

Pil-Jin Yoo

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.

176 papers	8,370 citations	42 h-index	88 g-index
183 ext. papers	9,353 ext. citations	9.7 avg, IF	6.14 L-index

#	Paper	IF	Citations
176	Re nanoclusters anchored on nanosheet supports: Formation of Re-O-matrix bonding and evaluation as all-pH-range hydrogen evolution reaction (HER) electrocatalysts. <i>Journal of Energy Chemistry</i> , 2022 , 69, 185-193	12	1
175	Highly penetrant organic solvent-resistant layer-by-layer assembled ultra-thin barrier coating for confined microchannel devices. <i>Composites Part B: Engineering</i> , 2022 , 230, 109537	10	0
174	An in-situ spectroscopic study on the photochemical CO ₂ reduction on CsPbBr ₃ perovskite catalysts embedded in a porous copper scaffold. <i>Chemical Engineering Journal</i> , 2022 , 430, 132807	14.7	3
173	Self-Assembled Honeycomb Lattices of Dielectric Colloidal Nanospheres Featuring Photonic Dirac Cones. <i>ACS Applied Nano Materials</i> , 2022 , 5, 3386-3393	5.6	1
172	Patchwork-Structured Heterointerface of 1T-WS ₂ /a-WO ₃ with Sustained Hydrogen Spillover as a Highly Efficient Hydrogen Evolution Reaction Electrocatalyst.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	2
171	Broad Tunability in mechanical properties of closed cellular foams using micro-bubble assembly of Graphene/silica Nanocomposites. <i>Materials and Design</i> , 2021 , 202, 109558	8.1	2
170	Continuous and conformal thin TiO ₂ -coating on carbon support makes Pd nanoparticles highly efficient and durable electrocatalyst. <i>Applied Catalysis B: Environmental</i> , 2021 , 284, 119715	21.8	10
169	Kirkendall effect induced bifunctional hybrid electrocatalyst (Co ₉ S ₈ @MoS ₂ /N-doped hollow carbon) for high performance overall water splitting. <i>Journal of Power Sources</i> , 2021 , 493, 229688	8.9	18
168	Graphene-Based Ultralight Compartmentalized Isotropic Foams with an Extremely Low Thermal Conductivity of 5.75 mW m ⁻¹ K ⁻¹ . <i>Advanced Functional Materials</i> , 2021 , 31, 2007392	15.6	13
167	Reconstructed Water Oxidation Electrocatalysts: The Impact of Surface Dynamics on Intrinsic Activities. <i>Advanced Functional Materials</i> , 2021 , 31, 2008190	15.6	64
166	A NiCoP nanocluster-anchored porous TiCT monolayer as high performance hydrogen evolution reaction electrocatalysts. <i>Nanoscale</i> , 2021 , 13, 12854-12864	7.7	2
165	Low-Temperature Synthesis of Wafer-Scale MoS ₂ -WS ₂ Vertical Heterostructures by Single-Step Penetrative Plasma Sulfurization. <i>ACS Nano</i> , 2021 , 15, 707-718	16.7	10
164	Thermal Insulation Materials: Graphene-Based Ultralight Compartmentalized Isotropic Foams with an Extremely Low Thermal Conductivity of 5.75 mW m ⁻¹ K ⁻¹ (Adv. Funct. Mater. 5/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170034	15.6	
163	Modularly aromatic-knit graphitizable phenolic network as a tailored platform for electrochemical applications. <i>Energy and Environmental Science</i> , 2021 , 14, 3203-3215	35.4	3
162	Perpendicularly anchored ReSe ₂ nanoflakes on reduced graphene oxide support for highly efficient hydrogen evolution reactions. <i>Chemical Engineering Journal</i> , 2021 , 405, 126728	14.7	9
161	Metal-phenolic network-coated hollow fiber catalytic membranes via solvent transfer induced phase separation (STRIPS) for Suzuki coupling reaction. <i>Journal of Membrane Science</i> , 2021 , 634, 119386	9.6	3
160	Sub-nanometer thin TiO ₂ -coating on carbon support for boosting oxygen reduction activity and durability of Pt nanoparticles. <i>Electrochimica Acta</i> , 2021 , 394, 139127	6.7	0

