

Jong Hyeok Park

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.

347 papers	16,849 citations	67 h-index	117 g-index
359 ext. papers	18,605 ext. citations	9.3 avg, IF	6.95 L-index

#	Paper	IF	Citations
347	Interfacial nitrogen modulated Z-scheme photoanode for solar water oxidation. <i>Journal of Power Sources</i> , 2022 , 519, 230784	8.9	0
346	Expandable crosslinked polymer coatings on silicon nanoparticle anode toward high-rate and long-cycle-life lithium-ion battery. <i>Applied Surface Science</i> , 2022 , 571, 151294	6.7	1
345	Enhanced band-filling effect in halide perovskites via hydrophobic conductive linkers. <i>Cell Reports Physical Science</i> , 2022 , 3, 100800	6.1	0
344	Revealing improved electrocatalytic performances of electrochemically synthesized S and Ni doped Fe ₂ O ₃ nanostructure interfaces. <i>Applied Surface Science</i> , 2022 , 588, 152894	6.7	0
343	Au/MoS ₂ tips as auxiliary rate aligners for the photocatalytic generation of syngas with a tunable composition. <i>Applied Catalysis B: Environmental</i> , 2022 , 308, 121219	21.8	4
342	Monolithic Lead Halide Perovskite Photoelectrochemical Cell with 9.16% Applied Bias Photon-to-Current Efficiency. <i>ACS Energy Letters</i> , 2022 , 7, 320-327	20.1	0
341	Artificial photosynthesis for high-value-added chemicals: Old material, new opportunity 2022 , 4, 21-44		6
340	Improving the oxygen evolution reaction using electronic structure modulation of sulfur-retaining nickel-based electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 27034-27040	13	1
339	Inhibition of iodide ion migration in flexible perovskite solar cells using oxide-metal-oxide transparent electrode. <i>Surfaces and Interfaces</i> , 2021 , 27, 101546	4.1	1
338	Pyrrolidinium-PEG Ionic Copolyester: Li-Ion Accelerator in Polymer Network Solid-State Electrolytes. <i>Advanced Energy Materials</i> , 2021 , 11, 2102660	21.8	0
337	Understanding morphological degradation of Ag nanoparticle during electrochemical CO ₂ reduction reaction by identical location observation. <i>Electrochimica Acta</i> , 2021 , 371, 137795	6.7	6
336	Defect Dominated Hierarchical Ti-Metal-Organic Frameworks via a Linker Competitive Coordination Strategy for Toluene Removal. <i>Advanced Functional Materials</i> , 2021 , 31, 2102511	15.6	11
335	Metal-Assisted Efficient Nanotubular Electrocatalyst of MoS ₂ for Hydrogen Production. <i>ChemCatChem</i> , 2021 , 13, 3237-3246	5.2	1
334	Disordered-Layer-Mediated Reverse Metal-Oxide Interactions for Enhanced Photocatalytic Water Splitting. <i>Nano Letters</i> , 2021 , 21, 5247-5253	11.5	6
333	Optimized ion-conductive pathway in UV-cured solid polymer electrolytes for all-solid lithium/sodium ion batteries. <i>Journal of Membrane Science</i> , 2021 , 619, 118771	9.6	9
332	Unprecedented electrocatalytic oxygen evolution performances by cobalt-incorporated molybdenum carbide microflowers with controlled charge re-distribution. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1770-1783	13	3
331	A highly activated iron phosphate over-layer for enhancing photoelectrochemical ammonia decomposition. <i>Journal of Hazardous Materials</i> , 2021 , 408, 124900	12.8	4

330	Electrocatalytic methane oxidation on Co ₃ O ₄ -incorporated ZrO ₂ nanotube powder. <i>Applied Catalysis B: Environmental</i> , 2021 , 283, 119653	21.8	15
329	Revisiting surface chemistry in TiO ₂ : A critical role of ionic passivation for pH-independent and anti-corrosive photoelectrochemical water oxidation. <i>Chemical Engineering Journal</i> , 2021 , 407, 126929	14.7	7
328	Unravelling the K-promotion effect in highly active and stable Fe ₅ C ₂ nanoparticles for catalytic linear olefin production. <i>Materials Advances</i> , 2021 , 2, 1050-1058	3.3	1
327	High-Valent Iodoperoxide-Rich Perovskite Precursor Solution Solar Illumination for Reproducible Power Conversion Efficiency. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 1676-1682	6.4	4
326	Engineered Polymeric Carbon Nitride Additive for Energy Storage Materials: A Review. <i>Advanced Functional Materials</i> , 2021 , 31, 2102300	15.6	6
325	Preparation of multilayer periodic nanopatterned WO ₃ -based photoanode by reverse nanoimprinting for water splitting. <i>Nanotechnology</i> , 2021 , 32,	3.4	1
324	Unnatural Hygroscopic Property of Nicotinic Acid by Restructuring Molecular Density: Self-Healing Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 8932-8938	6.4	0
323	Solar-harvesting lead halide perovskite for artificial photosynthesis. <i>Journal of Energy Chemistry</i> , 2021 , 62, 11-26	12	5
322	Enhanced desalination performance of nitrogen-doped porous carbon electrode in redox-mediated deionization. <i>Desalination</i> , 2021 , 520, 115333	10.3	2
321	Unveiling the enhanced electrocatalytic activity at electrochemically synthesized Pt-WO ₃ hybrid nanostructure interfaces. <i>Chemical Communications</i> , 2021 , 57, 11165-11168	5.8	1
320	Polymer-Clay Nanocomposite Solid-State Electrolyte with Selective Cation Transport Boosting and Retarded Lithium Dendrite Formation. <i>Advanced Energy Materials</i> , 2020 , 10, 2003114	21.8	35
319	Stretchable Hole Extraction Layer for Improved Stability in Perovskite Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 8004-8010	8.3	4
318	Near-Complete Suppression of Oxygen Evolution for Photoelectrochemical H ₂ O Oxidative H ₂ O ₂ Synthesis. <i>Journal of the American Chemical Society</i> , 2020 , 142, 8641-8648	16.4	68
317	Ultrathin Hematite on Mesoporous WO ₃ from Atomic Layer Deposition for Minimal Charge Recombination. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 11358-11367	8.3	12
316	Black TiO ₂ : What are exact functions of disorder layer 2020 , 2, 44-53		28
315	Retarded Charge Carrier Recombination in Photoelectrochemical Cells from Plasmon-Induced Resonance Energy Transfer. <i>Advanced Energy Materials</i> , 2020 , 10, 2000570	21.8	22
314	Artificial Photosynthesis for Value-Added Chemicals Production. <i>Ceramist</i> , 2020 , 23, 324-338	0.3	
313	Highly dispersible graphene oxide nanoflakes in pseudo-gel-polymer porous separators for boosting ion transportation. <i>Carbon</i> , 2020 , 166, 427-435	10.4	5

