Xin Wen

List of Publications by Year
in descending order

88 papers	3,642 citations	87888 38 h-index	144013 57 g-index
91 all docs	91 docs citations	91 times ranked	3382 citing authors

#	Article	IF	Citations
1	Competitive induction of circularly polarized luminescence of CdSe/ZnS quantum dots in a nucleotideâ€“amino acid hydrogel. Materials Advances, 2022, 3, 682-688.	5.4	5
2	One-step converting biowaste wolfberry fruits into hierarchical porous carbon and its application for high-performance supercapacitors. Renewable Energy, 2022, 185, 187-195.	8.9	39
3	Intumescent flame retardants inspired template-assistant synthesis of N/P dual-doped three-dimensional porous carbons for high-performance supercapacitors. Journal of Colloid and Interface Science, 2022, 613, 35-46.	9.4	15
4	<i>In situ</i> synthesis of a functional ZIF-8 nanocomposite for synergistic photodynamicâ€“chemotherapy and pH and NIR-stimulated drug release. New Journal of Chemistry, 2022, 46, 6966-6970.	2.8	2
5	Branched Poly(<scp>l</scp>-lysine)-Derived Nitrogen-Containing Porous Carbon Flake as the Metal-Free Electrocatalyst toward Efficient Oxygen Reduction Reaction. ACS Applied Energy Materials, 2021, 4, 3317-3326.	5.1	13
6	Investigating the Effect of Aluminum Diethylphosphinate on Thermal Stability, Flame Retardancy, and Mechanical Properties of Poly(butylene succinate). Frontiers in Materials, 2021, 8, .	2.4	8
7	A green and high-yield route to recycle waste masks into CNTs/Ni hybrids via catalytic carbonization and their application for superior microwave absorption. Applied Catalysis B: Environmental, 2021, 298, 120544.	20.2	60
8	Porous carbon nanosheet with high surface area derived from waste poly(ethylene terephthalate) for supercapacitor applications. Journal of Applied Polymer Science, 2020, 137, 48338.	2.6	45
9	Nanosized carbon black as synergist in PP/POE-MA/IFR system for simultaneously improving thermal, electrical and mechanical properties. Journal of Thermal Analysis and Calorimetry, 2020, 139, 1091-1098.	3.6	16
10	Bioinspired growth of iron derivatives on mesoporous silica: effect on thermal degradation and fire behavior of polystyrene. Nanotechnology, 2020, 31, 065601.	2.6	3
11	Electrospun submicron NiO fibers combined with nanosized carbon black as reinforcement for multi-functional poly(lactic acid) composites. Composites Part A: Applied Science and Manufacturing, 2020, 129, 105662.	7.6	17
12	Sustainable recycling of waste polystyrene into hierarchical porous carbon nanosheets with potential applications in supercapacitors. Nanotechnology, 2020, 31, 035402.	2.6	42
13	Reactive construction of catalytic carbonization system in PP/C60/Ni(OH)2 nanocomposites for simultaneously improving thermal stability, flame retardancy and mechanical properties. Composites Part A: Applied Science and Manufacturing, 2020, 129, 105722.	7.6	23
14	Flame retardant effect and mechanism of nanosized NiO as synergist in PLA/APP/CSi-MCA composites. Composites Communications, 2020, 17, 170-176.	6.3	51
15	Constructing multifunctional nanofiller with reactive interface in PLA/CB-g-DOPO composites for simultaneously improving flame retardancy, electrical conductivity and mechanical properties. Composites Science and Technology, 2020, 188, 107988.	7.8	94
16	Na3PO4 assistant dispersion of nano-CaCO3 template to enhance electrochemical interface: N/O/P co-doped porous carbon hybrids towards high-performance flexible supercapacitors. Composites Part B: Engineering, 2020, 199, 108256.	12.0	33
17	One-Step Synergistic Effect to Produce Two-Dimensional N-Doped Hierarchical Porous Carbon Nanosheets for High-Performance Flexible Supercapacitors. ACS Applied Energy Materials, 2020, 3, 8562-8572.	5.1	32
18	Eucalyptus derived heteroatom-doped hierarchical porous carbons as electrode materials in supercapacitors. Scientific Reports, 2020, 10, 14631.	3.3	29