159	Chemical transformation approach for high-performance ternary NiFeCo metal compound-based water splitting electrodes. <i>Applied Catalysis B: Environmental</i> , 2021 , 294, 120246	21.8	12
158	Oxidized-co-crumpled multiscale porous architectures of MXene for high performance supercapacitors. <i>Journal of Alloys and Compounds</i> , 2021 , 887, 161304	5.7	8
157	A Robust Fabrication Technique for Hydrogel Films Containing Micropatterned Opal Structures via Micromolding and an Integrated Evaporative Deposition-Photopolymerization Approach. <i>Langmuir</i> , 2021 , 37, 1456-1464	4	1
156	Strong Bathochromic Shift of Conjugated Polymer Nanowires Assembled with a Liquid Crystalline Alkyl Benzoic Acid via a Film Dispersion Process.. <i>ACS Omega</i> , 2021 , 6, 34876-34888	3.9	1
155	Nanocomposite Films: Optically Transparent and Low-CTE Polyethersulfone-Based Nanocomposite Films for Flexible Display (Adv. Mater. Interfaces 24/2020). <i>Advanced Materials Interfaces</i> , 2020 , 7, 2070134	4.6	134
154	Development of Co(OH) _x F _{2-x} Nanosheets for Acetone Gas Sensor Applications: Material Characterization and Sensor Performance Evaluation. <i>Crystals</i> , 2020 , 10, 968	2.3	1
153	Optically Transparent and Low-CTE Polyethersulfone-Based Nanocomposite Films for Flexible Display. <i>Advanced Materials Interfaces</i> , 2020 , 7, 2001422	4.6	6
152	Controlled High-Capacity Storage of Lithium-Ions Using Void-Incorporated 3D MXene Architectures. <i>Advanced Materials Interfaces</i> , 2020 , 7, 2000734	4.6	3
151	Microfluidic Synthesis of Carbon Nanotube-Networked Solid-Shelled Bubbles. <i>Langmuir</i> , 2020 , 36, 948-955	4.5	2
150	Click-functionalized inverse-opal structured membranes for organocatalytic reactions. <i>Separation and Purification Technology</i> , 2020 , 240, 116621	8.3	2
149	Graphene-based 3D lightweight cellular structures: Synthesis and applications. <i>Korean Journal of Chemical Engineering</i> , 2020 , 37, 189-208	2.8	7
148	Catalytic effect of reduced graphene oxide on facilitating reversible conversion reaction in SnO ₂ for next-generation Li rechargeable batteries. <i>Journal of Power Sources</i> , 2020 , 446, 227321	8.9	16
147	Simultaneous separation of high-purity semiconducting and metallic single-walled carbon nanotubes by surfactant concentration-controlled gel chromatography. <i>Applied Surface Science</i> , 2020 , 508, 145258	6.7	5
146	Controlling inter-sheet-distance in reduced graphene oxide electrodes for highly sensitive electrochemical impedimetric sensing of myoglobin. <i>Sensors and Actuators B: Chemical</i> , 2020 , 305, 127477	8.5	15
145	Sonochemically activated synthesis of gradationally complexed Ag/TEMPO-oxidized cellulose for multifunctional textiles with high electrical conductivity, super-hydrophobicity, and efficient EMI shielding. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 13990-13998	7.1	14
144	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
143	Hydrogen bonding-based strongly adhesive coacervate hydrogels synthesized using poly(N-vinylpyrrolidone) and tannic acid. <i>Soft Matter</i> , 2019 , 15, 785-791	3.6	72
142	Si nanoparticle clusters in hollow carbon capsules (SNC@C) as lithium battery anodes: toward high initial coulombic efficiency. <i>Nanoscale</i> , 2019 , 11, 13650-13658	7.7	17

141	Interconnected assembly of ZrO ₂ @SiO ₂ nanoparticles with dimensional selectivity and refractive index tunability. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 8176-8184	7.1	5
140	Dual-colour generation from layered colloidal photonic crystals harnessing core hatching in double emulsions. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 6924-6931	7.1	4
