Yuan Hu

List of Publications by Year
in descending order

428 papers	30,079 citations	2543 96 h-index	9579 142 g-index
428 all docs	428 docs citations	428 times ranked	13893 citing authors

#	Article	IF	Citations
1	Flame retardancy and thermal degradation mechanism of epoxy resin composites based on a DOPO substituted organophosphorus oligomer. Polymer, 2010, 51, 2435-2445.	1.8	477
2	In situ polymerization of graphene nanosheets and polyurethane with enhanced mechanical and thermal properties. Journal of Materials Chemistry, 2011, 21, 4222.	6.7	371
3	Enhanced thermal and flame retardant properties of flame-retardant-wrapped graphene/epoxy resin nanocomposites. Journal of Materials Chemistry A, 2015, 3, 8034-8044.	5.2	371
4	Preparation of graphene by pressurized oxidation and multiplex reduction and its polymer nanocomposites by masterbatch-based melt blending. Journal of Materials Chemistry, 2012, 22, 6088.	6.7	366
5	In situ preparation of functionalized graphene oxide/epoxy nanocomposites with effective reinforcements. Journal of Materials Chemistry, 2011, 21, 13290.	6.7	362
6	Thermal exfoliation of hexagonal boron nitride for effective enhancements on thermal stability, flame retardancy and smoke suppression of epoxy resin nanocomposites via solâ€“gel process. Journal of Materials Chemistry A, 2016, 4, 7330-7340.	5.2	346
7	Poly(vinyl alcohol) nanocomposites based on graphene and graphite oxide: a comparative investigation of property and mechanism. Journal of Materials Chemistry, 2011, 21, 13942.	6.7	342
8	Covalent functionalization of graphene with organosilane and its use as a reinforcement in epoxy composites. Composites Science and Technology, 2012, 72, 737-743.	3.8	342
9	Preparation of functionalized graphene oxide/polypropylene nanocomposite with significantly improved thermal stability and studies on the crystallization behavior and mechanical properties. Chemical Engineering Journal, 2014, 237, 411-420.	6.6	341
10	In Situ Polymerization of Graphene, Graphite Oxide, and Functionalized Graphite Oxide into Epoxy Resin and Comparison Study of On-the-Flame Behavior. Industrial & Engineering Chemistry Research, 2011, 50, 7772-7783.	1.8	290
11	Magnetically Separable Fe₃O₄/TiO₂ Hollow Spheres: Fabrication and Photocatalytic Activity. Journal of Physical Chemistry C, 2009, 113, 553-558.	1.5	285
12	Dual modification of graphene by polymeric flame retardant and Ni(OH) 2 nanosheets for improving flame retardancy of polypropylene. Composites Part A: Applied Science and Manufacturing, 2017, 100, 106-117.	3.8	283
13	Construction of multifunctional boron nitride nanosheet towards reducing toxic volatiles (CO and) Tj ETQq1 1 0.784314 rgBT /Overlo 362, 482-494.	6.5	279
14	Melamine-containing polyphosphazene wrapped ammonium polyphosphate: A novel multifunctional organic-inorganic hybrid flame retardant. Journal of Hazardous Materials, 2018, 344, 839-848.	6.5	262
15	Eco-friendly flame retardant and electromagnetic interference shielding cotton fabrics with multi-layered coatings. Chemical Engineering Journal, 2019, 372, 1077-1090.	6.6	251
16	Simultaneous reduction and surface functionalization of graphene oxide with POSS for reducing fire hazards in epoxy composites. Journal of Materials Chemistry, 2012, 22, 22037.	6.7	227
17	Self-assembly of Niâ€“Fe layered double hydroxide/graphene hybrids for reducing fire hazard in epoxy composites. Journal of Materials Chemistry A, 2013, 1, 4383.	5.2	227
18	Flame-retardant-wrapped polyphosphazene nanotubes: A novel strategy for enhancing the flame retardancy and smoke toxicity suppression of epoxy resins. Journal of Hazardous Materials, 2017, 325, 327-339.	6.5	223

