Yong Lak Joo

List of Publications by Citations

84 papers	2,526 citations	26 h-index	48 g-index
93 ext. papers	2,776 ext. citations	5.1 avg, IF	5.26 L-index

#	Paper	IF	Citations
84	The thermal effects on electrospinning of polylactic acid melts. *Polymer*, **2006**, 47, 7497-7505	3.9	306
83	Structural studies of electrospun cellulose nanofibers. *Polymer*, **2006**, 47, 5097-5107	3.9	262
82	Nanofibers from gas-assisted polymer melt electrospinning. *Polymer*, **2010**, 51, 4140-4144	3.9	140
81	Electrospinning of viscoelastic Boger fluids: Modeling and experiments. *Physics of Fluids*, **2006**, 18, 053102	4.4	116
80	Preparation of submicron-scale, electrospun cellulose fibers via direct dissolution. *Journal of Polymer Science, Part B: Polymer Physics*, **2005**, 43, 1673-1683	2.6	116
79	Confined assembly of asymmetric block-copolymer nanofibers via multiaxial jet electrospinning. *Small*, **2009**, 5, 2323-32	11	87
78	A general approach to fabricate free-standing metal sulfide@carbon nanofiber networks as lithium ion battery anodes. *Chemical Communications*, **2016**, 52, 1501-4	5.8	76
77	Further improvement of air filtration efficiency of cellulose filters coated with nanofibers via inclusion of electrostatically active nanoparticles. *Polymer*, **2013**, 54, 2364-2372	3.9	72
76	Controlling nanoparticle location via confined assembly in electrospun block copolymer nanofibers. *Small*, **2008**, 4, 2067-73	11	72
75	Modeling of non-isothermal polymer jets in melt electrospinning. *Journal of Non-Newtonian Fluid Mechanics*, **2008**, 153, 95-108	2.7	70
74	Self-Assembled Structures in Electrospun Poly(styrene-block-isoprene) Fibers. *Macromolecules*, **2006**, 39, 5453-5457	5.5	64
73	Axisymmetric instabilities of electrically driven viscoelastic jets. *Journal of Non-Newtonian Fluid Mechanics*, **2008**, 153, 130-148	2.7	61
72	Mechanical properties and biodegradability of electrospun soy protein Isolate/PVA hybrid nanofibers. *Polymer Degradation and Stability*, **2012**, 97, 747-754	4.7	57
71	Electrospun Hybrid Soy Protein/PVA Fibers. *Macromolecular Materials and Engineering*, **2010**, 295, 763-773	3.9	50
70	Structural studies of electrospun nylon 6 fibers from solution and melt. *Polymer*, **2011**, 52, 4600-4609	3.9	48
69	Electrohydrodynamic quenching in polymer melt electrospinning. *Physics of Fluids*, **2011**, 23, 073102	4.4	42
68	Effect of shear on nanoparticle dispersion in polymer melts: A coarse-grained molecular dynamics study. *Journal of Chemical Physics*, **2010**, 132, 024901	3.9	41

