Jung Kyu Kim

List of Publications by Year in Descending Order

93 papers	3,148 citations	30 h-index	54 g-index
102 ext. papers	3,693 ext. citations	9.9 avg, IF	5.37 L-index

#	Paper	IF	Citations
93	Rational nanopositioning of homogeneous amorphous phase on crystalline tungsten oxide for boosting solar water oxidation. *Chemical Engineering Journal*, **2022**, 438, 135532	14.7	3
92	Anchoring of Ni12P5 Microbricks in Nitrogen- and Phosphorus-Enriched Carbon Frameworks: Engineering Bifunctional Active Sites for Efficient Water-Splitting Systems. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1182-1194	8.3	2
91	Ultra-intimate hydrogel hybrid skin patch with asymmetric elastomeric spatula-like cylinders. *Chemical Engineering Journal*, **2022**, 444, 136581	14.7	2
90	Identification of anti-adipogenic withanolides from the roots of Indian ginseng (Withania somnifera). *Journal of Ginseng Research*, **2021**,	5.8	4
89	Ulmusakidian, a new coumarin glycoside and antifungal phenolic compounds from the root bark of Ulmus davidiana var. japonica. *Bioorganic and Medicinal Chemistry Letters*, **2021**, 36, 127828	2.9	1
88	Self-Assembled Colloidal Nanopatterns: Self-Assembled Colloidal Nanopatterns toward Unnatural Optical Meta-Materials (Adv. Funct. Mater. 12/2021). *Advanced Functional Materials*, **2021**, 31, 2170080	15.6	
87	Thermally cross-linkable spirobifluorene-core-based hole transport layer with high solvent-resistivity for solution processible OLEDs. *Dyes and Pigments*, **2021**, 187, 109122	4.6	1
86	Ginkwanghols A and B, osteogenic coumaric acid-aliphatic alcohol hybrids from the leaves of Ginkgo biloba. *Archives of Pharmacal Research*, **2021**, 44, 514-524	6.1	6
85	Phytochemical Analysis of the Fruits of Sea Buckthorn (): Identification of Organic Acid Derivatives. *Plants*, **2021**, 10,	4.5	4
84	Printable wet-resistive textile strain sensors using bead-blended composite ink for robustly integrative wearable electronics. *Composites Part B: Engineering*, **2021**, 210, 108674	10	11
83	Anti-fibrotic effects of brevilin A in hepatic fibrosis via inhibiting the STAT3 signaling pathway. *Bioorganic and Medicinal Chemistry Letters*, **2021**, 41, 127989	2.9	1
82	Rational Design of Metal Oxide-Based Heterostructure for Efficient Photocatalytic and Photoelectrochemical Systems. *Advanced Functional Materials*, **2021**, 31, 2008247	15.6	24
81	Self-Assembled Colloidal Nanopatterns toward Unnatural Optical Meta-Materials. *Advanced Functional Materials*, **2021**, 31, 2008246	15.6	5
80	A highly activated iron phosphate over-layer for enhancing photoelectrochemical ammonia decomposition. *Journal of Hazardous Materials*, **2021**, 408, 124900	12.8	4
79	Revisiting surface chemistry in TiO2: A critical role of ionic passivation for pH-independent and anti-corrosive photoelectrochemical water oxidation. *Chemical Engineering Journal*, **2021**, 407, 126929	14.7	7
78	An Electronically Perceptive Bioinspired Soft Wet-Adhesion Actuator with Carbon Nanotube-Based Strain Sensors. *ACS Nano*, **2021**, 15, 14137-14148	16.7	12
77	Ginkgonitroside, a new nitrophenyl glycoside and bioactive compounds from Ginkgo biloba leaves controlling adipocyte and osteoblast differentiation. *Bioorganic and Medicinal Chemistry Letters*, **2021**, 50, 128322	2.9	