139	Poly(3-hexylthiophene) Nanoparticles Prepared via a Film Shattering Process and Hybridization with TiO ₂ for Visible-Light Active Photocatalysis. <i>Macromolecular Research</i> , 2019 , 27, 427-434	1.9	9
138	Ultralightweight Strain-Responsive 3D Graphene Network. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 9884-9893	3.8	4
137	Lightweight Materials: Structurally Controlled Cellular Architectures for High-Performance Ultra-Lightweight Materials (Adv. Mater. 34/2019). <i>Advanced Materials</i> , 2019 , 31, 1970245	24	2
136	Carbonization/oxidation-mediated synthesis of MOF-derived hollow nanocages of ZnO/N-doped carbon interwoven by carbon nanotubes for lithium-ion battery anodes. <i>Dalton Transactions</i> , 2019 , 48, 11941-11950	4.3	14
135	Binder-free heat dissipation films assembled with reduced graphene oxide and alumina nanoparticles for simultaneous high in-plane and cross-plane thermal conductivities. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 9380-9388	7.1	11
134	MXene supported CoxAy (A = OH, P, Se) electrocatalysts for overall water splitting: unveiling the role of anions in intrinsic activity and stability. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 27383-27393	13	39
133	Metal-Phenolic Network-Coated Hyaluronic Acid Nanoparticles for pH-Responsive Drug Delivery. <i>Pharmaceutics</i> , 2019 , 11,	6.4	9
132	Harnessing designer biotemplates for biomineralization of TiO ₂ with tunable photocatalytic activity. <i>Ceramics International</i> , 2019 , 45, 6467-6476	5.1	1
131	Structurally Controlled Cellular Architectures for High-Performance Ultra-Lightweight Materials. <i>Advanced Materials</i> , 2019 , 31, e1803670	24	38
130	Uniaxial alignment of ZnO nanowires via light-induced directional migration of azopolymeric microspheres. <i>Polymer</i> , 2018 , 138, 180-187	3.9	6
129	Enhanced capacitive deionization performance by an rGO/SnO ₂ nanocomposite modified carbon felt electrode. <i>RSC Advances</i> , 2018 , 8, 4182-4190	3.7	27
128	Cumulative energy analysis of thermally-induced surface wrinkling of heterogeneously multilayered thin films. <i>Soft Matter</i> , 2018 , 14, 704-710	3.6	11
127	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
126	Mediator- and co-catalyst-free direct Z-scheme composites of BiWO ₃ -CuP for solar-water splitting. <i>Nanoscale</i> , 2018 , 10, 3026-3036	7.7	65
125	Lysozyme-Templated Meso-Macroporous Hollow TiO ₂ for Lithium Ion Battery Anode. <i>ACS Applied Nano Materials</i> , 2018 , 1, 698-710	5.6	22
124	In-direct localized surface plasmon resonance (LSPR)-based nanosensors for highly sensitive and rapid detection of cortisol. <i>Sensors and Actuators B: Chemical</i> , 2018 , 266, 710-716	8.5	20

123	Conjugated polymer nano-ellipsoids assembled with octanoic acid and their polyurethane nanocomposites with simultaneous thermal storage and antibacterial activity. <i>Journal of Industrial and Engineering Chemistry</i> , 2018 , 63, 33-40	6.3	11
122	Large-scale separation of single-walled carbon nanotubes by electronic type using click chemistry. <i>Applied Surface Science</i> , 2018 , 429, 278-283	6.7	10
121	Effect of semiconductor polymer backbone structures and side-chain parameters on the facile separation of semiconducting single-walled carbon nanotubes from as-synthesized mixtures. <i>Applied Surface Science</i> , 2018 , 429, 264-271	6.7	8
120	Layer-by-layer assembled multilayers of charged polyurethane and graphene oxide platelets for flexible and stretchable gas barrier films. <i>Soft Matter</i> , 2018 , 14, 6708-6715	3.6	13
