

Sang Ouk Kim

List of Publications by Year in descending order

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290
papers

24,261
citations

5558

82
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8370

147
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310
all docs

310
docs citations

310
times ranked

28492
citing authors

#	ARTICLE	IF	CITATIONS
1	Epitaxial self-assembly of block copolymers on lithographically defined nanopatterned substrates. <i>Nature</i> , 2003, 424, 411-414.	13.7	1,594
2	Directed Assembly of Block Copolymer Blends into Nonregular Device-Oriented Structures. <i>Science</i> , 2005, 308, 1442-1446.	6.0	912
3	Molybdenum Sulfide/N-Doped CNT Forest Hybrid Catalysts for High-Performance Hydrogen Evolution Reaction. <i>Nano Letters</i> , 2014, 14, 1228-1233.	4.5	634
4	Flexible Nanocomposite Generator Made of BaTiO ₃ Nanoparticles and Graphitic Carbons. <i>Advanced Materials</i> , 2012, 24, 2999-3004.	11.1	601
5	Graphene Oxide Thin Films for Flexible Nonvolatile Memory Applications. <i>Nano Letters</i> , 2010, 10, 4381-4386.	4.5	554
6	Noncovalent functionalization of graphene with end-functional polymers. <i>Journal of Materials Chemistry</i> , 2010, 20, 1907.	6.7	553
7	Graphene Oxide Liquid Crystals. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3043-3047.	7.2	534
8	25th Anniversary Article: Chemically Modified/Doped Carbon Nanotubes & Graphene for Optimized Nanostructures & Nanodevices. <i>Advanced Materials</i> , 2014, 26, 40-67.	11.1	479
9	Nitrogen-doped carbon nanotubes and graphene composite structures for energy and catalytic applications. <i>Chemical Communications</i> , 2014, 50, 6818.	2.2	428
10	Electromagnetic Shielding of Monolayer MXene Assemblies. <i>Advanced Materials</i> , 2020, 32, e1906769.	11.1	410
11	Three-Dimensional Self-Assembly of Graphene Oxide Platelets into Mechanically Flexible Macroporous Carbon Films. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 10084-10088.	7.2	404
12	Three-Dimensional Shape Engineered, Interfacial Gelation of Reduced Graphene Oxide for High Rate, Large Capacity Supercapacitors. <i>Advanced Materials</i> , 2014, 26, 615-619.	11.1	396
13	Chemical structures of hydrazine-treated graphene oxide and generation of aromatic nitrogen doping. <i>Nature Communications</i> , 2012, 3, 638.	5.8	354
14	Polymer Brushes via Controlled, Surface-Initiated Atom Transfer Radical Polymerization (ATRP) from Graphene Oxide. <i>Macromolecular Rapid Communications</i> , 2010, 31, 281-288.	2.0	350
15	Theory, Synthesis, and Oxygen Reduction Catalysis of Fe-Porphyrin-Like Carbon Nanotube. <i>Physical Review Letters</i> , 2011, 106, 175502.	2.9	317
16	Versatile Carbon Hybrid Films Composed of Vertical Carbon Nanotubes Grown on Mechanically Compliant Graphene Films. <i>Advanced Materials</i> , 2010, 22, 1247-1252.	11.1	307
17	Workfunction-Tunable, N-Doped Reduced Graphene Transparent Electrodes for High-Performance Polymer Light-Emitting Diodes. <i>ACS Nano</i> , 2012, 6, 159-167.	7.3	297
18	Directed self-assembly of block copolymers for next generation nanolithography. <i>Materials Today</i> , 2013, 16, 468-476.	8.3	260

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19	Flexible room-temperature NO ₂ gas sensors based on carbon nanotubes/reduced graphene hybrid films. Applied Physics Letters, 2010, 96, .	1.5	255
20	Peptide/Graphene Hybrid Assembly into Core/Shell Nanowires. Advanced Materials, 2010, 22, 2060-2064.	11.1	248
21	Selective Electron or Hole Transport Enhancement in Bulk Heterojunction Organic Solar Cells with N- or B-Doped Carbon Nanotubes. Advanced Materials, 2011, 23, 629-633.	11.1	248
22	Combination of Titanium Oxide and a Conjugated Polyelectrolyte for High Performance Inverted Type Organic Optoelectronic Devices. Advanced Materials, 2011, 23, 2759-2763.	11.1	242
23	Vertical ZnO nanowires/graphene hybrids for transparent and flexible field emission. Journal of Materials Chemistry, 2011, 21, 3432-3437.	6.7	227
24	Mussel Inspired Highly Aligned Ti ₃ C ₂ T _x MXene Film with Synergistic Enhancement of Mechanical Strength and Ambient Stability. ACS Nano, 2020, 14, 11722-11732.	7.3	212
25	Graphene Oxide Liquid Crystals: Discovery, Evolution and Applications. Advanced Materials, 2016, 28, 3045-3068.	11.1	211
26	Tailored Assembly of Carbon Nanotubes and Graphene. Advanced Functional Materials, 2011, 21, 1338-1354.	7.8	207
27	Fabrication and Electrochemical Characterization of TiO ₂ Three-Dimensional Nanonetwork Based on Peptide Assembly. ACS Nano, 2009, 3, 1085-1090.	7.3	195
28	Synthesis of Exfoliated PMMA/Na-MMT Nanocomposites via Soap-Free Emulsion Polymerization. Macromolecules, 2001, 34, 8978-8985.	2.2	194
29	One-Dimensional RuO ₂ /Mn ₂ O ₃ Hollow Architectures as Efficient Bifunctional Catalysts for Lithium Oxygen Batteries. Nano Letters, 2016, 16, 2076-2083.	4.5	193
30	The Role of N-Doped Multiwall Carbon Nanotubes in Achieving Highly Efficient Polymer Bulk Heterojunction Solar Cells. Nano Letters, 2013, 13, 2365-2369.	4.5	191
31	Mussel-Inspired Block Copolymer Lithography for Low Surface Energy Materials of Teflon, Graphene, and Gold. Advanced Materials, 2011, 23, 5618-5622.	11.1	188
32	Role of Water in Directing Diphenylalanine Assembly into Nanotubes and Nanowires. Advanced Materials, 2010, 22, 583-587.	11.1	187
33	Biomaterialized N-Doped CNT/TiO ₂ Core/Shell Nanowires for Visible Light Photocatalysis. ACS Nano, 2012, 6, 935-943.	7.3	186
34	Nitrogen Dopants in Carbon Nanomaterials: Defects or a New Opportunity?. Small Methods, 2017, 1, 1600014.	4.6	179
35	Flexible Multilevel Resistive Memory with Controlled Charge Trap B- and N-Doped Carbon Nanotubes. Nano Letters, 2012, 12, 2217-2221.	4.5	177
36	Transferred vertically aligned N-doped carbon nanotube arrays: use in dye-sensitized solar cells as counter electrodes. Chemical Communications, 2011, 47, 4264.	2.2	175