312	In situ electrochemically synthesized Pt-MoO ₃ x nanostructure catalysts for efficient hydrogen evolution reaction. <i>Journal of Catalysis</i> , 2020 , 381, 1-13	7.3	14
311	Edge functionalized graphene nanoribbons with tunable band edges for carrier transport interlayers in organic-inorganic perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 2955-2962	3.6	2
310	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
309	Catalytic Oxidation of Methane to Oxygenated Products: Recent Advancements and Prospects for Electrocatalytic and Photocatalytic Conversion at Low Temperatures. <i>Advanced Science</i> , 2020 , 7, 2001946	13.6	18
308	Large and reversible sodium storage through interlaced reaction design. <i>Energy Storage Materials</i> , 2020 , 25, 687-694	19.4	5
307	Boosting Faradaic reactions of metal oxides on polymeric carbon nitride/PANI hybrid. <i>Energy Storage Materials</i> , 2020 , 25, 487-494	19.4	9
306	Efficient photodegradation of volatile organic compounds by iron-based metal-organic frameworks with high adsorption capacity. <i>Applied Catalysis B: Environmental</i> , 2020 , 263, 118284	21.8	34
305	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
304	Heterojunction Photoanode of Atomic-Layer-Deposited MoS on Single-Crystalline CdS Nanorod Arrays. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 37586-37594	9.5	24
303	Disordered layers on WO ₃ nanoparticles enable photochemical generation of hydrogen from water. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 221-227	13	37
302	Growth of BiVO ₄ nanoparticles on a WO ₃ porous scaffold: improved water-splitting by high band-edge light harvesting. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 4480-4485	13	8
301	Aligned Heterointerface-Induced 1T-MoS Monolayer with Near-Ideal Gibbs Free for Stable Hydrogen Evolution Reaction. <i>Small</i> , 2019 , 15, e1804903	11	43
300	An ultrathin inorganic-organic hybrid layer on commercial polymer separators for advanced lithium-ion batteries. <i>Journal of Power Sources</i> , 2019 , 416, 89-94	8.9	33
299	Carbon-Coated Supraballs of Randomly Packed LiFePO ₄ Nanoplates for High Rate and Stable Cycling of Li-Ion Batteries. <i>Particle and Particle Systems Characterization</i> , 2019 , 36, 1900149	3.1	3
298	Black phosphorene as a hole extraction layer boosting solar water splitting of oxygen evolution catalysts. <i>Nature Communications</i> , 2019 , 10, 2001	17.4	120
297	Grain Boundary Healing of Organic-Inorganic Halide Perovskites for Moisture Stability. <i>Nano Letters</i> , 2019 , 19, 6498-6505	11.5	16
296	Electrochemical CH ₄ oxidation into acids and ketones on ZrO ₂ :NiCo ₂ O ₄ quasi-solid solution nanowire catalyst. <i>Applied Catalysis B: Environmental</i> , 2019 , 259, 118095	21.8	23
295	Unveiling the origin of performance reduction in perovskite solar cells with TiO ₂ electron transport layer: Conduction band minimum mismatches and chemical interactions at buried interface. <i>Applied Surface Science</i> , 2019 , 495, 143490	6.7	5

294	Cu ₂ O/Cu ₂ Se Mixed-Phase Nanoflake Arrays: pH-Universal Hydrogen Evolution Reactions with Ultralow Overpotential. <i>ChemElectroChem</i> , 2019 , 6, 5014-5021	4.3	4
293	A Surface patching strategy to achieve highly efficient solar water oxidation beyond surface passivation effect. <i>Nano Energy</i> , 2019 , 66, 104110	17.1	12
292	Band Alignment Engineering between Planar SnO and Halide Perovskites via Two-Step Annealing. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 6545-6550	6.4	14
291	Li-Ion Batteries: Carbon-Coated Supraballs of Randomly Packed LiFePO ₄ Nanoplates for High Rate and Stable Cycling of Li-Ion Batteries (Part. Part. Syst. Charact. 7/2019). <i>Particle and Particle Systems Characterization</i> , 2019 , 36, 1970019	3.1	
290	Hydrogen Peroxide Production from Solar Water Oxidation. <i>ACS Energy Letters</i> , 2019 , 4, 3018-3027	20.1	65
289	Vertically constructed monolithic electrodes for sodium ion batteries: toward low tortuosity and high energy density. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25985-25992	13	7
288	In Operando Stacking of Reduced Graphene Oxide for Active Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 43460-43465	9.5	13
287	Rationally designed hybrids of NiCo ₂ O ₄ and polymeric carbon nitride as faradaic electrodes with enhanced electrochemical performance. <i>Electrochimica Acta</i> , 2019 , 299, 717-726	6.7	15
286	Rationally Designed Copper-Modified Polymeric Carbon Nitride as a Photocathode for Solar Water Splitting. <i>ChemSusChem</i> , 2019 , 12, 866-872	8.3	15
285	Solar Cells: Oriented Grains with Preferred Low-Angle Grain Boundaries in Halide Perovskite Films by Pressure-Induced Crystallization (Adv. Energy Mater. 10/2018). <i>Advanced Energy Materials</i> , 2018 , 8, 1870045	21.8	4
284	Conceptual design of three-dimensional CoN/Ni ₃ N-coupled nanograsses integrated on N-doped carbon to serve as efficient and robust water splitting electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 4466-4476	13	107
283	Rapid Formation of a Disordered Layer on Monoclinic BiVO ₄ : Co-Catalyst-Free Photoelectrochemical Solar Water Splitting. <i>ChemSusChem</i> , 2018 , 11, 933-940	8.3	31
282	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
281	Oriented Grains with Preferred Low-Angle Grain Boundaries in Halide Perovskite Films by Pressure-Induced Crystallization. <i>Advanced Energy Materials</i> , 2018 , 8, 1702369	21.8	56
280	Dual or multi carbonaceous coating strategies for next-generation batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 1900-1914	13	24
279	Mediator- and co-catalyst-free direct Z-scheme composites of BiWO ₄ -CuP for solar-water splitting. <i>Nanoscale</i> , 2018 , 10, 3026-3036	7.7	65
278	Solution-processed yolk-shell-shaped WO ₃ /BiVO ₄ heterojunction photoelectrodes for efficient solar water splitting. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 2585-2592	13	78
277	Enhancement of Adsorption Performance for Organic Molecules by Combined Effect of Intermolecular Interaction and Morphology in Porous rGO-Incorporated Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 17335-17344	9.5	16

276	Vertically Oriented MoS ₂ with Spatially Controlled Geometry on Nitrogenous Graphene Sheets for High-Performance Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1703300	21.8	116
275	Electron beam induced strong organic/inorganic grafting for thermally stable lithium-ion battery separators. <i>Applied Surface Science</i> , 2018 , 444, 339-344	6.7	19
274	Metallic NiS Films Grown by Atomic Layer Deposition as an Efficient and Stable Electrocatalyst for Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 12807-12815	9.5	63
273	Stacked Porous Iron-Doped Nickel Cobalt Phosphide Nanoparticle: An Efficient and Stable Water Splitting Electrocatalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 6146-6156	8.3	84
272	Enhancing Mo:BiVO ₄ Solar Water Splitting with Patterned Au Nanospheres by Plasmon-Induced Energy Transfer. <i>Advanced Energy Materials</i> , 2018 , 8, 1701765	21.8	60
271	Tuning surface chemistry and morphology of graphene oxide by γ irradiation for improved performance of perovskite photovoltaics. <i>Carbon</i> , 2018 , 139, 564-571	10.4	14
270	Halide Perovskite Nanopillar Photodetector. <i>ACS Nano</i> , 2018 , 12, 8564-8571	16.7	46
269	Strategy for Boosting Li-Ion Current in Silicon Nanoparticles. <i>ACS Energy Letters</i> , 2018 , 3, 2252-2258	20.1	35
268	Multiple Heterojunction in Single Titanium Dioxide Nanoparticles for Novel Metal-Free Photocatalysis. <i>Nano Letters</i> , 2018 , 18, 4257-4262	11.5	35
267	Methodologies toward Efficient and Stable Cesium Lead Halide Perovskite-Based Solar Cells. <i>Advanced Science</i> , 2018 , 5, 1800509	13.6	38
266	An Hg^{2+} -level d-spacing controlling synthetic route for MoS ₂ towards stable intercalation of sodium ions. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22513-22518	13	20
265	Mixed-Phase (2H and 1T) MoS ₂ Catalyst for a Highly Efficient and Stable Si Photocathode. <i>Catalysts</i> , 2018 , 8, 580	4	13
264	Electrostatically regulated ternary-doped carbon foams with exposed active sites as metal-free oxygen reduction electrocatalysts. <i>Nanoscale</i> , 2018 , 10, 19498-19508	7.7	11
263	Porous supraparticles of LiFePO ₄ nanorods with carbon for high rate Li-ion batteries. <i>Materials Express</i> , 2018 , 8, 316-324	1.3	7
262	Suppressing buoyant force: New avenue for long-term durability of oxygen evolution catalysts. <i>Nano Energy</i> , 2018 , 54, 184-191	17.1	23
261	Epitaxial growth of WO ₃ nanoneedles achieved using a facile flame surface treatment process engineering of hole transport and water oxidation reactivity. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 19542-19546	13	16
260	Resolving Hysteresis in Perovskite Solar Cells with Rapid Flame-Processed Cobalt-Doped TiO ₂ . <i>Advanced Energy Materials</i> , 2018 , 8, 1801717	21.8	54
259	Design of a porous gel polymer electrolyte for sodium ion batteries. <i>Journal of Membrane Science</i> , 2018 , 566, 122-128	9.6	32

