

# Yuan Hu

## List of Publications by Citations

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415  
papers

21,181  
citations

82  
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123  
g-index

428  
ext. papers

25,806  
ext. citations

7.5  
avg, IF

7.41  
L-index

#	Paper	IF	Citations
415	Flame retardancy and thermal degradation mechanism of epoxy resin composites based on a DOPO substituted organophosphorus oligomer. <i>Polymer</i> , <b>2010</b> , 51, 2435-2445	3.9	407
414	Preparation of graphene by pressurized oxidation and multiplex reduction and its polymer nanocomposites by masterbatch-based melt blending. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 6088		342
413	In situ polymerization of graphene nanosheets and polyurethane with enhanced mechanical and thermal properties. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 4222		330
412	In situ preparation of functionalized graphene oxide/epoxy nanocomposites with effective reinforcements. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 13290		325
411	Enhanced thermal and flame retardant properties of flame-retardant-wrapped graphene/epoxy resin nanocomposites. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 8034-8044	13	317
410	Poly(vinyl alcohol) nanocomposites based on graphene and graphite oxide: a comparative investigation of property and mechanism. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 13942		303
409	Covalent functionalization of graphene with organosilane and its use as a reinforcement in epoxy composites. <i>Composites Science and Technology</i> , <b>2012</b> , 72, 737-743	8.6	295
408	Preparation of functionalized graphene oxide/polypropylene nanocomposite with significantly improved thermal stability and studies on the crystallization behavior and mechanical properties. <i>Chemical Engineering Journal</i> , <b>2014</b> , 237, 411-420	14.7	289
407	Thermal exfoliation of hexagonal boron nitride for effective enhancements on thermal stability, flame retardancy and smoke suppression of epoxy resin nanocomposites via sol-gel process. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7330-7340	13	265
406	Magnetically Separable Fe <sub>3</sub> O <sub>4</sub> /TiO <sub>2</sub> Hollow Spheres: Fabrication and Photocatalytic Activity. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 553-558	3.8	263
405	In Situ Polymerization of Graphene, Graphite Oxide, and Functionalized Graphite Oxide into Epoxy Resin and Comparison Study of On-the-Flame Behavior. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 7772-7783	3.9	257
404	Dual modification of graphene by polymeric flame retardant and Ni(OH) <sub>2</sub> nanosheets for improving flame retardancy of polypropylene. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 100, 106-117	8.4	221
403	Simultaneous reduction and surface functionalization of graphene oxide with POSS for reducing fire hazards in epoxy composites. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 22037		200
402	Self-assembly of NiFe layered double hydroxide/graphene hybrids for reducing fire hazard in epoxy composites. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 4383	13	196
401	Synergistic Effect of Graphene on Antidripping and Fire Resistance of Intumescent Flame Retardant Poly(butylene succinate) Composites. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 5376-5383	3.9	193
400	Synergistic effect between a char forming agent (CFA) and microencapsulated ammonium polyphosphate on the thermal and flame retardant properties of polypropylene. <i>Polymers for Advanced Technologies</i> , <b>2008</b> , 19, 1077-1083	3.2	174
399	Construction of multifunctional boron nitride nanosheet towards reducing toxic volatiles (CO and HCN) generation and fire hazard of thermoplastic polyurethane. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 362, 482-494	12.8	172

398	Preparation of poly(vinyl alcohol) nanocomposites with molybdenum disulfide (MoS <sub>2</sub> ): structural characteristics and markedly enhanced properties. <i>RSC Advances</i> , <b>2012</b> , 2, 11695	3.7	170
397	Melamine-containing polyphosphazene wrapped ammonium polyphosphate: A novel multifunctional organic-inorganic hybrid flame retardant. <i>Journal of Hazardous Materials</i> , <b>2018</b> , 344, 839-848	12.8	162
396	Synthesis and characterization of a functional polyhedral oligomeric silsesquioxane and its flame retardancy in epoxy resin. <i>Progress in Organic Coatings</i> , <b>2009</b> , 65, 490-497	4.8	160
395	Functionalization of graphene with grafted polyphosphamide for flame retardant epoxy composites: synthesis, flammability and mechanism. <i>Polymer Chemistry</i> , <b>2014</b> , 5, 1145-1154	4.9	159
394	Effect of expanded graphite on properties of high-density polyethylene/paraffin composite with intumescent flame retardant as a shape-stabilized phase change material. <i>Solar Energy Materials and Solar Cells</i> , <b>2010</b> , 94, 360-365	6.4	158
393	Investigation of the flammability of different textile fabrics using micro-scale combustion calorimetry. <i>Polymer Degradation and Stability</i> , <b>2010</b> , 95, 108-115	4.7	157
392	The effects of graphene on the flammability and fire behavior of intumescent flame retardant polypropylene composites at different flame scenarios. <i>Polymer Degradation and Stability</i> , <b>2017</b> , 143, 42-56	4.7	156
391	Functionalized graphene oxide/phosphoramidate oligomer hybrids flame retardant prepared via in situ polymerization for improving the fire safety of polypropylene. <i>RSC Advances</i> , <b>2014</b> , 4, 31782	3.7	156
390	Flame Retardancy and Thermal Degradation of Intumescent Flame Retardant Starch-Based Biodegradable Composites. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 3150-3157	3.9	153
389	Graphitic carbon nitride/phosphorus-rich aluminum phosphinates hybrids as smoke suppressants and flame retardants for polystyrene. <i>Journal of Hazardous Materials</i> , <b>2017</b> , 332, 87-96	12.8	150
388	MoS <sub>2</sub> nanolayers grown on carbon nanotubes: an advanced reinforcement for epoxy composites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 6070-81	9.5	150
387	Flame-retardant-wrapped polyphosphazene nanotubes: A novel strategy for enhancing the flame retardancy and smoke toxicity suppression of epoxy resins. <i>Journal of Hazardous Materials</i> , <b>2017</b> , 325, 327-339	12.8	149
386	Eco-friendly flame retardant and electromagnetic interference shielding cotton fabrics with multi-layered coatings. <i>Chemical Engineering Journal</i> , <b>2019</b> , 372, 1077-1090	14.7	141
385	A novel strategy to simultaneously electrochemically prepare and functionalize graphene with a multifunctional flame retardant. <i>Chemical Engineering Journal</i> , <b>2017</b> , 316, 514-524	14.7	138
384	Thermal degradation behaviors of epoxy resin/POSS hybrids and phosphorus-silicon synergism of flame retardancy. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2010</b> , 48, 693-705	2.6	137
383	Anomalous nano-barrier effects of ultrathin molybdenum disulfide nanosheets for improving the flame retardance of polymer nanocomposites. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 14307-14317	13	136
382	Novel organic/inorganic flame retardants containing exfoliated graphene: preparation and their performance on the flame retardancy of epoxy resins. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 6822	13	136
381	Flame Retardancy and Thermal Degradation of Intumescent Flame Retardant Poly(lactic acid)/Starch Biocomposites. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 713-720	3.9	136