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37	Carbon nanotube-based membranes: Fabrication and application to desalination. <i>Journal of Industrial and Engineering Chemistry</i> , 2012, 18, 1551-1559.	2.9	165
38	Amine-Based Polar Solvent Treatment for Highly Efficient Inverted Polymer Solar Cells. <i>Advanced Materials</i> , 2014, 26, 494-500.	11.1	159
39	Low-Temperature Chemical Vapor Deposition Synthesis of Pt-Co Alloyed Nanoparticles with Enhanced Oxygen Reduction Reaction Catalysis. <i>Advanced Materials</i> , 2016, 28, 7115-7122.	11.1	156
40	High-performance nanopattern triboelectric generator by block copolymer lithography. <i>Nano Energy</i> , 2015, 12, 331-338.	8.2	146
41	Flexible Resistive Switching Memory Device Based on Graphene Oxide. <i>IEEE Electron Device Letters</i> , 2010, 31, 1005-1007.	2.2	145
42	Soft Graphoepitaxy of Block Copolymer Assembly with Disposable Photoresist Confinement. <i>Nano Letters</i> , 2009, 9, 2300-2305.	4.5	144
43	Highly tunable refractive index visible-light metasurface from block copolymer self-assembly. <i>Nature Communications</i> , 2016, 7, 12911.	5.8	143
44	Universal Block Copolymer Lithography for Metals, Semiconductors, Ceramics, and Polymers. <i>Advanced Materials</i> , 2008, 20, 1898-1904.	11.1	138
45	Highly efficient inverted polymer light-emitting diodes using surface modifications of ZnO layer. <i>Nature Communications</i> , 2014, 5, 4840.	5.8	138
46	Highly Efficient Vertical Growth of Wall-Number-Selected, N-Doped Carbon Nanotube Arrays. <i>Nano Letters</i> , 2009, 9, 1427-1432.	4.5	137
47	N-doped graphitic self-encapsulation for high performance silicon anodes in lithium-ion batteries. <i>Energy and Environmental Science</i> , 2014, 7, 621-626.	15.6	137
48	Surface Energy Modification by Spin-Cast, Large-Area Graphene Film for Block Copolymer Lithography. <i>ACS Nano</i> , 2010, 4, 5464-5470.	7.3	132
49	Au-Ag Core-Shell Nanoparticle Array by Block Copolymer Lithography for Synergistic Broadband Plasmonic Properties. <i>ACS Nano</i> , 2015, 9, 5536-5543.	7.3	130
50	Surfactant mediated liquid phase exfoliation of graphene. <i>Nano Convergence</i> , 2015, 2, 20.	6.3	128
51	Rheological properties of graphene oxide liquid crystal. <i>Carbon</i> , 2014, 80, 453-461.	5.4	124
52	Laser Crystallization of Organic-Inorganic Hybrid Perovskite Solar Cells. <i>ACS Nano</i> , 2016, 10, 7907-7914.	7.3	123
53	Study on Morphology Evolution, Orientational Behavior, and Anisotropic Phase Formation of Highly Filled Polymer-Layered Silicate Nanocomposites. <i>Macromolecules</i> , 2003, 36, 2748-2757.	2.2	121
54	Graphene oxide liquid crystals: a frontier 2D soft material for graphene-based functional materials. <i>Chemical Society Reviews</i> , 2018, 47, 6013-6045.	18.7	121

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55	Flexible Field Emission of Nitrogen-Doped Carbon Nanotubes/Reduced Graphene Hybrid Films. <i>Small</i> , 2011, 7, 95-100.	5.2	116
56	Liquid Crystal Size Selection of Large-Size Graphene Oxide for Size-Dependent N-Doping and Oxygen Reduction Catalysis. <i>ACS Nano</i> , 2014, 8, 9073-9080.	7.3	116
57	Dopant-specific unzipping of carbon nanotubes for intact crystalline graphene nanostructures. <i>Nature Communications</i> , 2016, 7, 10364.	5.8	109
58	Nanoscale Assembly of 2D Materials for Energy and Environmental Applications. <i>Advanced Materials</i> , 2020, 32, e1907006.	11.1	106
59	Analysis on switching mechanism of graphene oxide resistive memory device. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	103
60	Exciton Dissociation and Charge Transport Enhancement in Organic Solar Cells with Quantum-Dot/N-Doped CNT Hybrid Nanomaterials. <i>Advanced Materials</i> , 2013, 25, 2011-2017.	11.1	103
61	Morphology Evolution and Anisotropic Phase Formation of the Maleated Polyethylene-Layered Silicate Nanocomposites. <i>Macromolecules</i> , 2002, 35, 5116-5122.	2.2	102
62	One-Dimensional Metal Nanowire Assembly via Block Copolymer Soft Graphoepitaxy. <i>Nano Letters</i> , 2010, 10, 3500-3505.	4.5	102
63	Laser Writing Block Copolymer Self-Assembly on Graphene Light-Absorbing Layer. <i>ACS Nano</i> , 2016, 10, 3435-3442.	7.3	102
64	Microtopography-Guided Conductive Patterns of Liquid-Driven Graphene Nanoplatelet Networks for Stretchable and Skin-Conformal Sensor Array. <i>Advanced Materials</i> , 2017, 29, 1606453.	11.1	101
65	Liquid Crystalline Peptide Nanowires. <i>Advanced Materials</i> , 2007, 19, 3924-3927.	11.1	99
66	Multicomponent Nanopatterns by Directed Block Copolymer Self-Assembly. <i>ACS Nano</i> , 2013, 7, 8899-8907.	7.3	99
67	Ultralarge-Area Block Copolymer Lithography Enabled by Disposable Photoresist Pre patterning. <i>ACS Nano</i> , 2010, 4, 5181-5186.	7.3	97
68	A plasmonic biosensor array by block copolymer lithography. <i>Journal of Materials Chemistry</i> , 2010, 20, 7241.	6.7	96
69	Mechanical and rheological properties of the maleated polypropylene-layered silicate nanocomposites with different morphology. <i>Journal of Applied Polymer Science</i> , 2003, 88, 1526-1535.	1.3	95
70	Characteristics of polyvinylpyrrolidone-layered silicate nanocomposites prepared by attrition ball milling. <i>Polymer</i> , 2003, 44, 681-689.	1.8	95
71	Interface-Confined High Crystalline Growth of Semiconducting Polymers at Graphene Fibers for High-Performance Wearable Supercapacitors. <i>ACS Nano</i> , 2017, 11, 9424-9434.	7.3	94
72	Surface modification of metal oxide using ionic liquid molecules in hybrid organic-inorganic optoelectronic devices. <i>Journal of Materials Chemistry</i> , 2011, 21, 2051.	6.7	93