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19	Synergistic Effect of Graphene on Antidripping and Fire Resistance of Intumescent Flame Retardant Poly(butylene succinate) Composites. Industrial & Engineering Chemistry Research, 2011, 50, 5376-5383.	1.8	215
20	Airâ€Stable Polyphosphazeneâ€Functionalized Fewâ€Layer Black Phosphorene for Flame Retardancy of Epoxy Resins. Small, 2019, 15, e1805175.	5.2	209
21	The effects of graphene on the flammability and fire behavior of intumescent flame retardant polypropylene composites at different flame scenarios. Polymer Degradation and Stability, 2017, 143, 42-56.	2.7	202
22	Preparation of poly(vinyl alcohol) nanocomposites with molybdenum disulfide (MoS2): structural characteristics and markedly enhanced properties. RSC Advances, 2012, 2, 11695.	1.7	201
23	Functionalization of graphene with grafted polyphosphamide for flame retardant epoxy composites: synthesis, flammability and mechanism. Polymer Chemistry, 2014, 5, 1145-1154.	1.9	190
24	Renewable Cardanol-Based Phosphate as a Flame Retardant Toughening Agent for Epoxy Resins. ACS Sustainable Chemistry and Engineering, 2017, 5, 3409-3416.	3.2	188
25	Synergistic effect between a char forming agent (CFA) and microencapsulated ammonium polyphosphate on the thermal and flame retardant properties of polypropylene. Polymers for Advanced Technologies, 2008, 19, 1077-1083.	1.6	185
26	Effect of expanded graphite on properties of high-density polyethylene/paraffin composite with intumescent flame retardant as a shape-stabilized phase change material. Solar Energy Materials and Solar Cells, 2010, 94, 360-365.	3.0	184
27	Functionalized graphene oxide/phosphoramide oligomer hybrids flame retardant prepared via in situ polymerization for improving the fire safety of polypropylene. RSC Advances, 2014, 4, 31782.	1.7	184
28	MoS₂ Nanolayers Grown on Carbon Nanotubes: An Advanced Reinforcement for Epoxy Composites. ACS Applied Materials & Interfaces, 2015, 7, 6070-6081.	4.0	180
29	Graphitic carbon nitride/phosphorus-rich aluminum phosphinates hybrids as smoke suppressants and flame retardants for polystyrene. Journal of Hazardous Materials, 2017, 332, 87-96.	6.5	179
30	Investigation of the flammability of different textile fabrics using micro-scale combustion calorimetry. Polymer Degradation and Stability, 2010, 95, 108-115.	2.7	177
31	Construction of multifunctional MoSe2 hybrid towards the simultaneous improvements in fire safety and mechanical property of polymer. Journal of Hazardous Materials, 2018, 352, 36-46.	6.5	177
32	Highly Effective Pâ€“P Synergy of a Novel DOPO-Based Flame Retardant for Epoxy Resin. Industrial & Engineering Chemistry Research, 2017, 56, 1245-1255.	1.8	176
33	Synthesis and characterization of a functional polyhedral oligomeric silsesquioxane and its flame retardancy in epoxy resin. Progress in Organic Coatings, 2009, 65, 490-497.	1.9	175
34	Anomalous nano-barrier effects of ultrathin molybdenum disulfide nanosheets for improving the flame retardance of polymer nanocomposites. Journal of Materials Chemistry A, 2015, 3, 14307-14317.	5.2	169
35	Economical and environment-friendly synthesis of a novel hyperbranched poly(aminomethylphosphine) Tj ETQq1 1 0.784314 rgBT /Over temperature and toughness of epoxy resins. Chemical Engineering Journal, 2017, 322, 618-631.	6.6	169
36	Flame Retardancy and Thermal Degradation of Intumescent Flame Retardant Starch-Based Biodegradable Composites. Industrial & Engineering Chemistry Research, 2009, 48, 3150-3157.	1.8	167

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37	A novel strategy to simultaneously electrochemically prepare and functionalize graphene with a multifunctional flame retardant. Chemical Engineering Journal, 2017, 316, 514-524.	6.6	165
