Youn Sang Kim

List of Publications by Citations

177 papers	4,229 citations	35 h-index	54 g-index
186 ext. papers	4,764 ext. citations	9.4 avg, IF	5.48 L-index

#	Paper	IF	Citations
177	Thin-film formation of imidazolium-based conjugated polydiacetylenes and their application for sensing anionic surfactants. *Angewandte Chemie - International Edition*, **2010**, 49, 1422-5	16.4	247
176	Low-Temperature, solution-processed and alkali metal doped ZnO for high-performance thin-film transistors. *Advanced Materials*, **2012**, 24, 834-8	24	189
175	Highly effective fluorescent and colorimetric sensors for pyrophosphate over H2PO4- in 100% aqueous solution. *Journal of Organic Chemistry*, **2005**, 70, 9603-6	4.2	126
174	High-power density piezoelectric energy harvesting using radially strained ultrathin trigonal tellurium nanowire assembly. *Advanced Materials*, **2013**, 25, 2920-5	24	124
173	All-solution-processed flexible thin film piezoelectric nanogenerator. *Advanced Materials*, **2012**, 24, 6022-7	24	118
172	An effective energy harvesting method from a natural water motion active transducer. *Energy and Environmental Science*, **2014**, 7, 3279-3283	35.4	103
171	UV-visible spectroscopic analysis of electrical properties in alkali metal-doped amorphous zinc tin oxide thin-film transistors. *Advanced Materials*, **2013**, 25, 2994-3000	24	78
170	Gate Capacitance-Dependent Field-Effect Mobility in Solution-Processed Oxide Semiconductor Thin-Film Transistors. *Advanced Functional Materials*, **2014**, 24, 4689-4697	15.6	76
169	Zinc Oxide Nanorod-Based Piezoelectric Dermal Patch for Wound Healing. *Advanced Functional Materials*, **2017**, 27, 1603497	15.6	72
168	A simple fabrication route to a highly transparent super-hydrophobic surface with a poly(dimethylsiloxane) coated flexible mold. *Chemical Communications*, **2007**, 2237-9	5.8	72
167	High density nanostructure transfer in soft molding using polyurethane acrylate molds and polyelectrolyte multilayers. *Nanotechnology*, **2003**, 14, 1140-1144	3.4	71
166	Oxidation of silver electrodes induces transition from conventional to inverted photovoltaic characteristics in polymer solar cells. *Applied Physics Letters*, **2009**, 95, 183301	3.4	68
165	Novel Synthesis, Coating, and Networking of Curved Copper Nanowires for Flexible Transparent Conductive Electrodes. *Small*, **2015**, 11, 4576-83	11	64
164	Small-Molecule Thiophene-C60 Dyads As Compatibilizers in Inverted Polymer Solar Cells. *Chemistry of Materials*, **2010**, 22, 5762-5773	9.6	61
163	Solution-processed amorphous hafnium-lanthanum oxide gate insulator for oxide thin-film transistors. *Journal of Materials Chemistry C*, **2014**, 2, 1050-1056	7.1	58
162	Facile synthesis of oxidation-resistant copper nanowires toward solution-processable, flexible, foldable, and free-standing electrodes. *Small*, **2014**, 10, 5047-52	11	58
161	Water adsorption effects of nitrate ion coordinated Al2O3 dielectric for high performance metal-oxide thin-film transistor. *Journal of Materials Chemistry C*, **2013**, 1, 7166	7.1	56

160	Chemically nanopatterned surfaces using polyelectrolytes and ultraviolet-cured hard molds. *Nano Letters*, **2005**, 5, 1347-50	11.5	56
159	Layer-by-layer growth of polymer/quantum dot composite multilayers by nucleophilic substitution in organic media. *Angewandte Chemie - International Edition*, **2010**, 49, 359-63	16.4	53
158	Nanofeature-Patterned Polymer Mold Fabrication toward Precisely Defined Nanostructure Replication. *Chemistry of Materials*, **2005**, 17, 5867-5870	9.6	49