76	Molecular manipulation of PEDOT:PSS for efficient hole transport by incorporation of N-doped carbon quantum dots. *Dyes and Pigments*, **2021**, 194, 109610	4.6	3
75	Solar-harvesting lead halide perovskite for artificial photosynthesis. *Journal of Energy Chemistry*, **2021**, 62, 11-26	12	5
74	Core-Shell Structured MXene@Carbon Nanodots as Bifunctional Catalysts for Solar-Assisted Water Splitting. *ACS Nano*, **2020**,	16.7	28
73	Rational Design of Spinel Oxide Nanocomposites with Tailored Electrochemical Oxygen Evolution and Reduction Reactions for ZincAir Batteries. *Applied Sciences (Switzerland)*, **2020**, 10, 3165	2.6	15
72	Intrinsically Strain-Insensitive, Hyperelastic Temperature-Sensing Fiber with Compressed Micro-Wrinkles for Integrated Textronics. *Advanced Materials Technologies*, **2020**, 5, 2000073	6.8	17
71	Electrospun Carbon Nanofibers with Embedded Co-Ceria Nanoparticles for Efficient Hydrogen Evolution and Overall Water Splitting. *Materials*, **2020**, 13,	3.5	11
70	Fabrication of an ingenious metallic asymmetric supercapacitor by the integration of anodic iron oxide and cathodic nickel phosphide. *Applied Surface Science*, **2020**, 511, 145424	6.7	14
69	Acidity Suppression of Hole Transport Layer via Solution Reaction of Neutral PEDOT:PSS for Stable Perovskite Photovoltaics. *Polymers*, **2020**, 12,	4.5	12
68	Retarded Charge□Carrier Recombination in Photoelectrochemical Cells from Plasmon-Induced Resonance Energy Transfer. *Advanced Energy Materials*, **2020**, 10, 2000570	21.8	22
67	Biopolymer-Inspired N-Doped Nanocarbon Using Carbonized Polydopamine: A High-Performance Electrocatalyst for Hydrogen-Evolution Reaction. *Polymers*, **2020**, 12,	4.5	4
66	Review□Non-Noble Metal-Based Single-Atom Catalysts for Efficient Electrochemical CO2 Reduction Reaction. *Journal of the Electrochemical Society*, **2020**, 167, 164503	3.9	8
65	Carbon quantum dot-incorporated nickel oxide for planar p-i-n type perovskite solar cells with enhanced efficiency and stability. *Journal of Alloys and Compounds*, **2020**, 818, 152887	5.7	17
64	Electrochemically controlled CdS@CdSe nanoparticles on ITO@TiO2 dual core□shell nanowires for enhanced photoelectrochemical hydrogen production. *Applied Surface Science*, **2020**, 505, 144569	6.7	6
63	Enhancing Solar Water Splitting of Textured BiVO4 by Dual Effect of a Plasmonic Silver Nanoshell: Plasmon-Induced Light Absorption and Enhanced Hole Transport. *ACS Applied Energy Materials*, **2020**, 3, 11886-11892	6.1	4
62	Metal-Organic Decomposition-Mediated Nanoparticulate Vanadium Oxide Hole Transporting Buffer Layer for Polymer Bulk-Heterojunction Solar Cells. *Polymers*, **2020**, 12,	4.5	3
61	Omnidirectional, Broadband Light Absorption in a Hierarchical Nanoturf Membrane for an Advanced Solar-Vapor Generator. *Advanced Functional Materials*, **2020**, 30, 2003862	15.6	18
60	Synergy effects of Al2O3 promoter on a highly ordered mesoporous heterogeneous Rh-g-C3N4 for a liquid-phase carbonylation of methanol. *Applied Catalysis A: General*, **2019**, 585, 117209	5.1	7
59	PEG-assisted Sol-gel Synthesis of Compact Nickel Oxide Hole-Selective Layer with Modified Interfacial Properties for Organic Solar Cells. *Polymers*, **2019**, 11,	4.5	11

