Jae-Hak Choi

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Ion beam fabrication of an antifouling Pluronic F-108 thin film-based microwell bioplatform for highly resolved cell microarrays. Applied Surface Science, 2022, 573, 151551.	3.1	1
2	Preparation and electrochemical characterization of porous carbon pearls from carboxymethyl cellulose for electrical double-layer capacitors. Korean Journal of Chemical Engineering, 2022, 39, 1232-1239.	1.2	8
3	Preparation and Electrochemical Characterization of Si@C Nanoparticles as an Anode Material for Lithium-Ion Batteries via Solvent-Assisted Wet Coating Process. Nanomaterials, 2022, 12, 1649.	1.9	10
4	Preparation and cesium adsorption behavior of Prussian blue-based polypropylene nonwoven fabric by surfactant-assisted aqueous preirradiation graft polymerization. Radiation Physics and Chemistry, 2022, 199, 110356.	1.4	4
5	Fabrication of porous carbon beads from polyacrylonitrile as electrode materials for electric double-layer capacitors. Carbon Letters, 2021, 31, 67-74.	3.3	15
6	Oriented wrinkle textures of free-standing graphene nanosheets: application as a high-performance lithium-ion battery anode. Carbon Letters, 2021, 31, 277-285.	3.3	13
7	Facile fabrication of polyacrylonitrileâ€derived porous carbon beads via electron beam irradiation as anode materials for Liâ€ion batteries. International Journal of Energy Research, 2021, 45, 9530-9540.	2.2	6
8	Photothermal Fabrics for Efficient Oil-Spill Remediation via Solar-Driven Evaporation Combined with Adsorption. ACS Applied Materials & amp; Interfaces, 2021, 13, 13106-13113.	4.0	23
9	Li-incorporated porous carbon monoliths derived from carboxymethyl cellulose as anode material for high power lithium-ion batteries. Journal of Power Sources, 2021, 506, 230050.	4.0	10
10	Eco-friendly fabrication of porous carbon monoliths from water-soluble carboxymethyl cellulose for supercapacitor applications. Journal of Industrial and Engineering Chemistry, 2020, 82, 367-373.	2.9	27
11	Oriented layered assemblies of graphene nanosheets/Fe3O4 nanoparticles as a superior anode material for lithium ion batteries. Applied Surface Science, 2020, 508, 144416.	3.1	14
12	Electrically stimulable indium tin oxide plate for long-term in vitro cardiomyocyte culture. Biomaterials Research, 2020, 24, 10.	3.2	8
13	Electric heating performance of carbon thin films prepared from SU-8 photoresist by deep UV exposure and carbonization. Carbon Letters, 2020, 30, 595-601.	3.3	4
14	Surface-attached brush-type CO2-philic poly(PEGMA)/PSf composite membranes by UV/ozone-induced graft polymerization: Fabrication, characterization, and gas separation properties. Journal of Membrane Science, 2019, 589, 117214.	4.1	16
15	Cellulose non-woven fabric-derived porous carbon films as binder-free electrodes for supercapacitors. Cellulose, 2019, 26, 4529.	2.4	13
16	Free-Standing Janus Graphene Oxide with Anisotropic Properties for 2D Materials as Surfactant. ACS Applied Nano Materials, 2019, 2, 4203-4210.	2.4	13
17	Fabrication of hexagonally arranged porous carbon films by proton beam irradiation and carbonization. Radiation Physics and Chemistry, 2019, 163, 18-21.	1.4	10
18	Fabrication of Wettability-Patterned Surface for Cellular Micropatterning Using Step-Wise Ion Beam Processing. Journal of Nanoscience and Nanotechnology, 2019, 19, 4647-4650.	0.9	1

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19	Fabrication and electrochemical characterization of polyimideâ€derived carbon nanofibers for selfâ€standing supercapacitor electrode materials. Journal of Applied Polymer Science, 2019, 136, 47846.	1.3	21