157	Patterning of Flexible Transparent Thin-Film Transistors with Solution-Processed ZnO Using the Binary Solvent Mixture. *Advanced Functional Materials*, **2011**, 21, 3546-3553	15.6	45
156	Low temperature and solution-processed Na-doped zinc oxide transparent thin film transistors with reliable electrical performance using methanol developing and surface engineering. *Journal of Materials Chemistry*, **2012**, 22, 23120		44
155	Orientational Transition of Liquid Crystal Molecules by a Photoinduced Transformation Process into a Recovery-free Silicon Oxide Layer. *Advanced Materials*, **2008**, 20, 3073-3078	24	44
154	Reversible Soft-Contact Lamination and Delamination for Non-Invasive Fabrication and Characterization of Bulk-Heterojunction and Bilayer Organic Solar Cells. *Chemistry of Materials*, **2010**, 22, 4931-4938	9.6	43
153	Solution-based TiO2-polymer composite dielectric for low operating voltage OTFTs. *Journal of the American Chemical Society*, **2010**, 132, 14721-3	16.4	42
152	Epitaxial-Growth-Induced Junction Welding of Silver Nanowire Network Electrodes. *ACS Nano*, **2018**, 12, 4894-4902	16.7	41
151	Rose rock-shaped nano Cu 2 O anchored graphene for high-performance supercapacitors via solvothermal route. *Journal of Power Sources*, **2016**, 318, 66-75	8.9	41
150	Influences of Surface and Ionic Properties on Electricity Generation of an Active Transducer Driven by Water Motion. *Journal of Physical Chemistry Letters*, **2015**, 6, 745-9	6.4	40
149	Ion Specificity on Electric Energy Generated by Flowing Water Droplets. *Angewandte Chemie - International Edition*, **2018**, 57, 2091-2095	16.4	37
148	All-solution-processed transparent thin film transistor and its application to liquid crystals driving. *Advanced Materials*, **2013**, 25, 3209-14	24	37
147	No bias pi cell using a dual alignment layer with an intermediate pretilt angle. *Applied Physics Letters*, **2007**, 91, 023507	3.4	37
146	Simple fabrication of hydrophilic nanochannels using the chemical bonding between activated ultrathin PDMS layer and cover glass by oxygen plasma. *Lab on A Chip*, **2011**, 11, 348-53	7.2	36
145	Bridging Oriented Copper Nanowire-Graphene Composites for Solution-Processable, Annealing-Free, and Air-Stable Flexible Electrodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 1733-41	9.5	35
144	Organic nonvolatile resistive switching memory based on molecularly entrapped fullerene derivative within a diblock copolymer nanostructure. *Macromolecular Rapid Communications*, **2013**, 34, 355-61	4.8	35
143	Identification of Droplet-Flow-Induced Electric Energy on Electrolyte-Insulator-Semiconductor Structure. *Journal of the American Chemical Society*, **2017**, 139, 10968-10971	16.4	35

142	Copper nanowire/multi-walled carbon nanotube composites as all-nanowire flexible electrode for fast-charging/discharging lithium-ion battery. *Nano Research*, **2018**, 11, 769-779	10	34
141	Self-Healing Polymer Dielectric for a High Capacitance Gate Insulator. *ACS Applied Materials & Interfaces*, **2016**, 8, 23854-61	9.5	34
140	Characteristics and self-cleaning effect of the transparent super-hydrophobic film having nanofibers array structures. *Applied Surface Science*, **2010**, 256, 6729-6735	6.7	34
139	The Directional Peeling Effect of Nanostructured Rigiflex Molds on Liquid-Crystal Devices: Liquid-Crystal Alignment and Optical Properties. *Advanced Functional Materials*, **2008**, 18, 1340-1347	15.6	34
138	A systematic study on effects of precursors and solvents for optimization of solution-processed oxide semiconductor thin-film transistors. *Journal of Materials Chemistry C*, **2017**, 5, 7768-7776	7.1	33