380	Thermal Degradation and Flame Retardance of Biobased Polylactide Composites Based on Aluminum Hypophosphite. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 12009-12016	3.9	132
379	Renewable Cardanol-Based Phosphate as a Flame Retardant Toughening Agent for Epoxy Resins. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 3409-3416	8.3	131
378	Air-Stable Polyphosphazene-Functionalized Few-Layer Black Phosphorene for Flame Retardancy of Epoxy Resins. <i>Small</i> , <b>2019</b> , 15, e1805175	11	130
377	Construction of multifunctional MoSe hybrid towards the simultaneous improvements in fire safety and mechanical property of polymer. <i>Journal of Hazardous Materials</i> , <b>2018</b> , 352, 36-46	12.8	128
376	Functionalized graphene oxide for fire safety applications of polymers: a combination of condensed phase flame retardant strategies. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 23057		128
375	Highly Effective PB Synergy of a Novel DOPO-Based Flame Retardant for Epoxy Resin. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 1245-1255	3.9	127
374	Influence of g-C3N4 nanosheets on thermal stability and mechanical properties of biopolymer electrolyte nanocomposite films: a novel investigation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 429-37	9.5	125
373	Study on thermal degradation and combustion behaviors of PC/POSS hybrids. <i>Polymer Degradation and Stability</i> , <b>2008</b> , 93, 627-639	4.7	124
372	Design of reduced graphene oxide decorated with DOPO-phosphanomidate for enhanced fire safety of epoxy resin. <i>Journal of Colloid and Interface Science</i> , <b>2018</b> , 521, 160-171	9.3	121
371	The effect of graphene presence in flame retarded epoxy resin matrix on the mechanical and flammability properties of glass fiber-reinforced composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2013</b> , 53, 88-96	8.4	121
370	Effect of cellulose acetate butyrate microencapsulated ammonium polyphosphate on the flame retardancy, mechanical, electrical, and thermal properties of intumescent flame-retardant ethylene-vinyl acetate copolymer/microencapsulated ammonium polyphosphate/polyamide-6 blends. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 2754-61	9.5	121
369	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. <i>Chemical Engineering Journal</i> , <b>2017</b> , 309, 802-814	14.7	120
368	Synthesis and characterization of a DOPO-substituted organophosphorus oligomer and its application in flame retardant epoxy resins. <i>Progress in Organic Coatings</i> , <b>2011</b> , 71, 72-82	4.8	118
367	In situ synthesis of a MoS <sub>2</sub> /CoOOH hybrid by a facile wet chemical method and the catalytic oxidation of CO in epoxy resin during decomposition. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 13299	13	117
366	Graphite oxide, graphene, and metal-loaded graphene for fire safety applications of polystyrene. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 16399		117
365	Modification of lignin and its application as char agent in intumescent flame-retardant poly(lactic acid). <i>Polymer Engineering and Science</i> , <b>2012</b> , 52, 2620-2626	2.3	114
364	The influence of titanate nanotube on the improved thermal properties and the smoke suppression in poly(methyl methacrylate). <i>Journal of Hazardous Materials</i> , <b>2012</b> , 209-210, 34-9	12.8	113
363	Phosphorus and Nitrogen-Containing Polyols: Synergistic Effect on the Thermal Property and Flame Retardancy of Rigid Polyurethane Foam Composites. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 10813-10822	3.9	112

362	Economical and environment-friendly synthesis of a novel hyperbranched poly(aminomethylphosphine oxide-amine) as co-curing agent for simultaneous improvement of fire safety, glass transition temperature and toughness of epoxy resins. <i>Chemical Engineering Journal</i> , <b>2017</b> , 322, 618-631	14.7	111
361	Cobalt oxide/graphene composite for highly efficient CO oxidation and its application in reducing the fire hazards of aliphatic polyesters. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 3426		110
360	Functionalized Carbon Nanotubes with Phosphorus- and Nitrogen-Containing Agents: Effective Reinforcer for Thermal, Mechanical, and Flame-Retardant Properties of Polystyrene Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 26266-26274	9.5	109
359	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. <i>Journal of Hazardous Materials</i> , <b>2018</b> , 352, 57-69	12.8	108
358	Thermal degradation mechanism of flame retarded epoxy resins with a DOPO-substituted organophosphorus oligomer by TG-FTIR and DP-MS. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2011</b> , 92, 164-170	6	108
357	In situ preparation of reduced graphene oxide/DOPO-based phosphonamidate hybrids towards high-performance epoxy nanocomposites. <i>Composites Part B: Engineering</i> , <b>2017</b> , 123, 154-164	10	106
356	Formation of self-extinguishing flame retardant biobased coating on cotton fabrics via Layer-by-Layer assembly of chitin derivatives. <i>Carbohydrate Polymers</i> , <b>2015</b> , 115, 516-24	10.3	106
355	Synthesis of mesoporous silica@Co-Al layered double hydroxide spheres: layer-by-layer method and their effects on the flame retardancy of epoxy resins. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 14076-86	9.5	106
354	Novel CuCo2O4/graphitic carbon nitride nanohybrids: Highly effective catalysts for reducing CO generation and fire hazards of thermoplastic polyurethane nanocomposites. <i>Journal of Hazardous Materials</i> , <b>2015</b> , 293, 87-96	12.8	105
353	Formation of layer-by-layer assembled titanate nanotubes filled coating on flexible polyurethane foam with improved flame retardant and smoke suppression properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 101-11	9.5	105
352	Hierarchical Polyphosphazene@Molybdenum Disulfide Hybrid Structure for Enhancing the Flame Retardancy and Mechanical Property of Epoxy Resins. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 29147-29156	9.5	105
351	Combustion and Thermal Degradation Mechanism of a Novel Intumescent Flame Retardant for Epoxy Acrylate Containing Phosphorus and Nitrogen. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 1881-1892	3.9	103
350	A effective flame retardant for epoxy resins based on poly(DOPO substituted dihydroxyl phenyl pentaerythritol diphosphonate). <i>Materials Chemistry and Physics</i> , <b>2011</b> , 125, 536-541	4.4	103
349	Preparation and thermal properties of a novel flame-retardant coating. <i>Polymer Degradation and Stability</i> , <b>2007</b> , 92, 1141-1150	4.7	101
348	MoS2/Polymer Nanocomposites: Preparation, Properties, and Applications. <i>Polymer Reviews</i> , <b>2017</b> , 57, 440-466	14	99
347	Hyper-branched polymer grafting graphene oxide as an effective flame retardant and smoke suppressant for polystyrene. <i>Journal of Hazardous Materials</i> , <b>2015</b> , 300, 58-66	12.8	99
346	Surface Modification of Graphene with Layered Molybdenum Disulfide and Their Synergistic Reinforcement on Reducing Fire Hazards of Epoxy Resins. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2013</b> , 52, 17882-17890	3.9	94
345	Studies on Synthesis of Electrochemically Exfoliated Functionalized Graphene and Polylactic Acid/Ferric Phytate Functionalized Graphene Nanocomposites as New Fire Hazard Suppression Materials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 25552-62	9.5	92

