Intumescent fire-retardant systems

Polymer Degradation and Stability
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Citation Report

#	Article	IF	Citations
1	Parameters affecting fire retardant effectiveness in intumescent systems. Polymer Degradation and Stability, 1989, 25, 277-292.	5.8	48
2	Thermal degradation of pentaerythritol diphosphate, model compound for fire retardant intumescent systems: Part Iâ€"Overall thermal degradation. Polymer Degradation and Stability, 1990, 27, 285-296.	5.8	103
3	Fire retardance of polypropylene by diammonium pyrophosphate-pentaerythritol: Spectroscopic characterization of the protective coatings. Polymer Degradation and Stability, 1990, 30, 41-56.	5.8	27
4	Investigation of phosphorus-containing foam-forming systems as combustion retardants for polypropylene. Polymer Science USSR, 1991, 33, 544-550.	0.2	4
5	Overview of fire retardant mechanisms. Polymer Degradation and Stability, 1991, 33, 131-154.	5.8	212
6	A Review of Phosphorus-Containing Flame Retardants. Journal of Fire Sciences, 1992, 10, 470-487.	2.0	149
7	Evaluation of polymer combustion and fire retardance by using thermography. Fire and Materials, 1993, 17, 125-129.	2.0	8
12	FIRE RETARDANT POLYMERIC MATERIALS. , 1993, , 461-494.		6
13	Bench-scale evaluations and mechanistic studies of intumescent/fire-protective coatings for polyvinyl chloride nitrile rubber. Fire and Materials, 1994, 18, 277-287.	2.0	3
14	Structure-property relationships in intumescent fire-retardant derivatives of 4-hydroxymethyl-2,6,7-trioxa-1-phosphabicyclo[2,2,2]octane-1-oxide. Polymer Degradation and Stability, 1994, 45, 399-408.	5.8	18
15	Fast thermolysis/FT-IR studies of fire-retardant melamine-cyanurate and melamine-cyanurate containing polymer. Journal of Analytical and Applied Pyrolysis, 1995, 33, 253-267.	5.5	34
16	Fire-retardant polymers. Polymerisation of 1-oxo-2,6,7-trioxa-1-phosphabicyclo[2,2,2]oct-4-ylmethyl methacrylate, and its copolymerisation with methyl methacrylate, styrene, and triallylcyanurate. Polymer Degradation and Stability, 1995, 47, 67-72.	5.8	21
17	Complex char formation in flame-retarded fibre-intumescent combinationsâ€"II. Thermal analytical studies. Polymer Degradation and Stability, 1996, 54, 289-303.	5.8	156
18	Mathematical description of combustion of intumescent polymer systems. Combustion, Explosion and Shock Waves, 1997, 33, 669-684.	0.8	10
19	The application of expandable graphite as a flame retardant and smoke-suppressing additive for ethylene-propylene-diene terpolymer. Journal of Polymer Research, 1997, 4, 153-158.	2.4	11
20	Influence of surface structure on thermoprotection properties of intumescent systems. Applied Surface Science, 1997, 115, 199-201.	6.1	9
21	Etude de la Degradation Thermique du Polystyrene Choc Ignifuge. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 1998, 53, 297-308.	1.4	4
22	Synthesis and properties of epoxy resins containing 2-(6-oxid-6H-dibenzã€c,eã€‰â€ã€1,2ã€‰oxaphosphorin-6-yl)1,4-benzenediol. Polymer, 1998, 39, 5819-5826.	3.8	156

#	Article	IF	Citations
23	FLAME RETARDANT COMPOSITES, A REVIEW: THE POTENTIAL FOR USE OF INTUMESCENTS. , 1998, , 395-417.		5
24	Flame retardants: intumescent systems. Polymer Science and Technology, 1998, , 297-306.	0.1	16
25	THE ROLE OF RADIATION OVER INTUMESCENT SYSTEMS BURNING. , 1998, , 152-158.		2
26	Combustion of char-forming polymeric systems. Russian Chemical Reviews, 1999, 68, 605-614.	6.5	17
27	An oxygen index evaluation of flammability on modified epoxy/polyester systems. Polymer, 1999, 40, 4093-4098.	3.8	70
28	Use of cone calorimeter for evaluating fire performances of polyurethane foams. Polymer Degradation and Stability, 1999, 64, 573-576.	5.8	36
