# Nam-Gyu Park

# List of Publications by Year in Descending Order

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50,256 96 340 221 h-index g-index citations papers 56,374 8.49 10.9 375 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
340	Quasi-Two-Dimensional Perovskite Solar Cells with Efficiency Exceeding 22%. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 757-765	20.1	22
339	Effect of Fluorine Substitution in a Hole Dopant on the Photovoltaic Performance of Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 741-748	20.1	4
338	Antiseptic Povidone-Iodine Heals the Grain Boundary of Perovskite Solar Cells <i>ACS Applied Materials &amp; Description of Perovskite Solar Cells.</i>	9.5	9
337	Extended X-ray absorption fine structure (EXAFS) of FAPbI3 for understanding local structure-stability relation in perovskite solar cells. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 67, 549-554	12	4
336	Hysteresis of I IV Performance: Its Origin and Engineering for Elimination <b>2022</b> , 215-232		
335	Rethinking the A cation in halide perovskites <i>Science</i> , <b>2022</b> , 375, eabj1186	33.3	29
334	Sustainable Green Process for Environmentally Viable Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 1154-1177	20.1	5
333	Mixed-Dimensional Formamidinium Bismuth Iodides Featuring In-Situ Formed Type-I Band Structure for Convolution Neural Networks <i>Advanced Science</i> , <b>2022</b> , e2200168	13.6	2
332	Stability-limiting heterointerfaces of perovskite photovoltaics <i>Nature</i> , <b>2022</b> ,	50.4	31
331	Enhanced band-filling effect in halide perovskites via hydrophobic conductive linkers. <i>Cell Reports Physical Science</i> , <b>2022</b> , 3, 100800	6.1	0
330	High-performing laminated perovskite solar cells by surface engineering of perovskite films. <i>Applied Surface Science</i> , <b>2022</b> , 591, 153148	6.7	2
329	Asymmetric carrier transport in flexible interface-type memristor enables artificial synapses with sub-femtojoule energy consumption. <i>Nanoscale Horizons</i> , <b>2021</b> , 6, 987-997	10.8	5
328	Propylammonium Chloride Additive for Efficient and Stable FAPbI3 Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2102538	21.8	29
327	How antisolvent miscibility affects perovskite film wrinkling and photovoltaic properties. <i>Nature Communications</i> , <b>2021</b> , 12, 1554	17.4	29
326	Dual Additive for Simultaneous Improvement of Photovoltaic Performance and Stability of Perovskite Solar Cell. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100396	15.6	34
325	Nanocrystalline Polymorphic Energy Funnels for Efficient and Stable Perovskite Light-Emitting Diodes. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 1821-1830	20.1	10
324	Amorphous AlO6BnO2 nanocomposite electron-selective layers yielding over 21% efficiency in ambient-air-processed MAPbI3-based planar solar cells. <i>Chemical Engineering Journal</i> , <b>2021</b> , 409, 12821	5 <sup>14.7</sup>	5

323	Nonhalide Materials for Efficient and Stable Perovskite Solar Cells Small Methods, 2021, 5, e2100311	12.8	7
322	Progress of Perovskite Solar Modules. <i>Advanced Energy and Sustainability Research</i> , <b>2021</b> , 2, 2000051	1.6	3
321	Viscosity Blending Approach for 22.42% Efficient Perovskite Solar Cells. <i>Bulletin of the Korean Chemical Society</i> , <b>2021</b> , 42, 1112-1120	1.2	1
320	Device Performance of Emerging Photovoltaic Materials (Version 1). <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2002774	21.8	56
319	A Review on Scaling Up Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2008621	15.6	54
318	Recent cutting-edge strategies for flexible perovskite solar cells toward commercialization. <i>Chemical Communications</i> , <b>2021</b> , 57, 11604-11612	5.8	2
317	Dynamic structural property of organic-inorganic metal halide perovskite. <i>IScience</i> , <b>2021</b> , 24, 101959	6.1	12
316	Scalable perovskite coating via anti-solvent-free Lewis acid <b>B</b> ase adduct engineering for efficient perovskite solar modules. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 3018-3028	13	27
315	A layered (n-CHNH)CsAgBiBr perovskite for bipolar resistive switching memory with a high ON/OFF ratio. <i>Nanoscale</i> , <b>2021</b> , 13, 12475-12483	7.7	6
314	Dynamic halide perovskite heterojunction generates direct current. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 374-381	35.4	11
313	Capturing Mobile Lithium Ions in a Molecular Hole Transporter Enhances the Thermal Stability of Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2021</b> , 33, e2007431	24	28
312	Stabilizing Mixed Halide Lead Perovskites against Photoinduced Phase Segregation by A-Site Cation Alloying. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 837-847	20.1	15
311	Nonchemical n- and p-Type Charge Transfer Doping of FAPbI3 Perovskite. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 2817-2824	20.1	5
310	Simultaneous Enhanced Efficiency and Stability of Perovskite Solar Cells Using Adhesive Fluorinated Polymer Interfacial Material. <i>ACS Applied Materials &amp; Discrete Amplied </i>	5 <sup>9.5</sup>	8
309	Amorphous TiO2 Coatings Stabilize Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 3332-3341	20.1	14
308	Efficient surface passivation of perovskite films by a post-treatment method with a minimal dose. Journal of Materials Chemistry A, <b>2021</b> , 9, 3441-3450	13	25
307	A Realistic Methodology for 30% Efficient Perovskite Solar Cells. <i>CheM</i> , <b>2020</b> , 6, 1254-1264	16.2	79
306	Layered (C6H5CH2NH3)2CuBr4 Perovskite for Multilevel Storage Resistive Switching Memory. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2002653	15.6	42

305	CsPbBr3/CH3NH3PbCl3 Double Layer Enhances Efficiency and Lifetime of Perovskite Light-Emitting Diodes. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2191-2199	20.1	25
304	Stability of Precursor Solution for Perovskite Solar Cell: Mixture (FAI + PbI) versus Synthetic FAPbI Crystal. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2020</b> , 12, 15167-15174	9.5	20
303	Proton-transfer-induced 3D/2D hybrid perovskites suppress ion migration and reduce luminance overshoot. <i>Nature Communications</i> , <b>2020</b> , 11, 3378	17.4	51
302	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , <b>2020</b> , 5, 35-49	62.3	369
301	17% efficient perovskite solar mini-module via hexamethylphosphoramide (HMPA)-adduct-based large-area D-bar coating. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 9345-9354	13	31
300	Scalable fabrication and coating methods for perovskite solar cells and solar modules. <i>Nature Reviews Materials</i> , <b>2020</b> , 5, 333-350	73.3	292
299	Organic-inorganic hybrid lead halides as absorbers in perovskite solar cells: a debate on ferroelectricity. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 493002	3	14
298	High Efficiency Perovskite Solar Cells: Materials and Devices Engineering. <i>Transactions on Electrical and Electronic Materials</i> , <b>2020</b> , 21, 1-15	1.7	15
297	Chemical Approaches for Stabilizing Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 19032	<b>49</b> 1.8	88
296	Achieving Reproducible and High-Efficiency (>21%) Perovskite Solar Cells with a Presynthesized FAPbI3 Powder. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 360-366	20.1	81
295	Roadmap on halide perovskite and related devices. <i>Nanotechnology</i> , <b>2020</b> , 31, 152001	3.4	15
294	Research Direction toward Scalable, Stable, and High Efficiency Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1903106	21.8	118
293	Paradoxical Approach with a Hydrophilic Passivation Layer for Moisture-Stable, 23% Efficient Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 3268-3275	20.1	53
292	Methodologies for structural investigations of organic lead halide perovskites. <i>Materials Today</i> , <b>2020</b> , 38, 67-83	21.8	4
291	Effect of alkaline earth metal chloride additives BCl (B = Mg, Ca, Sr and Ba) on the photovoltaic performance of FAPbI based perovskite solar cells. <i>Nanoscale Horizons</i> , <b>2020</b> , 5, 1332-1343	10.8	16
290	High-Efficiency Perovskite Solar Cells. <i>Chemical Reviews</i> , <b>2020</b> , 120, 7867-7918	68.1	587
289	A thin film (. Journal of Materials Chemistry A, 2020, 8, 17420-17428	13	7
288	Materials and Methods for Interface Engineering toward Stable and Efficient Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2742-2786	20.1	141

