Bong Hoon Kim

List of Publications by Year
in descending order

79 papers	7,882 citations	61984 43 h-index	69250 77 g-index
83 all docs	83 docs citations	83 times ranked	10478 citing authors

#	Article	IF	Citations
1	Durability-enhanced monolithic inorganic electrochromic devices with tantalum-doped nickel oxide as a counter electrode. Solar Energy Materials and Solar Cells, 2022, 234, 111435.	6.2	18
2	Artificial stretchable armor for skin-interfaced wearable devices and soft robotics. Extreme Mechanics Letters, 2022, 50, 101537.	4.1	15
3	Directed highâ€‡ block copolymer <scp>selfâ€assembly</scp> by laser writing on silicon substrate. Journal of Applied Polymer Science, 2022, 139, .	2.6	3
4	Collapse-Induced Multimer Formation of Self-Assembled Nanoparticles for Surface Enhanced Raman Scattering. Coatings, 2021, 11, 76.	2.6	1
5	Hierarchical Self-Assembly of Thickness-Modulated Block Copolymer Thin Films for Controlling Nanodomain Orientations inside Bare Silicon Trenches. Polymers, 2021, 13, 553.	4.5	4
6	High Performance Field-Effect Transistors Based on Partially Suspended 2D Materials via Block Copolymer Lithography. Polymers, 2021, 13, 566.	4.5	2
7	Flexible electrochromic and thermochromic hybrid smart window based on a highly durable ITO/graphene transparent electrode. Chemical Engineering Journal, 2021, 416, 129028.	12.7	38
8	Battery-free, wireless soft sensors for continuous multi-site measurements of pressure and temperature from patients at risk for pressure injuries. Nature Communications, 2021, 12, 5008.	12.8	83
9	Three-dimensional electronic microfliers inspired by wind-dispersed seeds. Nature, 2021, 597, 503-510.	27.8	120
10	Fractal Web Design of a Hemispherical Photodetector Array with Organicâ€Dyeâ€Sensitized Graphene Hybrid Composites. Advanced Materials, 2020, 32, e2004456.	21.0	25
11	Development of a neural interface for high-definition, long-term recording in rodents and nonhuman primates. Science Translational Medicine, 2020, 12, .	12.4	145
12	Multimodal Sensing with a Three-Dimensional Piezoresistive Structure. ACS Nano, 2019, 13, 10972-10979.	14.6	134
13	Effect of ethanolamine passivation of ZnO nanoparticles in quantum dot light emitting diode structure. Current Applied Physics, 2019, 19, 998-1005.	2.4	17
14	Binodal, wireless epidermal electronic systems with in-sensor analytics for neonatal intensive care. Science, 2019, 363, .	12.6	521
15	A wireless closed-loop system for optogenetic peripheral neuromodulation. Nature, 2019, 565, 361-365.	27.8	358
16	Freestanding 3D Mesostructures, Functional Devices, and Shapeâ€Programmable Systems Based on Mechanically Induced Assembly with Shape Memory Polymers. Advanced Materials, 2019, 31, e1805615.	21.0	105
17	Battery-free, wireless sensors for full-body pressure and temperature mapping. Science Translational Medicine, 2018, 10, .	12.4	247
18	Three-Dimensional Silicon Electronic Systems Fabricated by Compressive Buckling Process. ACS Nano, 2018, 12, 4164-4171.	14.6	36