38	Construction of durable flame-retardant and robust superhydrophobic coatings on cotton fabrics for water-oil separation application. Chemical Engineering Journal, 2020, 398, 125661.	6.6	165
39	Self-standing cuprous oxide nanoparticles on silica@ polyphosphazene nanospheres: 3D nanostructure for enhancing the flame retardancy and toxic effluents elimination of epoxy resins via synergistic catalytic effect. Chemical Engineering Journal, 2017, 309, 802-814.	6.6	164
40	Flame Retardancy and Thermal Degradation of Intumescent Flame Retardant Poly(lactic acid)/Starch Biocomposites. Industrial & Engineering Chemistry Research, 2011, 50, 713-720.	1.8	163
41	Novel organicâ€“inorganic flame retardants containing exfoliated graphene: preparation and their performance on the flame retardancy of epoxy resins. Journal of Materials Chemistry A, 2013, 1, 6822.	5.2	163
42	Influence of g-C₃N₄ Nanosheets on Thermal Stability and Mechanical Properties of Biopolymer Electrolyte Nanocomposite Films: A Novel Investigation. ACS Applied Materials & Interfaces, 2014, 6, 429-437.	4.0	159
43	Hierarchical Polyphosphazene@Molybdenum Disulfide Hybrid Structure for Enhancing the Flame Retardancy and Mechanical Property of Epoxy Resins. ACS Applied Materials & Interfaces, 2017, 9, 29147-29156.	4.0	157
44	Design of reduced graphene oxide decorated with DOPO-phosphanomidate for enhanced fire safety of epoxy resin. Journal of Colloid and Interface Science, 2018, 521, 160-171.	5.0	157
45	Thermal Degradation and Flame Retardance of Biobased Polylactide Composites Based on Aluminum Hypophosphite. Industrial & Engineering Chemistry Research, 2012, 51, 12009-12016.	1.8	156
46	Functionalized graphene oxide for fire safety applications of polymers: a combination of condensed phase flame retardant strategies. Journal of Materials Chemistry, 2012, 22, 23057.	6.7	154
47	Phosphorus and Nitrogen-Containing Polyols: Synergistic Effect on the Thermal Property and Flame Retardancy of Rigid Polyurethane Foam Composites. Industrial & Engineering Chemistry Research, 2016, 55, 10813-10822.	1.8	150
48	The effect of graphene presence in flame retarded epoxy resin matrix on the mechanical and flammability properties of glass fiber-reinforced composites. Composites Part A: Applied Science and Manufacturing, 2013, 53, 88-96.	3.8	149
49	Thermal degradation behaviors of epoxy resin/POSS hybrids and phosphorusâ€“silicon synergism of flame retardancy. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 693-705.	2.4	148
50	Self-healable castor oil-based waterborne polyurethane/MXene film with outstanding electromagnetic interference shielding effectiveness and excellent shape memory performance. Journal of Colloid and Interface Science, 2021, 588, 164-174.	5.0	147
51	Modification of lignin and its application as char agent in intumescent flameâ€retardant poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlo	1.5	146
52	DOPO-Modified Two-Dimensional Co-Based Metalâ€“Organic Framework: Preparation and Application for Enhancing Fire Safety of Poly(lactic acid). ACS Applied Materials & Interfaces, 2018, 10, 8274-8286.	4.0	146
53	Effect of Cellulose Acetate Butyrate Microencapsulated Ammonium Polyphosphate on the Flame Retardancy, Mechanical, Electrical, and Thermal Properties of Intumescent Flame-Retardant Ethyleneâ€“Vinyl Acetate Copolymer/Microencapsulated Ammonium Polyphosphate/Polyamide-6 Blends. ACS Applied Materials & Interfaces, 2011, 3, 3754-3761.	4.0	143
54	Synthesis of Mesoporous Silica@Coâ€“Al Layered Double Hydroxide Spheres: Layer-by-Layer Method and Their Effects on the Flame Retardancy of Epoxy Resins. ACS Applied Materials & Interfaces, 2014, 6, 14076-14086.	4.0	143

