

Weizhao Hu

List of Publications by Year in descending order

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62
papers

4,012
citations

94433

37
h-index

118850

62
g-index

62
all docs

62
docs citations

62
times ranked

2067
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced thermal and flame retardant properties of flame-retardant-wrapped graphene/epoxy resin nanocomposites. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8034-8044.	10.3	371
2	Construction of multifunctional boron nitride nanosheet towards reducing toxic volatiles (CO and Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 362, 482-494.	12.4	279
3	Air- Stable Polyphosphazene- Functionalized Few- Layer Black Phosphorene for Flame Retardancy of Epoxy Resins. <i>Small</i> , 2019, 15, e1805175.	10.0	209
4	Construction of multifunctional MoSe ₂ hybrid towards the simultaneous improvements in fire safety and mechanical property of polymer. <i>Journal of Hazardous Materials</i> , 2018, 352, 36-46.	12.4	177
5	A novel strategy to simultaneously electrochemically prepare and functionalize graphene with a multifunctional flame retardant. <i>Chemical Engineering Journal</i> , 2017, 316, 514-524.	12.7	165
6	Preparation of Metal- Organic Frameworks and Their Application as Flame Retardants for Polystyrene. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 2036-2045.	3.7	135
7	The influence of zinc hydroxystannate on reducing toxic gases (CO, NO _x and HCN) generation and fire hazards of thermoplastic polyurethane composites. <i>Journal of Hazardous Materials</i> , 2016, 314, 260-269.	12.4	113
8	Renewable vanillin-based flame retardant toughening agent with ultra-low phosphorus loading for the fabrication of high-performance epoxy thermoset. <i>Composites Part B: Engineering</i> , 2020, 190, 107925.	12.0	113
9	Natural antioxidant functionalization for fabricating ambient-stable black phosphorus nanosheets toward enhancing flame retardancy and toxic gases suppression of polyurethane. <i>Journal of Hazardous Materials</i> , 2020, 387, 121971.	12.4	106
10	A novel Co(â€¦)â€“based metal-organic framework with phosphorus-containing structure: Build for enhancing fire safety of epoxy. <i>Composites Science and Technology</i> , 2017, 152, 231-242.	7.8	100
11	Recent advances for microencapsulation of flame retardant. <i>Polymer Degradation and Stability</i> , 2015, 113, 96-109.	5.8	97
12	Functionalizing Ti ₃ C ₂ T _x for enhancing fire resistance and reducing toxic gases of flexible polyurethane foam composites with reinforced mechanical properties. <i>Journal of Colloid and Interface Science</i> , 2022, 607, 1300-1312.	9.4	97
13	Effect of additive phosphorus-nitrogen containing flame retardant on char formation and flame retardancy of epoxy resin. <i>Materials Chemistry and Physics</i> , 2018, 214, 154-164.	4.0	96
14	Construction of graphite oxide modified black phosphorus through covalent linkage: An efficient strategy for smoke toxicity and fire hazard suppression of epoxy resin. <i>Journal of Hazardous Materials</i> , 2020, 399, 123015.	12.4	91
15	Hierarchical core- shell TiO ₂ @LDH@Ni(OH) ₂ architecture with regularly-oriented nanocatalyst shells: Towards improving the mechanical performance, flame retardancy and toxic smoke suppression of unsaturated polyester resin. <i>Chemical Engineering Journal</i> , 2021, 405, 126650.	12.7	90
16	Facile Synthesis of a Highly Efficient, Halogen-Free, and Intumescent Flame Retardant for Epoxy Resins: Thermal Properties, Combustion Behaviors, and Flame-Retardant Mechanisms. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 10868-10879.	3.7	86
17	Vertically Aligned Nickel 2-Methylimidazole Metal- Organic Framework Fabricated from Graphene Oxides for Enhancing Fire Safety of Polystyrene. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 8778-8786.	3.7	81
18	Construction of Bimetallic ZIF-Derived Co- Ni LDHs on the Surfaces of GO or CNTs with a Recyclable Method: Toward Reduced Toxicity of Gaseous Thermal Decomposition Products of Unsaturated Polyester Resin. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 18359-18371.	8.0	78