#### (2019-2020)

287	Effect of Additives AX (A = FA, MA, Cs, Rb, NH4, X = Cl, Br, I) in FAPbI3 on Photovoltaic Parameters of Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000331	7.1	28
286	Importance of tailoring lattice strain in halide perovskite crystals. NPG Asia Materials, 2020, 12,	10.3	30
285	A Correlation between Iodoplumbate and Photovoltaic Performance of Perovskite Solar Cells Observed by Precursor Solution Aging. <i>Small Methods</i> , <b>2020</b> , 4, 1900398	12.8	18
284	Flexible Perovskite Solar Cells. <i>Joule</i> , <b>2019</b> , 3, 1850-1880	27.8	146
283	Precursor Engineering for a Large-Area Perovskite Solar Cell with >19% Efficiency. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2393-2401	20.1	70
282	Hot Scientific Debate on Halide Perovskites: Fundamentals, Photovoltaics, and Optoelectronics at Eighth Sungkyun International Solar Forum 2019 (SISF 2019). <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2475-2479	20.1	3
281	Atomic layer deposition for efficient and stable perovskite solar cells. <i>Chemical Communications</i> , <b>2019</b> , 55, 2403-2416	5.8	52
<b>2</b> 80	Importance of Oxygen Partial Pressure in Annealing NiO Film for High Efficiency Inverted Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2019</b> , 3, 1800339	7.1	23
279	Morphological and compositional progress in halide perovskite solar cells. <i>Chemical Communications</i> , <b>2019</b> , 55, 1192-1200	5.8	106
278	Bifacial stamping for high efficiency perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 308-321	35.4	56
277	Gradient Sn-Doped Heteroepitaxial Film of Faceted Rutile TiO as an Electron Selective Layer for Efficient Perovskite Solar Cells. <i>ACS Applied Materials &amp; Distriction Selective Layer for Efficient Perovskite Solar Cells.</i> ACS Applied Materials & Distriction Selective Layer for Efficient Perovskite Solar Cells. ACS Applied Materials & Distriction Selective Layer for Efficient Perovskite Solar Cells. ACS Applied Materials & Distriction Selective Layer for Efficient Perovskite Solar Cells.	9.5	19
276	Perovskite-related (CHNH)SbBr for forming-free memristor and low-energy-consuming neuromorphic computing. <i>Nanoscale</i> , <b>2019</b> , 11, 6453-6461	7.7	78
275	Light Emission Enhancement by Tuning the Structural Phase of APbBr (A = CHNH, Cs) Perovskites. Journal of Physical Chemistry Letters, <b>2019</b> , 10, 2135-2142	6.4	9
274	Verification and mitigation of ion migration in perovskite solar cells. APL Materials, 2019, 7, 041111	5.7	125
273	On the Current-Voltage Hysteresis in Perovskite Solar Cells: Dependence on Perovskite Composition and Methods to Remove Hysteresis. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805214	24	214
272	Causes and Solutions of Recombination in Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2019</b> , 31, e18030	194	242
271	Perovskite Cluster-Containing Solution for Scalable D-Bar Coating toward High-Throughput Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1189-1195	20.1	88
270	Predicting synthesizability. <i>Journal Physics D: Applied Physics</i> , <b>2019</b> , 52,	3	161

269	Importance of Functional Groups in Cross-Linking Methoxysilane Additives for High-Efficiency and Stable Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2192-2200	20.1	80
268	Multifunctional Chemical Linker Imidazoleacetic Acid Hydrochloride for 21% Efficient and Stable Planar Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2019</b> , 31, e1902902	24	195
267	Water Splitting Exceeding 17% Solar-to-Hydrogen Conversion Efficiency Using Solution-Processed Ni-Based Electrocatalysts and Perovskite/Si Tandem Solar Cell. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2019</b> , 11, 33835-33843	9.5	39
266	The effect of compositional engineering of imidazolium lead iodide on the resistive switching properties. <i>Nanoscale</i> , <b>2019</b> , 11, 14455-14464	7.7	12
265	Effect of interlayer spacing in layered perovskites on resistive switching memory. <i>Nanoscale</i> , <b>2019</b> , 11, 14330-14338	7.7	23
264	Potassium ions as a kinetic controller in ionic double layers for hysteresis-free perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 18807-18815	13	36
263	Elongated Lifetime and Enhanced Flux of Hot Electrons on a Perovskite Plasmonic Nanodiode. <i>Nano Letters</i> , <b>2019</b> , 19, 5489-5495	11.5	23
262	Effect of bidentate and tridentate additives on the photovoltaic performance and stability of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 4977-4987	13	83
261	Control of Crystal Growth toward Scalable Fabrication of Perovskite Solar Cells. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1807047	15.6	74
260	Improvement of efficiency and stability of CuSCN-based inverted perovskite solar cells by post-treatment with potassium thiocyanate. <i>Journal of Solid State Chemistry</i> , <b>2019</b> , 269, 367-374	3.3	26
259	Insulated Interlayer for Efficient and Photostable Electron-Transport-Layer-Free Perovskite Solar Cells. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2018</b> , 10, 10132-10140	9.5	28
258	Post-treatment of perovskite film with phenylalkylammonium iodide for hysteresis-less perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2018</b> , 179, 57-65	6.4	64
257	Inorganic Hole Transporting Materials for Stable and High Efficiency Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 14039-14063	3.8	125
256	Simply designed carbazole-based hole transporting materials for efficient perovskite solar cells. <i>Organic Electronics</i> , <b>2018</b> , 56, 27-30	3.5	19
255	Efficient and Reproducible CHNHPbI Perovskite Layer Prepared Using a Binary Solvent Containing a Cyclic Urea Additive. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2018</b> , 10, 9390-9397	9.5	23
254	Methodologies toward Highly Efficient Perovskite Solar Cells. Small, 2018, 14, e1704177	11	266
253	Simultaneous Improvement of Photovoltaic Performance and Stability by In Situ Formation of 2D Perovskite at (FAPbI3)0.88(CsPbBr3)0.12/CuSCN Interface. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702714	1 <sup>21.8</sup>	191
252	Enthusiastic Discussions on Halide Perovskite Materials beyond Photovoltaics at Sungkyun International Solar Forum 2017 (SISF2017). <i>ACS Energy Letters</i> , <b>2018</b> , 3, 199-203	20.1	1