58	Grain Boundary Healing of Organic-Inorganic Halide Perovskites for Moisture Stability. *Nano Letters*, **2019**, 19, 6498-6505	11.5	16
57	A polydopamine-mediated biomimetic facile synthesis of molybdenum carbide-phosphide nanodots encapsulated in carbon shell for electrochemical hydrogen evolution reaction with long-term durability. *Composites Part B: Engineering*, **2019**, 175, 107071	10	21
56	Harnessing designer biotemplates for biomineralization of TiO2 with tunable photocatalytic activity. *Ceramics International*, **2019**, 45, 6467-6476	5.1	1
55	Solar Cells: Oriented Grains with Preferred Low-Angle Grain Boundaries in Halide Perovskite Films by Pressure-Induced Crystallization (Adv. Energy Mater. 10/2018). *Advanced Energy Materials*, **2018**, 8, 1870045	21.8	4
54	Rapid Formation of a Disordered Layer on Monoclinic BiVO : Co-Catalyst-Free Photoelectrochemical Solar Water Splitting. *ChemSusChem*, **2018**, 11, 933-940	8.3	31
53	Oriented Grains with Preferred Low-Angle Grain Boundaries in Halide Perovskite Films by Pressure-Induced Crystallization. *Advanced Energy Materials*, **2018**, 8, 1702369	21.8	56
52	Enhancing Mo:BiVO4 Solar Water Splitting with Patterned Au Nanospheres by Plasmon-Induced Energy Transfer. *Advanced Energy Materials*, **2018**, 8, 1701765	21.8	60
51	Multiple Heterojunction in Single Titanium Dioxide Nanoparticles for Novel Metal-Free Photocatalysis. *Nano Letters*, **2018**, 18, 4257-4262	11.5	35
50	Hexagonal Array Patterned PMMA Buffer Layer for Efficient Hole Transport and Tailored Interfacial Properties of FTO-Based Organic Solar Cells. *Macromolecular Research*, **2018**, 26, 1173-1178	1.9	5
49	Enhancing Catalytic Activity of MoS2 Basal Plane S-Vacancy by Co Cluster Addition. *ACS Energy Letters*, **2018**, 3, 2685-2693	20.1	79
48	Epitaxial growth of WO3 nanoneedles achieved using a facile flame surface treatment process engineering of hole transport and water oxidation reactivity. *Journal of Materials Chemistry A*, **2018**, 6, 19542-19546	13	16
47	Conformal Titanyl Phosphate Surface Passivation for Enhancing Photocatalytic Activity. *Applied Sciences (Switzerland)*, **2018**, 8, 1402	2.6	3
46	Resolving Hysteresis in Perovskite Solar Cells with Rapid Flame-Processed Cobalt-Doped TiO2. *Advanced Energy Materials*, **2018**, 8, 1801717	21.8	54
45	Improved Stability of Interfacial Energy-Level Alignment in Inverted Planar Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 18964-18973	9.5	17
44	Double 2-dimensional H2-evoluting catalyst tipped photocatalyst nanowires: A new avenue for high-efficiency solar to H2 generation. *Nano Energy*, **2017**, 34, 481-490	17.1	38
43	Defect-Induced Epitaxial Growth for Efficient Solar Hydrogen Production. *Nano Letters*, **2017**, 17, 6676-6683	12.3	77
42	Ultrafast Flame Annealing of TiO Paste for Fabricating Dye-Sensitized and Perovskite Solar Cells with Enhanced Efficiency. *Small*, **2017**, 13, 1702260	11	13
41	A 3D triple-deck photoanode with a strengthened structure integrality: enhanced photoelectrochemical water oxidation. *Nanoscale*, **2016**, 8, 3474-81	7.7	22

40	An order/disorder/water junction system for highly efficient co-catalyst-free photocatalytic hydrogen generation. *Energy and Environmental Science*, **2016**, 9, 499-503	35.4	201