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19	A review on metal-organic hybrids as flame retardants for enhancing fire safety of polymer composites. <i>Composites Part B: Engineering</i> , 2021, 221, 109014.	12.0	78
20	The combustion and pyrolysis process of flame-retardant polystyrene/cobalt-based metal organic frameworks (MOF) nanocomposite. <i>Combustion and Flame</i> , 2021, 226, 108-116.	5.2	76
21	Synthesis of a novel liquid phosphorus-containing flame retardant for flexible polyurethane foam: Combustion behaviors and thermal properties. <i>Polymer Degradation and Stability</i> , 2020, 171, 109029.	5.8	74
22	Highly-efficient reinforcement and flame retardancy of rigid polyurethane foam with phosphorus-containing additive and nitrogen-containing compound. <i>Materials Chemistry and Physics</i> , 2018, 211, 42-53.	4.0	71
23	Hierarchical Structure: An effective Strategy to Enhance the Mechanical Performance and Fire Safety of Unsaturated Polyester Resin. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 29436-29447.	8.0	66
24	Novel glycerol-based polymerized flame retardants with combined phosphorus structures for preparation of high performance unsaturated polyester resin composites. <i>Composites Part B: Engineering</i> , 2022, 233, 109647.	12.0	62
25	Facile Construction of Flame-Retardant-Wrapped Molybdenum Disulfide Nanosheets for Properties Enhancement of Thermoplastic Polyurethane. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 7229-7238.	3.7	61
26	The improvement of fire safety performance of flexible polyurethane foam by Highly-efficient P-N-S elemental hybrid synergistic flame retardant. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 768-783.	9.4	59
27	Facile synthesis of a novel hyperbranched poly(urethane-phosphine oxide) as an effective modifier for epoxy resin. <i>Polymer Degradation and Stability</i> , 2018, 154, 157-169.	5.8	58
28	Interfacial flame retardant unsaturated polyester composites with simultaneously improved fire safety and mechanical properties. <i>Chemical Engineering Journal</i> , 2021, 426, 131313.	12.7	54
29	A novel phosphorous-containing polymeric compatibilizer: Effective reinforcement and flame retardancy in glass fiber reinforced polyamide 6 composites. <i>Composites Part B: Engineering</i> , 2021, 205, 108536.	12.0	53
30	A facile strategy to simultaneously improve the mechanical and fire safety properties of ramie fabric-reinforced unsaturated polyester resin composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 115, 264-273.	7.6	51
31	Highly efficient catalysts for reducing toxic gases generation change with temperature of rigid polyurethane foam nanocomposites: A comparative investigation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 112, 142-154.	7.6	47
32	Effect of cuprous oxide with different sizes on thermal and combustion behaviors of unsaturated polyester resin. <i>Journal of Hazardous Materials</i> , 2017, 334, 39-48.	12.4	45
33	Construction of Hierarchical Natural Fabric Surface Structure Based on Two-Dimensional Boron Nitride Nanosheets and Its Application for Preparing Biobased Toughened Unsaturated Polyester Resin Composites. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 40168-40179.	8.0	43
34	Atherton's "Todd reaction assisted synthesis of functionalized multicomponent MoSe ₂ /CNTs nanoarchitecture towards the fire safety enhancement of polymer. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 112, 271-282.	7.6	42
35	Metal-organic framework@polyaniline nanoarchitecture for improved fire safety and mechanical performance of epoxy resin. <i>Materials Chemistry and Physics</i> , 2020, 247, 122875.	4.0	41
36	The influence of carbon-encapsulated transition metal oxide microparticles on reducing toxic gases release and smoke suppression of rigid polyurethane foam composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 131, 105815.	7.6	40

