

Yu Wang

List of Publications by Year in descending order

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83
papers

2,807
citations

159585

30
h-index

197818

49
g-index

83
all docs

83
docs citations

83
times ranked

3446
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of Electrolytes towards Achieving Safe and High-Performance Energy Storage Devices: A Review. <i>ChemElectroChem</i> , 2015, 2, 22-36.	3.4	299
2	A review of the electrical and mechanical properties of carbon nanofiller-reinforced polymer composites. <i>Journal of Materials Science</i> , 2019, 54, 1036-1076.	3.7	210
3	Soy-Protein-Based Nanofabrics for Highly Efficient and Multifunctional Air Filtration. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20023-20031.	8.0	139
4	Towards Sustainable and Multifunctional Air-Filters: A Review on Biopolymer-Based Filtration Materials. <i>Polymer Reviews</i> , 2019, 59, 651-686.	10.9	80
5	Natural polypeptides treat pollution complex: Moisture-resistant multi-functional protein nanofabrics for sustainable air filtration. <i>Nano Research</i> , 2018, 11, 4265-4277.	10.4	78
6	A Disposable Multi-Functional Air Filter: Paper Towel/Protein Nanofibers with Gradient Porous Structures for Capturing Pollutants of Broad Species and Sizes. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 6209-6217.	6.7	77
7	A comparison of melt and solution mixing on the dispersion of carbon nanotubes in a poly(vinylidene fluoride)/poly(ethylene terephthalate) matrix. <i>Polymer</i> , 2012, 53, 1207-1214.	12.0	76
8	“Green” nano-filters: fine nanofibers of natural protein for high efficiency filtration of particulate pollutants and toxic gases. <i>RSC Advances</i> , 2016, 6, 105948-105956.	3.6	70
9	Morphology engineering of protein fabrics for advanced and sustainable filtration. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21585-21595.	10.3	69
10	Strategies for Building Robust Traffic Networks in Advanced Energy Storage Devices: A Focus on Composite Electrodes. <i>Advanced Materials</i> , 2019, 31, e1804204.	21.0	69
11	Cross-Linked Protein Nanofilter with Antibacterial Properties for Multifunctional Air Filtration. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22846-22855.	8.0	65
12	High-Strength Poly(lactic acid) (PLA) Biocomposites Reinforced by Epoxy-Modified Pine Fibers. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 13236-13247.	6.7	59
13	Synergistically effects of copolymer and core-shell particles for toughening epoxy. <i>Polymer</i> , 2018, 140, 39-46.	3.8	56
14	Hierarchically Structured All-biomass Air Filters with High Filtration Efficiency and Low Air Pressure Drop Based on Pickering Emulsion. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 14266-14274.	8.0	52
15	A Gum-Like Electrolyte: Safety of a Solid, Performance of a Liquid. <i>Advanced Energy Materials</i> , 2013, 3, 1557-1562.	19.5	51
16	A Nanoprotein-Functionalized Hierarchical Composite Air Filter. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11606-11613.	6.7	47
17	A Particle-Controlled, High-Performance, Gum-Like Electrolyte for Safe and Flexible Energy Storage Devices. <i>Advanced Energy Materials</i> , 2015, 5, 1400463.	19.5	42
18	Crystallization behavior of poly(vinylidene fluoride)/multi-walled carbon nanotubes nanocomposites. <i>Journal of Materials Science</i> , 2011, 46, 1542-1550.	3.7	40