258	Improved Stability of Interfacial Energy-Level Alignment in Inverted Planar Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 18964-18973	9.5	17
257	Additive-free electrode fabrication with reduced graphene oxide using supersonic kinetic spray for flexible lithium-ion batteries. <i>Carbon</i> , 2018 , 139, 195-204	10.4	14
256	Controllable sulfuration engineered NiO nanosheets with enhanced capacitance for high rate supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 4543-4549	13	92
255	Potassium Incorporation for Enhanced Performance and Stability of Fully Inorganic Cesium Lead Halide Perovskite Solar Cells. <i>Nano Letters</i> , 2017 , 17, 2028-2033	11.5	371
254	Plasmon-Sensitized Graphene/TiO Inverse Opal Nanostructures with Enhanced Charge Collection Efficiency for Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 7075-7083	9.5	108
253	Double 2-dimensional H ₂ -evolving catalyst tipped photocatalyst nanowires: A new avenue for high-efficiency solar to H ₂ generation. <i>Nano Energy</i> , 2017 , 34, 481-490	17.1	38
252	Unveiling the Crystal Formation of Cesium Lead Mixed-Halide Perovskites for Efficient and Stable Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 2936-2940	6.4	144
251	Bulk layered heterojunction as an efficient electrocatalyst for hydrogen evolution. <i>Science Advances</i> , 2017 , 3, e1602215	14.3	64
250	Long-term Stability of Conducting Polymers in Iodine/iodide Electrolytes: Beyond Conventional Platinum Catalysts. <i>Electrochimica Acta</i> , 2017 , 227, 95-100	6.7	7
249	Surface Localization of Defects in Black TiO: Enhancing Photoactivity or Reactivity. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 199-207	6.4	79
248	Porphyrin Sensitizers with Donor Structural Engineering for Superior Performance Dye-Sensitized Solar Cells and Tandem Solar Cells for Water Splitting Applications. <i>Advanced Energy Materials</i> , 2017 , 7, 1602117	21.8	151
247	Amorphous Phosphorus-Incorporated Cobalt Molybdenum Sulfide on Carbon Cloth: An Efficient and Stable Electrocatalyst for Enhanced Overall Water Splitting over Entire pH Values. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 37739-37749	9.5	88
246	Defect-Induced Epitaxial Growth for Efficient Solar Hydrogen Production. <i>Nano Letters</i> , 2017 , 17, 6676-6683	16.3	77
245	Edge-On MoS ₂ Thin Films by Atomic Layer Deposition for Understanding the Interplay between the Active Area and Hydrogen Evolution Reaction. <i>Chemistry of Materials</i> , 2017 , 29, 7604-7614	9.6	64
244	Ultrafast Flame Annealing of TiO Paste for Fabricating Dye-Sensitized and Perovskite Solar Cells with Enhanced Efficiency. <i>Small</i> , 2017 , 13, 1702260	11	13
243	Ultrahigh Electrocatalytic Conversion of Methane at Room Temperature. <i>Advanced Science</i> , 2017 , 4, 1700379	13.79	44
242	A Structurable Gel-Polymer Electrolyte for Sodium Ion Batteries. <i>Advanced Functional Materials</i> , 2017 , 27, 1701768	15.6	59
241	Thermodynamically self-organized hole transport layers for high-efficiency inverted-planar perovskite solar cells. <i>Nanoscale</i> , 2017 , 9, 12677-12683	7.7	17

240	Tailored Metal Oxide Thin Film on Polyethylene Separators for Sodium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A1965-A1969	3.9	12
239	Hierarchical MnCo-layered double hydroxides@Ni(OH) ₂ core-shell heterostructures as advanced electrodes for supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 1043-1049	13	233
238	Overcoming Charge Collection Limitation at Solid/Liquid Interface by a Controllable Crystal Deficient Overlayer. <i>Advanced Energy Materials</i> , 2017 , 7, 1600923	21.8	51
237	Stibnite sensitized hollow cubic TiO ₂ photoelectrodes for organic-inorganic heterojunction solar cells. <i>Solar Energy</i> , 2017 , 157, 434-440	6.8	6
236	PVdF-HFP/exfoliated graphene oxide nanosheet hybrid separators for thermally stable Li-ion batteries. <i>RSC Advances</i> , 2016 , 6, 80706-80711	3.7	18
235	Hollow and yolk-shell structured off-stoichiometric tungsten trioxide via selective leaching and hydrogenation for enhanced lithium storage properties. <i>Electrochimica Acta</i> , 2016 , 215, 466-472	6.7	8
234	Dual Oxygen and Tungsten Vacancies on a WO ₃ Photoanode for Enhanced Water Oxidation. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 11819-23	16.4	140
233	Dual Oxygen and Tungsten Vacancies on a WO ₃ Photoanode for Enhanced Water Oxidation. <i>Angewandte Chemie</i> , 2016 , 128, 11998-12002	3.6	64
232	Solution processable formation of a few nanometer thick-disordered overlayer on the surface of open-ended TiO nanotubes. <i>Chemical Communications</i> , 2016 , 52, 13807-13810	5.8	8
231	Molecular Chemistry-Controlled Hybrid Ink-Derived Efficient Cu ₂ ZnSnS ₄ Photocathodes for Photoelectrochemical Water Splitting. <i>ACS Energy Letters</i> , 2016 , 1, 1127-1136	20.1	83
230	Unassisted photoelectrochemical water splitting exceeding 7% solar-to-hydrogen conversion efficiency using photon recycling. <i>Nature Communications</i> , 2016 , 7, 11943	17.4	109
229	Supercritical Carbon Dioxide-Assisted Process for Well-Dispersed Silicon/Graphene Composite as a Li ion Battery Anode. <i>Scientific Reports</i> , 2016 , 6, 32011	4.9	20
228	Designed seamless outer surface: Application for high voltage LiNi _{0.5} Mn _{1.5} O ₄ cathode with excellent cycling stability. <i>Journal of Power Sources</i> , 2016 , 336, 307-315	8.9	17
227	Two-terminal DSSC/silicon tandem solar cells exceeding 18% efficiency. <i>Energy and Environmental Science</i> , 2016 , 9, 3657-3665	35.4	34
226	A 3D triple-deck photoanode with a strengthened structure integrality: enhanced photoelectrochemical water oxidation. <i>Nanoscale</i> , 2016 , 8, 3474-81	7.7	22
225	Self-Position of Au NPs in Perovskite Solar Cells: Optical and Electrical Contribution. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 449-54	9.5	77
224	Large Area Platinum and Fluorine-doped Tin Oxide-free Dye sensitized Solar Cells with Silver-Nanoplate Embedded Poly(3,4-Ethylenedioxythiophene) Counter Electrode. <i>Electrochimica Acta</i> , 2016 , 187, 218-223	6.7	9
223	An order/disorder/water junction system for highly efficient co-catalyst-free photocatalytic hydrogen generation. <i>Energy and Environmental Science</i> , 2016 , 9, 499-503	35.4	201