251	Universal Approach toward Hysteresis-Free Perovskite Solar Cell via Defect Engineering. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 1358-1364	16.4	512
250	Triphenylamine 3,6-carbazole derivative as hole-transporting material for mixed cation perovskite solar cells. <i>Chemical Papers</i> , <b>2018</b> , 72, 1779-1787	1.9	9
249	Perovskite Solar Cells: Perovskite Solar Cells with Inorganic Electron- and Hole-Transport Layers Exhibiting Long-Term (B00 h) Stability at 85 °C under Continuous 1 Sun Illumination in Ambient Air (Adv. Mater. 29/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870210	24	4
248	1D Hexagonal HC(NH2)2PbI3 for Multilevel Resistive Switching Nonvolatile Memory. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1800190	6.4	43
247	Rear-Surface Passivation by Melaminium Iodide Additive for Stable and Hysteresis-less Perovskite Solar Cells. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2018</b> , 10, 25372-25383	9.5	48
246	Halide perovskite photovoltaics: History, progress, and perspectives. <i>MRS Bulletin</i> , <b>2018</b> , 43, 527-533	3.2	12
245	CH NH PbI and HC(NH) PbI Powders Synthesized from Low-Grade PbI: Single Precursor for High-Efficiency Perovskite Solar Cells. <i>ChemSusChem</i> , <b>2018</b> , 11, 1813-1823	8.3	41
244	Non-doped and unsorted single-walled carbon nanotubes as carrier-selective, transparent, and conductive electrode for perovskite solar cells. <i>MRS Communications</i> , <b>2018</b> , 8, 1058-1063	2.7	10
243	FA Cs PbI (PF) Interlayer Formed by Ion Exchange Reaction between Perovskite and Hole Transporting Layer for Improving Photovoltaic Performance and Stability. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801948	24	147
242	Stoichiometric and Non-stoichiometric Adduct Approaches for High Efficiency Perovskite Solar Cells. <i>Materials and Energy</i> , <b>2018</b> , 31-58		
241	Dependence of hysteresis on the perovskite film thickness: inverse behavior between TiO2 and PCBM in a normal planar structure. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 18206-18215	13	31
240	Perovskite Solar Cells with Inorganic Electron- and Hole-Transport Layers Exhibiting Long-Term (B00 h) Stability at 85 LC under Continuous 1 Sun Illumination in Ambient Air. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801010	24	138
239	Research Direction toward Theoretical Efficiency in Perovskite Solar Cells. ACS Photonics, 2018, 5, 2970-	-269377	76
238	All-Inorganic Bismuth Halide Perovskite-Like Materials ABiI and ABiNaI (A = Rb and Cs) for Low-Voltage Switching Resistive Memory. <i>ACS Applied Materials &amp; District Resistive Memory</i> .	1 <b>9</b> ·5	60
237	Impact of Excess CH3NH3I on Free Carrier Dynamics in High-Performance Nonstoichiometric Perovskites. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 3143-3148	3.8	41
236	In-Situ Formed Type I Nanocrystalline Perovskite Film for Highly Efficient Light-Emitting Diode. <i>ACS Nano</i> , <b>2017</b> , 11, 3311-3319	16.7	134
235	Effect of Selective Contacts on the Thermal Stability of Perovskite Solar Cells. <i>ACS Applied Materials &amp; ACS Applied</i> Materials & Materia	9.5	145
234	High-Performance Long-Term-Stable Dopant-Free Perovskite Solar Cells and Additive-Free Organic Solar Cells by Employing Newly Designed Multirole Econjugated Polymers. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700183	24	113

233	The Interplay between Trap Density and Hysteresis in Planar Heterojunction Perovskite Solar Cells. <i>Nano Letters</i> , <b>2017</b> , 17, 4270-4276	11.5	175
232	Optimization of the Ag/PCBM interface by a rhodamine interlayer to enhance the efficiency and stability of perovskite solar cells. <i>Nanoscale</i> , <b>2017</b> , 9, 9440-9446	7.7	45
231	Acridine-based novel hole transporting material for high efficiency perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 7603-7611	13	44
230	A TiO2 embedded structure for perovskite solar cells with anomalous grain growth and effective electron extraction. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 1406-1414	13	48
229	Wafer-scale reliable switching memory based on 2-dimensional layered organic-inorganic halide perovskite. <i>Nanoscale</i> , <b>2017</b> , 9, 15278-15285	7.7	83
228	Printable organometallic perovskite enables large-area, low-dose X-ray imaging. <i>Nature</i> , <b>2017</b> , 550, 87-	<b>95</b> 0.4	503
227	Stabilizing the Ag Electrode and Reducing J-V Hysteresis through Suppression of Iodide Migration in Perovskite Solar Cells. <i>ACS Applied Materials &amp; Samp; Interfaces</i> , <b>2017</b> , 9, 36338-36349	9.5	87
226	Impact of Interfacial Layers in Perovskite Solar Cells. <i>ChemSusChem</i> , <b>2017</b> , 10, 3687-3704	8.3	129
225	Interfacial Modification of Perovskite Solar Cells Using an Ultrathin MAI Layer Leads to Enhanced Energy Level Alignment, Efficiencies, and Reproducibility. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 3947-3953	6.4	76
224	Solution-processed SnO2 thin film for a hysteresis-free planar perovskite solar cell with a power conversion efficiency of 19.2%. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 24790-24803	13	119
223	Perovskite Solar CellsTowards Commercialization. ACS Energy Letters, 2017, 2, 1749-1751	20.1	82
222	Nonstoichiometric Adduct Approach for High-Efficiency Perovskite Solar Cells. <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 3-10	5.1	22
221	Material and Device Stability in Perovskite Solar Cells. <i>ChemSusChem</i> , <b>2016</b> , 9, 2528-2540	8.3	198
220	Across the Board: Nam-Gyu Park. <i>ChemSusChem</i> , <b>2016</b> , 9, 2525-2527	8.3	
219	Impact of Selective Contacts on Long-Term Stability of CH3NH3PbI3 Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 27840-27848	3.8	40
218	Towards stable and commercially available perovskite solar cells. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	763
217	Self-formed grain boundary healing layer for highly efficient CH3NH3PbI3 perovskite solar cells. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	757
216	Moth-Eye TiO2 Layer for Improving Light Harvesting Efficiency in Perovskite Solar Cells. <i>Small</i> , <b>2016</b> , 12, 2443-9	11	115

## (2015-2016)

215	Role of LiTFSI in high Tg triphenylamine-based hole transporting material in perovskite solar cell. <i>RSC Advances</i> , <b>2016</b> , 6, 68553-68559	3.7	18
214	Organolead Halide Perovskites for Low Operating Voltage Multilevel Resistive Switching. <i>Advanced Materials</i> , <b>2016</b> , 28, 6562-7	24	219
213	Lewis Acid-Base Adduct Approach for High Efficiency Perovskite Solar Cells. <i>Accounts of Chemical Research</i> , <b>2016</b> , 49, 311-9	24.3	690
212	Dual function interfacial layer for highly efficient and stable lead halide perovskite solar cells. Journal of Materials Chemistry A, <b>2016</b> , 4, 6091-6097	13	66
211	Fully solution-processed transparent electrodes based on silver nanowire composites for perovskite solar cells. <i>Nanoscale</i> , <b>2016</b> , 8, 6308-16	7.7	82
210	Mesoscopic perovskite solar cells with an admixture of nanocrystalline TiOIand AllDIIrole of interconnectivity of TiOIIn charge collection. <i>Nanoscale</i> , <b>2016</b> , 8, 6341-51	7.7	24
209	Perovskite Solar Cells: Moth-Eye TiO2 Layer for Improving Light Harvesting Efficiency in Perovskite Solar Cells (Small 18/2016). <i>Small</i> , <b>2016</b> , 12, 2530-2530	11	1
208	Empowering Semi-Transparent Solar Cells with Thermal-Mirror Functionality. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502466	21.8	49
207	Transparent Conductive Oxide-Free Graphene-Based Perovskite Solar Cells with over 17% Efficiency. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1501873	21.8	161
206	Crystal growth engineering for high efficiency perovskite solar cells. <i>CrystEngComm</i> , <b>2016</b> , 18, 5977-59	8 <b>5</b> .3	71
205	An ultra-thin, un-doped NiO hole transporting layer of highly efficient (16.4%) organic-inorganic hybrid perovskite solar cells. <i>Nanoscale</i> , <b>2016</b> , 8, 11403-12	7.7	242
204	Multiple-Stage Structure Transformation of Organic-Inorganic Hybrid Perovskite CH3NH3PbI3. <i>Physical Review X</i> , <b>2016</b> , 6,	9.1	11
203	Observation of Enhanced Hole Extraction in Br Concentration Gradient Perovskite Materials. <i>Nano Letters</i> , <b>2016</b> , 16, 5756-63	11.5	80
202	A Sharp Focus on Perovskite Solar Cells at Sungkyun International Solar Forum (SISF). <i>ACS Energy Letters</i> , <b>2016</b> , 1, 500-502	20.1	4
202		20.1	3
	APbi3 (A = CH3NH3 and HC(NH2)2) Perovskite Solar Cells: From Sensitization to Planar	20.1 9.2	
201	Letters, 2016, 1, 500-502  APbI3 (A = CH3NH3 and HC(NH2)2) Perovskite Solar Cells: From Sensitization to Planar Heterojunction 2016, 223-253		3