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73	Two-Minute Assembly of Pristine Large-Area Graphene Based Films. <i>Nano Letters</i> , 2014, 14, 1388-1393.	4.5	92
74	Simple ZnO Nanowires Patterned Growth by Microcontact Printing for High Performance Field Emission Device. <i>Journal of Physical Chemistry C</i> , 2011, 115, 11435-11441.	1.5	91
75	Flexible and Transferrable Self-Assembled Nanopatterning on Chemically Modified Graphene. <i>Advanced Materials</i> , 2013, 25, 1331-1335.	11.1	88
76	Selective and Regenerative Carbon Dioxide Capture by Highly Polarizing Porous Carbon Nitride. <i>ACS Nano</i> , 2015, 9, 9148-9157.	7.3	88
77	Fe-N ₄ complex embedded free-standing carbon fabric catalysts for higher performance ORR both in alkaline & acidic media. <i>Nano Energy</i> , 2019, 56, 524-530.	8.2	88
78	Effective control of crystal grain size in CH ₃ NH ₃ PbI ₃ perovskite solar cells with a pseudohalide Pb(SCN) ₂ additive. <i>CrystEngComm</i> , 2016, 18, 6090-6095.	1.3	87
79	A ZnO/N-doped carbon nanotube nanocomposite charge transport layer for high performance optoelectronics. <i>Journal of Materials Chemistry</i> , 2012, 22, 12695.	6.7	86
80	High Performance Organic Photovoltaics with Plasmonic-Coupled Metal Nanoparticle Clusters. <i>ACS Nano</i> , 2014, 8, 10305-10312.	7.3	85
81	Direct Observation of a Carbon Filament in Water-Resistant Organic Memory. <i>ACS Nano</i> , 2015, 9, 7306-7313.	7.3	85
82	Synergistic Concurrent Enhancement of Charge Generation, Dissociation, and Transport in Organic Solar Cells with Plasmonic Metal-Carbon Nanotube Hybrids. <i>Advanced Materials</i> , 2015, 27, 1519-1525.	11.1	85
83	Unravelling inherent electrocatalysis of mixed-conducting oxide activated by metal nanoparticle for fuel cell electrodes. <i>Nature Nanotechnology</i> , 2019, 14, 245-251.	15.6	84
84	Efficient hybrid organic-inorganic light emitting diodes with self-assembled dipole molecule deposited metal oxides. <i>Applied Physics Letters</i> , 2010, 96, 243306.	1.5	83
85	Hierarchically Organized Carbon Nanotube Arrays from Self-Assembled Block Copolymer Nanotemplates. <i>Advanced Materials</i> , 2008, 20, 2480-2485.	11.1	81
86	Graphene-based materials and structures for energy harvesting with fluids – A review. <i>Materials Today</i> , 2018, 21, 1019-1041.	8.3	81
87	N ₂ -dopant of graphene with electrochemically switchable bifunctional ORR/OER catalysis for Zn-air battery. <i>Energy Storage Materials</i> , 2020, 32, 517-524.	9.5	80
88	Flash Light Millisecond Self-Assembly of High Γ Block Copolymers for Wafer-Scale Sub-10 nm Nanopatterning. <i>Advanced Materials</i> , 2017, 29, 1700595.	11.1	78
89	Hierarchical Self-Assembly of Block Copolymers for Lithography-Free Nanopatterning. <i>Advanced Materials</i> , 2008, 20, 2303-2307.	11.1	76
90	High-Energy Efficiency Membraneless Flowless Zn-Br Battery: Utilizing the Electrochemical-Chemical Growth of Polybromides. <i>Advanced Materials</i> , 2019, 31, e1904524.	11.1	76

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91	Hierarchically Ordered Polymer Films by Templated Organization of Aqueous Droplets. <i>Advanced Functional Materials</i> , 2007, 17, 2315-2320.	7.8	72
92	Highly entangled carbon nanotube scaffolds by self-organized aqueous droplets. <i>Soft Matter</i> , 2009, 5, 2343-2346.	1.2	70
93	Sub-Nanometer Level Size Tuning of a Monodisperse Nanoparticle Array Via Block Copolymer Lithography. <i>Advanced Functional Materials</i> , 2011, 21, 250-254.	7.8	70
94	Divalent Fe Atom Coordination in Two-Dimensional Microporous Graphitic Carbon Nitride. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 25438-25443.	4.0	70
95	Perylene tetracarboxylate surfactant assisted liquid phase exfoliation of graphite into graphene nanosheets with facile re-dispersibility in aqueous/organic polar solvents. <i>Carbon</i> , 2017, 119, 555-568.	5.4	70
96	Subnanometer Cobalt-Hydroxide-Anchored N-Doped Carbon Nanotube Forest for Bifunctional Oxygen Catalyst. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 1571-1577.	4.0	67
97	Mussel-Inspired Defect Engineering of Graphene Liquid Crystalline Fibers for Synergistic Enhancement of Mechanical Strength and Electrical Conductivity. <i>Advanced Materials</i> , 2018, 30, e1803267.	11.1	67
98	Defect Structure in Thin Films of a Lamellar Block Copolymer Self-Assembled on Neutral Homogeneous and Chemically Nanopatterned Surfaces. <i>Macromolecules</i> , 2006, 39, 5466-5470.	2.2	66
99	Electric fields line up graphene oxide. <i>Nature Materials</i> , 2014, 13, 325-326.	13.3	66
100	Novel Complex Nanostructure from Directed Assembly of Block Copolymers on Incommensurate Surface Patterns. <i>Advanced Materials</i> , 2007, 19, 3271-3275.	11.1	65
101	Synergistically enhanced photocatalytic activity of graphitic carbon nitride and WO ₃ nano hybrids mediated by photo-Fenton reaction and H ₂ O ₂ . <i>Applied Catalysis B: Environmental</i> , 2017, 206, 263-270.	10.8	65
102	Facile Fabrication and Field Emission of Metal-Particle-Decorated Vertical N-Doped Carbon Nanotube/Graphene Hybrid Films. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21184-21189.	1.5	64
103	Block copolymer multiple patterning integrated with conventional ArF lithography. <i>Soft Matter</i> , 2010, 6, 120-125.	1.2	64
104	Spontaneous Lamellar Alignment in Thickness-Modulated Block Copolymer Films. <i>Advanced Functional Materials</i> , 2009, 19, 2584-2591.	7.8	63
105	Bionanosphere Lithography via Hierarchical Peptide Self-Assembly of Aromatic Triphenylalanine. <i>Small</i> , 2010, 6, 945-951.	5.2	63
106	Directed self-assembly of block copolymers for universal nanopatterning. <i>Soft Matter</i> , 2013, 9, 2780.	1.2	62
107	Hybrid Perovskites: Effective Crystal Growth for Optoelectronic Applications. <i>Advanced Energy Materials</i> , 2017, 7, 1602596.	10.2	62
108	Systematic Study on the Sensitivity Enhancement in Graphene Plasmonic Sensors Based on Layer-by-Layer Self-Assembled Graphene Oxide Multilayers and Their Reduced Analogues. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 144-151.	4.0	60