222	Water Splitting Progress in Tandem Devices: Moving Photolysis beyond Electrolysis. <i>Advanced Energy Materials</i> , 2016 , 6, 1600602	21.8	216
221	Delocalized Electron Accumulation at Nanorod Tips: Origin of Efficient H ₂ Generation. <i>Advanced Functional Materials</i> , 2016 , 26, 4527-4534	15.6	51
220	Core-Shell Low-Oxidation State Oxides@Reduced Graphene Oxide Cubes via Pressurized Reduction for Highly Stable Lithium Ion Storage. <i>Advanced Functional Materials</i> , 2016 , 26, 2959-2965	15.6	33
219	Hybrid Silver Mesh Electrode for ITO-Free Flexible Polymer Solar Cells with Good Mechanical Stability. <i>ChemSusChem</i> , 2016 , 9, 1042-9	8.3	28
218	Tunable Bandgap Energy and Promotion of H ₂ O ₂ Oxidation for Overall Water Splitting from Carbon Nitride Nanowire Bundles. <i>Advanced Energy Materials</i> , 2016 , 6, 1502352	21.8	65
217	Morphology fixing agent for [6,6]-phenyl C ₆₁ -butyric acid methyl ester (PC60BM) in planar-type perovskite solar cells for enhanced stability. <i>RSC Advances</i> , 2016 , 6, 51513-51519	3.7	10
216	Controlled pore evolution during phase inversion from the combinatorial non-solvent approach: application to battery separators. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 9496-9501	13	22
215	Understanding the synergistic effect of WO ₃ -BiVO ₄ heterostructures by impedance spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 9255-61	3.6	35
214	Layer-by-Layer Self-Assembled Graphene Multilayers as Pt-Free Alternative Counter Electrodes in Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 11488-98	9.5	20
213	A facile chemical synthesis of ZnO@multilayer graphene nanoparticles with fast charge separation and enhanced performance for application in solar energy conversion. <i>Nano Energy</i> , 2016 , 25, 9-17	17.1	28
212	Counterbalancing of morphology and conductivity of poly(3,4-ethylenedioxythiophene) polystyrene sulfonate based flexible devices. <i>Nanoscale</i> , 2016 , 8, 19557-19563	7.7	10
211	High-reversible capacity of Perovskite BaSnO ₃ /rGO composite for Lithium-Ion Battery Anodes. <i>Electrochimica Acta</i> , 2016 , 214, 31-37	6.7	22
210	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
209	Unassisted photoelectrochemical water splitting beyond 5.7% solar-to-hydrogen conversion efficiency by a wireless monolithic photoanode/dye-sensitized solar cell tandem device. <i>Nano Energy</i> , 2015 , 13, 182-191	17.1	114
208	Conflicted Effects of a Solvent Additive on PTB7:PC71BM Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 5954-5961	3.8	138
207	Self-Organized Formation of Embossed Nanopatterns on Various Metal Substrates: Application to Flexible Solar Cells. <i>Electrochimica Acta</i> , 2015 , 176, 636-641	6.7	1
206	Origin of White Electroluminescence in Graphene Quantum Dots Embedded Host/Guest Polymer Light Emitting Diodes. <i>Scientific Reports</i> , 2015 , 5, 11032	4.9	46
205	Enhanced performance of layer-evolved bulk-heterojunction solar cells with Ag nanoparticles by sequential deposition. <i>Organic Electronics</i> , 2015 , 24, 325-329	3.5	8

204	Prevention of sulfur diffusion using MoS ₂ -intercalated 3D-nanostructured graphite for high-performance lithium-ion batteries. <i>Nanoscale</i> , 2015 , 7, 11928-33	7.7	22
203	The tailored inner space of TiO ₂ electrodes via a 30 second wet etching process: high efficiency solid-state perovskite solar cells. <i>Nanoscale</i> , 2015 , 7, 10745-51	7.7	11
202	Incorporation of a Metal Oxide Interlayer using a Virus-Templated Assembly for Synthesis of Graphene-Electrode-Based Organic Photovoltaics. <i>ChemSusChem</i> , 2015 , 8, 2385-91	8.3	5
201	Clay Nanosheets in Skeletons of Controlled Phase Inversion Separators for Thermally Stable Li-Ion Batteries. <i>Advanced Functional Materials</i> , 2015 , 25, 3399-3404	15.6	33
200	Conformal Coating Strategy Comprising N-doped Carbon and Conventional Graphene for Achieving Ultrahigh Power and Cyclability of LiFePO ₄ . <i>Nano Letters</i> , 2015 , 15, 6756-63	11.5	101
199	Highly Efficient Solar Water Splitting from Transferred TiO ₂ Nanotube Arrays. <i>Nano Letters</i> , 2015 , 15, 5709-15	11.5	85
198	Highly Transparent Dual-Sensitized Titanium Dioxide Nanotube Arrays for Spontaneous Solar Water Splitting Tandem Configuration. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 18429-34	9.5	14
197	Promising efficiency enhancement in cobalt redox couple-based back-illuminated dye-sensitized solar cells with titanium foil substrate. <i>Journal of Power Sources</i> , 2015 , 278, 32-37	8.9	14
196	Opto-electronic properties of TiO ₂ nanohelices with embedded HC(NH ₂) ₂ PbI ₃ perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 9179-9186	13	60
195	Enhanced fill factor of tandem organic solar cells incorporating a diketopyrrolopyrrole-based low-bandgap polymer and optimized interlayer. <i>ChemSusChem</i> , 2015 , 8, 331-6	8.3	8
194	High-performance perovskite-graphene hybrid photodetector. <i>Advanced Materials</i> , 2015 , 27, 41-6	24	651
193	Enhanced power conversion efficiency of dye-sensitized solar cells with multifunctional photoanodes based on a three-dimensional TiO ₂ nanohelix array. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 132, 47-55	6.4	30
192	Surface-Engineered Graphene Quantum Dots Incorporated into Polymer Layers for High Performance Organic Photovoltaics. <i>Scientific Reports</i> , 2015 , 5, 14276	4.9	48
191	General Characterization Methods for Photoelectrochemical Cells for Solar Water Splitting. <i>ChemSusChem</i> , 2015 , 8, 3192-203	8.3	51
190	Incorporation of PEDOT:PSS into SnO ₂ /reduced graphene oxide nanocomposite anodes for lithium-ion batteries to achieve ultra-high capacity and cyclic stability. <i>RSC Advances</i> , 2015 , 5, 13964-13977	17.7	27
189	Graphene Photodetectors: High Performance Perovskite-Graphene Hybrid Photodetector (Adv. Mater. 1/2015). <i>Advanced Materials</i> , 2015 , 27, 188-188	24	2
188	Facile control of intra- and inter-particle porosity in template-free synthesis of size-controlled nanoporous titanium dioxides beads for efficient organic/heterojunction solar cells. <i>Journal of Power Sources</i> , 2015 , 279, 72-79	8.9	6
187	Nano carbon conformal coating strategy for enhanced photoelectrochemical responses and long-term stability of ZnO quantum dots. <i>Nano Energy</i> , 2015 , 13, 258-266	17.1	48

186	Facilitated ion diffusion in multiscale porous particles: application in battery separators. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 4511-7	9.5	18
185	Cylindrical nanostructured MoS ₂ directly grown on CNT composites for lithium-ion batteries. <i>Nanoscale</i> , 2015 , 7, 3404-9	7.7	80
184	Tuning the charge transfer route by p/n junction catalysts embedded with CdS nanorods for simultaneous efficient hydrogen and oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 4803-4810	13	73
183	Controlled thermal sintering of a metal-metal oxide-carbon ternary composite with a multi-scale hollow nanostructure for use as an anode material in Li-ion batteries. <i>Chemical Communications</i> , 2014 , 50, 2589-91	5.8	14
182	Si-Mn/reduced graphene oxide nanocomposite anodes with enhanced capacity and stability for lithium-ion batteries. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 1702-8	9.5	34
181	Tungsten oxide/PEDOT:PSS hybrid cascade hole extraction layer for polymer solar cells with enhanced long-term stability and power conversion efficiency. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 122, 24-30	6.4	14
180	Unconventional pore and defect generation in molybdenum disulfide: application in high-rate lithium-ion batteries and the hydrogen evolution reaction. <i>ChemSusChem</i> , 2014 , 7, 2489-95	8.3	72
179	Lysozyme-mediated biomineralization of titanium-tungsten oxide hybrid nanoparticles with high photocatalytic activity. <i>Chemical Communications</i> , 2014 , 50, 12392-5	5.8	10
178	Enhanced performance and stability of polymer BHJ photovoltaic devices from dry transfer of PEDOT:PSS. <i>ChemSusChem</i> , 2014 , 7, 1957-63	8.3	22
177	Enhancement of the power conversion efficiency in a polymer solar cell using a work-function-controlled Ti/SiO _x interlayer. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 2033-2039	13	4
176	Efficient Hole Extraction from Sb ₂ S ₃ Heterojunction Solar Cells by the Solid Transfer of Preformed PEDOT:PSS Film. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 22672-22677	3.8	23
175	Double-Deck Inverse Opal Photoanodes: Efficient Light Absorption and Charge Separation in Heterojunction. <i>Chemistry of Materials</i> , 2014 , 26, 5592-5597	9.6	81
174	Flexible and transparent metallic grid electrodes prepared by evaporative assembly. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 12380-7	9.5	111
173	A roll-to-roll welding process for planarized silver nanowire electrodes. <i>Nanoscale</i> , 2014 , 6, 11828-34	7.7	132
172	Efficient photoelectrochemical hydrogen production from bismuth vanadate-decorated tungsten trioxide helix nanostructures. <i>Nature Communications</i> , 2014 , 5, 4775	17.4	320
171	Tailoring of the plasmonic and waveguide effect in bulk-heterojunction photovoltaic devices with ordered, nanopatterned structures. <i>Organic Electronics</i> , 2014 , 15, 3120-3126	3.5	3
170	A magnetic field assisted self-assembly strategy towards strongly coupled Fe ₃ O ₄ nanocrystal/rGO paper for high-performance lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9636	13	39
169	Highly conductive freestanding graphene films as anode current collectors for flexible lithium-ion batteries. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 11158-66	9.5	48