29	Degradation Thermique D'Un Polystyrene Choc Ignifuge Par Un Melange Intumescent. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 1999, 58, 19-28.	1.4	3
30	Synthesis and properties of phosphorus containing advanced epoxy resins. Journal of Applied Polymer Science, 2000, 75, 429-436.	2.6	77
31	Synthesis and properties of novel phosphorus-containing hardener for epoxy resins. Journal of Applied Polymer Science, 2000, 78, 1636-1644.	2.6	51
32	Flame retardancy of some ethylene-vinyl acetate copolymer-based formulations. Fire and Materials, 2000, 24, 159-164.	2.0	37
33	Experimental investigation into mechanical destruction of intumescent chars. Polymers for Advanced Technologies, 2000, 11, 392-397.	3.2	27
34	Ignifugation de polyurÃ©thanes. European Polymer Journal, 2000, 36, 1865-1873.	5.4	10
35	Synthesis and properties of epoxy resins containing 2-(6-oxid-6H-dibenz(c,e)(1,2) oxaphosphorin-6-yl) 1,4-benzenediol (II). Polymer, 2000, 41, 3631-3638.	3.8	94
36	Synthesis and properties of epoxy resins containing bis(3-hydroxyphenyl) phenyl phosphate. European Polymer Journal, 2000, 36, 443-452.	5.4	74
38	Thermosetting Resinâ€"Properties. , 2000, , 1-56.		19
39	Effect of structure on thermal behaviour of phosphorus containing addition polyimides and epoxy resins. Materials Research Innovations, 2001, 4, 306-310.	2.3	4
40	Thermal characterization of diglycidyl ether of bisphenol-A/phosphorus containing amines. Journal of Applied Polymer Science, 2001, 81, 390-395.	2.6	17
41	Phosphate-containing flame-retardant polymers with good compatibility to polypropylene. I. The effect of phosphate structure on its thermal behavior. Journal of Applied Polymer Science, 2001, 81, 1125-1135.	2.6	7

#	Article	IF	Citations
42	Chemical modification of 1,4-polydienes by di(alkyl or aryl)phosphates. European Polymer Journal, 2001, 37, 1297-1313.	5.4	15
43	Synthesis of novel flame retardant epoxy hardeners and properties of cured products. Polymer, 2001, 42, 7617-7625.	3.8	219
44	Halogen-free flame retardant radiation curable coatings. Progress in Organic Coatings, 2002, 45, 281-289.	3.9	57
45	Thermal properties of main-chain phosphorus-containing epoxide cured with amine. Journal of Applied Polymer Science, 2002, 83, 2733-2740.	2.6	16
46	Thermal properties of side-chain phosphorus-containing epoxide cured with amine. Journal of Applied Polymer Science, 2002, 83, 2741-2748.	2.6	23
47	Effect of the organophosphate structure on the physical and flame-retardant properties of an epoxy resin. Journal of Polymer Science Part A, 2002, 40, 369-378.	2.3	76
48	Epoxy resins possessing flame retardant elements from silicon incorporated epoxy compounds cured with phosphorus or nitrogen containing curing agents. Polymer, 2002, 43, 4277-4284.	3.8	230
49	Char formation in polyvinyl polymers I. Polyvinyl acetate. Polymer Degradation and Stability, 2002, 77, 503-510.	5.8	62
50	Flame retardant epoxy polymers based on all phosphorus-containing components. European Polymer Journal, 2002, 38, 683-693.	5.4	121
51	Title is missing!. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2002, 67, 761-772.	1.4	13
52	Title is missing!. Journal of Materials Science, 2003, 38, 1249-1254.	3.7	17
53	Studies on the curing kinetics of epoxy resins using silicon containing amide-amines. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2003, 71, 613-622.	1.4	5
54	Cure kinetics and properties of epoxy resins containing a phosphorous-based flame retardant. Advances in Polymer Technology, 2003, 22, 329-342.	1.7	26
55	New developments in flame retardancy of glass-reinforced epoxy composites. Journal of Applied Polymer Science, 2003, 88, 2511-2521.	2.6	46