119	Machine-Washable Smart Textiles with Photothermal and Antibacterial Activities from Nanocomposite Fibers of Conjugated Polymer Nanoparticles and Polyacrylonitrile. <i>Polymers</i> , 2018 , 11,	4.5	10
118	Cellular Networks: A Plesiohedral Cellular Network of Graphene Bubbles for Ultralight, Strong, and Superelastic Materials (Adv. Mater. 45/2018). <i>Advanced Materials</i> , 2018 , 30, 1870343	24	1
117	Optoelectronic Synapse Based on IGZO-Alkylated Graphene Oxide Hybrid Structure. <i>Advanced Functional Materials</i> , 2018 , 28, 1804397	15.6	171
116	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
115	A Plesiohedral Cellular Network of Graphene Bubbles for Ultralight, Strong, and Superelastic Materials. <i>Advanced Materials</i> , 2018 , 30, e1802997	24	24
114	Highly interdigitated and porous architected ternary composite of SnS ₂ , g-C ₃ N ₄ , and reduced graphene oxide (rGO) as high performance lithium ion battery anodes. <i>RSC Advances</i> , 2017 , 7, 3125-3135 ^{3.7}	3.7	35
113	Hydrous RuO ₂ nanoparticles as highly active electrocatalysts for hydrogen evolution reaction. <i>Chemical Physics Letters</i> , 2017 , 673, 89-92	2.5	33
112	Petal-Inspired Diffractive Grating on a Wavy Surface: Deterministic Fabrications and Applications to Colorizations and LED Devices. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 9935-9944	9.5	24
111	Porous MoS ₂ @C heteroshell with a Si yolk structure with improved lithium transport properties and superior cycle stability. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14906-14913	13	28
110	Fabrication of SiO _x Ultra-Fine Nanoparticles by IR nanosecond laser ablation as anode materials for lithium ion battery. <i>Applied Surface Science</i> , 2017 , 422, 155-161	6.7	8
109	Non-stoichiometric SnS microspheres with highly enhanced photoreduction efficiency for Cr(VI) ions. <i>RSC Advances</i> , 2017 , 7, 30533-30541	3.7	26
108	Nanowires of amorphous conjugated polymers prepared via a surfactant-templating process using an alkylbenzoic acid. <i>Journal of Industrial and Engineering Chemistry</i> , 2017 , 51, 172-177	6.3	9
107	Ultra-fine SnO ₂ nanoparticles doubly embedded in amorphous carbon and reduced graphene oxide (rGO) for superior lithium storage. <i>Electrochimica Acta</i> , 2017 , 224, 201-210	6.7	31
106	Competitive concurrence of surface wrinkling and dewetting of liquid crystalline polymer films on non-wettable substrates. <i>Soft Matter</i> , 2017 , 13, 7753-7759	3.6	7

105	Influence of Ionic Strength on the Deposition of Metal-Phenolic Networks. <i>Langmuir</i> , 2017 , 33, 10616-10622	4.2	44
104	High-Precision Temperature-Controllable Metal-Coated Polymeric Molds for Programmable, Hierarchical Patterning. <i>Advanced Functional Materials</i> , 2017 , 27, 1702993	15.6	4
103	Multiscale-architected functional membranes utilizing inverse opal structures. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 17111-17134	13	25
102	Si/Co-CoSi ₂ /reduced graphene oxide ternary nanocomposite anodes for Li-Ion batteries with enhanced capacity and cycling stability. <i>Journal of Alloys and Compounds</i> , 2017 , 724, 1134-1142	5.7	17
101	Carbohydrate-Functionalized rGO as an Effective Cancer Vaccine for Stimulating Antigen-Specific Cytotoxic T Cells and Inhibiting Tumor Growth. <i>Chemistry of Materials</i> , 2017 , 29, 6883-6892	9.6	26
100	Assembly of "3D" plasmonic clusters by "2D" AFM nanomanipulation of highly uniform and smooth gold nanospheres. <i>Scientific Reports</i> , 2017 , 7, 6045	4.9	19
99	Inverse Photonic Glasses by Packing Bidisperse Hollow Microspheres with Uniform Cores. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 24155-24160	9.5	33