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55	Polyphosphazenes-based flame retardants: A review. Composites Part B: Engineering, 2020, 202, 108397.	5.9	143
56	In situ preparation of reduced graphene oxide/DOPO-based phosphonamidate hybrids towards high-performance epoxy nanocomposites. Composites Part B: Engineering, 2017, 123, 154-164.	5.9	142
57	Mussel-inspired functionalization of electrochemically exfoliated graphene: Based on self-polymerization of dopamine and its suppression effect on the fire hazards and smoke toxicity of thermoplastic polyurethane. Journal of Hazardous Materials, 2018, 352, 57-69.	6.5	142
58	Synthesis and characterization of a DOPO-substitued organophosphorus oligomer and its application in flame retardant epoxy resins. Progress in Organic Coatings, 2011, 71, 72-82.	1.9	141
59	Study on thermal degradation and combustion behaviors of PC/POSS hybrids. Polymer Degradation and Stability, 2008, 93, 627-639.	2.7	139
60	Manufacturing, mechanical and flame retardant properties of poly(lactic acid) biocomposites based on calcium magnesium phytate and carbon nanotubes. Composites Part A: Applied Science and Manufacturing, 2018, 110, 227-236.	3.8	136
61	Preparation of Metalâ€“Organic Frameworks and Their Application as Flame Retardants for Polystyrene. Industrial & Engineering Chemistry Research, 2017, 56, 2036-2045.	1.8	135
62	A facile strategy to simultaneously exfoliate and functionalize boron nitride nanosheets via Lewis acid-base interaction. Chemical Engineering Journal, 2017, 330, 309-321.	6.6	135
63	Functionalized Carbon Nanotubes with Phosphorus- and Nitrogen-Containing Agents: Effective Reinforcer for Thermal, Mechanical, and Flame-Retardant Properties of Polystyrene Nanocomposites. ACS Applied Materials & Interfaces, 2016, 8, 26266-26274.	4.0	134
64	MoS₂/Polymer Nanocomposites: Preparation, Properties, and Applications. Polymer Reviews, 2017, 57, 440-466.	5.3	132
65	Formation of self-extinguishing flame retardant biobased coating on cotton fabrics via Layer-by-Layer assembly of chitin derivatives. Carbohydrate Polymers, 2015, 115, 516-524.	5.1	130
66	Thermal degradation mechanism of flame retarded epoxy resins with a DOPO-substitued organophosphorus oligomer by TG-FTIR and DP-MS. Journal of Analytical and Applied Pyrolysis, 2011, 92, 164-170.	2.6	129
67	In situ synthesis of a MoS₂/CoOOH hybrid by a facile wet chemical method and the catalytic oxidation of CO in epoxy resin during decomposition. Journal of Materials Chemistry A, 2014, 2, 13299.	5.2	129
68	Graphite oxide, graphene, and metal-loaded graphene for fire safety applications of polystyrene. Journal of Materials Chemistry, 2012, 22, 16399.	6.7	126
69	Novel CuCo2O4/graphitic carbon nitride nanohybrids: Highly effective catalysts for reducing CO generation and fire hazards of thermoplastic polyurethane nanocomposites. Journal of Hazardous Materials, 2015, 293, 87-96.	6.5	125
70	Aluminum hypophosphite microencapsulated to improve its safety and application to flame retardant polyamide 6. Journal of Hazardous Materials, 2015, 294, 186-194.	6.5	125
71	Intrinsically flame retardant bio-based epoxy thermosets: A review. Composites Part B: Engineering, 2019, 179, 107487.	5.9	124
72	Hyper-branched polymer grafting graphene oxide as an effective flame retardant and smoke suppressant for polystyrene. Journal of Hazardous Materials, 2015, 300, 58-66.	6.5	122

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73	Combination of black phosphorus nanosheets and MCNTs via phosphorus carbon bonds for reducing the flammability of air stable epoxy resin nanocomposites. Journal of Hazardous Materials, 2020, 383, 121069.	6.5	122