137	Effects of annealing temperature of aqueous solution-processed ZnO electron-selective layers on inverted polymer solar cells. *Organic Electronics*, **2013**, 14, 100-104	3.5	33
136	Enhanced electrochemical capabilities of lithium ion batteries by structurally ideal AAO separator. *Journal of Materials Chemistry A*, **2015**, 3, 10715-10719	13	32
135	All solid state flexible supercapacitors operating at 4 V with a cross-linked polymeric ionic liquid electrolyte. *Journal of Materials Chemistry A*, **2016**, 4, 4386-4391	13	32
134	The structural, optical and electrical characterization of high-performance, low-temperature and solution-processed alkali metal-doped ZnO TFTs. *Journal of Materials Chemistry C*, **2013**, 1, 1383	7.1	31
133	Ultrathin self-powered artificial skin. *Energy and Environmental Science*, **2014**, 7, 3994-3999	35.4	30
132	Selective patterning and immobilization of biomolecules within precisely-defined micro-reservoirs. *Biosensors and Bioelectronics*, **2006**, 21, 2188-93	11.8	30
131	Hydrophilic composite elastomeric mold for high-resolution soft lithography. *Langmuir*, **2006**, 22, 9018-24	4	29
130	Strong Influence of Humidity on Low-Temperature Thin-Film Fabrication via Metal Aqua Complex for High Performance Oxide Semiconductor Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2017**, 9, 548-557	9.5	27
129	Effective Atmospheric-Pressure Plasma Treatment toward High-Performance Solution-Processed Oxide Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2018**, 10, 30581-30586	9.5	27
128	Aqueous zinc ammine complex for solution-processed ZnO semiconductors in thin film transistors. *RSC Advances*, **2014**, 4, 11295	3.7	26
127	Lattice Transparency of Graphene. *Nano Letters*, **2017**, 17, 1711-1718	11.5	25
126	Self-reducible copper ion complex ink for air sinterable conductive electrodes. *Journal of Materials Chemistry C*, **2016**, 4, 10740-10746	7.1	25
125	Fluidic Active Transducer for Electricity Generation. *Scientific Reports*, **2015**, 5, 15695	4.9	24

124	A robust ionic liquid□polymer gate insulator for high-performance flexible thin film transistors. *Journal of Materials Chemistry C*, **2015**, 3, 4239-4243	7.1	24
123	Inducement of Azimuthal Molecular Orientation of Pentacene by Imprinted Periodic Groove Patterns for Organic Thin-Film Transistors. *Advanced Materials*, **2008**, 20, 1146-1153	24	24
122	Multilayer transfer printing on microreservoir-patterned substrate employing hydrophilic composite mold for selective immobilization of biomolecules. *Langmuir*, **2006**, 22, 7689-94	4	24
121	Nonwoven rGO Fiber-Aramid Separator for High-Speed Charging and Discharging of Li Metal Anode. *Advanced Energy Materials*, **2020**, 10, 2001479	21.8	23
120	Highly stable lithium metal battery with an applied three-dimensional mesh structure interlayer. *Journal of Materials Chemistry A*, **2018**, 6, 15540-15545	13	23
119	Superhydrophobic modification of gate dielectrics for densely packed pentacene thin film transistors. *Applied Physics Letters*, **2007**, 91, 063503	3.4	23
118	Hierarchical Surface Topography in Block Copolymer Thin Films Induced by Residual Solvent. *Macromolecules*, **2003**, 36, 4907-4915	5.5	23
117	Photosensitivity of InZnO thin-film transistors using a solution process. *Applied Physics Letters*, **2016**, 109, 132105	3.4	23
116	A visible light detector based on a heterojunction phototransistor with a highly stable inorganic CsPbIxBr3□ perovskite and In□Ga□Zn□O semiconductor double-layer. *Journal of Materials Chemistry C*, **2019**, 7, 14223-14231	7.1	23