98	Patterned Poly(dopamine) Films for Enhanced Cell Adhesion. <i>Bioconjugate Chemistry</i> , 2017 , 28, 75-80	6.3	13
97	Highly sensitive and selective electrochemical cortisol sensor using bifunctional protein interlayer-modified graphene electrodes. <i>Sensors and Actuators B: Chemical</i> , 2017 , 242, 1121-1128	8.5	28
96	Microspheres: Microfluidic Generation of Monodisperse and Photoreconfigurable Microspheres for Floral Iridescence-Inspired Structural Colorization (Adv. Mater. 26/2016). <i>Advanced Materials</i> , 2016 , 28, 5332	24	1
95	Capacitance enhancement in supercapacitors by incorporating ultra-long hydrated vanadium-oxide nanobelts into graphene. <i>Journal of Alloys and Compounds</i> , 2016 , 688, 814-821	5.7	20
94	Dramatically Enhanced Mechanosensitivity and Signal-to-Noise Ratio of Nanoscale Crack-Based Sensors: Effect of Crack Depth. <i>Advanced Materials</i> , 2016 , 28, 8130-8137	24	200
93	Self-formed grain boundary healing layer for highly efficient CH ₃ NH ₃ PbI ₃ perovskite solar cells. <i>Nature Energy</i> , 2016 , 1,	62.3	757
92	Percolation-Controlled Metal/Polyelectrolyte Complexed Films for All-Solution-Processable Electrical Conductors. <i>Advanced Functional Materials</i> , 2016 , 26, 8726-8734	15.6	10
91	Microfluidic Generation of Monodisperse and Photoreconfigurable Microspheres for Floral Iridescence-Inspired Structural Colorization. <i>Advanced Materials</i> , 2016 , 28, 5268-75	24	32
90	Thin Films Bearing Conjugated Polymer Nanoparticles Fabricated by Microliter-Scale Layer-by-Layer Deposition. <i>Macromolecular Materials and Engineering</i> , 2016 , 301, 530-534	3.9	2
89	Ag Nanoparticle/Polydopamine-Coated Inverse Opals as Highly Efficient Catalytic Membranes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 3250-7	9.5	44
88	Thermally Induced Charge Reversal of Layer-by-Layer Assembled Single-Component Polymer Films. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 7449-55	9.5	23

87	Giant Gyroid and Templates from High-Molecular-Weight Block Copolymer Self-assembly. <i>Scientific Reports</i> , 2016 , 6, 36326	4.9	25
86	Surface modification of magnesium hydroxide nanoparticles with hexylphosphoric acid to improve thermal stabilities of polyethylene composites. <i>Polymer Bulletin</i> , 2016 , 73, 2855-2866	2.4	20
85	Nanoscale Sensors: Dramatically Enhanced Mechanosensitivity and Signal-to-Noise Ratio of Nanoscale Crack-Based Sensors: Effect of Crack Depth (Adv. Mater. 37/2016). <i>Advanced Materials</i> , 2016 , 28, 8068-8068	24	8
84	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
83	Angle- and strain-independent coloured free-standing films incorporating non-spherical colloidal photonic crystals. <i>Soft Matter</i> , 2015 , 11, 1582-8	3.6	34
82	One-Step Generation of Multifunctional Polyelectrolyte Microcapsules via Nanoscale Interfacial Complexation in Emulsion (NICE). <i>ACS Nano</i> , 2015 , 9, 8269-78	16.7	53
81	Preparation of quaternary tungsten bronze nanoparticles by a thermal decomposition of ammonium metatungstate with oleylamine. <i>Chemical Engineering Journal</i> , 2015 , 281, 236-242	14.7	20
80	Electrochemical detection of Bisphenol A with high sensitivity and selectivity using recombinant protein-immobilized graphene electrodes. <i>Biosensors and Bioelectronics</i> , 2015 , 71, 214-221	11.8	49
79	Bathochromic shift in absorption spectra of conjugated polymer nanoparticles with displacement along backbones. <i>Macromolecular Research</i> , 2015 , 23, 574-577	1.9	22
78	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