39	Delocalized Electron Accumulation at Nanorod Tips: Origin of Efficient H2 Generation. *Advanced Functional Materials*, **2016**, 26, 4527-4534	15.6	51
38	Hybrid Silver Mesh Electrode for ITO-Free Flexible Polymer Solar Cells with Good Mechanical Stability. *ChemSusChem*, **2016**, 9, 1042-9	8.3	28
37	A facile chemical synthesis of ZnO@multilayer graphene nanoparticles with fast charge separation and enhanced performance for application in solar energy conversion. *Nano Energy*, **2016**, 25, 9-17	17.1	28
36	Unassisted photoelectrochemical water splitting beyond 5.7% solar-to-hydrogen conversion efficiency by a wireless monolithic photoanode/dye-sensitised solar cell tandem device. *Nano Energy*, **2015**, 13, 182-191	17.1	114
35	Conflicted Effects of a Solvent Additive on PTB7:PC71BM Bulk Heterojunction Solar Cells. *Journal of Physical Chemistry C*, **2015**, 119, 5954-5961	3.8	138
34	Origin of White Electroluminescence in Graphene Quantum Dots Embedded Host/Guest Polymer Light Emitting Diodes. *Scientific Reports*, **2015**, 5, 11032	4.9	46
33	Incorporation of a Metal Oxide Interlayer using a Virus-Templated Assembly for Synthesis of Graphene-Electrode-Based Organic Photovoltaics. *ChemSusChem*, **2015**, 8, 2385-91	8.3	5
32	Clay Nanosheets in Skeletons of Controlled Phase Inversion Separators for Thermally Stable Li-Ion Batteries. *Advanced Functional Materials*, **2015**, 25, 3399-3404	15.6	33
31	Surface-Engineered Graphene Quantum Dots Incorporated into Polymer Layers for High Performance Organic Photovoltaics. *Scientific Reports*, **2015**, 5, 14276	4.9	48
30	Nano carbon conformal coating strategy for enhanced photoelectrochemical responses and long-term stability of ZnO quantum dots. *Nano Energy*, **2015**, 13, 258-266	17.1	48
29	Tungsten oxide/PEDOT:PSS hybrid cascade hole extraction layer for polymer solar cells with enhanced long-term stability and power conversion efficiency. *Solar Energy Materials and Solar Cells* , **2014**, 122, 24-30	6.4	14
28	Lysozyme-mediated biomineralization of titanium-tungsten oxide hybrid nanoparticles with high photocatalytic activity. *Chemical Communications*, **2014**, 50, 12392-5	5.8	10
27	Enhanced performance and stability of polymer BHJ photovoltaic devices from dry transfer of PEDOT:PSS. *ChemSusChem*, **2014**, 7, 1957-63	8.3	22
26	Efficient Hole Extraction from Sb2S3 Heterojunction Solar Cells by the Solid Transfer of Preformed PEDOT:PSS Film. *Journal of Physical Chemistry C*, **2014**, 118, 22672-22677	3.8	23
25	Double-Deck Inverse Opal Photoanodes: Efficient Light Absorption and Charge Separation in Heterojunction. *Chemistry of Materials*, **2014**, 26, 5592-5597	9.6	81
24	Flexible and transparent metallic grid electrodes prepared by evaporative assembly. *ACS Applied Materials & Interfaces*, **2014**, 6, 12380-7	9.5	111
23	A roll-to-roll welding process for planarized silver nanowire electrodes. *Nanoscale*, **2014**, 6, 11828-34	7.7	132

22	Tailoring dispersion and aggregation of Au nanoparticles in the BHJ layer of polymer solar cells: plasmon effects versus electrical effects. *ChemSusChem*, **2014**, 7, 3452-8	8.3	11
21	Efficient solution-processed small-molecule solar cells by insertion of graphene quantum dots. *Nanoscale*, **2014**, 6, 15175-80	7.7	23