115	Curved copper nanowires-based robust flexible transparent electrodes via all-solution approach. *Nano Research*, **2017**, 10, 3077-3091	10	22
114	Soft contact transplanted nanocrystal quantum dots for light-emitting diodes: effect of surface energy on device performance. *ACS Applied Materials & Interfaces*, **2015**, 7, 10828-33	9.5	22
113	Free-standing film electronics using photo-crosslinking layer-by-layer assembly. *Journal of Materials Chemistry*, **2009**, 19, 4488		22
112	Increase in indium diffusion by tetrafluoromethane plasma treatment and its effects on the device performance of polymer light-emitting diodes. *Journal of Applied Physics*, **2008**, 103, 114502	2.5	22
111	Integrated Catalytic Activity of Patterned Multilayer Films Based on pH-Induced Electrostatic Properties of Enzymes. *Advanced Materials*, **2008**, 20, 1843-1848	24	22
110	A wearable piezoelectric bending motion sensor for simultaneous detection of bending curvature and speed. *RSC Advances*, **2017**, 7, 2520-2526	3.7	21
109	Programmable direct-printing nanowire electronic components. *Nano Letters*, **2010**, 10, 1016-21	11.5	21
108	Fully Solution-Processed and Foldable Metal-Oxide Thin-Film Transistor. *ACS Applied Materials & Interfaces*, **2016**, 8, 12894-900	9.5	21
107	Direct electron injection into an oxide insulator using a cathode buffer layer. *Nature Communications*, **2015**, 6, 6785	17.4	20

106	Surface-plasmon-enhanced visible-light emission of ZnO/Ag grating structures. *Optics Express*, **2011**, 19, 5895-901	3.3	20
105	Natural Evaporation-Driven Ionovoltaic Electricity Generation. *ACS Applied Electronic Materials*, **2019**, 1, 1746-1751	4	19
104	Electrical contact tunable direct printing route for a ZnO nanowire Schottky diode. *Nano Letters*, **2010**, 10, 3517-23	11.5	19
103	Low-Cost Fabrication of Transparent Hard Replica Molds for Imprinting Lithography. *Advanced Materials*, **2009**, 21, 4050-4053	24	19
102	Sequence of annealing polymer photoactive layer influences the air stability of inverted solar cells. *Organic Electronics*, **2009**, 10, 1483-1488	3.5	19
101	A Specific Groove Pattern Can Effectively Induce Osteoblast Differentiation. *Advanced Functional Materials*, **2017**, 27, 1703569	15.6	18
100	Redox-active ionic liquid electrolyte with multi energy storage mechanism for high energy density supercapacitor. *RSC Advances*, **2017**, 7, 55702-55708	3.7	18
99	TiO2-poly(4-vinylphenol) nanocomposite dielectrics for organic thin film transistors. *Organic Electronics*, **2013**, 14, 3406-3414	3.5	18
98	Water-soluble polymer dielectric with potential for high performance organic thin-film transistors. *Chemical Communications*, **2010**, 46, 3961-3	5.8	18
97	Superporous agarose beads as a solid support for microfluidic immunoassay. *Ultramicroscopy*, **2008**, 108, 1384-9	3.1	18
96	Fabric Active Transducer Stimulated by Water Motion for Self-Powered Wearable Device. *ACS Applied Materials & Interfaces*, **2016**, 8, 24579-84	9.5	18
95	Solvent-Free and Highly Transparent SiO2 Nanoparticle–Polymer Composite with an Enhanced Moisture Barrier Property. *Industrial & Engineering Chemistry Research*, **2016**, 55, 9433-9439	3.9	17
94	A Surface-Functionalized Ionovoltaic Device for Probing Ion-Specific Adsorption at the Solid-Liquid Interface. *Advanced Materials*, **2019**, 31, e1806268	24	17
93	Nanoscale in situ detection of nucleation and growth of Li electrodeposition at various current densities. *Journal of Materials Chemistry A*, **2018**, 6, 4629-4635	13	16