168	Multi-functionality of macroporous TiO ₂ spheres in dye-sensitized and hybrid heterojunction solar cells. <i>Langmuir</i> , 2014 , 30, 3010-8	4	35
167	Conducting Polymer Coated Non-woven Graphite Fiber Film for Dye-Sensitized Solar Cells: Superior Pt- and FTO-Free Counter Electrodes. <i>Electrochimica Acta</i> , 2014 , 137, 164-168	6.7	24
166	Tailoring dispersion and aggregation of Au nanoparticles in the BHJ layer of polymer solar cells: plasmon effects versus electrical effects. <i>ChemSusChem</i> , 2014 , 7, 3452-8	8.3	11
165	Efficient solution-processed small-molecule solar cells by insertion of graphene quantum dots. <i>Nanoscale</i> , 2014 , 6, 15175-80	7.7	23
164	Quasi-solid-state Dye-sensitized Solar Cells with Macropore-containing Hierarchical Electrodes. <i>Electrochimica Acta</i> , 2014 , 135, 192-198	6.7	3
163	Graphene oxide-assisted production of carbon nitrides using a solution process and their photocatalytic activity. <i>Carbon</i> , 2014 , 66, 119-125	10.4	49
162	Graphene/acid coassisted synthesis of ultrathin MoS ₂ nanosheets with outstanding rate capability for a lithium battery anode. <i>Inorganic Chemistry</i> , 2013 , 52, 9807-12	5.1	98
161	Transferable Graphene Oxide by Stamping Nanotechnology: Electron-Transport Layer for Efficient Bulk-Heterojunction Solar Cells. <i>Angewandte Chemie</i> , 2013 , 125, 2946-2952	3.6	6
160	Sub-100 nm scale polymer transfer printing process for organic photovoltaic devices. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 109, 1-7	6.4	7
159	Balancing light absorptivity and carrier conductivity of graphene quantum dots for high-efficiency bulk heterojunction solar cells. <i>ACS Nano</i> , 2013 , 7, 7207-12	16.7	152
158	Transferable graphene oxide by stamping nanotechnology: electron-transport layer for efficient bulk-heterojunction solar cells. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 2874-80	16.4	105
157	Surface roughened 1-D Au host nanorods for visible light induced photocatalyst. <i>Electrochimica Acta</i> , 2013 , 97, 404-408	6.7	10
156	Temperature sensing behavior of poly(3,4-ethylenedioxythiophene) thin film. <i>Synthetic Metals</i> , 2013 , 185-186, 52-55	3.6	3
155	Improvement of Electrical Conductivity of Poly(3,4-ethylenedioxythiophene) (PEDOT) Thin Film. <i>Molecular Crystals and Liquid Crystals</i> , 2013 , 580, 76-82	0.5	7
154	Chemically Modified Graphene Oxide-Wrapped Quasi-Micro Ag Decorated Silver Trimolybdate Nanowires for Photocatalytic Applications. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 24023-24032	3.8	34
153	Understanding the positive effects of (CoPi) co-catalyst modification in inverse-opal structured Fe ₂ O ₃ -based photoelectrochemical cells. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 12725-12732	6.7	46
152	Polymer-free Vertical Transfer of Silicon Nanowires and their Application to Energy Storage. <i>ChemSusChem</i> , 2013 , 6, 2144-8	8.3	12
151	Nanopatterned conductive polymer films as a Pt, TCO-free counter electrode for low-cost dye-sensitized solar cells. <i>Nanoscale</i> , 2013 , 5, 7838-43	7.7	59

150	Solution processable silica thin film coating on microporous substrate with high tortuosity: application to a battery separator. <i>RSC Advances</i> , 2013 , 3, 16708	3.7	10
149	Photoelectrochemical cell/dye-sensitized solar cell tandem water splitting systems with transparent and vertically aligned quantum dot sensitized TiO ₂ nanorod arrays. <i>Journal of Power Sources</i> , 2013 , 225, 263-268	8.9	41
148	Inverse opal structured α -Fe ₂ O ₃ on graphene thin films: enhanced photo-assisted water splitting. <i>Nanoscale</i> , 2013 , 5, 1939-44	7.7	66
147	Highly efficient monolithic dye-sensitized solar cells. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 2070-4	9.5	18
146	Single-step solvothermal synthesis of mesoporous Ag-TiO ₂ -reduced graphene oxide ternary composites with enhanced photocatalytic activity. <i>Nanoscale</i> , 2013 , 5, 5093-101	7.7	178
145	Layer-by-layer all-transfer-based organic solar cells. <i>Langmuir</i> , 2013 , 29, 5377-82	4	20
144	Highly robust silicon nanowire/graphene core-shell electrodes without polymeric binders. <i>Nanoscale</i> , 2013 , 5, 8986-91	7.7	30
143	Polymer bulk heterojunction solar cells with PEDOT:PSS bilayer structure as hole extraction layer. <i>ChemSusChem</i> , 2013 , 6, 1070-5	8.3	22
142	Controlled synthesis of skein shaped TiO ₂ -B nanotube cluster particles with outstanding rate capability. <i>Chemical Communications</i> , 2013 , 49, 2326-8	5.8	31
141	Dye molecules in electrolytes: new approach for suppression of dye-desorption in dye-sensitized solar cells. <i>Scientific Reports</i> , 2013 , 3,	4.9	39
140	Constructing inverse opal structured hematite photoanodes via electrochemical process and their application to photoelectrochemical water splitting. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 11717-22	7.6	33
139	Discrepancy of optimum ratio in bulk heterojunction photovoltaic devices: initial cell efficiency vs long-term stability. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 1612-8	9.5	11
138	Investigation of porosity and heterojunction effects of a mesoporous hematite electrode on photoelectrochemical water splitting. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 9775-82	3.6	32
137	Photoelectrochemical properties of vertically oriented hematite/gold multi-block nanorod arrays and their comparison to pure hematite nanorod arrays. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 1910-3	1.3	
136	Porous Materials: Multi-Scale Pore Generation from Controlled Phase Inversion: Application to Separators for Li-Ion Batteries (Adv. Energy Mater. 11/2013). <i>Advanced Energy Materials</i> , 2013 , 3, 1394-1394	21.8	28
135	Multi-Scale Pore Generation from Controlled Phase Inversion: Application to Separators for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2013 , 3, 1417-1420	21.8	28
134	Color-stable white-light-emitting diodes doped with phosphorescent dopants via enhanced energy transfer through homogeneous morphology. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 4203-6	1.3	
133	PEDOT Polymer Film Based Counter Electrodes for Pt-free Dye-Sensitized Solar Cells. <i>Journal of Electrochemical Science and Technology</i> , 2013 , 4, 89-92	3.2	4