197	15.76% efficiency perovskite solar cells prepared under high relative humidity: importance of PbI2 morphology in two-step deposition of CH3NH3PbI3. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 8808-88	15 <sup>13</sup>	267
196	Visible light absorption and photoelectrochemical activity of colorless molecular 1,3-bis(dicyanomethylidene)indane (BDMI) by surface complexation on TiO□ <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 18541-6	3.6	4
195	Highly Reproducible Perovskite Solar Cells with Average Efficiency of 18.3% and Best Efficiency of 19.7% Fabricated via Lewis Base Adduct of Lead(II) Iodide. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 8696-9	16.4	1751
194	Effects of Seed Layer on Growth of ZnO Nanorod and Performance of Perovskite Solar Cell. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 10321-10328	3.8	130
193	Ferroelectric Polarization in CH3NH3Pbl3 Perovskite. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 172	2963/5	165
192	On the Role of Interfaces in Planar-Structured HC(NH2 )2 PbI3 Perovskite Solar Cells. <i>ChemSusChem</i> , <b>2015</b> , 8, 2414-9	8.3	56
191	Niobium Doping Effects on TiO2 Mesoscopic Electron Transport Layer-Based Perovskite Solar Cells. <i>ChemSusChem</i> , <b>2015</b> , 8, 2392-8	8.3	123
190	Understanding the role of the dye/oxide interface via SnO2-based MK-2 dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 15193-200	3.6	15
189	Analysing the effect of crystal size and structure in highly efficient CH3NH3PbI3 perovskite solar cells by spatially resolved photo- and electroluminescence imaging. <i>Nanoscale</i> , <b>2015</b> , 7, 19653-62	7.7	75
188	Si/Ti2O3/Reduced Graphene Oxide Nanocomposite Anodes for Lithium-Ion Batteries with Highly Enhanced Cyclic Stability. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2015</b> , 7, 18483-90	9.5	41
187	Inverted Layer-By-Layer Fabrication of an Ultraflexible and Transparent Ag Nanowire/Conductive Polymer Composite Electrode for Use in High-Performance Organic Solar Cells. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 4580-4589	15.6	120
186	Reduced Graphene Oxide/Mesoporous TiO2 Nanocomposite Based Perovskite Solar Cells. <i>ACS Applied Materials &amp; District Materials &amp; Distri</i>	9.5	153
185	Epitaxial 1D electron transport layers for high-performance perovskite solar cells. <i>Nanoscale</i> , <b>2015</b> , 7, 15284-90	7.7	44
184	Electro-spray deposition of a mesoporous TiO2 charge collection layer: toward large scale and continuous production of high efficiency perovskite solar cells. <i>Nanoscale</i> , <b>2015</b> , 7, 20725-33	7.7	33
183	Control of I-V hysteresis in CH3NH3PbI3 perovskite solar cell. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 4633-9	6.4	379
182	Perovskite solar cells: Switchable photovoltaics. <i>Nature Materials</i> , <b>2015</b> , 14, 140-1	27	37
181	Perovskite solar cells: from materials to devices. <i>Small</i> , <b>2015</b> , 11, 10-25	11	967
180	Opto-electronic properties of TiO2 nanohelices with embedded HC(NH2)2PbI3 perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9179-9186	13	60

179	Perovskite solar cells: an emerging photovoltaic technology. <i>Materials Today</i> , <b>2015</b> , 18, 65-72	21.8	1073
178	Retarding charge recombination in perovskite solar cells using ultrathin MgO-coated TiO2 nanoparticulate films. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9160-9164	13	142
177	Highly efficient and bending durable perovskite solar cells: toward a wearable power source. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 916-921	35.4	518
176	Two-step deposition method for high-efficiency perovskite solar cells. MRS Bulletin, 2015, 40, 654-659	3.2	38
175	Transparent Electronics: Inverted Layer-By-Layer Fabrication of an Ultraflexible and Transparent Ag Nanowire/Conductive Polymer Composite Electrode for Use in High-Performance Organic Solar Cells (Adv. Funct. Mater. 29/2015). <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 4743-4743	15.6	3
174	Formamidinium and Cesium Hybridization for Photo- and Moisture-Stable Perovskite Solar Cell. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1501310	21.8	1085
173	Stability Issues on Perovskite Solar Cells. <i>Photonics</i> , <b>2015</b> , 2, 1139-1151	2.2	158
172	Modulation of photovoltage in mesoscopic perovskite solar cell by controlled interfacial electron injection. <i>RSC Advances</i> , <b>2015</b> , 5, 47334-47340	3.7	23
171	Real-Space Imaging of the Atomic Structure of Organic-Inorganic Perovskite. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 16049-54	16.4	131
170	New Hybrid Hole Extraction Layer of Perovskite Solar Cells with a Planar place Geometry. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 27285-27290	3.8	68
169	Thermodynamic regulation of CH3NH3PbI3 crystal growth and its effect on photovoltaic performance of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 19901-19906	13	78
168	Solar Cells: Perovskite Solar Cells: From Materials to Devices (Small 1/2015). Small, 2015, 11, 2-2	11	8
167	Cooperative kinetics of depolarization in CH3NH3PbI3 perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 910-915	35.4	102
166	Enhancement of Organic Photovoltaic Efficiency via Nanomorphology Control using Conjugated Polymers Incorporating Fullerene Compatible Side-Chains. <i>Macromolecules</i> , <b>2015</b> , 48, 337-345	5.5	10
165	11% Efficient Perovskite Solar Cell Based on ZnO Nanorods: An Effective Charge Collection System. Journal of Physical Chemistry C, <b>2014</b> , 118, 16567-16573	3.8	519
164	Rutile TiO2-based perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 9251	13	166
163	Enhancement of the photovoltaic performance of CHNHPbl[perovskite solar cells through a dichlorobenzene-functionalized hole-transporting material. <i>ChemPhysChem</i> , <b>2014</b> , 15, 2595-603	3.2	42
162	High efficiency electrospun TiO[hanofiber based hybrid organic-inorganic perovskite solar cell. <i>Nanoscale</i> , <b>2014</b> , 6, 1675-9	7:7	163