92	Verification of Charge Transfer in Metal-Insulator-Oxide Semiconductor Diodes via Defect Engineering of Insulator. *Scientific Reports*, **2019**, 9, 10323	4.9	15
91	Interface engineering for suppression of flat-band voltage shift in a solution-processed ZnO/polymer dielectric thin film transistor. *Journal of Materials Chemistry C*, **2013**, 1, 7742	7.1	15
90	Eco-friendly cross-linked polymeric dielectric material based on natural tannic acid. *Chemical Engineering Journal*, **2019**, 358, 170-175	14.7	15
89	Copper-embedded reduced graphene oxide fibers for multi-sensors. *Journal of Materials Chemistry C*, **2017**, 5, 12825-12832	7.1	14

88	Thermal expansion and contraction of an elastomer stamp causes position-dependent polymer patterns in capillary force lithography. *ACS Applied Materials & Interfaces*, **2011**, 3, 4695-702	9.5	14
87	A poly(dimethylsiloxane)-coated flexible mold for nanoimprint lithography. *Nanotechnology*, **2007**, 18, 415303	3.4	14
86	Surface-Functionalized Interfacial Self-Assembled Monolayers as Copper Electrode Diffusion Barriers for Oxide Semiconductor Thin-Film Transistor. *ACS Applied Electronic Materials*, **2019**, 1, 430-436	4	14
85	Solution-Grown Homojunction Oxide Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2019**, 11, 4103-4110	9.5	14
84	Characteristics of transparent encapsulation materials for OLEDs prepared from mesoporous silica nanoparticle-polyurethane acrylate resin composites. *Composites Part B: Engineering*, **2019**, 175, 107188	10	13
83	Micro-patterned ZnO semiconductors for high performance thin film transistors via chemical imprinting with a PDMS stamp. *Chemical Communications*, **2013**, 49, 2783-5	5.8	13
82	Micropatterned crystalline organic semiconductors via direct pattern transfer printing with PDMS stamp. *Journal of Materials Chemistry*, **2012**, 22, 22763		13
81	Fast, exact, and non-destructive diagnoses of contact failures in nano-scale semiconductor device using conductive AFM. *Scientific Reports*, **2013**, 3, 2088	4.9	13
80	Dewetting-Induced Formation of Periodic Dot Arrays of Polymer/Au Composites by Capillary Force Lithography. *Chemistry of Materials*, **2010**, 22, 4166-4174	9.6	13
79	Vertical Transport Control of Electrical Charge Carriers in Insulator/Oxide Semiconductor Hetero-structure. *Scientific Reports*, **2018**, 8, 5643	4.9	12
78	Electricity modulation of a water motion active transducer via surface functionality control. *Nano Energy*, **2017**, 40, 447-453	17.1	12
77	In-plane growth and directional control of Se nanowires in polymer thin films. *Chemical Communications*, **2009**, 1855-7	5.8	12
76	Ionovoltaic urea sensor. *Nano Energy*, **2019**, 57, 195-201	17.1	12
75	Nonlinear piezoelectric dual sensor for the detection of angle and radius of a bending deformation. *Nano Energy*, **2017**, 38, 232-238	17.1	11
74	A high-performance polymer composite electrolyte embedded with ionic liquid for all solid lithium based batteries operating at ambient temperature. *Journal of Industrial and Engineering Chemistry*, **2017**, 52, 1-6	6.3	11
73	Analysis on characteristics of contact-area-dependent electric energy induced by ion sorption at solid-liquid interface. *Nano Energy*, **2017**, 42, 257-261	17.1	11
72	Enhancement of the outdoor stability of dye-sensitized solar cells by a spectrum conversion layer with 1,8-naphthalimide derivatives. *RSC Advances*, **2015**, 5, 32588-32593	3.7	11
71	Nanoparticle assembly into a patterned template by controlling the surface wettability. *Nanotechnology*, **2008**, 19, 355301	3.4	11