132	Hematite modified tungsten trioxide nanoparticle photoanode for solar water oxidation. <i>Journal of Power Sources</i> , 2012 , 210, 32-37	8.9	38
131	Inorganic thin layer coated porous separator with high thermal stability for safety reinforced Li-ion battery. <i>Journal of Power Sources</i> , 2012 , 212, 22-27	8.9	75
130	Stability comparison: A PCDTBT/PC71BM bulk-heterojunction versus a P3HT/PC71BM bulk-heterojunction. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 101, 249-255	6.4	45
129	The role of non-solvent swelling in bulk hetero junction solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 102, 196-200	6.4	9
128	Efficient and low potential operative host/guest concentration graded bilayer polymer electrophosphorescence devices. <i>Journal of Luminescence</i> , 2012 , 132, 870-874	3.8	3
127	Green synthesis of biphasic TiO ₂ /reduced graphene oxide nanocomposites with highly enhanced photocatalytic activity. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 3893-901	9.5	457
126	Polymer Solar Cells: Efficiency Increase in Flexible Bulk Heterojunction Solar Cells with a Nano-Patterned Indium Zinc Oxide Anode (Adv. Energy Mater. 11/2012). <i>Advanced Energy Materials</i> , 2012 , 2, 1282-1282	21.8	1
125	Hollow Polypyrrole Films: Applications for Energy Storage Devices. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1052-A1056	3.9	18
124	Ultrathin nanoclay films with tunable thickness as barrier layers in organic light emitting devices. <i>Journal of Materials Chemistry</i> , 2012 , 22, 7718		15
123	Photoelectrochemical cells with tungsten trioxide/Mo-doped BiVO ₄ bilayers. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 11119-24	3.6	100
122	Size-tunable, fast, and facile synthesis of titanium oxide nanotube powders for dye-sensitized solar cells. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 4164-8	9.5	19
121	High-efficiency polymer photovoltaic cells using a solution-processable insulating interfacial nanolayer: the role of the insulating nanolayer. <i>Journal of Materials Chemistry</i> , 2012 , 22, 25148		40
120	Inverse opal tungsten trioxide films with mesoporous skeletons: synthesis and photoelectrochemical responses. <i>Chemical Communications</i> , 2012 , 48, 11939-41	5.8	33
119	Controlling surface enrichment in polymeric hole extraction layers to achieve high-efficiency organic photovoltaic cells. <i>ChemSusChem</i> , 2012 , 5, 2053-7	8.3	28
118	Controlled dissolution of polystyrene nanobeads: transition from liquid electrolyte to gel electrolyte. <i>Nano Letters</i> , 2012 , 12, 2233-7	11.5	53
117	Stamping transfer of a quantum dot interlayer for organic photovoltaic cells. <i>Langmuir</i> , 2012 , 28, 9893-84		19
116	Enhanced light harvesting in bulk heterojunction photovoltaic devices with shape-controlled Ag nanomaterials: Ag nanoparticles versus Ag nanoplates. <i>RSC Advances</i> , 2012 , 2, 7268	3.7	51
115	Side-chain effects on phenothiazine-based donor-acceptor copolymer properties in organic photovoltaic devices. <i>Journal of Polymer Science Part A</i> , 2012 , 50, 649-658	2.5	17

114	The preparation of highly ordered TiO ₂ nanotube arrays by an anodization method and their applications. <i>Chemical Communications</i> , 2012 , 48, 6456-71	5.8	76
113	Efficiency Increase in Flexible Bulk Heterojunction Solar Cells with a Nano-Patterned Indium Zinc Oxide Anode. <i>Advanced Energy Materials</i> , 2012 , 2, 1319-1322	21.8	37
112	Flexible and platinum-free dye-sensitized solar cells with conducting-polymer-coated graphene counter electrodes. <i>ChemSusChem</i> , 2012 , 5, 379-82	8.3	126
111	PEDOT:PSS/Single Wall Carbon Nanotube Composite Nanoparticles as an Additive for Electric-double Layer Capacitor. <i>Journal of Electrochemical Science and Technology</i> , 2012 , 3, 143-148	3.2	1
110	Synthesis of transparent mesoporous tungsten trioxide films with enhanced photoelectrochemical response: application to unassisted solar water splitting. <i>Energy and Environmental Science</i> , 2011 , 4, 1463-1468	35.4	132
109	Hierarchical construction of self-standing anodized titania nanotube arrays and nanoparticles for efficient and cost-effective front-illuminated dye-sensitized solar cells. <i>ACS Nano</i> , 2011 , 5, 5088-93	16.7	105
108	Electric-Field-Assisted Layer-by-Layer Assembly of Weakly Charged Polyelectrolyte Multilayers. <i>Macromolecules</i> , 2011 , 44, 2866-2872	5.5	34
107	Transferred vertically aligned N-doped carbon nanotube arrays: use in dye-sensitized solar cells as counter electrodes. <i>Chemical Communications</i> , 2011 , 47, 4264-6	5.8	170
106	Facile synthesis of TiO ₂ inverse opal electrodes for dye-sensitized solar cells. <i>Langmuir</i> , 2011 , 27, 856-604		43
105	Polypyrrole/titanium oxide nanotube arrays composites as an active material for supercapacitors. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 4522-6	1.3	10
104	Color-tunable electrophosphorescent device fabricated by a photo-bleaching method. <i>Thin Solid Films</i> , 2011 , 520, 452-456	2.2	2
103	Highly Interconnected Porous Electrodes for Dye-Sensitized Solar Cells Using Viruses as a Sacrificial Template. <i>Advanced Functional Materials</i> , 2011 , 21, 1160-1167	15.6	31
102	Enhanced Power Conversion Efficiency in PCDTBT/PC70BM Bulk Heterojunction Photovoltaic Devices with Embedded Silver Nanoparticle Clusters. <i>Advanced Energy Materials</i> , 2011 , 1, 766-770	21.8	215
101	Polyaniline-based conducting polymer compositions with a high work function for hole-injection layers in organic light-emitting diodes: formation of ohmic contacts. <i>ChemSusChem</i> , 2011 , 4, 363-8	8.3	40
100	Inside Cover: Polyaniline-Based Conducting Polymer Compositions with a High Work Function for Hole-Injection Layers in Organic Light-Emitting Diodes: Formation of Ohmic Contacts (ChemSusChem 3/2011). <i>ChemSusChem</i> , 2011 , 4, 286-286	8.3	
99	Enhancement of Donor-Acceptor Polymer Bulk Heterojunction Solar Cell Power Conversion Efficiencies by Addition of Au Nanoparticles. <i>Angewandte Chemie</i> , 2011 , 123, 5633-5637	3.6	83
98	Enhancement of donor-acceptor polymer bulk heterojunction solar cell power conversion efficiencies by addition of Au nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 5519-23	16.4	310
97	Back Cover: Enhancement of Donor-Acceptor Polymer Bulk Heterojunction Solar Cell Power Conversion Efficiencies by Addition of Au Nanoparticles (Angew. Chem. Int. Ed. 24/2011). <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 5404-5404	16.4	2