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19	Nitrogen/Oxygen Enriched Hierarchical Porous Carbons Derived from Waste Peanut Shells Boosting Performance of Supercapacitors. Advanced Electronic Materials, 2020, 6, 2000450.	5.1	18
20	Striking effect of nanosized carbon black modified by grafting sodium sulfonate on improving the flame retardancy of polycarbonate. Composites Communications, 2020, 20, 100359.	6.3	17
21	Insight into the influence of polymer topological structure on the exfoliation of clay in polystyrene matrix via annealing process. Applied Clay Science, 2020, 194, 105708.	5.2	4
22	A general approach towards carbonization of plastic waste into a well-designed 3D porous carbon framework for super lithium-ion batteries. Chemical Communications, 2020, 56, 9142-9145.	4.1	49
23	High yield conversion of biowaste coffee grounds into hierarchical porous carbon for superior capacitive energy storage. Scientific Reports, 2020, 10, 3518.	3.3	58
24	Study of nanocarbon black as synergist on improving flame retardancy of ethylene-vinyl acetate/brucite composites. Journal of Thermal Analysis and Calorimetry, 2019, 136, 601-608.	3.6	12
25	Sustainable polylysine conversion to nitrogenâ€containing porous carbon flakes: Potential application in supercapacitors. Journal of Applied Polymer Science, 2019, 136, 48214.	2.6	14
26	Interconnected nanoporous carbon structure delivering enhanced mass transport and conductivity toward exceptional performance in supercapacitor. Journal of Power Sources, 2019, 435, 226811.	7.8	24
27	Expanded graphite assistant construction of gradient-structured char layer in PBS/Mg(OH)2 composites for improving flame retardancy, thermal stability and mechanical properties. Composites Part B: Engineering, 2019, 177, 107402.	12.0	43
28	Three-dimensional porous carbon with big cavities and hierarchical pores derived from leek for superior electrochemical capacitive energy storage. Diamond and Related Materials, 2019, 98, 107522.	3.9	9
29	Synergistic effect of nanoscale carbon black and ammonium polyphosphate on improving thermal stability and flame retardancy of polypropylene: A reactive network for strengthening carbon layer. Composites Part B: Engineering, 2019, 174, 107038.	12.0	34
30	One-pot route to graft long-chain polymer onto silica nanoparticles and its application for high-performance poly(<scp>l</scp>-lactide) nanocomposites. RSC Advances, 2019, 9, 13908-13915.	3.6	17
31	Hierarchical porous carbon sheets derived on a MgO template for high-performance supercapacitor applications. Nanotechnology, 2019, 30, 295703.	2.6	29
32	Novel strategy for preparation of highly porous carbon sheets derived from polystyrene for supercapacitors. Diamond and Related Materials, 2019, 95, 5-13.	3.9	21
33	Nitrogen-doped porous carbon embedded with cobalt nanoparticles for excellent oxygen reduction reaction. Journal of Colloid and Interface Science, 2019, 546, 344-350.	9.4	21
34	From polystyrene waste to porous carbon flake and potential application in supercapacitor. Waste Management, 2019, 85, 333-340.	7.4	80
35	Large-scale converting waste coffee grounds into functional carbon materials as high-efficient adsorbent for organic dyes. Bioresource Technology, 2019, 272, 92-98.	9.6	78
36	Synthesis of Polylysine/Silica Hybrids through Branched-Polylysine-Mediated Biosilicification. ACS Omega, 2018, 3, 17573-17580.	3.5	7