70	Identification of water-infiltration-induced electrical energy generation by ionovoltaic effect in porous CuO nanowire films. *Energy and Environmental Science*, **2020**, 13, 3432-3438	35.4	11
69	Ultrathin Photo-Oxidized Siloxane Layer for Extreme Wettability: Anti-Fogging Layer for Spectacles. *Advanced Materials Interfaces*, **2016**, 3, 1500725	4.6	11
68	Effects of Unusual Gate Current on the Electrical Properties of Oxide Thin-Film Transistors. *Scientific Reports*, **2018**, 8, 13905	4.9	11
67	Advanced measurement and diagnosis of the effect on the underlayer roughness for industrial standard metrology. *Scientific Reports*, **2019**, 9, 1018	4.9	10
66	A high efficiency dye-sensitized solar cell with a UV-cured polymer gel electrolyte and a nano-gel electrolyte double layer. *Journal of Materials Chemistry A*, **2013**, 1, 8529	13	10
65	Solution processable silica thin film coating on microporous substrate with high tortuosity: application to a battery separator. *RSC Advances*, **2013**, 3, 16708	3.7	10
64	Fabrication of a multidomain and ultrafast-switching liquid crystal alignment layer using contact printing with a poly(dimethylsiloxane) stamp. *Advanced Materials*, **2013**, 25, 1408-14	24	10
63	Delicate modification of poly(dimethylsiloxane) ultrathin film by low-energy ion beam treatment for durable intermediate liquid crystal pretilt angles. *Langmuir*, **2010**, 26, 5072-6	4	10
62	Expanded graphite/copper oxide composite electrodes for cell kinetic balancing of lithium-ion capacitor. *Journal of Alloys and Compounds*, **2020**, 829, 154566	5.7	9
61	An in situ formed LiF protective layer on a Li metal anode with solvent-less cross-linking. *Sustainable Energy and Fuels*, **2020**, 4, 3282-3287	5.8	9
60	Effects of process variables on aqueous-based AlOx insulators for high-performance solution-processed oxide thin-film transistors. *Journal of Industrial and Engineering Chemistry*, **2018**, 68, 117-123	6.3	9
59	Reducing the Persistent Photoconductivity Effect in Zinc Oxide by Sequential Surface Ultraviolet Ozone and Annealing Treatments. *ACS Applied Electronic Materials*, **2019**, 1, 2655-2663	4	9
58	Effect of redox proteins on the behavior of non-volatile memory. *Chemical Communications*, **2012**, 48, 12008-10	5.8	9
57	A Simple Imprint Method for Multi-Tiered Polymer Nanopatterning on Large Flexible Substrates Employing a Flexible Mold and Hemispherical PDMS Elastomer. *Macromolecular Rapid Communications*, **2007**, 28, 1995-2000	4.8	9
56	Evaporative electrical energy generation via diffusion-driven ion-electron-coupled transport in semiconducting nanoporous channel. *Nano Energy*, **2021**, 80, 105522	17.1	9
55	Atmospheric-pressure plasma treatment toward high-quality solution-processed aluminum oxide gate dielectric films in thin-film transistors. *Nanotechnology*, **2019**, 30, 495702	3.4	8
54	Effective work function modulation of SWCNT/AZO NP hybrid electrodes in fully solution-processed flexible metal-oxide thin film transistors. *Journal of Materials Chemistry C*, **2015**, 3, 8121-8126	7.1	8
53	Oxygen Radical Control via Atmospheric Pressure Plasma Treatment for Highly Stable IGZO Thin-Film Transistors. *IEEE Transactions on Electron Devices*, **2020**, 67, 3135-3140	2.9	8

52	Highly transparent phototransistor based on quantum-dots and ZnO bilayers for optical logic gate operation in visible-light.. *RSC Advances*, **2020**, 10, 16404-16414	3.7	8
51	Synthesis of Copper Oxide/Graphite Composite for High-Performance Rechargeable Battery Anode. *Chemistry - A European Journal*, **2017**, 23, 11629-11635	4.8	8