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19	Gum-Like Nanocomposites as Conformable, Conductive, and Adhesive Electrode Matrix for Energy Storage Devices. <i>Advanced Energy Materials</i> , 2017, 7, 1601767.	19.5	40
20	Morphologies of injection molded isotactic polypropylene/ultra high molecular weight polyethylene blends. <i>Materials & Design</i> , 2012, 35, 633-639.	5.1	39
21	Decoupled Ion Transport in a Protein-Based Solid Ion Conductor. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 4304-4310.	4.6	38
22	Melt viscoelasticity, electrical conductivity, and crystallization of PVDF/MWCNT composites: Effect of the dispersion of MWCNTs. <i>Journal of Applied Polymer Science</i> , 2012, 125, E49.	2.6	37
23	Crystallization and reinforcement of poly (vinylidene fluoride) nanocomposites: Role of high molecular weight resin and carbon nanotubes. <i>Polymer Testing</i> , 2012, 31, 117-126.	4.8	37
24	Template-Free Self-Caging Nanochemistry for Large-Scale Synthesis of Sulfonated-Graphene@Sulfur Nanocage for Long-Life Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2008652.	14.9	37
25	Self-Assembled Protein Nanofilter for Trapping Polysulfides and Promoting Li ⁺ Transport in Lithium-Sulfur Batteries. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2450-2459.	4.6	35
26	A rheological study on temperature dependent microstructural changes of fumed silica gels in dodecane. <i>Soft Matter</i> , 2012, 8, 10457.	2.7	34
27	Control of morphology and properties by the selective distribution of nano-silica particles with different surface characteristics in PA6/ABS blends. <i>Journal of Materials Science</i> , 2012, 47, 4620-4631.	3.7	34
28	Poly(lactic acid) Toughening through Chain End Engineering. <i>ACS Applied Polymer Materials</i> , 2020, 2, 411-417.	4.4	34
29	A bio-surfactant for defect control: Multifunctional gelatin coated MWCNTs for conductive epoxy nanocomposites. <i>Composites Science and Technology</i> , 2018, 159, 216-224.	7.8	33
30	A Janus nanofiber-based separator for trapping polysulfides and facilitating ion-transport in lithium-sulfur batteries. <i>Nanoscale</i> , 2019, 11, 18090-18098.	5.6	33
31	Aggregate of nanoparticles: rheological and mechanical properties. <i>Nanoscale Research Letters</i> , 2011, 6, 114.	5.7	30
32	Advanced Graphene@Sulfur composites via an in-situ reduction and wrapping strategy for high energy density lithium-sulfur batteries. <i>Carbon</i> , 2019, 150, 224-232.	10.3	29
33	Regulating Polysulfide Diffusion and Deposition via Rational Design of Core-Shell Active Materials in Li-S Batteries. <i>ACS Nano</i> , 2022, 16, 7982-7992.	14.6	29
34	A polymeric nanocomposite interlayer as ion-transport-regulator for trapping polysulfides and stabilizing lithium metal. <i>Energy Storage Materials</i> , 2018, 15, 447-457.	18.0	27
35	Rational design and superfast production of biomimetic, calendaring-compatible, catalytic, sulfur-rich secondary particles for advanced lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2021, 40, 415-425.	18.0	27
36	Dynamic Rheological Behavior of HDPE/UHMWPE Blends. <i>Journal of Macromolecular Science - Physics</i> , 2011, 50, 1249-1259.	1.0	26