344	Preparation of Metal-Organic Frameworks and Their Application as Flame Retardants for Polystyrene. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 2036-2045	3.9	91
343	Aluminum hypophosphite microencapsulated to improve its safety and application to flame retardant polyamide 6. <i>Journal of Hazardous Materials</i> , <b>2015</b> , 294, 186-94	12.8	90
342	Surface functionalization of MoS <sub>2</sub> with POSS for enhancing thermal, flame-retardant and mechanical properties in PVA composites. <i>RSC Advances</i> , <b>2014</b> , 4, 3253-3262	3.7	89
341	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. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 1431-1438	8.3	88
340	The effect of metal oxide decorated graphene hybrids on the improved thermal stability and the reduced smoke toxicity in epoxy resins. <i>Chemical Engineering Journal</i> , <b>2014</b> , 250, 214-221	14.7	88
339	Enhancement of fire retardancy performance of glass-fibre reinforced poly(ethylene terephthalate) composites with the incorporation of aluminum hypophosphite and melamine cyanurate. <i>Composites Part B: Engineering</i> , <b>2011</b> , 42, 1057-1065	10	88
338	DOPO-Modified Two-Dimensional Co-Based Metal-Organic Framework: Preparation and Application for Enhancing Fire Safety of Poly(lactic acid). <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 8274-8286	9.5	86
337	A facile strategy to simultaneously exfoliate and functionalize boron nitride nanosheets via Lewis acid-base interaction. <i>Chemical Engineering Journal</i> , <b>2017</b> , 330, 309-321	14.7	86
336	Design of artificial nacre-like hybrid films as shielding to mitigate electromagnetic pollution. <i>Carbon</i> , <b>2014</b> , 75, 178-189	10.4	85
335	A review on flame retardant technology in China. Part II: flame retardant polymeric nanocomposites and coatings. <i>Polymers for Advanced Technologies</i> , <b>2011</b> , 22, 379-394	3.2	85
334	The influence of cobalt oxide-graphene hybrids on thermal degradation, fire hazards and mechanical properties of thermoplastic polyurethane composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2016</b> , 88, 10-18	8.4	85
333	In situ synthesis, morphology, and fundamental properties of polymer/MoS <sub>2</sub> nanocomposites. <i>Composites Science and Technology</i> , <b>2015</b> , 107, 120-128	8.6	82
332	Enhanced mechanical, thermal and flame retardant properties by combining graphene nanosheets and metal hydroxide nanorods for Acrylonitrile-Butadiene-Styrene copolymer composite. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2014</b> , 64, 203-210	8.4	82
331	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> , <b>2016</b> , 314, 260-269	12.8	82
330	The influence of graphene based smoke suppression agents on reduced fire hazards of polystyrene composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2016</b> , 80, 217-227	8.4	81
329	Liquid-exfoliated MoS <sub>2</sub> by chitosan and enhanced mechanical and thermal properties of chitosan/MoS <sub>2</sub> composites. <i>Composites Science and Technology</i> , <b>2014</b> , 93, 76-82	8.6	81
328	Recent advances for microencapsulation of flame retardant. <i>Polymer Degradation and Stability</i> , <b>2015</b> , 113, 96-109	4.7	80
327	Manufacturing, mechanical and flame retardant properties of poly(lactic acid) biocomposites based on calcium magnesium phytate and carbon nanotubes. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2018</b> , 110, 227-236	8.4	80