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109	DNA Origami Nanopatterning on Chemically Modified Graphene. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 912-915.	7.2	59
110	Single-layer graphene-wrapped Li ₄ Ti ₅ O ₁₂ anode with superior lithium storage capability. <i>Carbon</i> , 2017, 114, 275-283.	5.4	59
111	Ultralarge Area Sub-10 nm Plasmonic Nanogap Array by Block Copolymer Self-Assembly for Reliable High-Sensitivity SERS. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 44660-44667.	4.0	59
112	Monodisperse Pattern Nanoalloying for Synergistic Intermetallic Catalysis. <i>Nano Letters</i> , 2013, 13, 5720-5726.	4.5	58
113	3D Tailored Crumpling of Block Copolymer Lithography on Chemically Modified Graphene. <i>Advanced Materials</i> , 2016, 28, 1591-1596.	11.1	58
114	High Energy Density All Solid State Asymmetric Pseudocapacitors Based on Free Standing Reduced Graphene Oxide-Co ₃ O ₄ Composite Aerogel Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 22253-22260.	4.0	57
115	Hetero-Dimensional 2D Ti ₃ C ₂ T _x MXene and 1D Graphene Nanoribbon Hybrids for Machine Learning-Assisted Pressure Sensors. <i>ACS Nano</i> , 2021, 15, 10347-10356.	7.3	57
116	Smart Nanostructured Materials based on Self-Assembly of Block Copolymers. <i>Advanced Functional Materials</i> , 2020, 30, 1902049.	7.8	56
117	Electric Actuation of Nanostructured Thermoplastic Elastomer Gels with Ultralarge Electrostriction Coefficients. <i>Advanced Functional Materials</i> , 2011, 21, 3242-3249.	7.8	55
118	Atomic Layer Deposition Assisted Pattern Multiplication of Block Copolymer Lithography for 5 nm Scale Nanopatterning. <i>Advanced Functional Materials</i> , 2014, 24, 4343-4348.	7.8	55
119	Resilient High Catalytic Performance of Platinum Nanocatalysts with Porous Graphene Envelope. <i>ACS Nano</i> , 2015, 9, 5947-5957.	7.3	55
120	Ambient Stabilization of Few Layer Phosphorene via Noncovalent Functionalization with Surfactants: Systematic 2D NMR Characterization in Aqueous Dispersion. <i>Chemistry of Materials</i> , 2019, 31, 2786-2794.	3.2	54
121	Surface Order in Thin Films of Self-Assembled Columnar Liquid Crystals. <i>Macromolecules</i> , 2002, 35, 3717-3721.	2.2	51
122	Highly entangled hollow TiO ₂ nanoribbons templating diphenylalanine assembly. <i>Journal of Materials Chemistry</i> , 2009, 19, 3512.	6.7	50
123	Direct Growth of Polyaniline Chains from N-Doped Sites of Carbon Nanotubes. <i>Small</i> , 2013, 9, 3829-3833.	5.2	49
124	Graphene oxide-assisted production of carbon nitrides using a solution process and their photocatalytic activity. <i>Carbon</i> , 2014, 66, 119-125.	5.4	49
125	Electrical Biomolecule Detection Using Nanopatterned Silicon via Block Copolymer Lithography. <i>Small</i> , 2014, 10, 337-343.	5.2	48
126	Chemically modified graphene based supercapacitors for flexible and miniature devices. <i>Electronic Materials Letters</i> , 2015, 11, 719-734.	1.0	47

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127	Supramolecular Nanotubules as a Catalytic Regulator for Palladium Cations: Applications in Selective Catalysis. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11511-11514.	7.2	47
128	Spontaneous linker-free binding of polyoxometalates on nitrogen-doped carbon nanotubes for efficient water oxidation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1941-1947.	5.2	46
129	Phosphorene for energy and catalytic application—filling the gap between graphene and 2D metal chalcogenides. <i>2D Materials</i> , 2017, 4, 042006.	2.0	46
130	Joule heating-induced sp ² -restoration in graphene fibers. <i>Carbon</i> , 2019, 142, 230-237.	5.4	46
131	Multidimensional Ti ₃ C ₂ TX MXene Architectures via Interfacial Electrochemical Self-Assembly. <i>ACS Nano</i> , 2021, 15, 10058-10066.	7.3	46
132	Visible-light active nanohybrid TiO ₂ /carbon photocatalysts with programmed morphology by direct carbonization of block copolymer templates. <i>Green Chemistry</i> , 2011, 13, 3397.	4.6	44
133	Chemical modification of carbon nanotubes and preparation of polystyrene/carbon nanotubes composites. <i>Macromolecular Research</i> , 2004, 12, 384-390.	1.0	43
134	One-Dimensional Nanoassembly of Block Copolymers Tailored by Chemically Patterned Surfaces. <i>Macromolecules</i> , 2009, 42, 1189-1193.	2.2	43
135	Ultrafast Interfacial Self-Assembly of 2D Transition Metal Dichalcogenides Monolayer Films and Their Vertical and In-Plane Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 1021-1028.	4.0	43
136	Synthetic multiscale design of nanostructured Ni single atom catalyst for superior CO ₂ electroreduction. <i>Chemical Engineering Journal</i> , 2021, 426, 131063.	6.6	43
137	Complementary p- and n-Type Polymer Doping for Ambient Stable Graphene Inverter. <i>ACS Nano</i> , 2014, 8, 650-656.	7.3	42
138	Production of novel FeOOH/reduced graphene oxide hybrids and their performance as oxygen reduction reaction catalysts. <i>Carbon</i> , 2014, 80, 127-134.	5.4	42
139	2D Metal Chalcogenide Nanopatterns by Block Copolymer Lithography. <i>Advanced Functional Materials</i> , 2018, 28, 1804508.	7.8	41
140	Localized surface plasmon resonance coupling in Au nanoparticles/phosphorus dendrimer multilayer thin films fabricated by layer-by-layer self-assembly method. <i>Journal of Materials Chemistry</i> , 2009, 19, 2006.	6.7	40
141	High Activity Hydrogen Evolution Catalysis by Uniquely Designed Amorphous/Metal Interface of Core-shell Phosphosulfide-N-doped CNTs. <i>Advanced Energy Materials</i> , 2018, 8, 1702806.	10.2	39
142	Fabrication of Luminescent Nanoarchitectures by Electron Irradiation of Polystyrene. <i>Advanced Materials</i> , 2008, 20, 2094-2098.	11.1	38
143	High performance polymer light-emitting diodes with N-type metal oxide/conjugated polyelectrolyte hybrid charge transport layers. <i>Applied Physics Letters</i> , 2011, 99, 163305.	1.5	38
144	Wrinkle-Directed Self-Assembly of Block Copolymers for Aligning of Nanowire Arrays. <i>Advanced Materials</i> , 2014, 26, 4665-4670.	11.1	38