77	Si/TiO ₂ /Reduced Graphene Oxide Nanocomposite Anodes for Lithium-Ion Batteries with Highly Enhanced Cyclic Stability. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 18483-90	9.5	41
76	Facile Synthesis of Hierarchically Structured Bi ₂ S ₃ /Bi ₂ WO ₆ Photocatalysts for Highly Efficient Reduction of Cr(VI). <i>ACS Sustainable Chemistry and Engineering</i> , 2015 , 3, 2847-2855	8.3	124
75	Stable vesicle assemblies on surfaces of hydrogel nanoparticles formed from a polysaccharide modified with lipid moieties. <i>Chemical Engineering Journal</i> , 2015 , 263, 38-44	14.7	6
74	Self-supported Ag/AgCl nanoparticles incorporated polymeric multilayer films for reusable electrophotocatalyst. <i>Materials Express</i> , 2015 , 5, 401-409	1.3	6
73	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	3.7	27
72	Highly durable and unidirectionally stooped polymeric nanohairs for gecko-like dry adhesive. <i>Nanotechnology</i> , 2015 , 26, 415301	3.4	12
71	Fabrication of a three-electrode battery using hydrogen-storage materials. <i>Journal of Power Sources</i> , 2015 , 280, 125-131	8.9	2
70	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

69	Rutile TiO ₂ -based perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9251	13	166
68	Nanoparticles of conjugated polymers prepared from phase-separated films of phospholipids and polymers for biomedical applications. <i>Advanced Materials</i> , 2014 , 26, 4559-64	24	50
67	Morphological variation of highly porous NiSn foams fabricated by electro-deposition in hydrogen-bubble templates and their performance as pseudo-capacitors. <i>Applied Surface Science</i> , 2014 , 322, 15-20	6.7	15
66	Multiscale porous interconnected nanocorlander network with tunable transport properties. <i>Advanced Materials</i> , 2014 , 26, 7998-8003	24	17
65	Lysozyme-mediated biomineralization of titanium-tungsten oxide hybrid nanoparticles with high photocatalytic activity. <i>Chemical Communications</i> , 2014 , 50, 12392-5	5.8	10
64	Highly efficient and recyclable nanocomplexed photocatalysts of AgBr/N-doped and amine-functionalized reduced graphene oxide. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 20819-27	9.5	48
63	Al-C hybrid nanoclustered anodes for lithium ion batteries with high electrical capacity and cyclic stability. <i>Chemical Communications</i> , 2014 , 50, 2837-40	5.8	40
62	Restoration of the genuine electronic properties of functionalized single-walled carbon nanotubes. <i>RSC Advances</i> , 2014 , 4, 42930-42935	3.7	7
61	Particle-nested inverse opal structures as hierarchically structured large-scale membranes with tunable separation properties. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 9950-4	9.5	29
60	Nanomesh-structured ultrathin membranes harnessing the unidirectional alignment of viruses on a graphene-oxide film. <i>Advanced Materials</i> , 2014 , 26, 3899-904	24	43
59	Nanoporous block copolymer membranes for ultrafiltration: a simple approach to size tunability. <i>ACS Nano</i> , 2014 , 8, 11745-52	16.7	78
58	Highly sensitive reduced graphene oxide impedance sensor harnessing π -stacking interaction mediated direct deposition of protein probes. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 3591-8	9.5	35
57	Temperature sensing behavior of poly(3,4-ethylenedioxythiophene) thin film. <i>Synthetic Metals</i> , 2013 , 185-186, 52-55	3.6	3
56	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
55	Metal oxide/polymer hybrid nanofiber as flexible moisture absorbent. <i>Fibers and Polymers</i> , 2013 , 14, 1975-1980	2	6
54	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
53	Glucose Sensing by Glucose Oxidase/PEDOT Thin Film Electrode. <i>Molecular Crystals and Liquid Crystals</i> , 2013 , 580, 22-28	0.5	3