20	Electrothermal application of novolac-derived carbon micropatterns prepared by proton beam lithography and carbonization. Applied Surface Science, 2019, 471, 328-334.	3.1	13
21	Preparation and electrical-property characterization of poly(vinyl chloride)-derived carbon nanosheet by ion beam irradiation-induced carbon clustering and carbonization. Applied Surface Science, 2018, 439, 968-975.	3.1	7
22	Preparation of conductive carbon films from polyacrylonitrile/graphene oxide composite films by thermal treatment. Journal of Industrial and Engineering Chemistry, 2018, 58, 87-91.	2.9	34
23	Transparent Electric Heaters Based on Photoresistâ€Derived Carbon Micropatterns on Quartz Plates. Macromolecular Materials and Engineering, 2018, 303, 1800296.	1.7	4
24	Fabrication and electric heating behavior of carbon thin films from water-soluble poly(vinyl alcohol) via simple dry and ambient stabilization and carbonization. Applied Surface Science, 2018, 456, 561-567.	3.1	16
25	Preparation of Conductive Carbon Films from Poly(vinyl alcohol) by Chemical Pre-Treatment and Pyrolysis. Journal of Nanoscience and Nanotechnology, 2017, 17, 5481-5484.	0.9	5
26	Isolation and characterization of nanocrystalline cellulose from different precursor materials. Fibers and Polymers, 2017, 18, 272-277.	1.1	26
27	Photoacoustic effect on the electrical and mechanical properties of polymer-infiltrated carbon nanotube fiber/graphene oxide composites. Composites Science and Technology, 2017, 153, 136-144.	3.8	21
28	Preparation of porous carbon films from polyacrylonitrile by proton irradiation and carbonization. Radiation Physics and Chemistry, 2017, 141, 369-374.	1.4	10
29	Polyacrylonitrile-grafted reduced graphene oxide hybrid: An all-round and efficient hole-extraction material for organic and inorganic-organic hybrid photovoltaics. Nano Energy, 2017, 31, 19-27.	8.2	39
30	Preparation of Thin Porous Carbon Membranes from Polyacrylonitrile by Phase Separation and Heat Treatment. Journal of Nanoscience and Nanotechnology, 2017, 17, 5822-5825.	0.9	9
31	Facile construction of electrically-conductive carbon patterns from a cheap coal-type pitch and their application to electric heating devices. Journal of Industrial and Engineering Chemistry, 2016, 39, 188-193.	2.9	7
32	Simple and Biocompatible Ion Beam Micropatterning of a Cell-Repellent Polymer on Cell-Adhesive Surfaces to Manipulate Cell Adhesion. Journal of Biomedical Nanotechnology, 2016, 12, 387-393.	0.5	5
33	Surface modification of Nafion membranes by ion implantation to reduce methanol crossover in direct methanol fuel cells. RSC Advances, 2016, 6, 62467-62470.	1.7	19
34	Preparation of Polyacrylonitrile/Graphene Oxide Nanocomposite-Derived Carbon Microstructures by Ion Beam Patterning and Post-Pyrolysis. Science of Advanced Materials, 2016, 8, 1714-1718.	0.1	4
35	Data from crosslinked PS honeycomb thin film by deep UV irradiation. Data in Brief, 2015, 5, 990-994.	0.5	14
36	A simple PAN-based fabrication method for microstructured carbon electrodes for organic field-effect transistors. Carbon, 2015, 87, 257-268.	5.4	22

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37	Effect of Cross-Linking Density of Silicone Encapsulant on Sulfur Compound Gas Permeability of Light-Emitting Diode. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 163-167.	1.4	4
38	Highly ordered and robust honeycomb films with tunable pore sizes fabricated via UV crosslinking after applying improved phase separation. Polymer, 2015, 74, 46-53.	1.8	25