74	Cobalt oxide/graphene composite for highly efficient CO oxidation and its application in reducing the fire hazards of aliphatic polyesters. Journal of Materials Chemistry, 2012, 22, 3426.	6.7	119
75	Formation of Layer-by-Layer Assembled Titanate Nanotubes Filled Coating on Flexible Polyurethane Foam with Improved Flame Retardant and Smoke Suppression Properties. ACS Applied Materials & Interfaces, 2015, 7, 101-111.	4.0	119
76	Studies on Synthesis of Electrochemically Exfoliated Functionalized Graphene and Polylactic Acid/Ferric Phytate Functionalized Graphene Nanocomposites as New Fire Hazard Suppression Materials. ACS Applied Materials & Interfaces, 2016, 8, 25552-25562.	4.0	119
77	A effective flame retardant for epoxy resins based on poly(DOPO substituted dihydroxyl phenyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1C	2.0	118
78	The influence of titanate nanotube on the improved thermal properties and the smoke suppression in poly(methyl methacrylate). Journal of Hazardous Materials, 2012, 209-210, 34-39.	6.5	118
79	Combustion and Thermal Degradation Mechanism of a Novel Intumescent Flame Retardant for Epoxy Acrylate Containing Phosphorus and Nitrogen. Industrial & Engineering Chemistry Research, 2011, 50, 1881-1892.	1.8	117
80	The influence of zinc hydroxystannate on reducing toxic gases (CO, NO x and HCN) generation and fire hazards of thermoplastic polyurethane composites. Journal of Hazardous Materials, 2016, 314, 260-269.	6.5	113
81	Effect of Fully Biobased Coatings Constructed via Layer-by-Layer Assembly of Chitosan and Lignosulfonate on the Thermal, Flame Retardant, and Mechanical Properties of Flexible Polyurethane Foam. ACS Sustainable Chemistry and Engineering, 2016, 4, 1431-1438.	3.2	113
82	Preparation and thermal properties of a novel flame-retardant coating. Polymer Degradation and Stability, 2007, 92, 1141-1150.	2.7	112
83	A review on flame retardant technology in China. Part II: flame retardant polymeric nanocomposites and coatings. Polymers for Advanced Technologies, 2011, 22, 379-394.	1.6	111
84	Surface Modification of Graphene with Layered Molybdenum Disulfide and Their Synergistic Reinforcement on Reducing Fire Hazards of Epoxy Resins. Industrial & Engineering Chemistry Research, 2013, 52, 17882-17890.	1.8	110
85	The effect of metal oxide decorated graphene hybrids on the improved thermal stability and the reduced smoke toxicity in epoxy resins. Chemical Engineering Journal, 2014, 250, 214-221.	6.6	109
86	Enhancement of fire retardancy performance of glass-fibre reinforced poly(ethylene terephthalate) composites with the incorporation of aluminum hypophosphite and melamine cyanurate. Composites Part B: Engineering, 2011, 42, 1057-1065.	5.9	107
87	Cardanol derived benzoxazine in combination with boron-doped graphene toward simultaneously improved toughening and flame retardant epoxy composites. Composites Part A: Applied Science and Manufacturing, 2019, 116, 13-23.	3.8	107
88	Polydopamine-bridged synthesis of ternary h-BN@PDA@SnO2 as nanoenhancers for flame retardant and smoke suppression of epoxy composites. Composites Part A: Applied Science and Manufacturing, 2018, 111, 94-105.	3.8	106
89	Natural antioxidant functionalization for fabricating ambient-stable black phosphorus nanosheets toward enhancing flame retardancy and toxic gases suppression of polyurethane. Journal of Hazardous Materials, 2020, 387, 121971.	6.5	106
90	Liquid-exfoliated MoS2 by chitosan and enhanced mechanical and thermal properties of chitosan/MoS2 composites. Composites Science and Technology, 2014, 93, 76-82.	3.8	105