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145	Large-Area Buckled MoS ₂ Films on the Graphene Substrate. ACS Applied Materials & Interfaces, 2016, 8, 13512-13519.	4.0	38
146	Anomalous Rapid Defect Annihilation in Self-Assembled Nanopatterns by Defect Melting. Nano Letters, 2015, 15, 1190-1196.	4.5	37
147	Carbon Nanofibers as Potential Catalyst Support for Fuel Cell Cathodes: A Review. Energy & Fuels, 2021, 35, 11761-11799.	2.5	37
148	Peptide-templating dye-sensitized solar cells. Nanotechnology, 2010, 21, 185601.	1.3	36
149	Graphoepitaxy of Block Copolymer Self-Assembly Integrated with Single-Step ZnO Nanoimprinting. Small, 2012, 8, 1563-1569.	5.2	36
150	Random Graft Polymer-Directed Synthesis of Inorganic Mesostructures with Ultrathin Frameworks. Angewandte Chemie - International Edition, 2014, 53, 5117-5121.	7.2	36
151	Reversible Alloying of Phosphorene with Potassium and Its Stabilization Using Reduced Graphene Oxide Buffer Layers. ACS Nano, 2019, 13, 14094-14106.	7.3	36
152	Block Copolymer Nanopatterning for Nonsemiconductor Device Applications. ACS Applied Materials & Interfaces, 2022, 14, 12011-12037.	4.0	36
153	Macroporous Polymer Thin Film Prepared from Temporarily Stabilized Water-in-Oil Emulsion. Journal of Physical Chemistry B, 2006, 110, 13959-13964.	1.2	35
154	Tungsten nitride-coated graphene fibers for high-performance wearable supercapacitors. Nanoscale, 2020, 12, 20239-20249.	2.8	35
155	Perovskite Light-Emitting Diodes via Laser Crystallization: Systematic Investigation on Grain Size Effects for Device Performance. ACS Applied Materials & Interfaces, 2018, 10, 2490-2495.	4.0	34
156	Flash-induced ultrafast recrystallization of perovskite for flexible light-emitting diodes. Nano Energy, 2019, 61, 236-244.	8.2	34
157	Vertical Single-Walled Carbon Nanotube Arrays via Block Copolymer Lithography. Chemistry of Materials, 2009, 21, 1368-1374.	3.2	33
158	Hierarchical assembly of diphenylalanine into dendritic nanoarchitectures. Colloids and Surfaces B: Biointerfaces, 2010, 79, 440-445.	2.5	33
159	Application of N-Doped Three-Dimensional Reduced Graphene Oxide Aerogel to Thin Film Loudspeaker. ACS Applied Materials & Interfaces, 2016, 8, 22295-22300.	4.0	33
160	2D Materials Decorated with Ultrathin and Porous Graphene Oxide for High Stability and Selective Surface Activity. Advanced Materials, 2020, 32, e2002723.	11.1	33
161	Rheological investigation on the anisotropic phase of cellulose/MMNO/H ₂ O solution system. Polymer, 1999, 40, 6443-6450.	1.8	32
162	Ultralarge-area block copolymer lithography via soft graphoepitaxy. Journal of Materials Chemistry, 2011, 21, 5856.	6.7	32

#	ARTICLE	IF	CITATIONS
163	Biomimetic mineralization of vertical N-doped carbon nanotubes. <i>Chemical Communications</i> , 2011, 47, 535-537.	2.2	31
164	Amorphous Molybdenum Sulfide Deposited Graphene Liquid Crystalline Fiber for Hydrogen Evolution Reaction Catalysis. <i>Particle and Particle Systems Characterization</i> , 2017, 34, 1600375.	1.2	31
165	Self-organized grafting of carbon nanotubes by end-functionalized polymers. <i>Macromolecular Research</i> , 2008, 16, 261-266.	1.0	30
166	Atomic Layer Deposition Encapsulated Activated Carbon Electrodes for High Voltage Stable Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 1899-1906.	4.0	30
167	Device-oriented graphene nanopatterning by mussel-inspired directed block copolymer self-assembly. <i>Nanotechnology</i> , 2014, 25, 014008.	1.3	29
168	Atomic layer deposition assisted sacrificial template synthesis of mesoporous TiO ₂ electrode for high performance lithium ion battery anodes. <i>Energy Storage Materials</i> , 2016, 2, 27-34.	9.5	29
169	Electric field directed self-assembly of block copolymers for rapid formation of large-area complex nanopatterns. <i>Molecular Systems Design and Engineering</i> , 2017, 2, 560-566.	1.7	29
170	Tailored Colloidal Stability and Rheological Properties of Graphene Oxide Liquid Crystals with Polymer-Induced Depletion Attractions. <i>ACS Nano</i> , 2018, 12, 11399-11406.	7.3	29
171	Wide concentration liquid crystallinity of graphene oxide aqueous suspensions with interacting polymers. <i>Materials Horizons</i> , 2017, 4, 1157-1164.	6.4	27
172	The Effect of Thickness and Chemical Reduction of Graphene Oxide on Nanoscale Friction. <i>Journal of Physical Chemistry B</i> , 2018, 122, 543-547.	1.2	27
173	Open porous graphene nanoribbon hydrogel via additive-free interfacial self-assembly: Fast mass transport electrodes for high-performance biosensing and energy storage. <i>Energy Storage Materials</i> , 2019, 16, 251-258.	9.5	27
174	Janus Graphene Liquid Crystalline Fiber with Tunable Properties Enabled by Ultrafast Flash Reduction. <i>Small</i> , 2019, 15, e1901529.	5.2	27
175	Complex High-Aspect-Ratio Metal Nanostructures by Secondary Sputtering Combined with Block Copolymer Self-Assembly. <i>Advanced Materials</i> , 2016, 28, 8439-8445.	11.1	26
176	Elastic properties of hexagonal columnar mesophase self-organized from amphiphilic supramolecular columns. <i>Applied Physics Letters</i> , 2002, 80, 395-397.	1.5	25
177	Large-area, highly oriented lamellar block copolymer nanopatterning directed by graphoeptaxially assembled cylinder nanopatterns. <i>Journal of Materials Chemistry</i> , 2012, 22, 6307.	6.7	25
178	Ultra-large area graphene hybrid hydrogel for customized performance supercapacitors: High volumetric, areal energy density and potential wearability. <i>Electrochimica Acta</i> , 2020, 332, 135492.	2.6	25
179	Deep-Learning-Based Deconvolution of Mechanical Stimuli with Ti ₃ C ₂ MXene Electromagnetic Shield Architecture via Dual-Mode Wireless Signal Variation Mechanism. <i>ACS Nano</i> , 2020, 14, 11962-11972.	7.3	25
180	Self-Size-Limiting Nanoscale Perforation of Graphene for Dense Heteroatom Doping. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 25898-25905.	4.0	24