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37	Building Ion-Conduction Highways in Polymeric Electrolytes by Manipulating Protein Configuration. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4726-4736.	8.0	26
38	Toughening by Nanodroplets: Polymer-Droplet Biocomposite with Anomalous Toughness. <i>Macromolecules</i> , 2020, 53, 4568-4576.	4.8	25
39	Dynamic Electrical and Rheological Percolation in Isotactic Poly(propylene)/Carbon Black Composites. <i>Macromolecular Materials and Engineering</i> , 2012, 297, 51-59.	3.6	24
40	Synergistic effects of hybrid graphitic nanofillers on simultaneously enhanced wear and mechanical properties of polymer nanocomposites. <i>European Polymer Journal</i> , 2014, 55, 210-221.	5.4	24
41	Controlled Li ⁺ conduction pathway to achieve enhanced ionic conductivity in polymer electrolytes. <i>Journal of Power Sources</i> , 2014, 247, 452-459.	7.8	24
42	Roles of Alkaline Earth Ions in Garnet-Type Superionic Conductors. <i>ChemElectroChem</i> , 2017, 4, 266-271.	3.4	23
43	Faster and better: A polymeric chaperone binder for microenvironment management in thick battery electrodes. <i>Energy Storage Materials</i> , 2022, 45, 828-839.	18.0	23
44	Core-Shell Hybrid Nanowires with Protein Enabling Fast Ion Conduction for High-Performance Composite Polymer Electrolytes. <i>Small</i> , 2018, 14, e1803564.	10.0	22
45	A Polymer-Alloy Binder for Structures-Properties Control of Battery Electrodes. <i>Energy Storage Materials</i> , 2018, 14, 149-158.	18.0	21
46	Evolution of agglomerate structure of carbon nanotubes in multi-walled carbon nanotubes/polymer composite melt: A rheo-electrical study. <i>Composites Part B: Engineering</i> , 2012, 43, 3281-3287.	12.0	20
47	Synergistic effect of stereocomplex crystals and shear flow on the crystallization rate of poly(L-lactic acid): A rheological study. <i>RSC Advances</i> , 2014, 4, 2733-2742.	3.6	20
48	Poly(Vinylidene Fluoride)-Based Blends as New Binders for Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2018, 5, 2288-2294.	3.4	20
49	Self-Sensing Actuators Based on a Stiffness Variable Reversible Shape Memory Polymer Enabled by a Phase Change Material. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 22521-22530.	8.0	19
50	Enhancement effect of filler network on isotactic polypropylene/carbon black composite melts. <i>Colloid and Polymer Science</i> , 2011, 289, 1673-1681.	2.1	18
51	Evaluation of Hydrophobic Polyurethane Foam as Sorbent Material for Oil Spill Recovery. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2014, 51, 88-100.	2.2	18
52	Interfacial interaction of polyvinylidene fluoride/multiwalled carbon nanotubes nanocomposites: A rheological study. <i>Journal of Applied Polymer Science</i> , 2011, 121, 3041-3046.	2.6	17
53	Additive Manufacturing With Conductive, Viscoelastic Polymer Composites: Direct-Ink-Writing of Electrolytic and Anodic Poly(Ethylene Oxide) Composites. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2017, 139, .	2.2	17
54	Structure of fumed silica gels in dodecane: enhanced network by oscillatory shear. <i>Colloid and Polymer Science</i> , 2012, 290, 151-161.	2.1	16