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91	Design of artificial nacre-like hybrid films as shielding to mitigate electromagnetic pollution. Carbon, 2014, 75, 178-189.	5.4	103
92	Design of Hierarchical NiCo-LDH@PZS Hollow Dodecahedron Architecture and Application in High-Performance Epoxy Resin with Excellent Fire Safety. ACS Applied Materials & Interfaces, 2019, 11, 41736-41749.	4.0	103
93	Large-scale production of simultaneously exfoliated and Functionalized Mxenes as promising flame retardant for polyurethane. Composites Part B: Engineering, 2019, 179, 107486.	5.9	103
94	The influence of cobalt oxideâ€“graphene hybrids on thermal degradation, fire hazards and mechanical properties of thermoplastic polyurethane composites. Composites Part A: Applied Science and Manufacturing, 2016, 88, 10-18.	3.8	100
95	A novel Co(â…¡)â€“based metal-organic framework with phosphorus-containing structure: Build for enhancing fire safety of epoxy. Composites Science and Technology, 2017, 152, 231-242.	3.8	100
96	In situ synthesis, morphology, and fundamental properties of polymer/MoS2 nanocomposites. Composites Science and Technology, 2015, 107, 120-128.	3.8	99
97	Nano-fibrillated cellulose-hydroxyapatite based composite foams with excellent fire resistance. Carbohydrate Polymers, 2018, 195, 71-78.	5.1	99
98	Biobased polyelectrolyte multilayer-coated hollow mesoporous silica as a green flame retardant for epoxy resin. Journal of Hazardous Materials, 2018, 342, 689-697.	6.5	99
99	Surface functionalization of MoS₂with POSS for enhancing thermal, flame-retardant and mechanical properties in PVA composites. RSC Advances, 2014, 4, 3253-3262.	1.7	98
100	Novel Melamine/o-Phthalaldehyde Covalent Organic Frameworks Nanosheets: Enhancement Flame Retardant and Mechanical Performances of Thermoplastic Polyurethanes. ACS Applied Materials & Interfaces, 2017, 9, 23017-23026.	4.0	98
101	Recent advances for microencapsulation of flame retardant. Polymer Degradation and Stability, 2015, 113, 96-109.	2.7	97
102	The influence of graphene based smoke suppression agents on reduced fire hazards of polystyrene composites. Composites Part A: Applied Science and Manufacturing, 2016, 80, 217-227.	3.8	97
103	Nacre-Inspired Tunable Electromagnetic Interference Shielding Sandwich Films with Superior Mechanical and Fire-Resistant Protective Performance. ACS Applied Materials & Interfaces, 2020, 12, 6371-6382.	4.0	97
104	Functionalizing Ti3C2Tx for enhancing fire resistance and reducing toxic gases of flexible polyurethane foam composites with reinforced mechanical properties. Journal of Colloid and Interface Science, 2022, 607, 1300-1312.	5.0	97
105	Preparation of gelâ€silica/ammonium polyphosphate coreâ€shell flame retardant and properties of polyurethane composites. Polymers for Advanced Technologies, 2011, 22, 1824-1831.	1.6	94
106	A green approach to constructing multilayered nanocoating for flame retardant treatment of polyamide 66 fabric from chitosan and sodium alginate. Carbohydrate Polymers, 2017, 166, 131-138.	5.1	92
107	Enhanced mechanical, thermal and flame retardant properties by combining graphene nanosheets and metal hydroxide nanorods for Acrylonitrileâ€“Butadieneâ€“Styrene copolymer composite. Composites Part A: Applied Science and Manufacturing, 2014, 64, 203-210.	3.8	91
108	Construction of SiO2@UiO-66 coreâ€“shell microarchitectures through covalent linkage as flame retardant and smoke suppressant for epoxy resins. Composites Part B: Engineering, 2019, 176, 107261.	5.9	91

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109	Highly efficient flame retardant and smoke suppression mechanism of boron modified graphene Oxide/Poly(Lactic acid) nanocomposites. Carbon, 2019, 150, 8-20.	5.4	91