326	The influence of manganese-cobalt oxide/graphene on reducing fire hazards of poly(butylene terephthalate). <i>Journal of Hazardous Materials</i> , <b>2014</b> , 278, 391-400	12.8	80
325	Construction of durable flame-retardant and robust superhydrophobic coatings on cotton fabrics for water-oil separation application. <i>Chemical Engineering Journal</i> , <b>2020</b> , 398, 125661	14.7	77
324	A novel Co(II)Based metal-organic framework with phosphorus-containing structure: Build for enhancing fire safety of epoxy. <i>Composites Science and Technology</i> , <b>2017</b> , 152, 231-242	8.6	74
323	Fabrication of LDH nanosheets on FeOOH rods and applications for improving the fire safety of epoxy resin. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2016</b> , 80, 259-269	8.4	74
322	Nano-fibrillated cellulose-hydroxyapatite based composite foams with excellent fire resistance. <i>Carbohydrate Polymers</i> , <b>2018</b> , 195, 71-78	10.3	73
321	Preparation of gel-silica/ammonium polyphosphate core-shell flame retardant and properties of polyurethane composites. <i>Polymers for Advanced Technologies</i> , <b>2011</b> , 22, 1824-1831	3.2	72
320	Flame retardancy and thermal degradation of cotton textiles based on UV-curable flame retardant coatings. <i>Thermochimica Acta</i> , <b>2011</b> , 513, 75-82	2.9	72
319	Self-healable castor oil-based waterborne polyurethane/MXene film with outstanding electromagnetic interference shielding effectiveness and excellent shape memory performance. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 588, 164-174	9.3	72
318	Polydopamine-bridged synthesis of ternary h-BN@PDA@SnO <sub>2</sub> as nanoenhancers for flame retardant and smoke suppression of epoxy composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2018</b> , 111, 94-105	8.4	72
317	Functionalization of Cotton with UV-Cured Flame Retardant Coatings. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 5394-5401	3.9	70
316	Cardanol derived benzoxazine in combination with boron-doped graphene toward simultaneously improved toughening and flame retardant epoxy composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2019</b> , 116, 13-23	8.4	70
315	Effect of a triazine ring-containing charring agent on fire retardancy and thermal degradation of intumescent flame retardant epoxy resins. <i>Polymers for Advanced Technologies</i> , <b>2011</b> , 22, 2480-2487	3.2	69
314	Intumescent Flame Retardation of Starch Containing Polypropylene Semibiocomposites: Flame Retardancy and Thermal Degradation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 10751-10758	3.9	68
313	Novel Melamine/o-Phthalaldehyde Covalent Organic Frameworks Nanosheets: Enhancement Flame Retardant and Mechanical Performances of Thermoplastic Polyurethanes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 23017-23026	9.5	67
312	Biobased polyelectrolyte multilayer-coated hollow mesoporous silica as a green flame retardant for epoxy resin. <i>Journal of Hazardous Materials</i> , <b>2018</b> , 342, 689-697	12.8	67
311	Boron/phosphorus doping for retarding the oxidation of reduced graphene oxide. <i>Carbon</i> , <b>2016</b> , 101, 152-158	10.4	67
310	In situ loading ultra-small CuO nanoparticles on 2D hierarchical TiO-graphene oxide dual-nanosheets: Towards reducing fire hazards of unsaturated polyester resin. <i>Journal of Hazardous Materials</i> , <b>2016</b> , 320, 504-512	12.8	67
309	Fabrication of Ce-doped MnO <sub>2</sub> decorated graphene sheets for fire safety applications of epoxy composites: flame retardancy, smoke suppression and mechanism. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 17341-17351	13	66

308	Functionalized lignin for halogen-free flame retardant rigid polyurethane foam: preparation, thermal stability, fire performance and mechanical properties. <i>Journal of Polymer Research</i> , <b>2013</b> , 20, 1	2.7	66
307	Comparative study on the flame retarded efficiency of melamine phosphate, melamine phosphite and melamine hypophosphite on poly(butylene succinate) composites. <i>Polymer Degradation and Stability</i> , <b>2014</b> , 105, 248-256	4.7	65
306	The effect of defect-rich molybdenum disulfide nanosheets with phosphorus, nitrogen and silicon elements on mechanical, thermal, and fire behaviors of unsaturated polyester composites. <i>Chemical Engineering Journal</i> , <b>2017</b> , 313, 238-249	14.7	64
305	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 &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 10868-10879	3.9	64
304	Large-scale production of simultaneously exfoliated and Functionalized Mxenes as promising flame retardant for polyurethane. <i>Composites Part B: Engineering</i> , <b>2019</b> , 179, 107486	10	62
303	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. <i>Chemical Engineering Journal</i> , <b>2014</b> , 236, 233-241	14.7	62
302	Fire retardant synergism between melamine and triphenyl phosphate in poly(butylene terephthalate). <i>Polymer Degradation and Stability</i> , <b>2006</b> , 91, 2093-2100	4.7	62
301	Cyclodextrin microencapsulated ammonium polyphosphate: Preparation and its performance on the thermal, flame retardancy and mechanical properties of ethylene vinyl acetate copolymer. <i>Composites Part B: Engineering</i> , <b>2015</b> , 69, 22-30	10	61
300	Combination of black phosphorus nanosheets and MCNTs via phosphorus-carbon bonds for reducing the flammability of air stable epoxy resin nanocomposites. <i>Journal of Hazardous Materials</i> , <b>2020</b> , 383, 121069	12.8	59
299	Multi-functional hydroxyapatite/polyvinyl alcohol composite aerogels with self-cleaning, superior fire resistance and low thermal conductivity. <i>Composites Science and Technology</i> , <b>2018</b> , 158, 128-136	8.6	58
298	A green approach to constructing multilayered nanocoating for flame retardant treatment of polyamide 66 fabric from chitosan and sodium alginate. <i>Carbohydrate Polymers</i> , <b>2017</b> , 166, 131-138	10.3	57
297	TiO <sub>2</sub> loaded on graphene nanosheet as reinforcer and its effect on the thermal behaviors of poly(vinyl chloride) composites. <i>Chemical Engineering Journal</i> , <b>2015</b> , 260, 524-531	14.7	57
296	Effect of borates on thermal degradation and flame retardancy of epoxy resins using polyhedral oligomeric silsesquioxane as a curing agent. <i>Thermochimica Acta</i> , <b>2012</b> , 535, 71-78	2.9	57
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293	Nacre-Inspired Tunable Electromagnetic Interference Shielding Sandwich Films with Superior Mechanical and Fire-Resistant Protective Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 6371-6382	9.5	56
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291	Intrinsically flame retardant bio-based epoxy thermosets: A review. <i>Composites Part B: Engineering</i> , <b>2019</b> , 179, 107487	10	55