56	Flame retardants for polypropylene based on lignin. Polymer Degradation and Stability, 2003, 79, 139-145.	5.8	170
57	Material flammability, combustion, toxicity and fire hazard in transportation. Progress in Energy and Combustion Science, 2003, 29, 247-299.	31.2	68
58	A Brief Review of Intumescent Fire Retardant Coatings. Architectural Science Review, 2003, 46, 89-95.	2.2	33
61	Thermal and Flame Retardation Properties of Melamine Phosphate-Modified Epoxy Resins. Journal of Polymer Research, 2004, 11, 109-117.	2.4	55

#	Article	IF	Citations
62	Curing and pyrolysis of cresol novolac epoxy resins containing [2-(6-oxido-6H-dibenz(c,e)(1,2)oxaphosphorin-6-yl)-1,4-naphthalenediol]. Polymer Engineering and Science, 2004, 44, 376-387.	3.1	16
63	Study on poly(propylene)/ammonium polyphosphate composites modified by ethylene-1-octene copolymer grafted with glycidyl methacrylate. Journal of Applied Polymer Science, 2004, 93, 412-419.	2.6	19
64	Synergistic Effect of the Charring Agent on the Thermal and Flame Retardant Properties of Polyethylene. Macromolecular Materials and Engineering, 2004, 289, 208-212.	3.6	139
65	Thermal degradation and flame retardancy of a novel methacrylated phenolic melamine used for UV curable flame retardant coatings. Polymer Degradation and Stability, 2005, 87, 495-501.	5.8	38
66	Flammability and thermal degradation of flame retarded polypropylene composites containing melamine phosphate and pentaerythritol derivatives. Polymer Degradation and Stability, 2005, 90, 523-534.	5.8	232
67	Photopolymerization and properties of UV-curable flame-retardant resins with hexaacrylated cyclophosphazene compared with its cured powder. Journal of Applied Polymer Science, 2005, 97, 1776-1782.	2.6	18
68	Photopolymerization and thermal behavior of phosphate diacrylate and triacrylate used as reactive-type flame-retardant monomers in ultraviolet-curable resins. Journal of Applied Polymer Science, 2005, 97, 185-194.	2.6	23
69	Curing and pyrolysis of cresol novolac epoxy resins containing BABODOPN. Polymer Engineering and Science, 2005, 45, 478-486.	3.1	22
70	Advanced flame-retardant epoxy resins from phosphorus-containing diol. Journal of Polymer Science Part A, 2005, 43, 3510-3515.	2.3	46
71	Thermal Stability and Flame Retardancy of Polypropylene with Phosphorus, Nitrogen and Silicon-Containing Compounds. Polymers and Polymer Composites, 2005, 13, 697-707.	1.9	2
73	Flame Retardant Composites. , 2006, , 237-286.		4
74	Multiscale Experimental Approach for Developing High-Performance Intumescent Coatings. Industrial & Engineering Chemistry Research, 2006, 45, 4500-4508.	3.7	108
75	High-Throughput Fire Testing for Intumescent Coatings. Industrial & Engineering Chemistry Research, 2006, 45, 7475-7481.	3.7	52
76	Synthesis, characteristic, and application of new flame retardant containing phosphorus, nitrogen, and silicon. Polymer Engineering and Science, 2006, 46, 344-350.	3.1	61
77	Novel curing agent for lead-free electronics: Amino acid. Journal of Polymer Science Part A, 2006, 44, 1020-1027.	2.3	52
78	Synthesis and properties of poly(bisphenol A acryloxyethyl phosphate) as a UV curable flame retardant oligomer. European Polymer Journal, 2006, 42, 1506-1515.	5.4	34
79	Photopolymerization and thermal behaviors of acrylated benzenephosphonates/epoxy acrylate as flame retardant resins. European Polymer Journal, 2006, 42, 2261-2269.	5.4	43
80	Catalytic action of phospho-tungstic acid in the synthesis of melamine salts of pentaerythritol phosphate and their synergistic effects in flame retarded polypropylene. Polymer Degradation and Stability, 2006, 91, 2513-2519.	5.8	76