39	Preparation of sulfonated reduced graphene oxide by radiation-induced chemical reduction of sulfonated graphene oxide. Carbon Letters, 2015, 16, 41-44.	3.3	11
40	Electrowetting Technique for Measuring the Thickness of Spin-Coated Hydrophobic Fluoropolymer Films. Science of Advanced Materials, 2015, 7, 869-873.	0.1	1
41	Microfluidic Chips: Active Digital Microfluidic Paper Chips with Inkjetâ€Printed Patterned Electrodes (Adv. Mater. 15/2014). Advanced Materials, 2014, 26, 2286-2286.	11.1	2
42	Preparation of flexible PLA/PEG-POSS nanocomposites by melt blending and radiation crosslinking. Radiation Physics and Chemistry, 2014, 102, 23-28.	1.4	43
43	High-performance polymer solar cells with radiation-induced and reduction-controllable reduced graphene oxide as an advanced hole transporting material. Carbon, 2014, 79, 321-329.	5.4	29
44	Simple and non-toxic fabrication of poly(vinyl alcohol)-patterned polymer surface for the formation of cell patterns. Applied Surface Science, 2014, 316, 179-186.	3.1	4
45	Direct patterning of poly(acrylic acid) on polymer surfaces by ion beam lithography for the controlled adhesion of mammalian cells. Biotechnology Letters, 2014, 36, 2135-2142.	1.1	14
46	Rapid, facile, and eco-friendly reduction of graphene oxide by electron beam irradiation in an alcohol–water solution. Materials Letters, 2014, 126, 151-153.	1.3	28
47	Eco-friendly and simple radiation-based preparation of graphene and its application to organic solar cells. Journal Physics D: Applied Physics, 2014, 47, 015105.	1.3	13
48	Active Digital Microfluidic Paper Chips with Inkjetâ€Printed Patterned Electrodes. Advanced Materials, 2014, 26, 2335-2340.	11.1	128
49	Actuation of Digital Micro Drops by Electrowetting on Open Microfluidic Chips Fabricated in Photolithography. Journal of Nanoscience and Nanotechnology, 2014, 14, 5894-5897.	0.9	7
50	The Fabrication of Patterned Gold Nanoparticle Arrays via Selective Ion Irradiation and Plasma Treatment. Journal of Nanoscience and Nanotechnology, 2014, 14, 6158-6161.	0.9	0
51	Thermal Properties of Poly(lactic acid) Films Containing a Multi-Functional Monomer Cross-Linked by Electron Beam Irradiation. Journal of Biobased Materials and Bioenergy, 2014, 8, 130-136.	0.1	2
52	Patterning of Gold Nanoparticles on Fluoropolymer Films by Using Patterned Surface Grafting and Layer-by-Layer Deposition Techniques. ACS Applied Materials & Interfaces, 2013, 5, 8546-8552.	4.0	0
53	Local pH-Responsive Diazoketo-Functionalized Photoresist for Multicomponent Protein Patterning. ACS Applied Materials & Interfaces, 2013, 5, 10253-10259.	4.0	5
54	Preparation and characterization of crosslinked poly(butylene adipate-co-terephthalate)/polyhedral oligomeric silsesquioxane nanocomposite by electron beam irradiation. Radiation Physics and Chemistry, 2013, 82, 100-105.	1.4	10

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55	Fabrication and characterization of radiation-resistant LDPE/MWCNT nanocomposites. Journal of Nuclear Materials, 2013, 438, 41-45.	1.3	24
56	Cell patterning on poly(sodium 4-styrenesulfonate)-patterned fluoropolymer substrate. Nuclear Instruments & Methods in Physics Research B, 2013, 313, 54-59.	0.6	2
57	Fabrication and characterization of inkjet-printed carbon nanotube electrode patterns on paper. Carbon, 2013, 58, 116-127.	5.4	98
58	Poly(acrylic acid)-Grafted Fluoropolymer Films for Highly Sensitive Fluorescent Bioassays. ACS Applied Materials & Interfaces, 2013, 5, 2155-2160.	4.0	18
59	Signal Enhancement of Silicon Nanowire-Based Biosensor for Detection of Matrix Metalloproteinase-2 Using DNA-Au Nanoparticle Complexes. ACS Applied Materials & Interfaces, 2013, 5, 12023-12028.	4.0	43