20	Transferable Graphene Oxide by Stamping Nanotechnology: Electron-Transport Layer for Efficient Bulk-Heterojunction Solar Cells. *Angewandte Chemie*, **2013**, 125, 2946-2952	3.6	6
19	Balancing light absorptivity and carrier conductivity of graphene quantum dots for high-efficiency bulk heterojunction solar cells. *ACS Nano*, **2013**, 7, 7207-12	16.7	152
18	Transferable graphene oxide by stamping nanotechnology: electron-transport layer for efficient bulk-heterojunction solar cells. *Angewandte Chemie - International Edition*, **2013**, 52, 2874-80	16.4	105
17	Surface roughened 1-D Au host nanorods for visible light induced photocatalyst. *Electrochimica Acta*, **2013**, 97, 404-408	6.7	10
16	Inverse opal structured □Fe2O3 on graphene thin films: enhanced photo-assisted water splitting. *Nanoscale*, **2013**, 5, 1939-44	7.7	66
15	Layer-by-layer all-transfer-based organic solar cells. *Langmuir*, **2013**, 29, 5377-82	4	20
14	Polymer bulk heterojunction solar cells with PEDOT:PSS bilayer structure as hole extraction layer. *ChemSusChem*, **2013**, 6, 1070-5	8.3	22
13	Hematite modified tungsten trioxide nanoparticle photoanode for solar water oxidation. *Journal of Power Sources*, **2012**, 210, 32-37	8.9	38
12	Stability comparison: A PCDTBT/PC71BM bulk-heterojunction versus a P3HT/PC71BM bulk-heterojunction. *Solar Energy Materials and Solar Cells*, **2012**, 101, 249-255	6.4	45
11	Efficient and low potential operative host/guest concentration graded bilayer polymer electrophosphorescence devices. *Journal of Luminescence*, **2012**, 132, 870-874	3.8	3
10	Ultrathin nanoclay films with tunable thickness as barrier layers in organic light emitting devices. *Journal of Materials Chemistry*, **2012**, 22, 7718		15
9	Photoelectrochemical cells with tungsten trioxide/Mo-doped BiVO4 bilayers. *Physical Chemistry Chemical Physics*, **2012**, 14, 11119-24	3.6	100
8	Inverse opal tungsten trioxide films with mesoporous skeletons: synthesis and photoelectrochemical responses. *Chemical Communications*, **2012**, 48, 11939-41	5.8	33
7	Enhanced light harvesting in bulk heterojunction photovoltaic devices with shape-controlled Ag nanomaterials: Ag nanoparticles versus Ag nanoplates. *RSC Advances*, **2012**, 2, 7268	3.7	51
6	Synthesis of transparent mesoporous tungsten trioxide films with enhanced photoelectrochemical response: application to unassisted solar water splitting. *Energy and Environmental Science*, **2011**, 4, 1465	35.4	132
5	Enhanced Power Conversion Efficiency in PCDTBT/PC70BM Bulk Heterojunction Photovoltaic Devices with Embedded Silver Nanoparticle Clusters. *Advanced Energy Materials*, **2011**, 1, 766-770	21.8	215

4	Analysis of surface morphological changes in organic photovoltaic devices: bilayer versus bulk-heterojunction. *Energy and Environmental Science*, **2011**, 4, 1434	35.4	21
3	Controlled synthesis of vertically aligned hematite on conducting substrate for photoelectrochemical cells: nanorods versus nanotubes. *ACS Applied Materials & Interfaces*, **2011**, 3, 1852-8	9.5	94
2	Fabrication and Photocatalytic Effects of Tungsten Trioxide Nano-Pattern Arrays. *Materials Express*, **2011**, 1, 245-251	1.3	4
1	Boosting eco-friendly hydrogen generation by urea-assisted water electrolysis using spinel M2GeO4 (M = Fe, Co) as an active electrocatalyst. *Environmental Science: Nano*,	7.1	4