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289	Influences of metal ions crosslinked alginate based coatings on thermal stability and fire resistance of cotton fabrics. <i>Carbohydrate Polymers</i> , <b>2017</b> , 170, 133-139	10.3	54
288	Ultra-low phosphorus loading to achieve the superior flame retardancy of epoxy resin. <i>Polymer Degradation and Stability</i> , <b>2018</b> , 149, 119-128	4.7	54
287	Self-assembled supermolecular aggregate supported on boron nitride nanoplatelets for flame retardant and friction application. <i>Chemical Engineering Journal</i> , <b>2018</b> , 349, 223-234	14.7	53
286	Vertically Aligned Nickel 2-Methylimidazole Metal-Organic Framework Fabricated from Graphene Oxides for Enhancing Fire Safety of Polystyrene. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 8778-8786	3.9	53
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284	Integrated effect of supramolecular self-assembled sandwich-like melamine cyanurate/MoS hybrid sheets on reducing fire hazards of polyamide 6 composites. <i>Journal of Hazardous Materials</i> , <b>2016</b> , 320, 252-264	12.8	52
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281	Facile preparation of graphene supported Co <sub>3</sub> O <sub>4</sub> and NiO for reducing fire hazards of polyamide 6 composites. <i>Materials Chemistry and Physics</i> , <b>2013</b> , 142, 531-538	4.4	52
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278	Finishing of cotton fabrics by multi-layered coatings to improve their flame retardancy and water repellency. <i>Cellulose</i> , <b>2018</b> , 25, 4791-4803	5.5	50
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275	Tunable thermal, flame retardant and toxic effluent suppression properties of polystyrene based on alternating graphitic carbon nitride and multi-walled carbon nanotubes. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 17064-17073	13	49
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265	Highly-efficient reinforcement and flame retardancy of rigid polyurethane foam with phosphorus-containing additive and nitrogen-containing compound. <i>Materials Chemistry and Physics</i> , <b>2018</b> , 211, 42-53	4.4	47
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262	Effect of layer-by-layer self-assembled sepiolite-based nanocoating on flame retardant and smoke suppressant properties of flexible polyurethane foam. <i>Applied Clay Science</i> , <b>2019</b> , 168, 230-236	5.2	47
261	A combination of POSS and polyphosphazene for reducing fire hazards of epoxy resin. <i>Polymers for Advanced Technologies</i> , <b>2018</b> , 29, 1242-1254	3.2	46
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249	Electrochemically Exfoliated Functionalized Black Phosphorene and Its Polyurethane Acrylate Nanocomposites: Synthesis and Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 13652-13664	9.5	42
248	Thermal degradation and flammability of novel organic/inorganic epoxy hybrids containing organophosphorus-modified oligosiloxane. <i>Thermochimica Acta</i> , <b>2013</b> , 552, 87-97	2.9	42
247	Preparation of Large-Size Reduced Graphene Oxide-Wrapped Ammonium Polyphosphate and Its Enhancement of the Mechanical and Flame Retardant Properties of Thermoplastic Polyurethane. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 7468-7477	3.9	41
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242	The influence of highly dispersed CuO-anchored MoS hybrids on reducing smoke toxicity and fire hazards for rigid polyurethane foam. <i>Journal of Hazardous Materials</i> , <b>2020</b> , 382, 121028	12.8	41
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228	Constructing 3D Polyphosphazene Nanotube@Mesoporous Silica@Bimetallic Phosphide Ternary Nanostructures via Layer-by-Layer Method: Synthesis and Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 23027-23038	9.5	36
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216	Facile preparation of ZnS/g-C <sub>3</sub> N <sub>4</sub> nanohybrids for enhanced optical properties. <i>RSC Advances</i> , <b>2014</b> , 4, 2609-2613	3.7	32
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193	Functional covalent organic framework for exceptional Fe <sup>2+</sup> , Co <sup>2+</sup> and Ni <sup>2+</sup> removal: An upcycling strategy to achieve water decontamination and reutilization as smoke suppressant and flame retardant simultaneously. <i>Chemical Engineering Journal</i> , <b>2021</b> , 421, 127837	14.7	27
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177	Synthesis of a hyperbranched phosphorus-containing polyurethane as char forming agent combined with ammonium polyphosphate for reducing fire hazard of polypropylene. <i>Polymer Degradation and Stability</i> , <b>2019</b> , 165, 207-219	4.7	22
176	Construction of porous g-C <sub>3</sub> N <sub>4</sub> @PPZ tubes for high performance BMI resin with enhanced fire safety and toughness. <i>Chemical Engineering Journal</i> , <b>2020</b> , 401, 126094	14.7	22
175	A novel and efficient strategy to exfoliation of covalent organic frameworks and a significant advantage of covalent organic frameworks nanosheets as polymer nano-enhancer: High interface compatibility. <i>Journal of Colloid and Interface Science</i> , <b>2019</b> , 539, 609-618	9.3	22
174	Two-Dimensional Metal Phenylphosphonates as Novel Flame Retardants for Polystyrene. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 7192-7206	3.9	21
173	Anisotropic, low-tortuosity and ultra-thick red P@C-Wood electrodes for sodium-ion batteries. <i>Nanoscale</i> , <b>2020</b> , 12, 14642-14650	7.7	21
172	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> , <b>2020</b> , 177, 109160	4.7	21
171	Enhanced fire-retardancy of poly(ethylene vinyl acetate) electrical cable coatings containing microencapsulated ammonium polyphosphate as intumescent flame retardant. <i>RSC Advances</i> , <b>2016</b> , 6, 85564-85573	3.7	21
170	Study of the flame retardancy and thermal properties of unsaturated polyester resin via incorporation of a reactive cyclic phosphorus-containing monomer. <i>High Performance Polymers</i> , <b>2013</b> , 25, 938-946	1.6	21
169	Nacre-Inspired Black Phosphorus/Nanofibrillar Cellulose Composite Film with Enhanced Mechanical Properties and Superior Fire Resistance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 36639-36651	9.5	21
168	Phosphorus-Free Vanillin-Derived Intrinsically Flame-Retardant Epoxy Thermoset with Extremely Low Heat Release Rate and Smoke Emission. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 5268-5277	8.3	21
167	A high performance fully bio-based epoxy thermoset from a syringaldehyde-derived epoxy monomer cured by furan-derived amine. <i>Green Chemistry</i> , <b>2021</b> , 23, 501-510	10	21
166	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> , <b>2018</b> , 168, 74-80	8.6	21
165	Durable flame retardant treatment of polyethylene terephthalate (PET) fabric with cross-linked layer-by-layer assembled coating. <i>Polymer Degradation and Stability</i> , <b>2019</b> , 165, 145-152	4.7	20