161	Organolead Halide Perovskite: New Horizons in Solar Cell Research. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 5615-5625	3.8	549
160	Water-repellent perovskite solar cell. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 20017-20021	13	55
159	Highly efficient and recyclable nanocomplexed photocatalysts of AgBr/N-doped and amine-functionalized reduced graphene oxide. <i>ACS Applied Materials &amp; District Agency Amp; Interfaces</i> , <b>2014</b> , 6, 20819-	27 <sup>9.5</sup>	48
158	Strong Photocurrent Amplification in Perovskite Solar Cells with a Porous TiO2 Blocking Layer under Reverse Bias. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 3931-6	6.4	96
157	ORGANOMETAL HALIDE PEROVSKITE PHOTOVOLTAICS: A DIAMOND IN THE ROUGH. <i>Nano</i> , <b>2014</b> , 09, 1440002	1.1	23
156	Simultaneous Enhancement of Solar Cell Efficiency and Photostability via Chemical Tuning of Electron Donating Units in Diketopyrrolopyrrole-Based Push Pull Type Polymers. <i>Macromolecules</i> , <b>2014</b> , 47, 6270-6280	5.5	32
155	Panchromatic light harvesting by dye- and quantum dot-sensitized solar cells. <i>Solar Energy</i> , <b>2014</b> , 109, 183-188	6.8	10
154	Parameters Affecting I-V Hysteresis of CH3NH3PbI3 Perovskite Solar Cells: Effects of Perovskite Crystal Size and Mesoporous TiO2 Layer. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 2927-34	6.4	885
153	Growth of CH3NH3PbI3 cuboids with controlled size for high-efficiency perovskite solar cells. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 927-32	28.7	1442
152	Water photolysis at 12.3% efficiency via perovskite photovoltaics and Earth-abundant catalysts. <i>Science</i> , <b>2014</b> , 345, 1593-6	33.3	1920
151	Zn2SnO4-Based Photoelectrodes for Organolead Halide Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 22991-22994	3.8	76
150	Morphology-photovoltaic property correlation in perovskite solar cells: One-step versus two-step deposition of CH3NH3PbI3. <i>APL Materials</i> , <b>2014</b> , 2, 081510	5.7	337
150 149	Morphology-photovoltaic property correlation in perovskite solar cells: One-step versus two-step		337
	Morphology-photovoltaic property correlation in perovskite solar cells: One-step versus two-step deposition of CH3NH3PbI3. <i>APL Materials</i> , <b>2014</b> , 2, 081510  Correction to "Parameters Affecting I-V Hysteresis of CH3NH3PbI3 Perovskite Solar Cells: Effects of Perovskite Crystal Size and Mesoporous TiO2 Layer". <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> ,	5.7	
149	Morphology-photovoltaic property correlation in perovskite solar cells: One-step versus two-step deposition of CH3NH3PbI3. <i>APL Materials</i> , <b>2014</b> , 2, 081510  Correction to "Parameters Affecting I-V Hysteresis of CH3NH3PbI3 Perovskite Solar Cells: Effects of Perovskite Crystal Size and Mesoporous TiO2 Layer". <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 3434  Slow Dynamic Processes in Lead Halide Perovskite Solar Cells. Characteristic Times and Hysteresis.	5.7 6.4	14
149	Morphology-photovoltaic property correlation in perovskite solar cells: One-step versus two-step deposition of CH3NH3PbI3. <i>APL Materials</i> , <b>2014</b> , 2, 081510  Correction to "Parameters Affecting I-V Hysteresis of CH3NH3PbI3 Perovskite Solar Cells: Effects of Perovskite Crystal Size and Mesoporous TiO2 Layer". <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 3434  Slow Dynamic Processes in Lead Halide Perovskite Solar Cells. Characteristic Times and Hysteresis. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 2357-63  High-efficiency perovskite solar cells based on the black polymorph of HC(NH2)2 PbI3. <i>Advanced</i>	5·7 6.4 6.4	14 556
149 148 147	Morphology-photovoltaic property correlation in perovskite solar cells: One-step versus two-step deposition of CH3NH3PbI3. <i>APL Materials</i> , <b>2014</b> , 2, 081510  Correction to "Parameters Affecting I-V Hysteresis of CH3NH3PbI3 Perovskite Solar Cells: Effects of Perovskite Crystal Size and Mesoporous TiO2 Layer". <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 3434  Slow Dynamic Processes in Lead Halide Perovskite Solar Cells. Characteristic Times and Hysteresis. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 2357-63  High-efficiency perovskite solar cells based on the black polymorph of HC(NH2)2 PbI3. <i>Advanced Materials</i> , <b>2014</b> , 26, 4991-8	5.7 6.4 6.4	14 556 732

Perovskite solar cell. Vacuum Magazine, 2014, 1, 10-13 2 143 Sixfold enhancement of photocurrent by surface charge controlled high density quantum dot 5.8 142 19 coating. Chemical Communications, 2013, 49, 6448-50 Organometal Perovskite Light Absorbers Toward a 20% Efficiency Low-Cost Solid-State Mesoscopic 6.4 141 1104 Solar Cell. Journal of Physical Chemistry Letters, 2013, 4, 2423-2429 Mechanism of carrier accumulation in perovskite thin-absorber solar cells. Nature Communications, 140 702 17.4 2013, 4, 2242 Highly efficient monolithic dye-sensitized solar cells. ACS Applied Materials & amp; Interfaces, 2013, 18 139 9.5 5, 2070-4 Single-step solvothermal synthesis of mesoporous Ag-TiO2-reduced graphene oxide ternary 138 178 7.7 composites with enhanced photocatalytic activity. Nanoscale, 2013, 5, 5093-101 Hierarchical SnO[hanoparticle-ZnO nanorod photoanode for improving transport and life time of 137 42 photoinjected electrons in dye-sensitized solar cell. ACS Applied Materials & amp; Interfaces, 2013, 5, 1038-43 Quantum-dot-sensitized solar cell with unprecedentedly high photocurrent. Scientific Reports, 2013 136 4.9 220 , 3, 1050 High efficiency solid-state sensitized solar cell-based on submicrometer rutile TiO2 nanorod and 825 11.5 135 CH3NH3PbI3 perovskite sensitizer. Nano Letters, 2013, 13, 2412-7 Non-thermal phase separation of P3HT and PCBM using polar aprotic solvents for enhancement of 3.6 134 photovoltaic performance in bulk heterojunction solar cells. Synthetic Metals, 2013, 176, 26-30 Alkyloxy substituted organic dyes for high voltage dye-sensitized solar cell: Effect of alkyloxy chain 133 4.6 27 length on open-circuit voltage. Dyes and Pigments, 2012, 94, 88-98 Tuning of spacer groups in organic dyes for efficient inhibition of charge recombination in 132 4.6 44 dye-sensitized solar cells. Dyes and Pigments, 2012, 95, 134-141 Size-tunable, fast, and facile synthesis of titanium oxide nanotube powders for dye-sensitized solar 131 9.5 19 cells. ACS Applied Materials & Therfaces, 2012, 4, 4164-8 Quantum confinement effect of CdSe induced by nanoscale solvothermal reaction. Nanoscale, 2012 130 7.7 13 , 4, 6642-8 Urea as a long-term stable alternative to guanidium thiocyanate additive in dye-sensitized solar 6.7 129 12 cell. Applied Surface Science, 2012, 258, 8915-8918 Lead iodide perovskite sensitized all-solid-state submicron thin film mesoscopic solar cell with 128 4.9 5719 efficiency exceeding 9%. Scientific Reports, 2012, 2, 591 Synthesis, structure, and photovoltaic property of a nanocrystalline 2H perovskite-type novel 127 5 203 sensitizer (CH3CH2NH3)PbI3. Nanoscale Research Letters, 2012, 7, 353 Evaluation of dye aggregation and effect of deoxycholic acid concentration on photovoltaic 126 3.6 19 performance of N749-sensitized solar cell. Synthetic Metals, 2012, 162, 1503-1507