52	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

51	A simple one-step assay platform based on fluorescence quenching of macroporous silicon. <i>Biosensors and Bioelectronics</i> , 2013 , 41, 477-83	11.8	16
50	Enhanced Photocurrent Generation by Förster Resonance Energy Transfer between Phospholipid-Assembled Conjugated Oligoelectrolytes and Nile Red. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 3298-3307	3.8	24
49	Control over Growth of Hexagonal Sodium Tungstate Nanorods by Poly(styrenesulfonate). <i>Chemistry Letters</i> , 2013 , 42, 1149-1150	1.7	2
48	Near Infrared Shielding Properties of Quaternary Tungsten Bronze Nanoparticle Na _{0.11} Cs _{0.22} WO ₃ . <i>Bulletin of the Korean Chemical Society</i> , 2013 , 34, 731-734	1.2	14
47	Hematite modified tungsten trioxide nanoparticle photoanode for solar water oxidation. <i>Journal of Power Sources</i> , 2012 , 210, 32-37	8.9	38
46	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
45	Multidimensional Assembly of S-Layer Proteins on Mobility-Controlled Polyelectrolyte Multilayers. <i>ACS Macro Letters</i> , 2012 , 1, 1254-1257	6.6	2
44	Catalytic Performance and Kinetic Models on Zirconium Phosphate Modified Ru/Co/SiO ₂ Fischer-Tropsch Catalyst. <i>Catalysis Surveys From Asia</i> , 2012 , 16, 121-137	2.8	12
43	Hollow Polypyrrole Films: Applications for Energy Storage Devices. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1052-A1056	3.9	18
42	Ultrathin nanoclay films with tunable thickness as barrier layers in organic light emitting devices. <i>Journal of Materials Chemistry</i> , 2012 , 22, 7718		15
41	Hierarchical nanoflake surface driven by spontaneous wrinkling of polyelectrolyte/metal complexed films. <i>ACS Nano</i> , 2012 , 6, 1082-93	16.7	43
40	Self-organized anisotropic wrinkling of molecularly aligned liquid crystalline polymer. <i>Langmuir</i> , 2012 , 28, 3576-82	4	30
39	Effect of copper surface area and acidic sites to intrinsic catalytic activity for dimethyl ether synthesis from biomass-derived syngas. <i>Applied Catalysis B: Environmental</i> , 2012 , 126, 1-8	21.8	45
38	The interplay of peptide sequence and local structure in TiO ₂ biomineralization. <i>Journal of Inorganic Biochemistry</i> , 2012 , 115, 20-7	4.2	24
37	Layer-by-layer assembly of polyelectrolyte multilayers in three-dimensional inverse opal structured templates. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 2107-15	9.5	44
36	Surface Modification of Zinc Oxide Nanorods with Zn-Porphyrin via Metal-Ligand Coordination for Photovoltaic Applications. <i>Bulletin of the Korean Chemical Society</i> , 2012 , 33, 636-640	1.2	16
35	Fabrication of graphene thin films based on layer-by-layer self-assembly of functionalized graphene nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 360-8	9.5	154
34	Electric-Field-Assisted Layer-by-Layer Assembly of Weakly Charged Polyelectrolyte Multilayers. <i>Macromolecules</i> , 2011 , 44, 2866-2872	5.5	34

33	Invited paper: Fabrication of complexly patterned wavy structures using self-organized anisotropic wrinkling. <i>Electronic Materials Letters</i> , 2011 , 7, 17-23	2.9	27
32	Liquid-liquid interfacial nanomolding. <i>Small</i> , 2011 , 7, 2587-92	11	3
31	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
30	Fabrication of bacteria and virus microarrays based on polymeric capillary force lithography. <i>Methods in Molecular Biology</i> , 2011 , 671, 147-60	1.4	3
29	Spontaneous surface flattening via layer-by-layer assembly of interdiffusing polyelectrolyte multilayers. <i>Langmuir</i> , 2010 , 26, 17756-63	4	10