164	Exfoliation and modification of covalent organic frameworks by a green one-step strategy: Enhanced thermal, mechanical and flame retardant performances of biopolymer nanocomposite film. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2018</b> , 110, 162-171	8.4	20
163	Multi-role p-styrene sulfonate assisted electrochemical preparation of functionalized graphene nanosheets for improving fire safety and mechanical property of polystyrene composites. <i>Composites Part B: Engineering</i> , <b>2020</b> , 181, 107544	10	20
162	Integrated effect of flame retardant wrapped macromolecular covalent organic nanosheet on reduction of fire hazards of epoxy resin. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2019</b> , 117, 23-33	8.4	20
161	Functionalizing TiCT 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> , <b>2022</b> , 607, 1300-1312	9.3	20
160	UV Grafting of a DOPO-Based Phosphoramidate Monomer onto Polyamide 66 Fabrics for Flame Retardant Treatment. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 1376-1384	3.9	19
159	Phosphorylated cellulose applied for the exfoliation of LDH: An advanced reinforcement for polyvinyl alcohol. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 94, 170-177	8.4	19
158	Fabrication of carbon black coated flexible polyurethane foam for significantly improved fire safety. <i>RSC Advances</i> , <b>2015</b> , 5, 55870-55878	3.7	19
157	Construction of multifunctional and flame retardant separator towards stable lithium-sulfur batteries with high safety. <i>Chemical Engineering Journal</i> , <b>2021</b> , 416, 129087	14.7	19
156	Magnetron sputtering deposition of silicon nitride on polyimide separator for high-temperature lithium-ion batteries. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 56, 1-10	12	19
155	A novel phosphorous-containing polymeric compatibilizer: Effective reinforcement and flame retardancy in glass fiber reinforced polyamide 6 composites. <i>Composites Part B: Engineering</i> , <b>2021</b> , 205, 108536	10	19
154	Synthesis of highly active HM-SiO <sub>2</sub> @CeO <sub>2</sub> /NiO hybrids for fire safety applications of epoxy resins. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 95, 337-345	8.4	18
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150	A flame retardant sandwiched separator coated with ammonium polyphosphate wrapped by SiO <sub>2</sub> on commercial polyolefin for high performance safety lithium metal batteries. <i>Applied Materials Today</i> , <b>2020</b> , 21, 100793	6.6	18
149	Electrochemical exfoliation and functionalization of black phosphorene to enhance mechanical properties and flame retardancy of waterborne polyurethane. <i>Composites Part B: Engineering</i> , <b>2020</b> , 202, 108446	10	18
148	An environmentally friendly approach to fabricating flame retardant, antibacterial and antifungal cotton fabrics via self-assembly of guanazole-metal complex. <i>Journal of Cleaner Production</i> , <b>2020</b> , 273, 122832	10.3	18
147	The influence of melamine phosphate modified MoS <sub>2</sub> on the thermal and flammability of poly(butylene succinate) composites. <i>Polymers for Advanced Technologies</i> , <b>2016</b> , 27, 1397-1400	3.2	18



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145	Polyaniline-coupled graphene/nickel hydroxide nanohybrids as flame retardant and smoke suppressant for epoxy composites. <i>Polymers for Advanced Technologies</i> , <b>2019</b> , 30, 1959-1967	3.2	16
144	Rationally designed functionalized black phosphorus nanosheets as new fire hazard suppression material for polylactic acid. <i>Polymer Degradation and Stability</i> , <b>2020</b> , 178, 109194	4.7	16
143	Hydrophobic and flame-retardant finishing of cotton fabrics for water-oil separation. <i>Cellulose</i> , <b>2020</b> , 27, 4145-4159	5.5	16
142	The influence of mesoporous silica modified with phosphorus and nitrogen-containing hyperbranched molecules on thermal stability, combustion behavior, and toxic volatiles of epoxy resin. <i>Polymers for Advanced Technologies</i> , <b>2018</b> , 29, 372-383	3.2	16
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140	Investigation of Thermal and Combustion Properties for Intumescent Flame-Retardant Ethylene-Vinyl Acetate Composites Containing Ferrous Disulfide. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 15082-15088	3.9	16
139	Recent advances in construction of hybrid nano-structures for flame retardant polymers application. <i>Applied Materials Today</i> , <b>2020</b> , 20, 100762	6.6	16
138	Facile synthesis of a novel zinc-triazole complex for simultaneous improvement in fire safety and mechanical properties of epoxy resins. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2021</b> , 143, 106284	8.4	16
137	Preparation of Schiff base decorated graphene oxide and its application in TPU with enhanced thermal stability. <i>RSC Advances</i> , <b>2016</b> , 6, 90018-90023	3.7	16
136	Controllable magnetic field aligned sepiolite nanowires for high ionic conductivity and high safety PEO solid polymer electrolytes. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 585, 596-604	9.3	16
135	Self-assembly of phosphonate-metal complex for superhydrophobic and durable flame-retardant polyester-cotton fabrics. <i>Cellulose</i> , <b>2020</b> , 27, 6011-6025	5.5	15
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131	Synthesis of star-shaped allyl phosphazene small molecules for enhancing fire safety and toughness of high performance BMI resin. <i>Chemical Engineering Journal</i> , <b>2021</b> , 425, 130655	14.7	15
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122	Designing advanced 0D-2D hierarchical structure for Epoxy resin to accomplish exceeding thermal management and safety. <i>Chemical Engineering Journal</i> , <b>2022</b> , 427, 132046	14.7	14
121	Construction of hierarchical Ti <sub>3</sub> C <sub>2</sub> TX@PHBP-PHC architecture with enhanced free-radical quenching capability: Effective reinforcement and fire safety performance in bismaleimide resin. <i>Chemical Engineering Journal</i> , <b>2022</b> , 427, 131634	14.7	14
120	An infiltration method to synthesize thermoplastic polyurethane composites based on size-controlled graphene foams. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 97, 67-75	8.4	13
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114	Bio-based multifunctional carbon aerogels from sugarcane residue for organic solvents adsorption and solar-thermal-driven oil removal. <i>Chemical Engineering Journal</i> , <b>2021</b> , 426, 129580	14.7	13
113	Laponite-based inorganic-organic hybrid coating to reduce fire risk of flexible polyurethane foams. <i>Applied Clay Science</i> , <b>2020</b> , 189, 105525	5.2	12
112	1/2D SnO <sub>2</sub> nanowires on MnO <sub>2</sub> nanosheets hybrid architecture for reducing fire hazards of epoxy nanocomposites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2018</b> , 107, 461-470	8.4	12
111	Diphase flame-retardant effect of ammonium polyphosphate and dimethyl methyl phosphonate on polyisocyanurate-polyurethane foam. <i>Polymers for Advanced Technologies</i> , <b>2018</b> , 29, 2917-2925	3.2	12