125	Effects of Oxidation State and Crystallinity of Tungsten Oxide Interlayer on Photovoltaic Property in Bulk Hetero-Junction Solar Cell. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 13480-13487	3.8	33
124	Highly durable and flexible dye-sensitized solar cells fabricated on plastic substrates: PVDF-nanofiber-reinforced TiO2 photoelectrodes. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 8950	35.4	79
123	Effect of Overlayer Thickness of Hole Transport Material on Photovoltaic Performance in Solid-Sate Dye-Sensitized Solar Cell. <i>Bulletin of the Korean Chemical Society</i> , <b>2012</b> , 33, 670-674	1.2	11
122	6.5% efficient perovskite quantum-dot-sensitized solar cell. <i>Nanoscale</i> , <b>2011</b> , 3, 4088-93	7.7	2465
121	Titanium nitride thin film as a novel charge collector in TCO-less dye-sensitized solar cell. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 3077		36
120	Pseudo first-order adsorption kinetics of N719 dye on TiO2 surface. <i>ACS Applied Materials &amp;</i> Interfaces, <b>2011</b> , 3, 1953-7	9.5	95
119	Transferred vertically aligned N-doped carbon nanotube arrays: use in dye-sensitized solar cells as counter electrodes. <i>Chemical Communications</i> , <b>2011</b> , 47, 4264-6	5.8	170
118	Voltage-enhancement mechanisms of an organic dye in high open-circuit voltage solid-state dye-sensitized solar cells. <i>ACS Nano</i> , <b>2011</b> , 5, 8267-74	16.7	48
117	Evaluation of external quantum efficiency of a 12.35% tandem solar cell comprising dye-sensitized and CIGS solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 3419-3423	6.4	60
116	Nano-grain SnO2 electrodes for high conversion efficiency SnO2 <b>D</b> SSC. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 179-183	6.4	7 <sup>2</sup>
115	Dependence of porosity, charge recombination kinetics and photovoltaic performance on annealing condition of TiO2 films. <i>Frontiers of Optoelectronics in China</i> , <b>2011</b> , 4, 59-64		4
114	Highly Interconnected Porous Electrodes for Dye-Sensitized Solar Cells Using Viruses as a Sacrificial Template. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 1160-1167	15.6	31
113	Molecular design and synthesis of ruthenium(II) sensitizers for highly efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 12389		36
112	Enhanced light harvesting in dye-sensitized solar cells with highly reflective TCO- and Pt-less counter electrodes. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 15193		18
111	Improvement of mass transport of the [Co(bpy)3](II/III) redox couple by controlling nanostructure of TiO2 films in dye-sensitized solar cells. <i>Chemical Communications</i> , <b>2011</b> , 47, 12637-9	5.8	65
110	Expanding the spectral response of a dye-sensitized solar cell by applying a selective positioning method. <i>Nanotechnology</i> , <b>2011</b> , 22, 045201	3.4	17
109	Controlled growth of vertically oriented hematite/Pt composite nanorod arrays: use for photoelectrochemical water splitting. <i>Nanotechnology</i> , <b>2011</b> , 22, 175703	3.4	61
108	Pure anatase TiO2 flanoglue[An inorganic binding agent to improve nanoparticle interconnections in the low-temperature sintering of dye-sensitized solar cells. <i>Applied Physics Letters</i> <b>2011</b> 98 103301	3.4	47

107	Blocking Layers Deposited on TCO Substrate and Their Effects on Photovoltaic Properties in Dye-Sensitized Solar Cells. <i>Journal of Electrochemical Science and Technology</i> , <b>2011</b> , 2, 68-75	3.2	7
106	Bismuth Borosilicate-Based Thick Film Passivation of Ag Grid for Large-Area Dye-Sensitized Solar Cells. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 1554	3.8	9
105	High performance organic photosensitizers for dye-sensitized solar cells. <i>Chemical Communications</i> , <b>2010</b> , 46, 1335-7	5.8	120
104	Unusual Enhancement of Photocurrent by Incorporation of Brfisted Base Thiourea into Electrolyte of Dye-Sensitized Solar Cell. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 19849-19852	3.8	48
103	Two-Step Sol <b>G</b> el Method-Based TiO2 Nanoparticles with Uniform Morphology and Size for Efficient Photo-Energy Conversion Devices. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 1958-1965	9.6	153
102	Prediction and Evaluation of Styrenic Block Copolymers as Surface Modifiers for Multiwalled Carbon Nanotubes in Herpineol-Based Pastes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 11393-11401	3.9	9
101	Method to protect charge recombination in the back-contact dye-sensitized solar cell. <i>Optics Express</i> , <b>2010</b> , 18 Suppl 3, A395-402	3.3	7
100	Dye-sensitized solar cells with Pt- and TCO-free counter electrodes. <i>Chemical Communications</i> , <b>2010</b> , 46, 4505-7	5.8	168
99	Enhanced charge collection efficiency by thin-TiO2-film deposition on FTO-coated ITO conductive oxide in dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 4392		51
98	Improvement of photovoltaic efficiency of dye-sensitized solar cell by introducing highly transparent nanoporous TiO2 buffer layer. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2010</b> , 10, 340-4	1.3	8
97	Study on the Change in Photovoltage by Control of Cell Gap in Dye-Sensitized Solar Cells. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , <b>2010</b> , 132,	2.3	2
96	Light management in dye-sensitized solar cell. <i>Korean Journal of Chemical Engineering</i> , <b>2010</b> , 27, 375-38	<b>34</b> 2.8	25
95	Effect of surface modification of multi-walled carbon nanotubes on the fabrication and performance of carbon nanotube based counter electrodes for dye-sensitized solar cells. <i>Current Applied Physics</i> , <b>2010</b> , 10, S165-S167	2.6	60
94	Wiper coating method for PEDOT:PSS film on fabricating organic photovoltaic modules. <i>Current Applied Physics</i> , <b>2010</b> , 10, e185-e188	2.6	3
93	Synthetic Strategy of Low-Bandgap Organic Sensitizers and Their Photoelectron Injection Characteristics. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2010</b> , 16, 1627-1634	3.8	15
92	Chemically deposited blocking layers on FTO substrates: Effect of precursor concentration on photovoltaic performance of dye-sensitized solar cells. <i>Journal of Electroanalytical Chemistry</i> , <b>2010</b> , 638, 161-166	4.1	50
91	Solution processed polymer tandem cell utilizing organic layer coated nano-crystalline TiO2 as interlayer. <i>Organic Electronics</i> , <b>2010</b> , 11, 521-528	3.5	29
90	Evaluation on over photocurrents measured from unmasked dye-sensitized solar cells. <i>Solar Energy</i> , <b>2010</b> , 84, 418-425	6.8	23

89	Azide-induced crosslinking of electrolytes and its application in solid-state dye-sensitized solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2010</b> , 94, 436-441	6.4	17
88	Highly bendable composite photoelectrode prepared from TiO2/polymer blend for low temperature fabricated dye-sensitized solar cells. <i>Current Applied Physics</i> , <b>2010</b> , 10, e171-e175	2.6	22
87	Suppression of Charge Recombination Rate in Nanocrystalline SnO2by Thin Coatings of Divalent Oxides in Dye-Sensitized Solar Cells. <i>Bulletin of the Korean Chemical Society</i> , <b>2010</b> , 31, 3093-3098	1.2	11
86	Methods to Improve Light Harvesting Efficiency in Dye-Sensitized Solar Cells. <i>Journal of Electrochemical Science and Technology</i> , <b>2010</b> , 1, 69-74	3.2	11
85	Dye-Sensitized Metal Oxide Nanostructures and Their Photoelectrochemical Properties. <i>Journal of the Korean Electrochemical Society</i> , <b>2010</b> , 13, 10-18		4
84	Novel extended Econjugated Zn(II)-porphyrin derivatives bearing pendant triphenylamine moiety for dye-sensitized solar cell: synthesis and characterization. <i>Journal of Porphyrins and Phthalocyanines</i> , <b>2009</b> , 13, 798-804	1.8	22
83	Compact Inverse-Opal Electrode Using Non-Aggregated TiO2 Nanoparticles for Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1093-1099	15.6	184
82	Formation of Highly Efficient Dye-Sensitized Solar Cells by Hierarchical Pore Generation with Nanoporous TiO2 Spheres. <i>Advanced Materials</i> , <b>2009</b> , 21, 3668-3673	24	430
81	Nanostructured photoelectrode consisting of TiO2 hollow spheres for non-volatile electrolyte-based dye-sensitized solar cells. <i>Journal of Power Sources</i> , <b>2009</b> , 194, 574-579	8.9	54
80	New liquid crystal-embedded PVdF-co-HFP-based polymer electrolytes for dye-sensitized solar cell applications. <i>Macromolecular Research</i> , <b>2009</b> , 17, 963-968	1.9	16
79	Selective positioning of organic dyes in a mesoporous inorganic oxide film. <i>Nature Materials</i> , <b>2009</b> , 8, 665-71	27	226
78	Improvement of electron transport by low-temperature chemically assisted sintering in dye-sensitized solar cell. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2009</b> , 204, 144-147	4.7	23
77	Structural, optical and photoelectrochemical studies on the nanodispersed titania. <i>Current Applied Physics</i> , <b>2009</b> , 9, 900-906	2.6	20
76	Effect of donor moiety in organic sensitizer on spectral response, electrochemical and photovoltaic properties. <i>Synthetic Metals</i> , <b>2009</b> , 159, 2571-2577	3.6	14
75	Zinc Borosilicate Thick Films as a Ag-Protective Layer for Dye-Sensitized Solar Cells. <i>Journal of the Korean Ceramic Society</i> , <b>2009</b> , 46, 313-316	2.2	4
74	Mesoporous nanocrystalline TiO2 electrode with ionic liquid-based solid polymer electrolyte for dye-sensitized solar cell application. <i>Synthetic Metals</i> , <b>2008</b> , 158, 590-593	3.6	36
73	Formation of efficient dye-sensitized solar cells by introducing an interfacial layer of long-range ordered mesoporous TiO2 thin film. <i>Langmuir</i> , <b>2008</b> , 24, 13225-30	4	85
72	Fabrication of heterosensitizer-junction dye-sensitized solar cells. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 142	19.3	23