110	Construction of graphite oxide modified black phosphorus through covalent linkage: An efficient strategy for smoke toxicity and fire hazard suppression of epoxy resin. Journal of Hazardous Materials, 2020, 399, 123015.	6.5	91
111	Multifunctional fireproof electromagnetic shielding polyurethane films with thermal management performance. Chemical Engineering Journal, 2022, 439, 135673.	6.6	91
112	Ultra-low phosphorus loading to achieve the superior flame retardancy of epoxy resin. Polymer Degradation and Stability, 2018, 149, 119-128.	2.7	90
113	Functionalized lignin for halogen-free flame retardant rigid polyurethane foam: preparation, thermal stability, fire performance and mechanical properties. Journal of Polymer Research, 2013, 20, 1.	1.2	89
114	The influence of manganeseâ€“cobalt oxide/graphene on reducing fire hazards of poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	6.5	88
115	Cyclodextrin microencapsulated ammonium polyphosphate: Preparation and its performance on the thermal, flame retardancy and mechanical properties of ethylene vinyl acetate copolymer. Composites Part B: Engineering, 2015, 69, 22-30.	5.9	87
116	Facile Synthesis of a Highly Efficient, Halogen-Free, and Intumescent Flame Retardant for Epoxy Resins: Thermal Properties, Combustion Behaviors, and Flame-Retardant Mechanisms. Industrial & Engineering Chemistry Research, 2016, 55, 10868-10879.	1.8	86
117	Flame retardancy and thermal degradation of cotton textiles based on UV-curable flame retardant coatings. Thermochimica Acta, 2011, 513, 75-82.	1.2	85
118	Comparative study on the flame retarded efficiency of melamine phosphate, melamine phosphite and melamine hypophosphite on poly(butylene succinate) composites. Polymer Degradation and Stability, 2014, 105, 248-256.	2.7	85
119	Fabrication of LDH nanosheets on Î²-FeOOH rods and applications for improving the fire safety of epoxy resin. Composites Part A: Applied Science and Manufacturing, 2016, 80, 259-269.	3.8	85
120	Self-assembled supermolecular aggregate supported on boron nitride nanoplatelets for flame retardant and friction application. Chemical Engineering Journal, 2018, 349, 223-234.	6.6	85
121	A high performance fully bio-based epoxy thermoset from a syringaldehyde-derived epoxy monomer cured by furan-derived amine. Green Chemistry, 2021, 23, 501-510.	4.6	85
122	Effect of a triazine ringâ€containing charring agent on fire retardancy and thermal degradation of intumescent flame retardant epoxy resins. Polymers for Advanced Technologies, 2011, 22, 2480-2487.	1.6	84
123	Multi-functional hydroxyapatite/polyvinyl alcohol composite aerogels with self-cleaning, superior fire resistance and low thermal conductivity. Composites Science and Technology, 2018, 158, 128-136.	3.8	84
124	In situ loading ultra-small Cu2O nanoparticles on 2D hierarchical TiO2-graphene oxide dual-nanosheets: Towards reducing fire hazards of unsaturated polyester resin. Journal of Hazardous Materials, 2016, 320, 504-512.	6.5	83
125	Boron/phosphorus doping for retarding the oxidation of reduced graphene oxide. Carbon, 2016, 101, 152-158.	5.4	83
126	The effect of defect-rich molybdenum disulfide nanosheets with phosphorus, nitrogen and silicon elements on mechanical, thermal, and fire behaviors of unsaturated polyester composites. Chemical Engineering Journal, 2017, 313, 238-249.	6.6	82

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127	Functionalization of Cotton with UV-Cured Flame Retardant Coatings. Industrial & Engineering Chemistry Research, 2012, 51, 5394-5401.	1.8	81