67	Axisymmetric instabilities in electrospinning of highly conducting, viscoelastic polymer solutions. *Physics of Fluids*, **2009**, 21, 103101	4.4	39
66	Synergy Between Metal Oxide Nanofibers and Graphene Nanoribbons for Rechargeable Lithium-Oxygen Battery Cathodes. *Advanced Energy Materials*, **2015**, 5, 1401412	21.8	38
65	Graphene Folding in Si Rich Carbon Nanofibers for Highly Stable, High Capacity Li-Ion Battery Anodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 5243-50	9.5	35
64	Coarse-grained molecular dynamics simulation on the placement of nanoparticles within symmetric diblock copolymers under shear flow. *Journal of Chemical Physics*, **2008**, 128, 164909	3.9	33
63	Graphene Oxide Involved Air-Controlled Electrospray for Uniform, Fast, Instantly Dry, and Binder-Free Electrode Fabrication. *ACS Applied Materials & Interfaces*, **2017**, 9, 9738-9746	9.5	30
62	Metal nanofibers with highly tunable electrical and magnetic properties via highly loaded water-based electrospinning. *Small*, **2012**, 8, 1510-4	11	29
61	Direct addition of sulfur and nitrogen functional groups to graphite felt electrodes for improving all-vanadium redox flow battery performance. *Electrochimica Acta*, **2019**, 297, 905-915	6.7	28
60	The critical contribution of unzipped graphene nanoribbons to scalable silicon–carbon fiber anodes in rechargeable Li-ion batteries. *Nano Energy*, **2015**, 16, 446-457	17.1	26
59	Effect of annealing on the crystallization and properties of electrospun polylatic acid and nylon 6 fibers. *Journal of Applied Polymer Science*, **2011**, 120, 752-758	2.9	26
58	Cylindrically confined assembly of asymmetrical block copolymers with and without nanoparticles. *Soft Matter*, **2012**, 8, 1845-1857	3.6	24
57	Fabrication of SiO2-ZrO2 composite fiber mats via electrospinning. *Journal of Porous Materials*, **2006**, 13, 325-330	2.4	24
56	Effective Suppression of the Polysulfide Shuttle Effect in Lithium-Sulfur Batteries by Implementing rGO-PEDOT:PSS-Coated Separators via Air-Controlled Electrospray. *ACS Omega*, **2018**, 3, 16465-16471	3.9	23
55	Discretized modeling for centrifugal spinning of viscoelastic liquids. *Journal of Non-Newtonian Fluid Mechanics*, **2017**, 247, 62-77	2.7	22
54	Solid-state compaction and drawing of nascent reactor powders of ultra-high-molecular-weight polyethylene. *Journal of Applied Polymer Science*, **2005**, 98, 718-730	2.9	21
53	Silicon-Rich Carbon Hybrid Nanofibers from Water-Based Spinning: The Synergy Between Silicon and Carbon for Li-ion Battery Anode Application. *ChemElectroChem*, **2014**, 1, 220-226	4.3	20
52	Tailoring nanorod alignment in a polymer matrix by elongational flow under confinement: simulation, experiments, and surface enhanced Raman scattering application. *Soft Matter*, **2014**, 10, 3494-505	3.6	20
51	The jetting behavior of viscoelastic Boger fluids during centrifugal spinning. *Physics of Fluids*, **2015**, 27, 123101	4.4	20
50	Discretized modeling of electrically driven viscoelastic jets in the initial stage of electrospinning. *Journal of Applied Physics*, **2011**, 109, 094315	2.5	20