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37	Effects of novel phosphorus-nitrogen-containing DOPO derivative salts on mechanical properties, thermal stability and flame retardancy of flexible polyurethane foam. <i>Polymer Degradation and Stability</i> , 2020, 177, 109160.	5.8	40
38	Nanosized bimetal-organic frameworks as robust coating for multi-functional flexible polyurethane foam: Rapid oil-absorption and excellent fire safety. <i>Composites Science and Technology</i> , 2019, 177, 66-72.	7.8	39
39	Exploration on structural rules of highly efficient flame retardant unsaturated polyester resins. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 142-157.	9.4	39
40	Scalable one-step synthesis of hydroxylated boron nitride nanosheets for obtaining multifunctional polyvinyl alcohol nanocomposite films: Multi-azimuth properties improvement. <i>Composites Science and Technology</i> , 2018, 168, 74-80.	7.8	32
41	Bi ₂ Se ₃ decorated recyclable liquid-exfoliated MoS ₂ nanosheets: Towards suppress smoke emission and improve mechanical properties of epoxy resin. <i>Journal of Hazardous Materials</i> , 2019, 364, 720-732.	12.4	29
42	Halogen and halogen-free flame retarded biologically-based polyamide with markedly suppressed smoke and toxic gases releases. <i>Composites Part B: Engineering</i> , 2020, 184, 107737.	12.0	28
43	Rationally designed functionalized black phosphorus nanosheets as new fire hazard suppression material for polylactic acid. <i>Polymer Degradation and Stability</i> , 2020, 178, 109194.	5.8	28
44	Construction of hierarchical layered double hydroxide/poly(dimethylsiloxane) composite coatings on ramie fabric surfaces for oil/water separation and flame retardancy. <i>Cellulose</i> , 2020, 27, 3485-3499.	4.9	27
45	High-performance flexible polyurethane foam based on hierarchical BN@MOF-LDH@APTES structure: Enhanced adsorption, mechanical and fire safety properties. <i>Journal of Colloid and Interface Science</i> , 2022, 609, 794-806.	9.4	23
46	Which part of metal-organic frameworks affects polymers' heat release, smoke emission and CO production behaviors more significantly, metallic component or organic ligand?. <i>Composites Part B: Engineering</i> , 2021, 223, 109131.	12.0	22
47	Design of copper salt@graphene nano hybrids to accomplish excellent resilience and superior fire safety for flexible polyurethane foam. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 1205-1218.	9.4	20
48	Synthesis of Ethyl (Diethoxymethyl)phosphinate Derivatives and Their Flame Retardancy in Flexible Polyurethane Foam: Structure-flame Retardancy Relationships. <i>Polymer Degradation and Stability</i> , 2021, 188, 109557.	5.8	19
49	MOF-derived 3D petal-like CoNi-LDH array cooperates with MXene to effectively inhibit fire and toxic smoke hazards of FPUF. <i>Chemosphere</i> , 2022, 297, 134134.	8.2	19
50	Fabrication of flexible polyurethane/phosphorus interpenetrating polymer network (IPN) foam for enhanced thermal stability, flame retardancy and mechanical properties. <i>Polymer Degradation and Stability</i> , 2021, 189, 109602.	5.8	18
51	Construction of bismaleimide resin with enhanced flame retardancy and mechanical properties based on a novel DOPO-derived bismaleimide monomer. <i>Journal of Colloid and Interface Science</i> , 2022, 614, 629-641.	9.4	18
52	Bi ₂ Se ₃ nanosheets: Advanced nanofillers for reinforcing and flame retarding polyethylene nanocomposites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 100, 371-380.	7.6	16
53	Exploring the effects of cardanol-based co-curing agents with different phosphorus structures on the mechanical and flame-retardant properties of bismaleimide resin. <i>Composites Part B: Engineering</i> , 2022, 241, 110047.	12.0	15
54	The effect of triphenyl phosphate inhibition on flame propagation over cast PMMA slabs. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4635-4644.	3.9	11

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55	Poly(dimethyl siloxane)-grafted black phosphorus nanosheets as filler to enhance moisture-resistance and flame-retardancy of thermoplastic polyurethane. <i>Materials Chemistry and Physics</i> , 2022, 286, 126189.	4.0	11
56	Applications of GO/OA@POSS Layer-by-Layer self-assembly nanocoating on flame retardancy and smoke suppression of flexible polyurethane foam. <i>Polymers for Advanced Technologies</i> , 2021, 32, 4516-4530.	3.2	10
57	Rapid Synthesis of Oxygen-Rich Covalent C ₂ N (CNO) Nanosheets by Sacrifice of HKUST-1: Advanced Metal-Free Nanofillers for Polymers. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 32688-32697.	8.0	9
58	Preparation of soybean root-like CNTs/bimetallic oxides hybrid to enhance fire safety and mechanical performance of thermoplastic polyurethane. <i>Chemical Engineering Journal</i> , 2022, 428, 132338.	12.7	9
59	Magnetic Fe ₃ O ₄ Nanoparticle/ZIF-8 Composites for Contaminant Removal from Water and Enhanced Flame Retardancy of Flexible Polyurethane Foams. <i>ACS Applied Nano Materials</i> , 2022, 5, 3491-3501.	5.0	9
60	High-performance flexible polyurethane from renewable castor oil: Preparation, properties and mechanism. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 159, 107034.	7.6	8
61	An insight into pyrolysis and flame retardant mechanism of unsaturated polyester resin with different valance states of phosphorus structures. <i>Polymer Degradation and Stability</i> , 2022, 202, 110026.	5.8	5
62	Mechanical, Thermal, and Flame-Retardant Behaviors of Thermoplastic Polyether Ester Elastomer Composites with Polyphenylene Oxide and Aluminum Hypophosphite. <i>Polymer-Plastics Technology and Engineering</i> , 2017, 56, 1096-1107.	1.9	3