2% Average Power Conversion Efficiency Irrespective of the Scan Rate (Adv. Mater. 22/2015). *Advanced Materials*, **2015** , 27, 3464-3464	24	2
125	Hysteresis-less mesoscopic CH3NH3PbI3 perovskite hybrid solar cells by introduction of Li-treated TiO2 electrode. *Nano Energy*, **2015**, 15, 530-539	17.1	221
124	Overcoming the electroluminescence efficiency limitations of perovskite light-emitting diodes. *Science*, **2015**, 350, 1222-5	33.3	1963
123	Synthesis and characterization of benzo[1,2-b:4,5-b□]dithiophene-based copolymers for polymer solar cells. *Journal of the Korean Physical Society*, **2015**, 67, 1018-1022	0.6	
122	Hollow ZIF-8 nanoparticles improve the permeability of mixed matrix membranes for CO2/CH4 gas separation. *Journal of Membrane Science*, **2015**, 480, 11-19	9.6	122

121	Growth pathways of silver nanoplates in kinetically controlled synthesis: bimodal versus unimodal growth. *RSC Advances*, **2015**, 5, 14266-14272	3.7	36
120	Light-Emitting Diodes: Multicolored Organic/Inorganic Hybrid Perovskite Light-Emitting Diodes (Adv. Mater. 7/2015). *Advanced Materials*, **2015**, 27, 1303-1303	24	2
119	Origin of photoluminescence from colloidal gallium phosphide nanocrystals synthesized via a hot-injection method. *RSC Advances*, **2015**, 5, 2466-2469	3.7	12
118	Synthesis of PS-b-P2VP di-block copolymer particles with internal structure via simple reprecipitation method. *Macromolecular Research*, **2014**, 22, 324-328	1.9	7
117	Effect of backbone structures on photovoltaic properties in naphthodithiophene-based copolymers. *Journal of Polymer Science Part A*, **2014**, 52, 305-312	2.5	5
116	PbS colloidal quantum-dot-sensitized inorganic-organic hybrid solar cells with radial-directional charge transport. *ChemPhysChem*, **2014**, 15, 1024-7	3.2	17
115	Efficient Inorganic-Organic Heterojunction Solar Cells Employing Sb2(Sx/Se1-x)3 Graded-Composition Sensitizers. *Advanced Energy Materials*, **2014**, 4, 1301680	21.8	102
114	Sb2Se3-Sensitized Inorganic□Organic Heterojunction Solar Cells Fabricated Using a Single-Source Precursor. *Angewandte Chemie*, **2014**, 126, 1353-1357	3.6	40
113	Organolead Halide Perovskite: New Horizons in Solar Cell Research. *Journal of Physical Chemistry C*, **2014**, 118, 5615-5625	3.8	549
112	Maneuvering the growth of silver nanoplates: use of halide ions to promote vertical growth. *Journal of Materials Chemistry C*, **2014**, 2, 6165-6170	7.1	39
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