## (2005-2008)

71	Nanocrystalline porous TiO2 electrode with ionic liquid impregnated solid polymer electrolyte for dye sensitized solar cells. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2008</b> , 8, 5271-4	1.3	16
70	Transparent solar cells based on dye-sensitized nanocrystalline semiconductors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 1895-1904	1.6	86
69	Nano-embossed Hollow Spherical TiO2 as Bifunctional Material for High-Efficiency Dye-Sensitized Solar Cells. <i>Advanced Materials</i> , <b>2008</b> , 20, 195-199	24	531
68	Novel thixotropic gel electrolytes based on dicationic bis-imidazolium salts for quasi-solid-state dye-sensitized solar cells. <i>Journal of Power Sources</i> , <b>2008</b> , 175, 692-697	8.9	91
67	Low-temperature oxygen plasma treatment of TiO2 film for enhanced performance of dye-sensitized solar cells. <i>Journal of Power Sources</i> , <b>2008</b> , 175, 914-919	8.9	78
66	ITO/ATO/TiO2 triple-layered transparent conducting substrates for dye-sensitized solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2008</b> , 92, 873-877	6.4	73
65	Size-dependent scattering efficiency in dye-sensitized solar cell. <i>Inorganica Chimica Acta</i> , <b>2008</b> , 361, 677	7- <u>16</u> 83	238
64	On the IIV measurement of dye-sensitized solar cell: Effect of cell geometry on photovoltaic parameters. <i>Solar Energy Materials and Solar Cells</i> , <b>2007</b> , 91, 1749-1754	6.4	50
63	Enhanced Photovoltaic Properties of SiO2-treated ZnO Nanocrystalline Electrode for Dye-sensitized Solar Cell. <i>Chemistry Letters</i> , <b>2007</b> , 36, 1506-1507	1.7	52
62	Dye Sensitized Solar Cell Using Polymer Electrolytes Based on Poly(ethylene oxide) with an Ionic Liquid. <i>Macromolecular Symposia</i> , <b>2007</b> , 249-250, 162-166	0.8	30
61	A highly efficient organic sensitizer for dye-sensitized solar cells. Chemical Communications, 2007, 4887	<b>-9</b> 5.8	399
60	Nanostructured TiO2 films for dye-sensitized solar cells. <i>Journal of Physics and Chemistry of Solids</i> , <b>2006</b> , 67, 1308-1311	3.9	18
59	Physical and electrochemical characterizations of poly(vinylidene fluoride-co-hexafluoropropylene)/SiO2-based polymer electrolytes prepared by the phase-inversion technique. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 102, 140-148	2.9	17
58	Characteristics of PVdF-HFP/TiO2 composite membrane electrolytes prepared by phase inversion and conventional casting methods. <i>Electrochimica Acta</i> , <b>2006</b> , 51, 5636-5644	6.7	195
57	A 4.2% efficient flexible dye-sensitized TiO2 solar cells using stainless steel substrate. <i>Solar Energy Materials and Solar Cells</i> , <b>2006</b> , 90, 574-581	6.4	216
56	Photovoltaic Properties of Nano-particulate and Nanorod Array ZnO Electrodes for Dye-Sensitized Solar Cell. <i>Bulletin of the Korean Chemical Society</i> , <b>2006</b> , 27, 295-298	1.2	23
55	Effect of TiO2 Inclusion in the Poly(vinylidene fluoride-co-hexafluoropropylene)-Based Polymer Electrolyte of Dye-Sensitized Solar Cell. <i>Bulletin of the Korean Chemical Society</i> , <b>2006</b> , 27, 322-324	1.2	8
54	Hybrid solar cells with vertically aligned CdTe nanorods and a conjugated polymer. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 113101	3.4	135

53	Dye-sensitized solar cells based on composite solid polymer electrolytes. <i>Chemical Communications</i> , <b>2005</b> , 889-91	5.8	124
52	Electrochemical capacitor with chemically polymerized conducting polymer based on activated carbon as hybrid electrodes. <i>Synthetic Metals</i> , <b>2005</b> , 153, 89-92	3.6	38
51	Flexible Metallic Substrates for TiO2Film of Dye-sensitized Solar Cells. <i>Chemistry Letters</i> , <b>2005</b> , 34, 804	-8 <b>0.5</b>	48
50	Chemical Sintering of Nanoparticles: A Methodology for Low-Temperature Fabrication of Dye-Sensitized TiO2 Films. <i>Advanced Materials</i> , <b>2005</b> , 17, 2349-2353	24	194
49	Enhancement of Photovoltaic Properties of Ti-modified Nanocrystalline ZnO Electrode for Dye-sensitized Solar Cell. <i>Bulletin of the Korean Chemical Society</i> , <b>2005</b> , 26, 1929-1930	1.2	19
48	Electrochemical supercapacitor based on polyaniline doped with lithium salt and active carbon electrodes. <i>Solid State Ionics</i> , <b>2004</b> , 175, 765-768	3.3	61
47	Photovoltaic characteristics of dye-sensitized surface-modified nanocrystalline SnO2 solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2004</b> , 161, 105-110	4.7	104
46	Poly(ethylenedioxythiophene) (PEDOT) as polymer electrode in redox supercapacitor. <i>Electrochimica Acta</i> , <b>2004</b> , 50, 843-847	6.7	184
45	Factors affecting the electrochemical performance of organic/V2O5 hybrid cathode materials. <i>Journal of Power Sources</i> , <b>2004</b> , 133, 263-267	8.9	19
44	Dye-Sensitized TiO[sub 2] Solar Cells Using Polymer Gel Electrolytes Based on PVdF-HFP. <i>Journal of the Electrochemical Society</i> , <b>2004</b> , 151, E257	3.9	71
43	Enhancement of Photocurrent and Photovoltage of Dye-Sensitized Solar Cells with TiO2 Film Deposited on Indium Zinc Oxide Substrate. <i>Chemistry of Materials</i> , <b>2004</b> , 16, 493-497	9.6	34
42	Morphological and photoelectrochemical characterization of core-shell nanoparticle films for dye-sensitized solar cells: Zn-O type shell on SnO2 and TiO2 cores. <i>Langmuir</i> , <b>2004</b> , 20, 4246-53	4	145
41	Dye-sensitized nanocrystalline solar cells based on composite polymer electrolytes containing fumed silica nanoparticles. <i>Chemical Communications</i> , <b>2004</b> , 1662-3	5.8	189
40	A New Ionic Liquid for a Redox Electrolyte of Dye-Sensitized Solar Cells. ETRI Journal, 2004, 26, 647-657	2 1.4	20
39	Effect of evaporation temperature on the crystalline properties of solution-cast films of poly(vinylidene fluoride)s. <i>Korean Journal of Chemical Engineering</i> , <b>2003</b> , 20, 934-941	2.8	10
38	Characterization of poly(vinylidenefluoride-co-hexafluoropropylene)-based polymer electrolyte filled with rutile TiO2 nanoparticles. <i>Solid State Ionics</i> , <b>2003</b> , 161, 121-131	3.3	71
37	Capacity and cycle performance of a lithium-ion polymer battery using commercially available LiNiCoO2. <i>Journal of Power Sources</i> , <b>2003</b> , 123, 69-74	8.9	15
36	Manufacturing method for transparent electric windows using dye-sensitized TiO2 solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2003</b> , 75, 475-479	6.4	59