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108	Intrinsically flame retardant cardanol-based epoxy monomer for high-performance thermosets. <i>Polymer Degradation and Stability</i> , <b>2021</b> , 186, 109519	4.7	12
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84	Controlled self-template synthesis of manganese-based cuprous oxide nanoplates towards improved fire safety properties of epoxy composites. <i>Journal of Hazardous Materials</i> , <b>2020</b> , 387, 122006	12.8	8
83	Fabrication of CdS/Pt/MIL-125 with Effective Spatial Separation for Improved Visible-Light Catalytic H <sub>2</sub> Evolution Using $\gamma$ Ray Irradiation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 18196-18205	8.3	8
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59	Preparation of ECD@ferrocene@hollow mesoporous silica microsphere and investigation of its flame retardant EP. <i>Polymer Composites</i> , <b>2020</b> , 41, 2013-2024	3	4
58	Anti-Fogging, Frost-Resistant transparent and flexible silver Nanowire-TiCT MXene based composite films for excellent electromagnetic interference shielding ability. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> ,	9.3	4
57	Designing of multifunctional and flame retardant separator towards safer high-performance lithium-sulfur batteries. <i>Nano Research</i> , 1	10	4

56	Evolution Investigation of Combustion Behavior of Corn Based on Cone Calorimeter. <i>Combustion Science and Technology</i> , <b>2020</b> , 192, 229-239	1.5	4
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53	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> , <b>2021</b> , 223, 109131	10	4
52	Fully bio-based epoxy resin derived from vanillin with flame retardancy and degradability. <i>Reactive and Functional Polymers</i> , <b>2021</b> , 168, 105034	4.6	4
51	Facilely produced highly adhered, low thermal conductivity and non-combustible coatings for fire safety. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 604, 378-389	9.3	4
50	Photothermal-healing, and record thermal stability and fire safety black phosphorusBoron hybrid nanocomposites: mechanism of phosphorus fixation effects and charring inspired by cell walls. <i>Journal of Materials Chemistry A</i> ,	13	4
49	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> , <b>2022</b> , 614, 629-641	9.3	3
48	Integration of black phosphorene and MXene to improve fire safety and mechanical properties of waterborne polyurethane. <i>Applied Surface Science</i> , <b>2022</b> , 581, 152386	6.7	3
47	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> , <b>2021</b> , 32, 4516	3.2	3
46	Heterolayered Boron Nitride/Polyaniline/Molybdenum Disulfide Nanosheets for Flame-Retardant Epoxy Resins. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 8162-8172	5.6	3
45	Construction of a core-shell structure compound: Ammonium polyphosphate wrapped by rare earth compound to achieve superior smoke and toxic gases suppression for flame retardant flexible polyurethane foam composites. <i>Composites Communications</i> , <b>2021</b> , 28, 100939	6.7	3
44	Light stabilizer and diazo passivation of black phosphorus nanosheets: Covalent functionalization endows air stability and flame retardancy enhancements. <i>Chemical Engineering Journal</i> , <b>2021</b> , 425, 131532	14.7	3
43	Hindered phenolic antioxidant passivation of black phosphorus affords air stability and free radical quenching. <i>Journal of Colloid and Interface Science</i> , <b>2022</b> , 606, 1395-1409	9.3	3
42	Targeted modification of black phosphorus by MIL-53(Al) inspired by Cannikin's Law to achieve high thermal stability of flame retardant polycarbonate at ultra-low additions. <i>Composites Part B: Engineering</i> , <b>2022</b> , 238, 109943	10	3
41	Rapid electrothermal response and excellent flame retardancy of ethylene-vinyl acetate electrothermal film. <i>Polymers for Advanced Technologies</i> , <b>2020</b> , 31, 1088-1098	3.2	2
40	Bifunctional linear polyphosphazene decorated by allyl groups: Synthesis and application as efficient flame-retardant and toughening agent of bismaleimide. <i>Composites Part B: Engineering</i> , <b>2022</b> , 233, 109653	10	2
39	A multifunctional nanocomposite based on Pt-modified black phosphorus nanosheets loading with l-arginine for synergistic gas-sonodynamic cancer therapy. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2022</b> , 638, 128284	5.1	2