49	Viscoelastic Poiseuille flow through a curved channel: A new elastic instability. *Physics of Fluids A, Fluid Dynamics*, **1991**, 3, 2043-2046		20
48	Tunable Large Mesopores in Carbon Nanofiber Interlayers for High-Rate Lithium Sulfur Batteries. *Journal of the Electrochemical Society*, **2016**, 163, A2745-A2756	3.9	19
47	Properties of PVA/HfO2 Hybrid Electrospun Fibers and Calcined Inorganic HfO2 Fibers. *Journal of Physical Chemistry C*, **2011**, 115, 5535-5544	3.8	18
46	Polymer/ceramic co-continuous nanofiber membranes via room-curable organopolysilazane for improved lithium-ion battery performance. *Journal of Materials Science*, **2017**, 52, 3657-3669	4.3	17
45	Facile Synthesis of Porous Silicon Nanofibers by Magnesium Reduction for Application in Lithium Ion Batteries. *Nanoscale Research Letters*, **2015**, 10, 424	5	17
44	Properties of high-impact polystyrene/organoclay nanocomposites synthesized via in situ polymerization. *Journal of Applied Polymer Science*, **2008**, 110, 1441-1450	2.9	17
43	Coarse-grained molecular dynamics study of block copolymer/nanoparticle composites under elongational flow. *Journal of Chemical Physics*, **2009**, 131, 214904	3.9	16
42	Effect of flow structure at the onset of instability on barium sulfate precipitation in Taylor□Couette crystallizers. *Journal of Crystal Growth*, **2013**, 373, 20-31	1.6	15
41	Polysulfide entrapment and retardation in gel electrolyte Li□S batteries: experiments and modeling. *Journal of Materials Chemistry A*, **2020**, 8, 4341-4353	13	14
40	Controlling the dispersion and orientation of nanorods in polymer melt under shear: coarse-grained molecular dynamics simulation study. *Journal of Chemical Physics*, **2014**, 140, 124903	3.9	14
39	Harvesting Interconductivity and Intraconductivity of Graphene Nanoribbons for a Directly Deposited, High-Rate Silicon-Based Anode for Li-Ion Batteries. *ACS Applied Energy Materials*, **2018**, 1, 1106-1115	6.1	13
38	Facile and scalable fabrication of highly loaded sulfur cathodes and lithium□sulfur pouch cells via air-controlled electrospray. *Materials Today Energy*, **2017**, 6, 255-263	7	12
37	Enhanced Dispersion and Stability of Petroleum Coke Water Slurries via Triblock Copolymer and Xanthan Gum: Rheological and Adsorption Studies. *Langmuir*, **2015**, 31, 8989-97	4	11
36	Role of Nanoparticle Selectivity in the Symmetry Breaking of Cylindrically Confined Block Copolymers. *Journal of Physical Chemistry C*, **2014**, 118, 7653-7668	3.8	11
35	Surface hydro-properties of electrospun fiber mats. *Fibers and Polymers*, **2015**, 16, 1578-1586	2	10
34	Photocatalytic self-detoxification by coaxially electrospun fiber containing titanium dioxide nanoparticles. *Textile Reseach Journal*, **2012**, 82, 1920-1927	1.7	10
33	Controlling the Placement of Spherical Nanoparticles in Electrically Driven Polymer Jets and its Application to Li-Ion Battery Anodes. *Small*, **2016**, 12, 5543-5553	11	9
32	Continuous Synthesis of Structurally Uniform Graphene Oxide Materials in a Model Taylor□Couette Flow Reactor. *Industrial & Engineering Chemistry Research*, **2019**, 58, 1167-1176	3.9	9

31	Nanofibers from Polylactic Acid Nanocomposites: Effect of Nanoclays on Molecular Structures. *ACS Symposium Series*, **2006**, 217-230	0.4	8
30	Discretized modeling of beads-on-a-string morphology from electrically driven, conducting, and viscoelastic polymer jets. *Journal of Applied Physics*, **2017**, 121, 134306	2.5	7
29	Design principles in continuous inkjet electrohydrodynamic printing from discretized modeling and image analysis. *Journal of Manufacturing Processes*, **2020**, 54, 413-419	5	6
28	Formation of interconnected morphologies via nanorod inclusion in the confined assembly of symmetric block copolymers. *Physical Chemistry Chemical Physics*, **2014**, 16, 8865-71	3.6	6
27	Immersion Electrospinning as a New Method to Direct Fiber Deposition. *Macromolecular Materials and Engineering*, **2017**, 302, 1700148	3.9	6
26	Structural phase transitions and ferroelastic properties of perovskite-type layered (CH3NH3)2CdCl4. *Journal of Applied Physics*, **2017**, 121, 215501	2.5	6
25	Production of fast-charge Zn-based aqueous batteries via interfacial adsorption of ion-oligomer complexes.. *Nature Communications*, **2022**, 13, 2283	17.4	6
24	Control of formation of viscoelastic droplets and distribution of nano-inclusions in functional deposition for lithium-sulfur batteries. *Soft Matter*, **2019**, 15, 6485-6494	3.6	5
23	Structural dynamics of CHNH and PbBr in tetragonal and cubic phases of CHNHPbBr hybrid perovskite by nuclear magnetic resonance. *Scientific Reports*, **2020**, 10, 13140	4.9	5
22	Physicochemical properties and structural dynamics of organic-inorganic hybrid [NH(CH)NH]ZnX (X = Cl and Br) crystals. *Scientific Reports*, **2021**, 11, 8408	4.9	5
21	Non-enthalpic enhancement of spatial distribution and orientation of CNTs and GNRs in polymer nanofibers. *Polymer*, **2019**, 178, 121551	3.9	4
20	Facile Production of Graphenic Microsheets and Their Assembly via Water-Based, Surfactant-Aided Mechanical Deformations. *ACS Applied Materials & Interfaces*, **2020**, 12, 8944-8951	9.5	4
19	Conductive Membrane Coatings for High-Rate Vanadium Redox Flow Batteries. *ACS Omega*, **2018**, 3, 1856-1863	3.9	4
18	Facile, Water-Based, Direct□Deposit Fabrication of Hybrid Silicon Assemblies for Scalable and High□Performance Li□on Battery Anodes. *Electrochimica Acta*, **2016**, 222, 946-955	6.7	4
17	Effect of elongational flow on immiscible polymer blend/nanoparticle composites: a molecular dynamics study. *Soft Matter*, **2016**, 12, 6132-40	3.6	4
16	Discretized Modeling of Motionless Printing Based on Retarded Bending Motion and Deposition Control of Electrically Driven Jet. *3D Printing and Additive Manufacturing*, **2018**, 5, 248-256	4	4
15	Dynamics of micelle□nanoparticle systems undergoing shear: a coarse-grained molecular dynamics approach. *Soft Matter*, **2013**, 9, 10294	3.6	4
14	Cation dynamics by H and C MAS NMR in hybrid organic-inorganic (CHCHNH)CuCl.. *RSC Advances*, **2018**, 8, 34110-34115	3.7	4