96	Analysis of surface morphological changes in organic photovoltaic devices: bilayer versus bulk-heterojunction. <i>Energy and Environmental Science</i> , 2011 , 4, 1434	35.4	21
95	Dye-sensitized solar cells with TiO ₂ nano-particles on TiO ₂ nano-tube-grown Ti substrates. <i>Journal of Materials Chemistry</i> , 2011 , 21, 3558		40
94	Enhanced light harvesting in dye-sensitized solar cells with highly reflective TCO- and Pt-less counter electrodes. <i>Journal of Materials Chemistry</i> , 2011 , 21, 15193		18
93	Controlled synthesis of vertically aligned hematite on conducting substrate for photoelectrochemical cells: nanorods versus nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 1852-8	9.5	94
92	Sequential processing: control of nanomorphology in bulk heterojunction solar cells. <i>Nano Letters</i> , 2011 , 11, 3163-8	11.5	105
91	Controlled growth of vertically oriented hematite/Pt composite nanorod arrays: use for photoelectrochemical water splitting. <i>Nanotechnology</i> , 2011 , 22, 175703	3.4	61
90	White-light-emitting diodes using miscible polymer blend doped with phosphorescent dye. <i>Organic Electronics</i> , 2011 , 12, 891-896	3.5	11
89	The effect of a concentration graded cathode for organic solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2011 , 95, 2443-2447	6.4	8
88	Enhanced photocurrent density of tungsten oxide hollow particle arrays produced by colloidal template synthesis. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 1538-41	1.3	3
87	Fabrication and Photocatalytic Effects of Tungsten Trioxide Nano-Pattern Arrays. <i>Materials Express</i> , 2011 , 1, 245-251	1.3	4
86	Effects of E-beam Irradiation on Physical and Electrochemical Properties of Inorganic Nanoparticle Separators with Different Particle Sizes. <i>Journal of the Electrochemical Society</i> , 2011 , 158, A511	3.9	6
85	Enhanced photoelectrochemical cell property from alpha-Fe ₂ O ₃ nanoparticle decoration on vertically grown TiO ₂ nanotubes arrays. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 7290-3	1.3	5
84	Enhanced charge collection via nanoporous morphology in polymer solar cells. <i>Applied Physics Letters</i> , 2010 , 96, 103304	3.4	12
83	Positive Effects of E-Beam Irradiation in Inorganic Particle Based Separators for Lithium-Ion Battery. <i>Journal of the Electrochemical Society</i> , 2010 , 157, A31	3.9	17
82	Observation of Positive Effects of Freestanding Scattering Film in Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 288-291	9.5	20
81	Spontaneous surface flattening via layer-by-layer assembly of interdiffusing polyelectrolyte multilayers. <i>Langmuir</i> , 2010 , 26, 17756-63	4	10
80	Holographically defined TiO ₂ electrodes for dye-sensitized solar cells. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 2970-3	9.5	17
79	Synthesis and photoelectrochemical cell properties of vertically grown Fe ₂ O ₃ nanorod arrays on a gold nanorod substrate. <i>Journal of Materials Chemistry</i> , 2010 , 20, 2247		66

78	Photovoltaic devices with an active layer from a stamping transfer technique: single layer versus double layer. <i>Langmuir</i> , 2010 , 26, 9584-8	4	37
77	Dye-sensitized solar cells with Pt- and TCO-free counter electrodes. <i>Chemical Communications</i> , 2010 , 46, 4505-7	5.8	168
76	CdS or CdSe decorated TiO ₂ nanotube arrays from spray pyrolysis deposition: use in photoelectrochemical cells. <i>Chemical Communications</i> , 2010 , 46, 2385-7	5.8	120
75	Solution-processable polymer based photovoltaic devices with concentration graded bilayers made via composition control of a poly(3-hexylthiophene)/[6,6]-phenyl C61-butyric acidmethyl ester. <i>Journal of Materials Chemistry</i> , 2010 , 20, 4910		25
74	Generation behavior of electricity in a microbial fuel cell. <i>Korean Journal of Chemical Engineering</i> , 2010 , 27, 546-550	2.8	1
73	Preparation of a trilayer separator and its application to lithium-ion batteries. <i>Journal of Power Sources</i> , 2010 , 195, 8302-8305	8.9	73
72	Effect of conducting additives on the properties of composite cathodes for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2010 , 14, 593-597	2.6	16
71	Electrochemical performances of inorganic membrane coated electrodes for li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2010 , 14, 769-773	2.6	14
70	Effect of MWCNT on the performances of the rounded shape natural graphite as anode material for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2010 , 14, 951-956	2.6	6
69	Heat transfer characteristics of high temperature molten salt for storage of thermal energy. <i>Korean Journal of Chemical Engineering</i> , 2010 , 27, 1452-1457	2.8	16
68	Roles of interlayers in efficient organic photovoltaic devices. <i>Macromolecular Rapid Communications</i> , 2010 , 31, 2095-108	4.8	83
67	Effect of the ordered 2D-dot nano-patterned anode for polymer solar cells. <i>Organic Electronics</i> , 2010 , 11, 285-290	3.5	28
66	Active layer transfer by stamping technique for polymer solar cells: Synergistic effect of TiO _x interlayer. <i>Organic Electronics</i> , 2010 , 11, 599-603	3.5	22
65	Unexpected solid-solid intermixing in a bilayer of poly(3-hexylthiophene) and [6,6]-phenyl C61-butyric acidmethyl ester via stamping transfer. <i>Organic Electronics</i> , 2010 , 11, 1376-1380	3.5	37
64	Highly conductive PEDOT/silicate hybrid anode for ITO-free polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2010 , 94, 471-477	6.4	31
63	Catalytic characteristics of carbon black for decomposition of ethane. <i>Carbon</i> , 2010 , 48, 2030-2036	10.4	11
62	Controlled TiO ₂ Nanotube Arrays as an Active Material for High Power Energy-Storage Devices. <i>Journal of the Electrochemical Society</i> , 2009 , 156, A584	3.9	57
61	Effect of incorporation of TiO ₂ nanoparticles into oriented TiO ₂ nanotube based dye-sensitized solar cells. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 7436-9	1.3	5

60	Charge carrier trapping and enhanced electroluminescent efficiency of blue light emitting polymer with gold nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 7451-5	1.3	1
59	Dual functions of a new n-type conjugated dendrimer: light-emitting material and additive for polymer electroluminescent devices. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 035101	3	3
58	Inverted Bottom-Emission Polymer Light-Emitting Devices Doped with Organic Salt. <i>Japanese Journal of Applied Physics</i> , 2009 , 48, 110203	1.4	2
57	Designing a Stable Cathode with Multiple Layers to Improve the Operational Lifetime of Polymer Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2009 , 19, 1863-1868	15.6	22
56	Enhanced photocatalytic oxidation properties in Pt-TiO ₂ thin films by grounding. <i>Korean Journal of Chemical Engineering</i> , 2009 , 26, 392-397	2.8	2
55	Increased generation of electricity in a microbial fuel cell using <i>Geobacter sulfurreducens</i> . <i>Korean Journal of Chemical Engineering</i> , 2009 , 26, 748-753	2.8	25
54	Enhanced carrier balance by organic salt doping in single-layer polymer light-emitting devices. <i>Organic Electronics</i> , 2009 , 10, 1345-1351	3.5	14
53	Optimization of polymeric host composition for polymer-based electrophosphorescent devices. <i>Journal of Luminescence</i> , 2009 , 129, 496-500	3.8	4
52	Dye-sensitized solar cells containing polymer film with honey-comb like morphology. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009 , 203, 151-154	4.7	7
51	Enhanced High-Temperature Long-Term Stability of Polymer Solar Cells with a Thermally Stable TiO _x Interlayer. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 17268-17273	3.8	58
50	Optimization of conditions for hydrogen production from anodized TiO ₂ nanotube-based photoelectrochemical cells. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 7293-7	1.3	4
49	Solution-processable polymer solar cells from a poly(3-hexylthiophene)/[6,6]-phenyl C61-butyric acidmethyl ester concentration graded bilayers. <i>Applied Physics Letters</i> , 2009 , 95, 043505	3.4	60
48	Growth, detachment and transfer of highly-ordered TiO ₂ nanotube arrays: use in dye-sensitized solar cells. <i>Chemical Communications</i> , 2008 , 2867-9	5.8	209
47	Fabrication of an Efficient Dye-Sensitized Solar Cell with Stainless Steel Substrate. <i>Journal of the Electrochemical Society</i> , 2008 , 155, F145	3.9	107
46	Effect of Oxidant on Morphology and Electrochemistry of Polypyrrole-Coated Graphite Fiber. <i>Electrochemical and Solid-State Letters</i> , 2008 , 11, A68		5
45	Spin-assembled nanolayer of a hyperbranched polymer on the anode in organic light-emitting diodes: the mechanism of hole injection and electron blocking. <i>Langmuir</i> , 2008 , 24, 12704-9	4	14
44	Dual Functions of Clay Nanoparticles with High Aspect Ratio in Dye-Sensitized Solar Cells. <i>Electrochemical and Solid-State Letters</i> , 2008 , 11, B171		29
43	Low vacuum process for polymer solar cells: Effect of TiO _x interlayer. <i>Applied Physics Letters</i> , 2008 , 92, 143504	3.4	35