#	ARTICLE	IF	CITATIONS
181	Ultrastable Graphene-Encapsulated 3 nm Nanoparticles by In Situ Chemical Vapor Deposition. <i>Advanced Materials</i> , 2018, 30, e1805023.	11.1	24
182	2D graphene oxide liquid crystal for real-world applications: Energy, environment, and antimicrobial. <i>APL Materials</i> , 2020, 8, .	2.2	24
183	Enhancing the Performance of Surface Plasmon Resonance Biosensor via Modulation of Electron Density at the Graphene-Gold Interface. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800433.	1.9	23
184	Protein nanoarrays on a highly-oriented lamellar surface. <i>Chemical Communications</i> , 2010, 46, 1911-1913.	2.2	22
185	Self-Assembly of Complex Multimetal Nanostructures from Perforated Lamellar Block Copolymer Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15727-15732.	4.0	22
186	Electroless Bimetal Decoration on N-Doped Carbon Nanotubes and Graphene for Oxygen Reduction Reaction Catalysts. <i>Particle and Particle Systems Characterization</i> , 2014, 31, 965-970.	1.2	21
187	Laser-Directed Self-Assembly of Highly Aligned Lamellar and Cylindrical Block Copolymer Nanostructures: Experiment and Simulation. <i>Macromolecules</i> , 2018, 51, 1418-1426.	2.2	21
188	Phase Behavior, Crystallization Kinetics, and Morphology of Monotropic Liquid Crystalline Poly(ester-imide)s with a Decamethylene Spacer. <i>Macromolecules</i> , 2001, 34, 8961-8967.	2.2	20
189	Polymer/carbon nanotube nanocomposites via noncovalent grafting with end-functionalized polymers. <i>Journal of Applied Polymer Science</i> , 2008, 110, 2345-2351.	1.3	20
190	Morphology Control of One-Dimensional Peptide Nanostructures. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 5547-5550.	0.9	20
191	Growth Kinetics of Wall-Number Controlled Carbon Nanotube Arrays. <i>Journal of Physical Chemistry C</i> , 2010, 114, 3454-3458.	1.5	20
192	Cobalt-Based Active Species Molecularly Immobilized on Carbon Nanotubes for the Oxygen Reduction Reaction. <i>ChemSusChem</i> , 2017, 10, 3473-3481.	3.6	20
193	Controlled Segmentation of Metal Nanowire Array by Block Copolymer Lithography and Reversible Ion Loading. <i>Small</i> , 2017, 13, 1603939.	5.2	19
194	Discovery of Single-Atom Catalyst: Customized Heteroelement Dopants on Graphene. <i>Accounts of Materials Research</i> , 2021, 2, 394-406.	5.9	19
195	Water-repellent macroporous carbon nanotube/elastomer nanocomposites by self-organized aqueous droplets. <i>Macromolecular Research</i> , 2009, 17, 666-671.	1.0	18
196	Hybrid organic-inorganic light-emitting electrochemical cells using fluorescent polymer and ionic liquid blend as an active layer. <i>Applied Physics Letters</i> , 2011, 98, 253309.	1.5	18
197	Nanodomain Swelling Block Copolymer Lithography for Morphology Tunable Metal Nanopatterning. <i>Small</i> , 2014, 10, 3742-3749.	5.2	18
198	Nitrogen-Dopant-Induced Organic-Inorganic Hybrid Perovskite Crystal Growth on Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2019, 29, 1902489.	7.8	18

#	ARTICLE	IF	CITATIONS
199	Longitudinal unzipping of 2D transition metal dichalcogenides. <i>Nature Communications</i> , 2020, 11, 5032.	5.8	18
200	Spectral Instability of Layered Mixed Halide Perovskites Results from Anion Phase Redistribution and Selective Hole Injection. <i>ACS Nano</i> , 2021, 15, 1486-1496.	7.3	18
201	A 2D Ultrathin Nanopatterned Interlayer to Suppress Lithium Dendrite Growth in High-Energy Lithium-Metal Anodes. <i>Advanced Materials</i> , 2022, 34, .	11.1	18
202	Semiconducting Polymers with Nanocrystallites Interconnected via Boron-Doped Carbon Nanotubes. <i>Nano Letters</i> , 2014, 14, 7100-7106.	4.5	17
203	Liquid crystallinity driven highly aligned large graphene oxide composites. <i>Journal of Solid State Chemistry</i> , 2015, 224, 115-119.	1.4	17
204	Selective protein transport through ultra-thin suspended reduced graphene oxide nanopores. <i>Nanoscale</i> , 2017, 9, 13457-13464.	2.8	17
205	Bimodal phase separated block copolymer/homopolymer blends self-assembly for hierarchical porous metal nanomesh electrodes. <i>Nanoscale</i> , 2018, 10, 100-108.	2.8	17
206	Microstructural lattice simulation and transient rheological behavior of a flow-aligning liquid crystalline polymer under low shear rates. <i>Korean Journal of Chemical Engineering</i> , 2001, 18, 46-53.	1.2	16
207	Hierarchical Directed Self-Assembly of Diblock Copolymers for Modified Pattern Symmetry. <i>Advanced Functional Materials</i> , 2016, 26, 6462-6470.	7.8	16
208	Hierarchical spatial heterogeneity in liquid crystals composed of graphene oxides. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 22399-22406.	1.3	16
209	Omnidirectional Deformable Energy Textile for Human Joint Movement Compatible Energy Storage. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 41363-41370.	4.0	16
210	Self-Planarization of High-Performance Graphene Liquid Crystalline Fibers by Hydration. <i>ACS Central Science</i> , 2020, 6, 1105-1114.	5.3	16
211	Electromagnetic Interference Shielding: Electromagnetic Shielding of Monolayer MXene Assemblies (<i>Adv. Mater.</i> 9/2020). <i>Advanced Materials</i> , 2020, 32, 2070064.	11.1	16
212	Directed self-assembly of cylinder-forming diblock copolymers on sparse chemical patterns. <i>Soft Matter</i> , 2015, 11, 4496-4506.	1.2	15
213	Conformal 3D Nanopatterning by Block Copolymer Lithography with Vapor-Phase Deposited Neutral Adlayer. <i>ACS Nano</i> , 2019, 13, 13092-13099.	7.3	15
214	Universal Alignment of Graphene Oxide in Suspensions and Fibers. <i>ACS Nano</i> , 2021, 15, 13453-13462.	7.3	15
215	Palladium Nanoparticle Catalyzed Conversion of Iron Nanoparticles into Diameter- and Length-Controlled Fe ₂ P Nanorods. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5712-5716.	7.2	14
216	Size-Dependent Isotropic/Nematic Phase Transition Behavior of Liquid Crystalline Peptide Nanowires. <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 1283-1290.	1.1	13