#	Article	IF	Citations
81	Intumescent fire protective coating: Toward a better understanding of their mechanism of action. Thermochimica Acta, 2006, 449, 16-26.	2.7	275
82	Using PA6 as a charring agent in intumescent polypropylene formulations based on carboxylated polypropylene compatibilizer and nano-montmorillonite synergistic agent. Journal of Applied Polymer Science, 2006, 101, 739-746.	2.6	43
83	Halogen-free flame retardant epoxy resins from hybrids of phosphorus- or silicon-containing epoxies with an amine resin. Journal of Applied Polymer Science, 2006, 102, 1071-1077.	2.6	20
84	A novel flame retardant of spirocyclic pentaerythritol bisphosphorate for epoxy resins. Journal of Applied Polymer Science, 2006, 102, 4978-4982.	2.6	43
85	Fire behaviour of polyesterâ€“clay nanocomposites. Fire and Materials, 2006, 30, 333-341.	2.0	28
86	A Novel Intumescent Flame-Retardant Polyethylene System. Macromolecular Materials and Engineering, 2006, 291, 247-253.	3.6	153
87	Preparation and Application of Deformable and Orientable Intumescent Flame Retardants Incorporated with Polypropylene. Polymer-Plastics Technology and Engineering, 2007, 46, 455-460.	1.9	5
88	Synthesis and Characterization of New Organic Phosphonates Monomers as Flame Retardant Additives for Polymers. Phosphorus, Sulfur and Silicon and the Related Elements, 2007, 182, 1689-1701.	1.6	12
89	Novel flame retardant thermosets from nitrogenâ€containing and phosphorusâ€containing epoxy resins cured with dicyandiamide. Journal of Applied Polymer Science, 2007, 106, 2391-2397.	2.6	47
90	Synthesis of a soluble azomethineâ€containing bisphenol and the properties of its modified epoxy thermosets. Journal of Applied Polymer Science, 2007, 106, 1632-1639.	2.6	10
91	Synthesis and properties of a novel hyperbranched polyphosphate acrylate applied to UV curable flame retardant coatings. European Polymer Journal, 2007, 43, 1302-1312.	5.4	71
92	Effects of EG and MoSi2 on thermal degradation of intumescent coating. Polymer Degradation and Stability, 2007, 92, 569-579.	5.8	75
93	Fire retardancy of a reactively extruded intumescent flame retardant polyethylene system enhanced by metal chelates. Polymer Degradation and Stability, 2007, 92, 1592-1598.	5.8	157
94	Novel, environmentally friendly crosslinking system of an epoxy using an amino acid: Tryptophan-cured diglycidyl ether of bisphenol A epoxy. Journal of Polymer Science Part A, 2007, 45, 181-190.	2.3	55
95	UV curing behavior of hyperbranched polyphosphate acrylate/di(hydroxylpropyl methacrylate) piperazine and properties of the cured film. Progress in Organic Coatings, 2007, 59, 312-317.	3.9	36
96	Flame Resistant Nylon-6,6 Composites with Improved Mechanical Strength by the Combination of Additive- and Reactive-Type Flame Retardants. Polymer Journal, 2007, 39, 347-358.	2.7	12
97	Brazilian clays as synergistic agents in an ethylenic polymer matrix containing an intumescent formulation. Journal of Thermal Analysis and Calorimetry, 2007, 87, 661-665.	3.6	26
98	Synthesis and properties of a phosphorus-containing flame retardant epoxy resin based on bis-phenoxy (3-hydroxy) phenyl phosphine oxide. Polymer Degradation and Stability, 2007, 92, 956-961.	5.8	141

#	Article	IF	Citations
99	Effect of metal chelates on the ignition and early flaming behaviour of intumescent fire-retarded polyethylene systems. Polymer Degradation and Stability, 2008, 93, 1024-1030.	5.8	87
100	Flame retardation and char formation mechanism of intumescent flame retarded polypropylene composites containing melamine phosphate and pentaerythritol phosphate. Polymer Degradation and Stability, 2008, 93, 1799-1806.	5.8	119
101	An Investigation of the thermal degradation of the intumescent coating containing MoO3 and Fe2O3. Surface and Coatings Technology, 2008, 202, 3121-3128.	4.8	54