50	Electro-optic switching with liquid crystal graphene. *Physica Status Solidi - Rapid Research Letters*, **2016**, 10, 397-403	2.5	8
49	Pressure-assisted electrode fabrication using simply synthesized Cu3Sn alloy nanoparticles. *Journal of Materials Chemistry C*, **2015**, 3, 2773-2777	7.1	7
48	Pressure-assisted printing with crack-free metal electrodes using an anti-adhesive rigiflex stamp. *Journal of Materials Chemistry*, **2010**, 20, 2746		7
47	Solution-processed amorphous ZrO gate dielectric films synthesized by a non-hydrolytic sol-gel route.. *RSC Advances*, **2018**, 8, 39115-39119	3.7	7
46	Synthesis of Cu3Sn alloy nanocrystals through sequential reduction induced by gradual increase of the reaction temperature. *Chemistry - A European Journal*, **2015**, 21, 6690-4	4.8	6
45	Liquid electrolyte-free cylindrical Al polymer capacitor review: Materials and characteristics. *Journal of Power Sources*, **2015**, 284, 466-480	8.9	6
44	Electron Density-Change in Semiconductor by Ion-Adsorption at Solid-Liquid Interface. *Advanced Materials*, **2021**, 33, e2007581	24	6
43	Turn-On Voltage Shift of Metal□Insulator□Oxide Semiconductor Thin-Film Diode by Adding Schottky Diode in Reverse Direction. *ACS Applied Electronic Materials*, **2019**, 1, 530-537	4	5
42	Highly reliable quinone-based cathodes and cellulose nanofiber separators: toward eco-friendly organic lithium batteries. *Cellulose*, **2020**, 27, 6707-6717	5.5	5
41	The effect of Surface energy characterized functional group of self-assembled monolayer for enhancing electrical stability of oxide semiconductor thin film transistor. *Nanotechnology*, **2020**,	3.4	5
40	CuxO Nanowires Based Flexible Ionovoltaic Device for Droplet-Flow-Induced Electrical Energy Generation. *ACS Applied Energy Materials*, **2020**, 3, 1253-1259	6.1	5
39	Advanced Li metal anode by fluorinated metathesis on conjugated carbon networks. *Energy and Environmental Science*, **2021**, 14, 940-954	35.4	5
38	Superconcentrated aqueous electrolyte and UV curable polymer composite as gate dielectric for high-performance oxide semiconductor thin-film transistors. *Applied Physics Letters*, **2019**, 114, 172903	3.4	4
37	An organic□inorganic composite separator for preventing shuttle effect in lithium□sulfur batteries. *Sustainable Energy and Fuels*, **2020**, 4, 3051-3057	5.8	4
36	Ion Specificity on Electric Energy Generated by Flowing Water Droplets. *Angewandte Chemie*, **2018**, 130, 2113-2117	3.6	4
35	Ni-Particle-Embedded Bilayer Gel Polymer Electrolyte for Highly Stable Lithium Metal Batteries. *ACS Applied Energy Materials*, **2019**, 2, 8310-8318	6.1	4

34	Conduction mechanism change with transport oxide layer thickness in oxide hetero-interface diode. *Applied Physics Letters*, **2017**, 111, 053506	3.4	4
33	Hierarchically-structured artificial water-repellent leaf surfaces replicated from reusable anodized aluminum oxide. *Macromolecular Research*, **2012**, 20, 762-767	1.9	4
32	Efficient Inverted Top-Emitting Organic Light Emitting Diodes with Transparent and Surface-Modified Multilayer Anodes. *Electrochemical and Solid-State Letters*, **2010**, 13, J43		4
31	Surface property controllable multilayered gate dielectric for low voltage organic thin film transistors. *Applied Physics Letters*, **2008**, 93, 083504	3.4	4
30	Ionic Diffusion-Driven Ionovoltaic Transducer for Probing Ion-Molecular Interactions at Solid-Liquid Interface. *Advanced Science*, **2021**, 9, e2103038	13.6	4
29	Nanometer-Thick Cs2SnI6 Perovskite–Polyethylene Glycol Dimethacrylate Composite Films for Highly Stable Broad-Band Photodetectors. *ACS Applied Nano Materials*, **2021**, 4, 5309-5318	5.6	4