#	ARTICLE	IF	CITATIONS
217	Novel Fabrication of 2D and 3D Inverted Opals and their Application. <i>Small</i> , 2011, 7, 2581-2586.	5.2	13
218	Atomic thin titania nanosheet-coupled reduced graphene oxide 2D heterostructures for enhanced photocatalytic activity and fast lithium storage. <i>Electronic Materials Letters</i> , 2016, 12, 211-218.	1.0	13
219	Intact Crystalline Semiconducting Graphene Nanoribbons from Unzipping Nitrogen-Doped Carbon Nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38006-38015.	4.0	13
220	Nanopatterns with a Square Symmetry from an Orthogonal Lamellar Assembly of Block Copolymers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 20265-20271.	4.0	13
221	CNT@rGO Hydrogel-Integrated Fabric Composite Synthesized via an Interfacial Gelation Process for Wearable Supercapacitor Electrodes. <i>ACS Omega</i> , 2021, 6, 19578-19585.	1.6	13
222	Characteristic dual-domain composite structure of reduced graphene oxide and its application to higher specific capacitance. <i>Chemical Engineering Journal</i> , 2022, 446, 137390.	6.6	13
223	Synthesis and Characterization of Thermotropic Liquid Crystalline Poly(ester-imide)s. <i>Polymers for Advanced Technologies</i> , 1997, 8, 305-318.	1.6	12
224	Spin coating nanopatterned multielemental materials via self-assembled nanotemplates. <i>Nanotechnology</i> , 2009, 20, 225301.	1.3	12
225	Work function engineering of ZnO electrodes by using p-type and n-type doped carbon nanotubes. <i>Nanotechnology</i> , 2013, 24, 484013.	1.3	12
226	Improved Oxygen Diffusion Barrier Properties of Ruthenium-Titanium Nitride Thin Films Prepared by Plasma-Enhanced Atomic Layer Deposition. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 671-674.	0.9	11
227	Enhancing Organic Solar Cells with Plasmonic Nanomaterials. <i>ChemNanoMat</i> , 2016, 2, 19-27.	1.5	11
228	Fabrication of 50 nm scale Pt nanostructures by block copolymer (BCP) and its characteristics of surface-enhanced Raman scattering (SERS). <i>RSC Advances</i> , 2016, 6, 70756-70762.	1.7	11
229	Cobalt Based Nanoparticles Embedded Reduced Graphene Oxide Aerogel for Hydrogen Evolution Electrocatalyst. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1900090.	1.2	11
230	Alloying of Alkali Metals with Tellurene. <i>Advanced Energy Materials</i> , 2021, 11, 2003248.	10.2	11
231	Molecular-Level Lubrication Effect of OD Nanodiamonds for Highly Bendable Graphene Liquid Crystalline Fibers. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 13601-13610.	4.0	10
232	Large-area, scalable fabrication of conical TiN/GST/TiN nanoarray for low-power phase change memory. <i>Journal of Materials Chemistry</i> , 2012, 22, 1347-1351.	6.7	9
233	Effective and sustainable Cs ⁺ remediation via exchangeable sodium-ion sites in graphene oxide fibers. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17754-17760.	5.2	9
234	A perspective on R&D status of energy storage systems in South Korea. <i>Energy Storage Materials</i> , 2019, 23, 154-158.	9.5	9

#	ARTICLE	IF	CITATIONS
235	Monodisperse Carbon Nitride Nanosheets as Multifunctional Additives for Efficient and Durable Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 61215-61226.	4.0	9
236	Well-Ordered Nanostructure SiC Ceramic Derived from Self-Assembly of Polycarbosilane-Block-Poly(methyl methacrylate) Diblock Copolymer. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 5527-5531.	0.9	8
237	Fabrication of Vertical Carbon Nanotube Arrays from Self-Assembled Block Copolymer Films. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 5571-5575.	0.9	8
238	Fabrication of high-density In ₃ Sb ₁ Te ₂ phase change nanoarray on glass-fabric reinforced flexible substrate. <i>Nanotechnology</i> , 2012, 23, 255301.	1.3	8
239	Single-step self-assembly of multilayer graphene based dielectric nanostructures. <i>FlatChem</i> , 2017, 4, 61-67.	2.8	8
240	Directed Nanoscale Self-Assembly of Natural Photosystems on Nitrogen-Doped Carbon Nanotubes for Solar-Energy Harvesting. <i>ACS Applied Bio Materials</i> , 2019, 2, 2109-2115.	2.3	8
241	Tailored growth of graphene oxide liquid crystals with controlled polymer crystallization in GO-polymer composites. <i>Nanoscale</i> , 2021, 13, 2720-2727.	2.8	8
242	Self-Assembled Nano-“Lotus Pod Metasurface for Light Trapping. <i>ACS Photonics</i> , 2021, 8, 1616-1622.	3.2	8
243	Carbon: 25th Anniversary Article: Chemically Modified/Doped Carbon Nanotubes & Graphene for Optimized Nanostructures & Nanodevices (<i>Adv. Mater.</i> 1/2014). <i>Advanced Materials</i> , 2014, 26, 2-2.	11.1	7
244	Large-Area Alignment of Supramolecular Columns by Photothermal Laser Writing. <i>Advanced Materials</i> , 2020, 32, 2002620.	11.1	7
245	Crystallization kinetics of thermotropic liquid crystalline poly(ester-imide)s. <i>European Polymer Journal</i> , 1997, 33, 1613-1626.	2.6	6
246	Negative-Tone Block Copolymer Lithography by In Situ Surface Chemical Modification. <i>Small</i> , 2014, 10, 4207-4212.	5.2	6
247	Supramolecular Nanotubules as a Catalytic Regulator for Palladium Cations: Applications in Selective Catalysis. <i>Angewandte Chemie</i> , 2017, 129, 11669-11672.	1.6	6
248	Highly Aligned Carbon Nanowire Array by E-Field Directed Assembly of PAN-Containing Block Copolymers. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 58113-58121.	4.0	6
249	Fabrication of Ordered Porous SWNT-Polymer Nanocomposites by Emulsion Templating. <i>Macromolecular Symposia</i> , 2007, 249-250, 618-622.	0.4	5
250	Capillarity Induced Large Area Patterning of Peptide Nanowires. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 6954-6957.	0.9	5
251	Alkylated sulfonated poly(arylene sulfone)s for proton exchange membranes. <i>Macromolecular Research</i> , 2017, 25, 400-407.	1.0	5
252	Graphene Oxide Liquid Crystals Special Issue, Editorial. <i>Particle and Particle Systems Characterization</i> , 2017, 34, 1700261.	1.2	5