60	Electron beam irradiation effects on green biodegradable poly(Ϊμ-caprolactone) films. Journal of Adhesion Science and Technology, 2013, 27, 1374-1381.	1.4	3
61	Micropatterning of Cells on Electron-Irradiated Poly(dimethylsiloxane) Surface. Journal of Biomedical Nanotechnology, 2013, 9, 461-466.	0.5	1
62	Micropatterning of Mammalian Cells on Indium Tin Oxide Substrates Using Ion Implantation. Journal of Biomedical Nanotechnology, 2013, 9, 819-824.	0.5	4
63	Patterning of TiO ₂ Particles on Poly(dimethyl siloxane) Films by Using Proton Irradiation and Liquid-Phase Deposition Process. Journal of Nanoscience and Nanotechnology, 2012, 12, 4284-4288.	0.9	0
64	The effects of energetic ion irradiation on metal-to-polymer adhesion. Radiation Physics and Chemistry, 2012, 81, 919-922.	1.4	10
65	Preparation and characterization of crosslinked poly(ε-caprolactone)/polyhedral oligomeric silsesquioxane nanocomposites by electron beam irradiation. Nuclear Instruments & Methods in Physics Research B, 2012, 287, 141-147.	0.6	5
66	Efficient Immobilization and Patterning of Biomolecules on Poly(ethylene terephthalate) Films Functionalized by Ion Irradiation for Biosensor Applications. ACS Applied Materials & Interfaces, 2011, 3, 2235-2239.	4.0	21
67	<i>In Situ</i> Patterning of High-Quality Crystalline Rubrene Thin Films for High-Resolution Patterned Organic Field-Effect Transistors. ACS Nano, 2011, 5, 8352-8356.	7.3	41
68	Surface Morphology Control of Polymer Films by Electron Irradiation and Its Application to Superhydrophobic Surfaces. ACS Applied Materials & amp; Interfaces, 2011, 3, 2988-2993.	4.0	21
69	Fabrication of Silicon Nanowire for Detecting <i>β</i> -Amyloid (1-42) by Nanoimprint Lithography. Journal of Nanoscience and Nanotechnology, 2011, 11, 4517-4521.	0.9	2
70	Reversibility of Electrowetting on Hydrophobic Surfaces and Dielectrics Under Continuous Applied DC Voltage. Journal of Nanoscience and Nanotechnology, 2011, 11, 7132-7136.	0.9	2
71	Patterned Immobilization of Biomolecules on a Polymer Surface Functionalized by Radiation Grafting. Journal of Nanoscience and Nanotechnology, 2011, 11, 4562-4566.	0.9	2
72	Micropatterning of proteins on ion beamâ€induced poly(acrylic acid)â€grafted polyethylene film. Polymers for Advanced Technologies, 2011, 22, 1989-1992.	1.6	5

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73	Patterning of Polymer Nanocomposite Resists Containing Metal Nanoparticles by Electron Beam Lithography. Journal of Nanoscience and Nanotechnology, 2011, 11, 7390-7393.	0.9	3
74	Electron Beam-Induced Modification of Poly(dimethyl siloxane). Porrime, 2011, 35, 157-160.	0.0	3
75	Micropatterning of Polymer-Embedded Metal Nanoparticles by an Ion Beam Contact Lithography. Journal of Nanoscience and Nanotechnology, 2010, 10, 6879-6882.	0.9	1
76	Preparation and biocompatibility study of gelatin/kappa-carrageenan scaffolds. Macromolecular Research, 2010, 18, 29-34.	1.0	37
77	Cell patterning on a poly(N-vinyl pyrrolidone)-patterned polystyrene substrate by using ion implantation. Journal of Industrial and Engineering Chemistry, 2010, 16, 87-90.	2.9	4
78	Electron beam-induced crosslinking of poly(butylene adipate-co-terephthalate). Nuclear Instruments & Methods in Physics Research B, 2010, 268, 3386-3389.	0.6	20
79	Preparation of sulfonated crosslinked poly(2,6â€dimethylâ€1,4â€phenylene oxide) membranes for direct methanol fuel cells by using electron beam irradiation. Journal of Polymer Science Part A, 2010, 48, 2725-2731.	2.5	15