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37	A Geometry Effect of Carbon Nanomaterials on Flame Retardancy and Mechanical Properties of Ethylene-Vinyl Acetate/Magnesium Hydroxide Composites. Polymers, 2018, 10, 1028.	4.5	15
38	A novel stiffener skeleton strategy in catalytic carbonization system with enhanced carbon layer structure and improved fire retardancy. Composites Science and Technology, 2018, 164, 82-91.	7.8	37
39	â€œOneâ€potâ€•synthesis of crosslinked siliconeâ€containing macromolecular charring agent and its synergistic flame retardant poly(<scp>l</scp>â€lactic acid) with ammonium polyphosphate. Polymers for Advanced Technologies, 2017, 28, 1409-1417.	3.2	17
40	Simultaneously improving the mechanical properties and flame retardancy of polypropylene using functionalized carbon nanotubes by covalently wrapping flame retardants followed by linking polypropylene. Materials Chemistry Frontiers, 2017, 1, 716-726.	5.9	30
41	Effect of particle size on the flame retardancy of poly(butylene succinate)/Mg(OH)₂ composites. Fire and Materials, 2016, 40, 1090-1096.	2.0	24
42	Striking effect of epoxy resin on improving mechanical properties of poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (tereph	7.8	11
43	Study of the effect of nanosized carbon black on flammability and mechanical properties of poly(butylene succinate). Polymers for Advanced Technologies, 2015, 26, 128-135.	3.2	21
44	A facile approach to prepare porous cup-stacked carbon nanotube with high performance in adsorption of methylene blue. Journal of Colloid and Interface Science, 2015, 445, 195-204.	9.4	74
45	Effect of carbon black on improving thermal stability, flame retardancy and electrical conductivity of polypropylene/carbon fiber composites. Composites Science and Technology, 2015, 113, 31-37.	7.8	113
46	Flammability properties and electromagnetic interference shielding of PVC/graphene composites containing Fe₃O₄ nanoparticles. RSC Advances, 2015, 5, 31910-31919.	3.6	95
47	Synergistic effect of carbon fibers and carbon nanotubes on improving thermal stability and flame retardancy of polypropylene: a combination of a physical network and chemical crosslinking. RSC Advances, 2015, 5, 5484-5493.	3.6	12
48	Converting real-world mixed waste plastics into porous carbon nanosheets with excellent performance in the adsorption of an organic dye from wastewater. Journal of Materials Chemistry A, 2015, 3, 341-351.	10.3	156
49	New insights into the role of lattice oxygen in the catalytic carbonization of polypropylene into high value-added carbon nanomaterials. New Journal of Chemistry, 2015, 39, 962-971.	2.8	8
50	Combination of fumed silica with carbon black for simultaneously improving the thermal stability, flame retardancy and mechanical properties of polyethylene. Polymer, 2014, 55, 2998-3007.	3.8	40
51	Synergistic effect of activated carbon and Ni2O3 in promoting the thermal stability and flame retardancy of polypropylene. Polymer Degradation and Stability, 2014, 99, 18-26.	5.8	38
52	Synergistic effect of fumed silica with Ni2O3 on improving flame retardancy of poly(lactic acid). Polymer Degradation and Stability, 2014, 104, 18-27.	5.8	39
53	Simultaneously improving the thermal stability, flame retardancy and mechanical properties of polyethylene by the combination of graphene with carbon black. RSC Advances, 2014, 4, 33776-33784.	3.6	28
54	Synthesis and characterization of a novel organophosphorus oligomer and its application in improving flame retardancy of epoxy resin. RSC Advances, 2014, 4, 17607-17614.	3.6	55

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55	Sustainable Conversion of Mixed Plastics into Porous Carbon Nanosheets with High Performances in Uptake of Carbon Dioxide and Storage of Hydrogen. ACS Sustainable Chemistry and Engineering, 2014, 2, 2837-2844.	6.7	103
56	One-pot synthesis of core/shell Co@C spheres by catalytic carbonization of mixed plastics and their application in the photo-degradation of Congo red. Journal of Materials Chemistry A, 2014, 2, 7461-7470.	10.3	41
57	Upcycle waste plastics to magnetic carbon materials for dye adsorption from polluted water. RSC Advances, 2014, 4, 26817.	3.6	13
58	Striking influence of NiO catalyst diameter on the carbonization of polypropylene into carbon nanomaterials and their high performance in the adsorption of oils. RSC Advances, 2014, 4, 33806-33814.	3.6	28
59	Upcycling Waste Polypropylene into Graphene Flakes on Organically Modified Montmorillonite. Industrial & Engineering Chemistry Research, 2014, 53, 4173-4181.	3.7	97
60	Synergetic effect of epoxy resin and maleic anhydride grafted polypropylene on improving mechanical properties of polypropylene/short carbon fiber composites. Composites Part A: Applied Science and Manufacturing, 2014, 67, 212-220.	7.6	50
61	Nanosized Carbon Black Combined with Ni₂O₃ as â€œUniversalâ€•Catalysts for Synergistically Catalyzing Carbonization of Polyolefin Wastes to Synthesize Carbon Nanotubes and Application for Supercapacitors. Environmental Science & Technology, 2014, 48, 4048-4055.	10.0	82
62	Catalytic carbonization of polypropylene into cup-stacked carbon nanotubes with high performances in adsorption of heavy metallic ions and organic dyes. Chemical Engineering Journal, 2014, 248, 27-40.	12.7	71
63	Striking influence of chain structure of polyethylene on the formation of cup-stacked carbon nanotubes/carbon nanofibers under the combined catalysis of CuBr and NiO. Applied Catalysis B: Environmental, 2014, 147, 592-601.	20.2	60
64	Converting mixed plastics into mesoporous hollow carbon spheres with controllable diameter. Applied Catalysis B: Environmental, 2014, 152-153, 289-299.	20.2	65
65	Synergistic Effect between a Novel Char Forming Agent and Ammonium Polyphosphate on Flame Retardancy and Thermal Properties of Polypropylene. Industrial & Engineering Chemistry Research, 2013, 52, 10905-10915.	3.7	45
66	Electrochemical Characteristics of Discrete, Uniform, and Monodispersed Hollow Mesoporous Carbon Spheres in Doubleâ€Layered Supercapacitors. Chemistry - an Asian Journal, 2013, 8, 2627-2633.	3.3	18
67	Synthesis and characterization of a novel organophosphorus flame retardant and its application in polypropylene. Polymers for Advanced Technologies, 2013, 24, 653-659.	3.2	25
68	Insight on the striking influence of the chain architecture on promoting the exfoliation of clay in a polylactide matrix during the annealing process. Soft Matter, 2013, 9, 10891.	2.7	9
69	Catalytic conversion of linear low density polyethylene into carbon nanomaterials under the combined catalysis of Ni2O3 and poly(vinyl chloride). Chemical Engineering Journal, 2013, 215-216, 339-347.	12.7	61
70	Effect of the added amount of organically-modified montmorillonite on the catalytic carbonization of polypropylene into cup-stacked carbon nanotubes. Chemical Engineering Journal, 2013, 225, 798-808.	12.7	64
71	Synthesis, characterization and growth mechanism of mesoporous hollow carbon nanospheres by catalytic carbonization of polystyrene. Microporous and Mesoporous Materials, 2013, 176, 31-40.	4.4	47
72	Striking influence of Fe2O3 on the â€œcatalytic carbonizationâ€•of chlorinated poly(vinyl chloride) into carbon microspheres with high performance in the photo-degradation of Congo red. Journal of Materials Chemistry A, 2013, 1, 5247.	10.3	69