#	ARTICLE	IF	CITATIONS
253	UV-crosslinked poly(arylene ether sulfone) - LAPONITE® nanocomposites for proton exchange membranes. RSC Advances, 2017, 7, 28358-28365.	1.7	5
254	2D Nanopatterning: 2D Metal Chalcogenide Nanopatterns by Block Copolymer Lithography (Adv. Funct. Mater. 2011, 1, 107-114)	7.8	5
255	Large Area Uniform Level Amorphous Carbon Layers from 3D Conformal Polymer Brushes. A Next-Generation Cu Diffusion Barrier?. Advanced Materials, 2022, 34, e2110454.	11.1	5
256	Study on Phase Transition and Crystallization Behavior of a Monotropic Liquid Crystalline Poly(ester-imide). Macromolecules, 2000, 33, 7549-7556.	2.2	4
257	Non-volatile memory using graphene oxide for flexible electronics. , 2010, , .		4
258	Subwavelength imaging in the visible range using a metal coated carbon nanotube forest. Nanoscale, 2014, 6, 5967-5970.	2.8	4
259	Graphene Fibers: Mussel-Inspired Defect Engineering of Graphene Liquid Crystalline Fibers for Synergistic Enhancement of Mechanical Strength and Electrical Conductivity (Adv. Mater. 40/2018). Advanced Materials, 2018, 30, 1870298.	11.1	4
260	Utilizing Hidden Surfaces: End-Cap Removal of Carbon Nanotubes for Improved Lithium Storage. Journal of Physical Chemistry C, 2019, 123, 6220-6228.	1.5	4
261	Air-Stable Perovskite Nanostructures with Dimensional Tunability by Polymerizable Structure-Directing Ligands. ACS Applied Materials & Interfaces, 2020, 12, 31770-31775.	4.0	4
262	Self-Assembled Nanostructures of Block Copolymers on Random Copolymer Brush. Solid State Phenomena, 2007, 124-126, 579-582.	0.3	3
263	Geometric effects of nanocrystals in nonvolatile memory using block copolymer nanotemplate. Solid-State Electronics, 2009, 53, 640-643.	0.8	3
264	Solar Cells: Exciton Dissociation and Charge Transport Enhancement in Organic Solar Cells with Quantum-Dot/N-doped CNT Hybrid Nanomaterials (Adv. Mater. 14/2013). Advanced Materials, 2013, 25, 2104-2104.	11.1	3
265	Liquid Crystals: Graphene Oxide Liquid Crystals: Discovery, Evolution and Applications (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overl	11.1	3
266	Photoexcitation-Controllable Magnetization in Magnetic-Semiconducting Nanohybrid Containing Fe_2O_3 -Graphene (2D) van der Waals Heterostructure Based on Steady-State Pump-Probe Light Scattering Measurement in Magnetic Field. Journal of Physical Chemistry C, 2018, 122, 6912-6917.	1.5	3
267	Synthesis of carboxylic acid-functionalized polymethacrylate-b-polystyrene as an Ag ion-loadable block copolymer thin film template. Polymer, 2021, 217, 123462.	1.8	3
268	Wide-Range Size Fractionation of Graphene Oxide by Flow Field-Flow Fractionation. ACS Nano, 2022, 16, 9172-9182.	7.3	3
269	The Synthesis of Random Brush for Nanostructure of Block Copolymer. Macromolecular Symposia, 2007, 249-250, 303-306.	0.4	2
270	Tailored Assembly of Carbon Nanostructures: Tailored Assembly of Carbon Nanotubes and Graphene (Adv. Funct. Mater. 8/2011). Advanced Functional Materials, 2011, 21, 1329-1329.	7.8	2

#	ARTICLE	IF	CITATIONS
271	Surface Nanopatterning: Mussel-Inspired Block Copolymer Lithography for Low Surface Energy Materials of Teflon, Graphene, and Gold (Adv. Mater. 47/2011). Advanced Materials, 2011, 23, 5584-5584.	11.1	2
272	Nanowire random networks. Materials Today, 2014, 17, 412-413.	8.3	2
273	Terminal Graphene Oxide Devices for Electrical Modulation of Broadband Terahertz Waves. Advanced Optical Materials, 2016, 4, 548-554.	3.6	2
274	Carbon nanotube-grafted inverse opal nanostructures. Optical Materials Express, 2017, 7, 2242.	1.6	2
275	Nanopatterning: Graphoepitaxy of Block Copolymer Self-Assembly Integrated with Single-Step ZnO Nanoimprinting (Small 10/2012). Small, 2012, 8, 1458-1458.	5.2	1
276	Direct Growth of Polyaniline Chains from Nitrogen Site of N-Doped Carbon Nanotubes for High Performance Supercapacitor. Advances in Science and Technology, 2014, 93, 164-167.	0.2	1
277	Surface Modification of Block Copolymer Through Sulfur Containing Plasma Treatment. Journal of Nanoscience and Nanotechnology, 2015, 15, 8093-8098.	0.9	1
278	Alloyed Nanoparticles: Low-Temperature Chemical Vapor Deposition Synthesis of Pt-Co Alloyed Nanoparticles with Enhanced Oxygen Reduction Reaction Catalysis (Adv. Mater. 33/2016). Advanced Materials, 2016, 28, 7292-7292.	11.1	1
279	Spontaneous Nanobelt Formation by Self-Assembly of β -Benzyl GABA. Chemistry - an Asian Journal, 2019, 14, 1945-1948.	1.7	1
280	Multidisciplinary Materials Research in KAIST Over the Last 50 Years. Advanced Materials, 2020, 32, e2000696.	11.1	1
281	Wafer-Scale Unidirectional Alignment of Supramolecular Columns on Faceted Surfaces. ACS Nano, 2021, 15, 11762-11769.	7.3	1
282	N-Dopant-Mediated Growth of Metal Oxide Nanoparticles on Carbon Nanotubes. Nanomaterials, 2021, 11, 1882.	1.9	1
283	Spin Cast PDMS Film Supported Versatile and Transferrable Block Copolymer Lithography. Science of Advanced Materials, 2015, 7, 886-890.	0.1	1
284	Soft materials nanoengineering by directed molecular assembly. , 2010, , .		0
285	Selective carrier transport enhancement in bulk-heterojunction organic photovoltaics with nitrogen or boron doped carbon nanotubes. , 2011, , .		0
286	Ultralarge-area block copolymer lithography using self-assembly assisted photoresist pre-pattern. , 2011, , .		0
287	Self-Assembly Nanofabrication via Mussel-Inspired Interfacial Engineering. Applied Mechanics and Materials, 0, 229-231, 2749-2752.	0.2	0
288	Back Cover: DNA Origami Nanopatterning on Chemically Modified Graphene (Angew. Chem. Int. Ed.) Tj ETQq0 0 0 rBT /Overlock 10 Tf		0

#	ARTICLE	IF	CITATIONS
289	Graphene: Microtopographyâ€Guided Conductive Patterns of Liquidâ€Driven Graphene Nanoplatelet Networks for Stretchable and Skinâ€Conformal Sensor Array (Adv. Mater. 21/2017). Advanced Materials, 2017, 29, .	11.1	0
290	Largeâ€Area Uniform 1â€nmâ€Level Amorphous Carbon Layers from 3D Conformal Polymer Brushes. A â€Nextâ€Generationâ€Cu Diffusion Barrier? (Adv. Mater. 15/2022). Advanced Materials, 2022, 34, .	11.1	0