80	Patterning of cells on a PVC film surface functionalized by ion irradiation. Polymers for Advanced Technologies, 2010, 21, 135-138.	1.6	9
81	Simple and Biocompatible Micropatterning of Multiple Cell Types on a Polymer Substrate by Using Ion Implantation. Langmuir, 2010, 26, 18437-18441.	1.6	11
82	Photosensitive polymer brushes grafted onto PTFE film surface for micropatterning of proteins. Journal of Materials Chemistry, 2010, 20, 2007.	6.7	11
83	A Study on Characterization of Polyethylene Separators Irradiated at various Electron Beam Current Conditions. Porrime, 2010, 34, 74-78.	0.0	2
84	A Stydy on the Immobilization of Biomolecules on Poly(acrylic acid)-grafted MWCNTs Prepared by Radiation-Induced Graft Polymerization. Porrime, 2010, 34, 150-153.	0.0	0
85	Surface modification of multi-walled carbon nanotubes by radiation-induced graft polymerization. Current Applied Physics, 2009, 9, S85-S87.	1.1	20
86	Patterned grafting of acrylic acid onto polymer substrates. Polymers for Advanced Technologies, 2009, 20, 173-177.	1.6	10
87	Patterned immobilization of biomolecules by using ion irradiationâ€induced graft polymerization. Journal of Polymer Science Part A, 2009, 47, 6124-6134.	2.5	18
88	Cell patterning on a glass surface by a mask-assisted ion implantation. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1089-1092.	0.6	1
89	Preparation of a new micro-porous poly(methyl methacrylate)-grafted polyethylene separator for high performance Li secondary battery. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 3309-3313.	0.6	39
90	Selective cell adhesion on an ion implanted poly(bisphenol A carbonate) film. Journal of Industrial and Engineering Chemistry, 2009, 15, 703-706.	2.9	3

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91	Battery performance of PMMA-grafted PE separators prepared by pre-irradiation grafting technique. Journal of Industrial and Engineering Chemistry, 2009, 15, 748-751.	2.9	39
92	Preparation and characterization of a PVDF-HFP/PEGDMA-coated PE separator for lithium-ion polymer battery by electron beam irradiation. Radiation Physics and Chemistry, 2009, 78, 505-508.	1.4	43
93	Preparation of polymer/POSS nanocomposites by radiation processing. Radiation Physics and Chemistry, 2009, 78, 517-520.	1.4	24
94	Patterning of biomolecules on a poly(É›-caprolactone) film surface functionalized by ion implantation. Colloids and Surfaces B: Biointerfaces, 2009, 74, 375-379.	2.5	11
95	Micropatterning of Poly(vinyl pyrrolidone)/Silver Nanoparticle Thin Films by Ion Irradiation. Journal of Nanoscience and Nanotechnology, 2009, 9, 7090-3.	0.9	3
96	Functionalization of Carbon Nanotubes by Radiation-Induced Graft Polymerization. Journal of Nanoscience and Nanotechnology, 2009, 9, 7126-9.	0.9	4
97	Surface Functionalization of Poly(Ethylene Terephthalate) for Biomolecule Immobilization by Ion Implantation. Journal of the Korean Physical Society, 2009, 54, 2071-2075.	0.3	5
98	Preparation of polymer-coated separators using an electron beam irradiation. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 4994-5000.	0.6	23
99	Preparation of polystyrene-grafted poly(vinylidene fluoride) membranes for lithium secondary batteries. Journal of Industrial and Engineering Chemistry, 2008, 14, 116-119.	2.9	14
100	Determination of three characteristic regimes of weakly charged polyelectrolytes monolayers. Ultramicroscopy, 2008, 108, 1191-1195.	0.8	1
101	Radiation-induced grafting of inorganic particles onto polymer backbone: A new method to design polymer-based nanocomposite. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 203-206.	0.6	22