38	Nacre inspired tailoring of mechanically strong hydrophobic coatings through Layer-by-Layer assembly. <i>Surface and Coatings Technology</i> , <b>2020</b> , 404, 126458	4.4	2
37	Expandable nitrogen-doped carbon-based anodes fabricated from self-sacrificial metal-organic frameworks for ultralong-life lithium storage. <i>Carbon</i> , <b>2022</b> , 186, 46-54	10.4	2
36	Emerging two-dimensional monoelemental materials (Xenes): Fabrication, modification, and applications thereof in the field of bioimaging as nanocarriers. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , <b>2021</b> , e1750	9.2	2
35	One-pot exfoliation and synthesis of hydroxyapatite-functionalized graphene as multifunctional nanomaterials based on electrochemical approach. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2021</b> , 149, 106583	8.4	2
34	Construction of multifunctional linear polyphosphazene and molybdenum diselenide hybrids for efficient fire retardant and toughening epoxy resins. <i>Chemical Engineering Journal</i> , <b>2021</b> , 426, 131839	14.7	2
33	Design of copper salt@graphene nanohybrids to accomplish excellent resilience and superior fire safety for flexible polyurethane foam. <i>Journal of Colloid and Interface Science</i> , <b>2022</b> , 606, 1205-1218	9.3	2
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31	Fabrication of a necklace-like fiber separator by the electrospinning technique for high electrochemical performance and safe lithium metal batteries. <i>Materials Chemistry Frontiers</i> ,	7.8	2
30	ICG-Loaded PEG-Modified Black Phosphorus Nanosheets for Fluorescence Imaging-Guided Breast Cancer Therapy.. <i>ACS Omega</i> , <b>2021</b> , 6, 35505-35513	3.9	2
29	Combustion behavior characterization of major crops through cone calorimeter. <i>Fire and Materials</i> , <b>2020</b> , 44, 693-703	1.8	1
28	Comprehensive Property Investigation of Mold Inhibitor Treated Raw Cotton and Ramie Fabric. <i>Materials</i> , <b>2020</b> , 13,	3.5	1
27	Graphite-like Carbon Nitride/Polyphosphoramidate Nanohybrids for Enhancement on Thermal Stability and Flame Retardancy of Thermoplastic Polyurethane Elastomers. <i>ACS Applied Polymer Materials</i> , <b>2022</b> , 4, 121-128	4.3	1
26	A Furan-based Phosphaphenanthrene-containing Derivative as a Highly Efficient Flame-retardant Agent for Epoxy Thermosets without Deteriorating Thermomechanical Performances. <i>Chinese Journal of Polymer Science (English Edition)</i> , <b>2022</b> , 40, 233-240	3.5	1
25	Eco-friendly thermally insulating cellulose aerogels with exceptional flame retardancy, mechanical property and thermal stability. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2022</b> , 131, 104159	5.3	1
24	Designing thermotolerant and flame-resistant PAN-based separator via surface engineering with heteroatoms doped carbon framework encapsulated with CoS <sub>2</sub> nanocatalysts towards safe lithium-sulfur batteries. <i>Composites Part B: Engineering</i> , <b>2022</b> , 233, 109644	10	1
23	MOF-derived strategy to obtain CuCoOx functionalized HO-BN: A novel design to enhance the toughness, fire safety and heat resistance of bismaleimide resin. <i>Chemical Engineering Journal</i> , <b>2022</b> , 431, 134013	14.7	1
22	Conceptually Novel Few-Layer Black Phosphorus/Supramolecular Coalition: Noncovalent Functionalization Toward Fire Safety Enhancement. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 12579-12591	3.9	1
21	Highly flame retardant, low thermally conducting, and hydrophobic phytic acid-guanazole-cellulose nanofiber composite foams. <i>Cellulose</i> , <b>2021</b> , 28, 9769-9783	5.5	1

20	Hierarchical MoS <sub>2</sub> /polyaniline binary hybrids with high performance for improving fire safety of epoxy resin. <i>Polymers for Advanced Technologies</i> ,	3.2	1
19	A novel coating of hyperbranched poly(urethane-phosphine oxide) for poly(methyl methacrylate) with high fire safety, excellent adhesion and transparency. <i>Progress in Organic Coatings</i> , <b>2021</b> , 161, 106481	4.8	1
18	A novel fire safety separator decorated by Co <sub>2</sub> P/Co/C multifunctional layer for Li-S batteries. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 164919	5.7	1
17	Oxygen-deficient titanium dioxide-loaded black phosphorus nanosheets for synergistic photothermal and sonodynamic cancer therapy <b>2022</b> , 212794		1
16	A novel carbon fiber/MXene coalition prepared by a bidirectional diazotization strategy: Properties and applications. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2022</b> , 642, 128649	5.1	1
15	Innovative design of environmentally friendly silicon-based polyphosphazene-functionalized hydroxyapatite nanowires: An efficient enhancement strategy for the fire safety and mechanical properties of unsaturated polyester. <i>Chemical Engineering Journal</i> , <b>2022</b> , 437, 135489	14.7	1
14	Chitin based multi-layered coatings with flame retardancy an approach to mimic nacre: Synthesis, characterization and mechanical properties. <i>Carbohydrate Polymers</i> , <b>2022</b> , 119488	10.3	1
13	Synthesis of Nitrogen-Rich Black Phosphorus via a Diazotization Strategy for Efficient Flame Retardancy and Mechanical Properties of Epoxy Resins. <i>Macromolecular Materials and Engineering</i> , <b>2020</b> , 300143	3.9	1
12	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> , <b>2022</b> , 286, 126189	4.4	1
11	Cleaner production to a multifunctional polyurethane sponge with high fire safety and low toxicity release. <i>Journal of Cleaner Production</i> , <b>2022</b> , 333, 130172	10.3	0
10	Fabrication of zirconium phenylphosphonate/epoxy composites with simultaneously enhanced mechanical strength, anti-flammability and smoke suppression. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2022</b> , 155, 106837	8.4	0
9	Biodegradable L-lysine-modified amino black phosphorus/poly(L-lactide-co-ε-caprolactone) nanofibers with enhancements in hydrophilicity, shape recovery and osteodifferentiation properties. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2022</b> , 209, 112209	6	0
8	Sucrose derivative as a cross-linking agent in enhancing coating stability and flame retardancy of polyamide 66 textiles. <i>Progress in Organic Coatings</i> , <b>2021</b> , 159, 106438	4.8	0
7	Covalent organic framework with Cu-containing compounds for enhancing flame retardancy and smoke suppression effects on epoxy resin. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2022</b> , 156, 106900	8.4	0
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5	Graphene-based polymer composites for flame-retardant application <b>2022</b> , 61-89		0
4	Experimental Investigation on Combustion and Emission Characteristics of Wheat Before and After Mildew. <i>Combustion Science and Technology</i> , <b>2020</b> , 1-17	1.5	
3	Combustion Inhibition Ability of Piperazine Phosphoramidate Derivatives and Titanium Carbide on Epoxy Resin. <i>Combustion Science and Technology</i> , 1-20	1.5	



2 Alginate-sepiolite-ammonium polyphosphate ternary hybrid gels for firefighting in grain and cotton reserves **2022**, 52, 8

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