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19	Bimodal phase separated block copolymer/homopolymer blends self-assembly for hierarchical porous metal nanomesh electrodes. Nanoscale, 2018, 10, 100-108.	5.6	17
20	Ultralarge Area Sub-10 nm Plasmonic Nanogap Array by Block Copolymer Self-Assembly for Reliable High-Sensitivity SERS. ACS Applied Materials & Interfaces, 2018, 10, 44660-44667.	8.0	59
21	Electronic Stuctures: Mechanically Guided Postâ€Assembly of 3D Electronic Systems (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Ov	14.9	2
22	Soft, Skinâ€Interfaced Microfluidic Systems with Wireless, Batteryâ€Free Electronics for Digital, Realâ€Time Tracking of Sweat Loss and Electrolyte Composition. Small, 2018, 14, e1802876.	10.0	88
23	Mechanically Guided Postâ€Assembly of 3D Electronic Systems. Advanced Functional Materials, 2018, 28, 1803149.	14.9	41
24	Natural Wax for Transient Electronics. Advanced Functional Materials, 2018, 28, 1801819.	14.9	90
25	Dry Transient Electronic Systems by Use of Materials that Sublime. Advanced Functional Materials, 2017, 27, 1606008.	14.9	34
26	Double-heterojunction nanorod light-responsive LEDs for display applications. Science, 2017, 355, 616-619.	12.6	207
27	Flexible and implantable capacitive microelectrode for bio-potential acquisition. Biochip Journal, 2017, 11, 153-163.	4.9	25
28	Self-assembled three dimensional network designs for soft electronics. Nature Communications, 2017, 8, 15894.	12.8	325
29	Transient Electronics: Dry Transient Electronic Systems by Use of Materials that Sublime (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Ove	14.9	0
30	Single-step self-assembly of multilayer graphene based dielectric nanostructures. FlatChem, 2017, 4, 61-67.	5.6	8
31	Soft, thin skin-mounted power management systems and their use in wireless thermography. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6131-6136.	7.1	139
32	Multilayer Transfer Printing for Pixelated, Multicolor Quantum Dot Light-Emitting Diodes. ACS Nano, 2016, 10, 4920-4925.	14.6	115
33	Bioresorbable silicon electronics for transient spatiotemporal mapping of electrical activity fromÂthe cerebral cortex. Nature Materials, 2016, 15, 782-791.	27.5	400
34	Ferromagnetic, Folded Electrode Composite as a Soft Interface to the Skin for Longâ€Term Electrophysiological Recording. Advanced Functional Materials, 2016, 26, 7281-7290.	14.9	53
35	Electrodes: Ferromagnetic, Folded Electrode Composite as a Soft Interface to the Skin for Longâ€Term Electrophysiological Recording (Adv. Funct. Mater. 40/2016). Advanced Functional Materials, 2016, 26, 7280-7280.	14.9	0
36	Highly tunable refractive index visible-light metasurface from block copolymer self-assembly. Nature Communications, 2016, 7, 12911.	12.8	143

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37	3D Tailored Crumpling of Blockâ€Copolymer Lithography on Chemically Modified Graphene. Advanced Materials, 2016, 28, 1591-1596.	21.0	58
38	Laser Writing Block Copolymer Self-Assembly on Graphene Light-Absorbing Layer. ACS Nano, 2016, 10, 3435-3442.	14.6	102
39	Wireless Microfluidic Systems for Programmed, Functional Transformation of Transient Electronic Devices. Advanced Functional Materials, 2015, 25, 5100-5106.	14.9	37
40	High-Resolution Patterns of Quantum Dots Formed by Electrohydrodynamic Jet Printing for Light-Emitting Diodes. Nano Letters, 2015, 15, 969-973.	9.1	355
41	Anomalous Rapid Defect Annihilation in Self-Assembled Nanopatterns by Defect Melting. Nano Letters, 2015, 15, 1190-1196.	9.1	37
42	Biological lipid membranes for on-demand, wireless drug delivery from thin, bioresorbable electronic implants. NPG Asia Materials, 2015, 7, e227-e227.	7.9	80
43	Materials and Wireless Microfluidic Systems for Electronics Capable of Chemical Dissolution on Demand. Advanced Functional Materials, 2015, 25, 1338-1343.	14.9	41
44	Dissolution Behaviors and Applications of Silicon Oxides and Nitrides in Transient Electronics. Advanced Functional Materials, 2014, 24, 4427-4434.	14.9	206
45	Negativeâ€Tone Block Copolymer Lithography by In Situ Surface Chemical Modification. Small, 2014, 10, 4207-4212.	10.0	6
46	Highâ€Performance Biodegradable/Transient Electronics on Biodegradable Polymers. Advanced Materials, 2014, 26, 3905-3911.	21.0	359
47	Wrinkleâ€Directed Selfâ€Assembly of Block Copolymers for Aligning of Nanowire Arrays. Advanced Materials, 2014, 26, 4665-4670.	21.0	38
48	Directed self-assembly of block copolymers for next generation nanolithography. Materials Today, 2013, 16, 468-476.	14.2	260
49	Flexible and Transferrable Selfâ€Assembled Nanopatterning on Chemically Modified Graphene. Advanced Materials, 2013, 25, 1331-1335.	21.0	88
50	Directed self-assembly of block copolymers for universal nanopatterning. Soft Matter, 2013, 9, 2780.	2.7	62
51	Large-area, highly oriented lamellar block copolymer nanopatterning directed by graphoepitaxially assembled cylinder nanopatterns. Journal of Materials Chemistry, 2012, 22, 6307.	6.7	25
52	Flexible Electronics: Materials and Designs for Wirelessly Powered Implantable Lightâ€Emitting Systems (Small 18/2012). Small, 2012, 8, 2770-2770.	10.0	2
53	Materials and Designs for Wirelessly Powered Implantable Lightâ€Emitting Systems. Small, 2012, 8, 2812-2818.	10.0	93
54	Stretchable, Transparent Graphene Interconnects for Arrays of Microscale Inorganic Light Emitting Diodes on Rubber Substrates. Nano Letters, 2011, 11, 3881-3886.	9.1	307