128	Vertically Aligned Nickel 2-Methylimidazole Metalâ€“Organic Framework Fabricated from Graphene Oxides for Enhancing Fire Safety of Polystyrene. Industrial & Engineering Chemistry Research, 2017, 56, 8778-8786.	1.8	81
129	Metal-organic frameworks for flame retardant polymers application: A critical review. Composites Part A: Applied Science and Manufacturing, 2020, 139, 106113.	3.8	80
130	Fabrication of Ce-doped MnO₂decorated graphene sheets for fire safety applications of epoxy composites: flame retardancy, smoke suppression and mechanism. Journal of Materials Chemistry A, 2014, 2, 17341-17351.	5.2	78
131	Constructing phosphorus, nitrogen, silicon-co-contained boron nitride nanosheets to reinforce flame retardant properties of unsaturated polyester resin. Composites Part A: Applied Science and Manufacturing, 2018, 109, 546-554.	3.8	78
132	Construction of Bimetallic ZIF-Derived Coâ€“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. ACS Applied Materials & Interfaces, 2018, 10, 18359-18371.	4.0	78
133	A review on metal-organic hybrids as flame retardants for enhancing fire safety of polymer composites. Composites Part B: Engineering, 2021, 221, 109014.	5.9	78
134	Cardanol as a versatile platform for fabrication of bio-based flame-retardant epoxy thermosets as DGEBA substitutes. Chemical Engineering Journal, 2021, 421, 129738.	6.6	78
135	Fire retardant synergism between melamine and triphenyl phosphate in poly(butylene terephthalate). Polymer Degradation and Stability, 2006, 91, 2093-2100.	2.7	77
136	Highly Efficient MXene-Coated Flame Retardant Cotton Fabric for Electromagnetic Interference Shielding. Industrial & Engineering Chemistry Research, 2020, 59, 14025-14036.	1.8	77
137	Intumescent Flame Retardation of Starch Containing Polypropylene Semibiocomposites: Flame Retardancy and Thermal Degradation. Industrial & Engineering Chemistry Research, 2009, 48, 10751-10758.	1.8	76
138	The combustion and pyrolysis process of flame-retardant polystyrene/cobalt-based metal organic frameworks (MOF) nanocomposite. Combustion and Flame, 2021, 226, 108-116.	2.8	76
139	One-pot surface functionalization and reduction of graphene oxide with long-chain molecules: Preparation and its enhancement on the thermal and mechanical properties of polyurea. Chemical Engineering Journal, 2014, 236, 233-241.	6.6	75
140	Influences of metal ions crosslinked alginate based coatings on thermal stability and fire resistance of cotton fabrics. Carbohydrate Polymers, 2017, 170, 133-139.	5.1	75
141	Fabrication of an anode composed of a N, S co-doped carbon nanotube hollow architecture with CoS₂ confined within: toward Li and Na storage. Nanoscale, 2019, 11, 20996-21007.	2.8	75
142	Finishing of cotton fabrics by multi-layered coatings to improve their flame retardancy and water repellency. Cellulose, 2018, 25, 4791-4803.	2.4	74
143	Electrochemically Exfoliated Functionalized Black Phosphorene and Its Polyurethane Acrylate Nanocomposites: Synthesis and Applications. ACS Applied Materials & Interfaces, 2019, 11, 13652-13664.	4.0	74
144	Synthesis of a novel liquid phosphorus-containing flame retardant for flexible polyurethane foam: Combustion behaviors and thermal properties. Polymer Degradation and Stability, 2020, 171, 109029.	2.7	74

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145	Phosphorus-Free Vanillin-Derived Intrinsically Flame-Retardant Epoxy Thermoset with Extremely Low Heat Release Rate and Smoke Emission. ACS Sustainable Chemistry and Engineering, 2021, 9, 5268-5277.	3.2	74
146	Synthesis of MnO 2 nanoparticles with different morphologies and application for improving the fire safety of epoxy. Composites Part A: Applied Science and Manufacturing, 2017, 95, 173-182.	3.8	72
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