42	Design of TiO ₂ nanotube array-based water-splitting reactor for hydrogen generation. <i>Journal of Power Sources</i> , 2008 , 184, 284-287	8.9	55
41	New approach for nanoscale morphology of polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2008 , 92, 1188-1191	6.4	13
40	Enhanced electroluminescence in emissive polymer/CdSe double-layer films. <i>Thin Solid Films</i> , 2007 , 515, 3085-3089	2.2	24
39	A systematic doping strategy to control the emission spectrum of ternary luminescent polymer blends for white emission. <i>Optical Materials</i> , 2007 , 30, 486-491	3.3	13
38	Electrophosphorescent devices from a poly(9-vinylcarbazole)/tris(2-phenylpyridine)iridium(III) bilayer with a concentration gradient. <i>Applied Physics Letters</i> , 2007 , 90, 043514	3.4	3
37	Effect of hole transporting layer doped with organic salts on performance of polymer electroluminescent devices. <i>Current Applied Physics</i> , 2006 , 6, 616-619	2.6	6
36	Photoelectrochemical water splitting at titanium dioxide nanotubes coated with tungsten trioxide. <i>Applied Physics Letters</i> , 2006 , 89, 163106	3.4	93
35	Photoelectrochemical Tandem Cell with Bipolar Dye-Sensitized Electrodes for Vectorial Electron Transfer for Water Splitting. <i>Electrochemical and Solid-State Letters</i> , 2006 , 9, E5-E8		61
34	P-197: Polymer Nanocomposite Blue-Light-Emitting Diodes. <i>Digest of Technical Papers SID International Symposium</i> , 2006 , 37, 968	0.5	
33	White light emission from a polymer bilayer by incomplete cascade energy transfer. <i>Current Applied Physics</i> , 2006 , 6, 640-643	2.6	5
32	Novel carbon-doped TiO ₂ nanotube arrays with high aspect ratios for efficient solar water splitting. <i>Nano Letters</i> , 2006 , 6, 24-8	11.5	1561
31	Improved asymmetric electrochemical capacitor using Zn-Co co-doped Ni(OH) ₂ positive electrode material. <i>Applied Physics A: Materials Science and Processing</i> , 2006 , 82, 593-597	2.6	38
30	Enhanced color purity and stability from polymer/nanoporous silica nanocomposite blue light-emitting diodes. <i>Synthetic Metals</i> , 2005 , 154, 145-148	3.6	3
29	Polymer/nanoporous silica nanocomposite blue-light-emitting diodes. <i>Nanotechnology</i> , 2005 , 16, 1793-1797	3.4	20
28	White polymer light-emitting devices from ternary-polymer blend with concentration gradient. <i>Chemical Physics Letters</i> , 2005 , 403, 293-297	2.5	32
27	Unassisted Water Splitting from Bipolar Pt/Dye-Sensitized TiO ₂ Photoelectrode Arrays. <i>Electrochemical and Solid-State Letters</i> , 2005 , 8, G371		35
26	Enhanced electrophosphorescence via highly efficient energy transfer from conjugated polymer. <i>Applied Physics Letters</i> , 2005 , 86, 171108	3.4	28
25	WHITE-ELECTROLUMINESCENCE DEVICE BASED ON POLYMER/QUANTUM DOT NANOCOMPOSITES. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2005 , 14, 481-486	0.8	5

24	Effect of polymer-insulating nanolayers on electron injection in polymer light-emitting diodes. <i>Applied Physics Letters</i> , 2004 , 84, 1783-1785	3.4	35
23	BLUE LIGHT-EMITTING POLYMER/DIELECTRIC NANOLAYER NANOCOMPOSITES: IMPEDIMENT OF EXCIMER FORMATION AND ENHANCEMENT OF PHOTOSTABILITY. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2004 , 13, 607-611	0.8	
22	White emission from polymer/quantum dot ternary nanocomposites by incomplete energy transfer. <i>Nanotechnology</i> , 2004 , 15, 1217-1220	3.4	87
21	Enhanced light output in bilayer light-emitting diodes with film thickness variations. <i>Chemical Physics Letters</i> , 2004 , 386, 101-104	2.5	9
20	Enhanced electroluminescence from a conjugated polymer/ionomer blend. <i>Polymer</i> , 2004 , 45, 8567-8571	3.9	18
19	Stabilized Blue Emission from Polymer/Dielectric Nanolayer Nanocomposites. <i>Advanced Functional Materials</i> , 2004 , 14, 377-382	15.6	25
18	Enhanced quantum efficiency in blue-emitting polymer/dielectric nanolayer nanocomposite light-emitting devices. <i>Materials Science and Engineering C</i> , 2004 , 24, 75-78	8.3	9
17	Hole-transporting property of a chemically hybridized poly(vinylcarbazole)-fullerene. <i>Current Applied Physics</i> , 2004 , 4, 659-662	2.6	7
16	Polymer/Gold Nanoparticle Nanocomposite Light-Emitting Diodes: Enhancement of Electroluminescence Stability and Quantum Efficiency of Blue-Light-Emitting Polymers. <i>Chemistry of Materials</i> , 2004 , 16, 688-692	9.6	172
15	Enhancement of Photostability in Blue-Light-Emitting Polymers Doped with Gold Nanoparticles. <i>Macromolecular Rapid Communications</i> , 2003 , 24, 331-334	4.8	31
14	Proton-conducting composite membranes derived from sulfonated hydrocarbon and inorganic materials. <i>Journal of Power Sources</i> , 2003 , 124, 18-25	8.9	141
13	Carbon Nanotube/RuO ₂ Nanocomposite Electrodes for Supercapacitors. <i>Journal of the Electrochemical Society</i> , 2003 , 150, A864	3.9	176
12	Improved electrorheological effect in polyaniline nanocomposite suspensions. <i>Journal of Colloid and Interface Science</i> , 2002 , 245, 198-203	9.3	59
11	Capacitance properties of graphite/polypyrrole composite electrode prepared by chemical polymerization of pyrrole on graphite fiber. <i>Journal of Power Sources</i> , 2002 , 105, 20-25	8.9	208
10	Morphology and electrochemical behaviour of ruthenium oxide thin film deposited on carbon paper. <i>Journal of Power Sources</i> , 2002 , 109, 121-126	8.9	36
9	Hybrid electrochemical capacitors based on polyaniline and activated carbon electrodes. <i>Journal of Power Sources</i> , 2002 , 111, 185-190	8.9	185
8	An Electrochemical Capacitor Based on a Ni(OH) ₂ /Activated Carbon Composite Electrode. <i>Electrochemical and Solid-State Letters</i> , 2002 , 5, H7		185
7	Rheological properties and dispersion stability of magnetorheological (MR) suspensions. <i>Rheologica Acta</i> , 2001 , 40, 211-219	2.3	124

6	Rheological properties and stability of magnetorheological fluids using viscoelastic medium and nanoadditives. <i>Korean Journal of Chemical Engineering</i> , 2001 , 18, 580-585	2.8	37
5	Rheological Properties and Stabilization of Magnetorheological Fluids in a Water-in-Oil Emulsion. <i>Journal of Colloid and Interface Science</i> , 2001 , 240, 349-354	9.3	104
4	A two-photon tandem black phosphorus quantum dot-sensitized BiVO ₄ photoanode for solar water splitting. <i>Energy and Environmental Science</i> ,	35.4	5
3	Continuous Oxygen Vacancy Gradient in TiO ₂ Photoelectrodes by a Photoelectrochemical-Driven Self-Purification Process. <i>Advanced Energy Materials</i> , 2103495	21.8	4
2	Tuning Selectivity of Photoelectrochemical Water Oxidation via Facet-Engineered Interfacial Energetics. <i>ACS Energy Letters</i> , 4071-4078	20.1	7
1	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