28	Implementation of Synaptic Device Using Ultraviolet Ozone Treated Water-in-Bisalt/Polymer Electrolyte-Gated Transistor. *Advanced Functional Materials*,2110591	15.6	4
27	Densification process and mechanism of solution-processed amorphous indium zinc oxide thin films for high-performance thin film transistors. *Applied Physics Express*, **2019**, 12, 071004	2.4	3
26	Effects of Li doping on the negative bias stress stability of solution-processed ZnO thin film transistors. *RSC Advances*, **2015**, 5, 68392-68396	3.7	3
25	Facile formation of a micro-crater structure for light scattering in quasi-solid state dye-sensitized solar cells. *RSC Advances*, **2014**, 4, 28133-28139	3.7	3
24	Alkali earth metal dopants for high performance and aqueous-derived ZnO TFT. *RSC Advances*, **2013** , 3, 21339	3.7	3
23	Interface Modeling via Tailored Energy Band Alignment: Toward the Electrochemically Stabilized All-Solid-State Li-Metal Battery. *Advanced Functional Materials*,2107555	15.6	3
22	Analysis of Interface Phenomena for High-Performance Dual-Stacked Oxide Thin-Film Transistors via Equivalent Circuit Modeling. *ACS Applied Materials & Interfaces*, **2021**, 13, 51266-51278	9.5	3
21	Solventless thermal crosslinked polymer protective layer for high stable lithium metal batteries. *Sustainable Energy and Fuels*, **2020**, 4, 522-527	5.8	3
20	Strategies for High-Performance Amorphous Indium–Gallium–Zinc Oxide Schottky Contact via Defect-Induced Physical Interface Modification. *ACS Applied Electronic Materials*, **2021**, 3, 1864-1872	4	3
19	Probing an Interfacial Ionic Pairing-Induced Molecular Dipole Effect in Ionovoltaic System.. *Small Methods*, **2021**, 5, e2100323	12.8	3
18	Precise Turn-On Voltage Control of MIOSM Thin-Film Diodes with Amorphous Indium-Gallium-Zinc Oxide. *ACS Applied Materials & Interfaces*, **2021**, 13, 878-886	9.5	3
17	Conductive Polymer-Assisted Metal Oxide Hybrid Semiconductors for High-Performance Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2021**, 13, 8552-8562	9.5	3

16	Investigation on Resistivity-Dependent Behavior of Carbon-Composite-Based Paintable Ionovoltaic Device. *ACS Applied Electronic Materials*, **2019**, 1, 1059-1064	4	2
15	A position-controllable external stage for critical dimension measurements via low-noise atomic force microscopy. *Ultramicroscopy*, **2018**, 194, 48-56	3.1	2
14	Investigation of Vertical Current Phenomena in the Insulator/Oxide Semiconductor Heterojunction Using XPS Analysis and an Atmospheric-Pressure Plasma Treatment System. *ACS Applied Electronic Materials*, **2019**, 1, 1698-1704	4	2
13	Graphene as a thin-film catalyst booster: graphene-catalyst interface plays a critical role. *Nanotechnology*, **2017**, 28, 495708	3.4	2
12	Organic Light-Emitting Bistable Memory Devices with Self-Assembled Organic Nanoparticles as a Charge Trapping Center. *Electrochemical and Solid-State Letters*, **2010**, 13, J103		2
11	Long-term stability in □CsPbI3 perovskite via an ultraviolet-curable polymer network. *Communications Materials*, **2021**, 2,	6	2
10	Nitrogen-doped MoS2 as a catalytic sulfur host for lithium-sulfur batteries. *Chemical Engineering Journal*, **2022**, 439, 135568	14.7	2
9	Mobility boost up of hybrid TFT with solvent-free cross-linked polyurethane-ionic liquid gate dielectric. *Applied Physics Express*, **2019**, 12, 101004	2.4	1
8	Unidirectional oxide hetero-interface thin-film diode. *Applied Physics Letters*, **2015**, 107, 143506	3.4	1
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