28	Controlled wavelength reduction in surface wrinkling of poly(dimethylsiloxane). <i>Soft Matter</i> , 2010 , 6, 677-684	3.6	58
27	Rigiflex lithography-based nanodot arrays for localized surface plasmon resonance biosensors. <i>Langmuir</i> , 2010 , 26, 6119-26	4	8
26	Spin-assembled layer-by-layer films of weakly charged polyelectrolyte multilayer. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 7467-72	1.3	9
25	A Direct, Multiplex Biosensor Platform for Pathogen Detection Based on Cross-linked Polydiacetylene (PDA) Supramolecules. <i>Advanced Functional Materials</i> , 2009 , 19, 3703-3710	15.6	61
24	Phase controllable transfer printing of patterned polyelectrolyte multilayers. <i>Langmuir</i> , 2009 , 25, 2575-81	4	14
23	Transferred microelectrodes fabricated with V2O5 nanowires embedded polyelectrolyte multilayers. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 7324-9	1.3	1
22	Stamped microbattery electrodes based on self-assembled M13 viruses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 17227-31	11.5	127
21	Complex pattern formation by adhesion-controlled anisotropic wrinkling. <i>Langmuir</i> , 2008 , 24, 6897-902	4	62
20	Controlling surface mobility in interdiffusing polyelectrolyte multilayers. <i>ACS Nano</i> , 2008 , 2, 561-71	16.7	73
19	Solvent-assisted patterning of polyelectrolyte multilayers and selective deposition of virus assemblies. <i>Nano Letters</i> , 2008 , 8, 1081-9	11.5	62
18	Selective Assembly of Colloidal Particles on a Nanostructured Template Coated with Polyelectrolyte Multilayers. <i>Advanced Materials</i> , 2007 , 19, 4426-4430	24	23
17	Grafted Conducting Polymer Films for Nano-patterning onto Various Organic and Inorganic Substrates by Oxidative Chemical Vapor Deposition. <i>Advanced Materials</i> , 2007 , 19, 2863-2867	24	94
16	Formation of regular nanoscale undulations on a thin polymer film imprinted by a soft mold. <i>Journal of Chemical Physics</i> , 2006 , 124, 024710	3.9	13

15	Spontaneous assembly of viruses on multilayered polymer surfaces. <i>Nature Materials</i> , 2006 , 5, 234-40	27	285
14	Virus-enabled synthesis and assembly of nanowires for lithium ion battery electrodes. <i>Science</i> , 2006 , 312, 885-8	33.3	1654
13	Morphological Diagram for Metal/Polymer Bilayer Wrinkling: Influence of Thermomechanical Properties of Polymer Layer. <i>Macromolecules</i> , 2005 , 38, 2820-2831	5.5	63
12	Simple Detachment Patterning of Organic Layers and Its Application to Organic Light-Emitting Diodes. <i>Advanced Materials</i> , 2005 , 17, 166-171	24	70
11	Solvent-driven dewetting and rim instability. <i>Journal of Chemical Physics</i> , 2004 , 121, 4346-51	3.9	59
10	Polymer elasticity-driven wrinkling and coarsening in high temperature buckling of metal-capped polymer thin films. <i>Physical Review Letters</i> , 2004 , 93, 034301	7.4	71
9	Patterning and separating infected bacteria using host-parasite and virus-antibody interactions. <i>Biomedical Microdevices</i> , 2004 , 6, 223-9	3.7	15
8	An ultraviolet-curable mold for sub-100-nm lithography. <i>Journal of the American Chemical Society</i> , 2004 , 126, 7744-5	16.4	273
7	Wave interactions in buckling: Self-organization of a metal surface on a structured polymer layer. <i>Applied Physics Letters</i> , 2004 , 84, 4487-4489	3.4	42
6	Unconventional Patterning with A Modulus-Tunable Mold: From Imprinting to Microcontact Printing. <i>Chemistry of Materials</i> , 2004 , 16, 5000-5005	9.6	115
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1	Accelerated Li-ion transport through a zwitterion-anchored separator for high-performance LiS batteries. <i>Journal of Materials Chemistry A</i> ,	13	3