102	Radiation grafting of methyl methacrylate onto polyethylene separators for lithium secondary batteries. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 3387-3391.	0.6	31
103	Shortening of multi-walled carbon nanotubes by γ-irradiation in the presence of hydrogen peroxide. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 3491-3494.	0.6	16
104	Simple micropatterning of biomolecules on a diazoketo-functionalized photoresist. Journal of Materials Chemistry, 2008, 18, 703.	6.7	24
105	Biocompatibility Improvement of Polytetrafluoroethylene by Ion Implantation. Journal of the Korean Physical Society, 2008, 52, 819-823.	0.3	7
106	Preparation of Patterned Polymer Brushes by Radiation-Induced Grafting. Journal of the Korean Physical Society, 2008, 52, 880-883.	0.3	1
107	Cell Patterning on Polystyrene by Ion Implantatio. Journal of the Korean Physical Society, 2008, 52, 884-887.	0.3	2
108	Graft Polymerization of Styrene onto Alumina Nanoparticles by a Radiation. Solid State Phenomena, 2007, 119, 259-262.	0.3	0

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109	Radiation Effect on Poly(ε-Caprolactone) Nanofibrous Scaffold. Solid State Phenomena, 2007, 119, 95-98.	0.3	0
110	Preparation of Ethyl-Cellulose Nanofibers via An Electrospinning. Solid State Phenomena, 2007, 119, 255-258.	0.3	9
111	POSS-Containing Nanocomposite Materials for Next Generation Nanolithography. Solid State Phenomena, 2007, 119, 299-302.	0.3	3
112	Preparation and Characterization of Polypyrrole-Coated Silicon Nanoparticles. Solid State Phenomena, 2007, 119, 295-298.	0.3	0
113	Preparation of Polypropylene Compatibilizer by Radiation Grafting and Its Effect on PP/Nylon 6 Blend. Macromolecular Symposia, 2007, 249-250, 573-579.	0.4	7
114	Photobleachable silicon-containing molecular resist for deep UV lithography. Journal of Materials Chemistry, 2006, 16, 3448.	6.7	26
115	High Performance Molecular Resists Based on β-Cyclodextrin. Polymer Journal, 2006, 38, 996-998.	1.3	9
116	Simple Patterning of Cells on a Biocompatible Nonchemically Amplified Resist. Macromolecular Rapid Communications, 2006, 27, 1442-1445.	2.0	10
117	Synthesis and lithographic evaluation of poly[(methacrylic acid tert-butyl cholate) Tj ETQq1 1 0.784314 rgBT /O	verlock 10 1.8	Tf ₈ 50 422 To
118	Adhesion Enhancement of Norbornene Polymers with Lithocholate Substituents for 193-nm Resists. Polymer Journal, 2004, 36, 18-22.	1.3	6
119	Environmentally Friendly Negative Resists Based on Acid-Catalyzed Acetalization for 193-nm Lithography. Macromolecular Rapid Communications, 2003, 24, 879-882.	2.0	10
120	Control of photogenerated acid diffusion and evaporation by copolymerization with a basic monomer. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 2097.	1.6	1
121	Acid diffusion control in chemically amplified resists. Polymer, 1999, 40, 1087-1089.	1.8	7
122	Synthesis of poly(2-trimethylsilyl-2-propyl methacrylate) and their application as a dry-developable chemically amplified photoresist. Polymer, 1999, 40, 1617-1621.	1.8	12
123	Poly(isobornyl methacrylate-co-3-(t-butoxycarbonyl)-1-vinyl-2-caprolactam) for an Environmentally Stable Chemically Amplified Resist. Polymer Journal, 1999, 31, 695-699.	1.3	2
124	Effect of the ionic conductivity of a polymer matrix on the electrooptical properties of polymer-dispersed liquid crystal films. Polymer Bulletin, 1998, 41, 37-43.	1.7	5
125	Polymer-dispersed liquid crystal films using poly(2-methyloxycarbonyl-bicyclo[2.2.1] hepta-2,5-diene- co) Tj ETQc	1 1 0.784 1.7	-314 rgBT /0