13	Modeling of Crystallizing Polymer Melts in Electrospinning. *AIP Conference Proceedings*, **2008**,	0	3
12	Fabrication of Activated Carbon Fibers with Sheath-Core, Hollow, or Porous Structures via Conjugated Melt Spinning of Polyethylene Precursor. *Polymers*, **2020**, 12,	4.5	3
11	Ultralight graphene/graphite hybrid fibers via entirely water-based processes and their application to density-controlled, high performance composites. *Carbon*, **2021**, 173, 880-890	10.4	3
10	Mitigation and In Situ Probing of Volume Expansion in Silicon/Graphene Hybrid Anodes for High-Capacity, High-Rate-Capable Lithium-Ion Batteries. *Advanced Energy and Sustainability Research*,2100125	1.6	3
9	Simultaneous uniaxial extensional deformation and cylindrical confinement of block copolymers using non-equilibrium molecular dynamics. *Soft Matter*, **2018**, 14, 1389-1396	3.6	2
8	Metal Oxide Coatings on Carbon Electrodes with Large Mesopores for Deeply Charged Zinc Bromine Redox Flow Batteries. *Journal of the Electrochemical Society*, **2019**, 166, A2245-A2254	3.9	2
7	Three-dimensional line edge roughness in pre- and post-dry etch line and space patterns of block copolymer lithography. *Physical Chemistry Chemical Physics*, **2020**, 22, 478-488	3.6	2
6	Directly Deposited Binder-Free Sulfur Electrode Enabled by Air-Controlled Electrospray Process. *ACS Applied Energy Materials*, **2019**, 2, 678-686	6.1	2
5	Designing an ordered template of cylindrical arrays based on a simple flat plate confinement of block copolymers: a coarse-grained molecular dynamics study. *Soft Matter*, **2018**, 14, 597-613	3.6	2
4	Using External Fields to Control the Location of Nanoparticles in Polymers: Simulations and Experiments. *AIP Conference Proceedings*, **2008**,	0	1
3	Thermal restacking of graphene structure to improve lithium-air battery cyclability. *Electrochemistry Communications*, **2016**, 70, 43-46	5.1	1
2	Critical roles of reduced graphene oxide in the electrochemical performance of silicon/reduced graphene oxide hybrids for high rate capable lithium-ion battery anodes. *Electrochimica Acta*, **2022**, 404, 139753	6.7	0
1	Study on structural geometry and dynamic property of [NH(CH)NH]CdCl crystal at phases I, II, and III.. *Scientific Reports*, **2022**, 12, 4251	4.9	0