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55	Vertical ZnO nanowires/graphene hybrids for transparent and flexible field emission. Journal of Materials Chemistry, 2011, 21, 3432-3437.	6.7	227
56	Electric Actuation of Nanostructured Thermoplastic Elastomer Gels with Ultralarge Electrostriction Coefficients. Advanced Functional Materials, 2011, 21, 3242-3249.	14.9	55
57	Musselâ€Inspired Block Copolymer Lithography for Low Surface Energy Materials of Teflon, Graphene, and Gold. Advanced Materials, 2011, 23, 5618-5622.	21.0	188
58	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.	21.0	2
59	Ultralarge-area block copolymer lithography using self-assembly assisted photoresist pre-pattern. , 2011, , .		0
60	Microscale, printed LEDs for unusual lighting and display systems. , 2011, , .		0
61	Waterproof AlInGaP optoelectronics on stretchable substrates with applications in biomedicine andÂrobotics. Nature Materials, 2010, 9, 929-937.	27.5	557
62	Ultralarge-Area Block Copolymer Lithography Enabled by Disposable Photoresist Prepatterning. ACS Nano, 2010, 4, 5181-5186.	14.6	97
63	Surface Energy Modification by Spin-Cast, Large-Area Graphene Film for Block Copolymer Lithography. ACS Nano, 2010, 4, 5464-5470.	14.6	132
64	One-Dimensional Metal Nanowire Assembly via Block Copolymer Soft Graphoepitaxy. Nano Letters, 2010, 10, 3500-3505.	9.1	102
65	Protein nanoarrays on a highly-oriented lamellar surface. Chemical Communications, 2010, 46, 1911-1913.	4.1	22
66	Block copolymer multiple patterning integrated with conventional ArFlithography. Soft Matter, 2010, 6, 120-125.	2.7	64
67	Spin coating nanopatterned multielemental materials via self-assembled nanotemplates. Nanotechnology, 2009, 20, 225301.	2.6	12
68	Spontaneous Lamellar Alignment in Thicknessâ€Modulated Block Copolymer Films. Advanced Functional Materials, 2009, 19, 2584-2591.	14.9	63
69	Geometric effects of nanocrystals in nonvolatile memory using block copolymer nanotemplate. Solid-State Electronics, 2009, 53, 640-643.	1.4	3
70	One-Dimensional Nanoassembly of Block Copolymers Tailored by Chemically Patterned Surfaces. Macromolecules, 2009, 42, 1189-1193.	4.8	43
71	Soft Graphoepitaxy of Block Copolymer Assembly with Disposable Photoresist Confinement. Nano Letters, 2009, 9, 2300-2305.	9.1	144
72	Fabrication of Luminescent Nanoarchitectures by Electron Irradiation of Polystyrene. Advanced Materials, 2008, 20, 2094-2098.	21.0	38

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73	Hierarchical Selfâ€Assembly of Block Copolymers for Lithographyâ€Free Nanopatterning. Advanced Materials, 2008, 20, 2303-2307.	21.0	76
74	Universal Block Copolymer Lithography for Metals, Semiconductors, Ceramics, and Polymers. Advanced Materials, 2008, 20, 1898-1904.	21.0	138
75	Self-Assembled Nanostructures of Block Copolymers on Random Copolymer Brush. Solid State Phenomena, 2007, 124-126, 579-582.	0.3	3
76	The Synthesis of Random Brush for Nanostructure of Block Copolymer. Macromolecular Symposia, 2007, 249-250, 303-306.	0.7	2
77	Novel Complex Nanostructure from Directed Assembly of Block Copolymers on Incommensurate Surface Patterns. Advanced Materials, 2007, 19, 3271-3275.	21.0	65
78	Defect Structure in Thin Films of a Lamellar Block Copolymer Self-Assembled on Neutral Homogeneous and Chemically Nanopatterned Surfaces. Macromolecules, 2006, 39, 5466-5470.	4.8	66
79	Self-Assembly Nanofabrication via Mussel-Inspired Interfacial Engineering. Applied Mechanics and Materials, 0, 229-231, 2749-2752.	0.2	0