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55	A protein-reinforced adhesive composite electrolyte. <i>Polymer</i> , 2016, 106, 43-52.	3.8	16
56	Nuomici-Inspired Universal Strategy for Boosting Piezoresistive Sensitivity and Elasticity of Polymer Nanocomposite-Based Strain Sensors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35362-35370.	8.0	16
57	Bio-treatment of poplar via amino acid for interface control in biocomposites. <i>Composites Part B: Engineering</i> , 2020, 199, 108276.	12.0	16
58	A Multifunctional Protein Coating for Self-Assembled Porous Nanostructured Electrodes. <i>ACS Omega</i> , 2017, 2, 1679-1686.	3.5	15
59	Small Molecules Make a Big Difference: A Solvent-Controlled Strategy for Building Robust Conductive Network Structures in High-Capacity Electrode Composites. <i>Small Methods</i> , 2018, 2, 1800066.	8.6	15
60	A critical study on a 3D scaffold-based lithium metal anode. <i>Electrochimica Acta</i> , 2019, 318, 220-227.	5.2	15
61	Gelation of attractive particles in polymer melt. <i>Polymer</i> , 2012, 53, 4293-4299.	3.8	14
62	Crystallization, rheological behavior and mechanical properties of poly(vinylidene fluoride) composites containing graphitic fillers: a comparative study. <i>Polymer International</i> , 2012, 61, 1031-1040.	3.1	13
63	Revisiting the electrode manufacturing: A look into electrode rheology and active material microenvironment. <i>Journal of Energy Chemistry</i> , 2022, 72, 41-55.	12.9	13
64	Soy protein-treated nanofillers creating adaptive interfaces in nanocomposites with effectively improved conductivity. <i>Journal of Materials Science</i> , 2018, 53, 8653-8665.	3.7	12
65	“See the invisibles: Inspecting battery separator defects via pressure drop. <i>Energy Storage Materials</i> , 2019, 16, 589-596.	18.0	12
66	Biobinder Nanocoating for Upgrading the Assembling Structures of High-Capacity Composite Electrodes with a Robust Polymeric Artificial Solid Electrolyte Interphase. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 58201-58211.	8.0	11
67	Superfast and solvent-free core-shell assembly of sulfur/carbon active particles by hail-inspired nanostorm technology for high-energy-density Li-S batteries. <i>Journal of Energy Chemistry</i> , 2022, 65, 565-573.	12.9	11
68	Dynamic Rheological Behavior of Copolymerized Linear Low-Density Polyethylenes: Effect of Molecular Weight and Its Distribution. <i>Journal of Macromolecular Science - Physics</i> , 2009, 48, 844-855.	1.0	10
69	A novel hierarchical crystalline structure of injection-molded bars of linear polymer: co-existence of bending and normal shish-kebab structure. <i>Colloid and Polymer Science</i> , 2013, 291, 1503-1511.	2.1	10
70	The beauty of frost: nano-sulfur assembly via low pressure vapour deposition. <i>Chemical Communications</i> , 2015, 51, 15967-15970.	4.1	9
71	A dynamic study on nonlinear viscoelastic behavior of isotactic polypropylene/carbon black composite melts. <i>Colloid and Polymer Science</i> , 2011, 289, 1927-1931.	2.1	7
72	Hyperbranched poly(methyl methacrylate)s prepared by miniemulsion polymerization and their (non)-Newtonian flow behaviors. <i>Polymer</i> , 2011, 52, 376-382.	3.8	7

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73	A thermal method for quantitatively determining the content of short chain branching in ethylene/1-octene copolymers. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012, 110, 1389-1394.	3.6	7
74	Tunable reversible deformation of semicrystalline polymer networks based on temperature memory effect. <i>Polymer</i> , 2021, 232, 124157.	3.8	7
75	Blossoming of Nanosheet Structures via a Disturbed Self-Assembly. <i>Nano Letters</i> , 2014, 14, 3474-3480.	9.1	4
76	Ion-induced effective control of morphologies of soy protein biocomposites. <i>Journal of Materials Science</i> , 2015, 50, 2691-2699.	3.7	4
77	Seeding Nanoparticles for Hierarchical Self-Assembly. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3560-3566.	3.1	3
78	Segregated polymeric nanocomposites with tunable three-dimensional network of nanoparticles by controlling the dispersion and distribution. <i>RSC Advances</i> , 2014, 4, 51872-51877.	3.6	2
79	Solvent-controlled formation of a reduced graphite oxide gel via hydrogen bonding. <i>RSC Advances</i> , 2016, 6, 27267-27271.	3.6	2
80	Scalable and Heavy Foam Functionalization by Electrode-Inspired Sticky Jammed Fluids for Efficient Indoor Air Quality Management. <i>Energy and Environmental Materials</i> , 0, , .	12.8	1
81	Characteristic Shear Rate for Nonlinear Viscoelastic Behavior in a Polydisperse Polymer Solution. <i>Journal of Macromolecular Science - Physics</i> , 2010, 50, 123-131.	1.0	0
82	INFLUENCE OF PHASE TRANSITION ON THE FILLER NETWORK IN ISOTACTIC POLYPROPYLENE/CARBON BLACK COMPOSITES. <i>Acta Polymerica Sinica</i> , 2011, 011, 1068-1072.	0.0	0
83	A RHEOLOGICAL STUDY ON THE CHAIN INTERDIFFUSION OF MISCIBLE POLYMER MELTS. <i>Acta Polymerica Sinica</i> , 2013, 013, 361-366.	0.0	0