#### (1998-2002)

35	Redox supercapacitor using polyaniline doped with Li salt as electrode. <i>Solid State Ionics</i> , <b>2002</b> , 152-153, 861-866	3.3	85
34	Symmetric redox supercapacitor with conducting polyaniline electrodes. <i>Journal of Power Sources</i> , <b>2002</b> , 103, 305-309	8.9	468
33	Synthesis and electrochemical properties of V2O5 intercalated with binary polymers. <i>Journal of Power Sources</i> , <b>2002</b> , 103, 273-279	8.9	57
32	Characterization of poly(vinylidenefluoride-co-hexafluoropropylene)-based polymer electrolyte filled with TiO2 nanoparticles. <i>Polymer</i> , <b>2002</b> , 43, 3951-3957	3.9	109
31	RF-Sputtered Vanadium Oxide Films. <i>Journal of the Electrochemical Society</i> , <b>2002</b> , 149, A597	3.9	26
30	Determining the locus for photocarrier recombination in dye-sensitized solar cells. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 685-687	3.4	79
29	Sonochemical synthesis of the high energy density cathode material VOPO4[2H2O. <i>Electrochemistry Communications</i> , <b>2001</b> , 3, 553-556	5.1	26
28	Raman spectroscopic studies of NiW oxide thin films. <i>Solid State Ionics</i> , <b>2001</b> , 140, 135-139	3.3	78
27	Ambipolar Diffusion of Photocarriers in Electrolyte-Filled, Nanoporous TiO2\(\textstyle{\pi}\) Journal of Physical Chemistry B, <b>2000</b> , 104, 3930-3936	3.4	320
26	Influence of Electrical Potential Distribution, Charge Transport, and Recombination on the Photopotential and Photocurrent Conversion Efficiency of Dye-Sensitized Nanocrystalline TiO2 Solar Cells: A Study by Electrical Impedance and Optical Modulation Techniques. <i>Journal of Physical</i>	3.4	734
25	Comparison of Dye-Sensitized Rutile- and Anatase-Based TiO2 Solar Cells. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 8989-8994	3.4	981
24	New Solution Route to Electrochromic Poly(acrylic acid)/WO3Hybrid Film. <i>Chemistry of Materials</i> , <b>2000</b> , 12, 2950-2956	9.6	32
23	Dye-Sensitized TiO2 Solar Cells: Structural and Photoelectrochemical Characterization of Nanocrystalline Electrodes Formed from the Hydrolysis of TiCl4. <i>Journal of Physical Chemistry B</i> , <b>1999</b> , 103, 3308-3314	3.4	327
22	Synthesis of new oligothiophene derivatives and their intercalation compounds: orientation effects. <i>Synthetic Metals</i> , <b>1999</b> , 105, 35-42	3.6	35
21	Evaluation of the Charge-Collection Efficiency of Dye-Sensitized Nanocrystalline TiO2 Solar Cells. Journal of Physical Chemistry B, <b>1999</b> , 103, 782-791	3.4	376
20	Estimation of the Charge-Collection Efficiency of Dye-Sensitized Nanocrystalline TiO2 Solar Cells*. <i>Zeitschrift Fur Physikalische Chemie</i> , <b>1999</b> , 212, 45-50	3.1	13
19	Charge Transfer <b>I</b> cRelation in the Superconducting Intercalates IBi2Sr2CaCu2Oy. <i>Journal of Solid State Chemistry</i> , <b>1998</b> , 138, 66-73	3.3	19
18	Development of Electrochromic Devices Working with Hydrophobic Lithium Electrolyte. <i>Active and Passive Electronic Components</i> , <b>1998</b> , 20, 201-213	0.3	2

17	Intracrystalline Structure of Molecular Mercury Halide Intercalated in High-Tc Superconducting Lattice of Bi2Sr2CaCu2Oy. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 1624-1633	16.4	93
16	Evolution of Superconducting Transition Temperature (Tc) upon Intercalation of HgBr2 into the Bi2Sr1.5-xLaxCa1.5Cu2Oy. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 3783-3787		16
15	X-ray Absorption Near-Edge Structure (XANES) of Iodine Intercalated C60: Evidence of I2⊞ in I2C60. <i>Chemistry of Materials</i> , <b>1996</b> , 8, 324-326	9.6	14
14	Effect of HgI2 intercalation on Bi2Sr2CaCu2Oy: Interlayer coupling effect. <i>Physical Review B</i> , <b>1996</b> , 53, 12416-12421	3.3	12
13	A new high-Tc superconducting intercalation compound. Synthetic Metals, 1995, 71, 1551-1553	3.6	11
12	N-alkylammonium intercalated 2-d hydrous titanates and their thermotropic phase transition. <i>Synthetic Metals</i> , <b>1995</b> , 71, 2053-2054	3.6	13
11	A new 2-dimensional magnetic model for the layered compounds of FeMO4Cl(M=Mo and W) with strong interlayer coupling. <i>Synthetic Metals</i> , <b>1995</b> , 71, 2055-2056	3.6	0
10	Molecular layer-by-layer engineering of superconducting and superionic materials in the (Agl)Bi2Sr2CaCu2Oy system. <i>The Journal of Physical Chemistry</i> , <b>1995</b> , 99, 7845-7848		14
9	New Superconducting Intercalation Compounds: (HgX2)0.5Bi2Sr2CaCu2Oy (X = Br and I). <i>Journal of the American Chemical Society</i> , <b>1994</b> , 116, 11564-11565	16.4	52
8	CHAPTER 7:Perovskite Solar Cells. <i>RSC Energy and Environment Series</i> ,242-257	0.6	3
7	Methodologies for >30% Efficient Perovskite Solar Cells via Enhancement of Voltage and Fill Factor. <i>Solar Rrl</i> ,2100767	7.1	4
6	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials,210252	<b>26</b> 21.8	17
5	Acid Dissociation Constant: A Criterion for Selecting Passivation Agents in Perovskite Solar Cells. <i>ACS Energy Letters</i> ,1612-1621	20.1	43
4	Cyclohexylammonium-Based 2D/3D Perovskite Heterojunction with Funnel-Like Energy Band Alignment for Efficient Solar Cells (23.91%). <i>Advanced Energy Materials</i> ,2102236	21.8	23
3	Materials and Methods for High-Efficiency Perovskite Solar Modules. Solar Rrl,2100455	7.1	20
2	Effect of Chemical Bonding Nature of Post-Treatment Materials on Photovoltaic Performance of Perovskite Solar Cells. <i>ACS Energy Letters</i> ,3435-3442	20.1	9
1	Polyacrylic Acid Grafted Carbon Nanotubes for Immobilization of Lead(II) in Perovskite Solar Cell. <i>ACS Energy Letters</i> ,1577-1585	20.1	4