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73	Striking Influence about HZSM-5 Content and Nickel Catalyst on Catalytic Carbonization of Polypropylene and Polyethylene into Carbon Nanomaterials. Industrial & Engineering Chemistry Research, 2013, 52, 15578-15588.	3.7	17
74	Catalytic Carbonization of Chlorinated Poly(vinyl chloride) Microfibers into Carbon Microfibers with High Performance in the Photodegradation of Congo Red. Journal of Physical Chemistry C, 2013, 117, 17016-17023.	3.1	23
75	Effect of nanosized carbon black on thermal stability and flame retardancy of polypropylene/carbon nanotubes nanocomposites. Polymers for Advanced Technologies, 2013, 24, 971-977.	3.2	35
76	Catalytic carbonization of polypropylene by the combined catalysis of activated carbon with Ni2O3 into carbon nanotubes and its mechanism. Applied Catalysis A: General, 2012, 449, 112-120.	4.3	114
77	Catalyzing carbonization of poly(l-lactide) by nanosized carbon black combined with Ni2O3 for improving flame retardancy. Journal of Materials Chemistry, 2012, 22, 19974.	6.7	83
78	Promoting the responsive ability of carbon nanotubes to an external stress field in a polypropylene matrix: A synergistic effect of the physical interaction and chemical linking. Journal of Materials Chemistry, 2012, 22, 3930.	6.7	6
79	The rheological, thermostable, and mechanical properties of polypropylene/fullerene C₆₀ nanocomposites with improved interfacial interaction. Polymer Engineering and Science, 2012, 52, 1457-1463.	3.1	12
80	Effect of Cl/Ni molar ratio on the catalytic conversion of polypropylene into Cuâ€“Ni/C composites and their application in catalyzing â€œClickâ€•reaction. Applied Catalysis B: Environmental, 2012, 117-118, 185-193.	20.2	67
81	Thermal and flammability properties of polypropylene/carbon black nanocomposites. Polymer Degradation and Stability, 2012, 97, 793-801.	5.8	133
82	Charing polymer wrapped carbon nanotubes for simultaneously improving the flame retardancy and mechanical properties of epoxy resin. Polymer, 2011, 52, 4891-4898.	3.8	71
83	Thermomechanical and surface properties of novel poly(ether urethane)/polyhedral oligomeric silsesquioxane nanohybrid elastomers. Polymer Engineering and Science, 2011, 51, 795-803.	3.1	18
84	Improvement in toughness and crystallization of poly(<scp>L</scp>â€lactic acid) by melt blending with poly(epichlorohydrinâ€<i>co</i>â€ethylene oxide). Polymer Engineering and Science, 2011, 51, 2370-2380.	3.1	49
85	Study of the thermal stabilization mechanism of biodegradable poly(<scp>L</scp>â€lactide)/silica nanocomposites. Polymer International, 2011, 60, 202-210.	3.1	65
86	Nonisothermal crystallization behavior and mechanical properties of poly(butylene succinate)/silica nanocomposites. Journal of Applied Polymer Science, 2010, 116, 902-912.	2.6	21
87	Dramatic Improvements in Mechanical Properties of Poly(<scp>L</scp>â€lactide)/Silica Nanocomposites by Addition of Hyperbranched Poly(ester amide). Macromolecular Materials and Engineering, 2010, 295, 415-419.	3.6	11
88	Thermomechanical and optical properties of biodegradable poly(<scp>L</scp>â€lactide)/silica nanocomposites by melt compounding. Journal of Applied Polymer Science, 2009, 114, 3379-3388.	2.6	92