102	Effects of intumescent formulation for acrylic-based coating on flame-retardancy of painted red lauan (Parashorea spp.) thin plywood. Wood Science and Technology, 2008, 42, 593-607.	3.2	30
103	A novel intumescent flameâ€retardant LDPE system and its thermoâ€oxidative degradation and flameâ€retardant mechanisms. Polymers for Advanced Technologies, 2008, 19, 1566-1575.	3.2	54
104	Flame retardation and thermal degradation of flameâ€retarded polypropylene composites containing melamine phosphate and pentaerythritol phosphate. Fire and Materials, 2008, 32, 307-319.	2.0	27
105	Reactive extrusion to synthesize intumescent flame retardant with a solid acid as catalyst and the flame retardancy of the products in polypropylene. Journal of Applied Polymer Science, 2008, 107, 14-20.	2.6	13
106	Polyamideâ€enhanced flame retardancy of ammonium polyphosphate on epoxy resin. Journal of Applied Polymer Science, 2008, 108, 2644-2653.	2.6	103
107	A study of the novel intumescent flameâ€retarded PP/EPDM copolymer blends. Journal of Applied Polymer Science, 2008, 110, 3804-3811.	2.6	24
108	Flame retardancy and dielectric properties of dicyclopentadieneâ€based benzoxazine cured with a phosphorusâ€containing phenolic resin. Journal of Applied Polymer Science, 2008, 110, 2413-2423.	2.6	33
109	Polyesters of 2-Pyrone-4,6-Dicarboxylic Acid (PDC) Obtained from a Metabolic Intermediate of Lignin. Polymer Journal, 2008, 40, 68-75.	2.7	52
110	Microencapsulated Ammonium Polyphosphate with Polyurethane Shell: Application to Flame Retarded Polypropylene/Ethylene-propylene Diene Terpolymer Blends. Journal of Macromolecular Science - Pure and Applied Chemistry, 2008, 46, 136-144.	2.2	27
111	Study on Thermal Decomposition of Intumescent Fire-Retardant Polypropylene by TG/Fourier Transform Infrared. Journal of Thermoplastic Composite Materials, 2009, 22, 681-701.	4.2	39
112	Novel halogen-free flame retardant thermoset from a hybrid hexakis (methoxymethyl) melamine/phosphorus-containing epoxy resin cured with phenol formaldehyde novolac. EXPRESS Polymer Letters, 2009, 3, 788-796.	2.1	12
113	Syntheses and properties of fluorinated phosphate acrylates used for UV-curing coatings. Progress in Organic Coatings, 2009, 64, 365-370.	3.9	15
114	Studies on the curing kinetics and thermal stability of diglycidyl ether of bisphenolâ€A using mixture of novel, environment friendly sulphur containing amino acids and 4,4â€²â€diaminodiphenylsulfone. Journal of Applied Polymer Science, 2009, 113, 216-225.	2.6	5
115	Effects of organo-clay and sodium dodecyl sulfonate intercalated layered double hydroxide on thermal and flame behaviour of intumescent flame retarded polypropylene. Polymer Degradation and Stability, 2009, 94, 1979-1985.	5.8	66
116	Synthesis, characterization and properties of halogen-free flame retardant PMMA nanocomposites containing nitrogen/ silicon prepared from the Sol-Gel method. Journal of Polymer Research, 2009, 16, 637-646.	2.4	18

#	Article	IF	Citations
117	Fabrication and thermal stability studies of polyamide 66 containing triaryl phosphine oxide. Bulletin of Materials Science, 2009, 32, 375-380.	1.7	25
118	Flame retardancy and thermal degradation of intumescent flame retardant polypropylene with MP/TPMP. Polymers for Advanced Technologies, 2009, 20, 696-702.	3.2	26
119	Study on combustion property and synergistic effect of intumescent flame retardant styrene butadiene rubber with metallic oxides. Polymers for Advanced Technologies, 2009, 20, 1091-1095.	3.2	20
120	Metal compound-enhanced flame retardancy of intumescent epoxy resins containing ammonium polyphosphate. Polymer Degradation and Stability, 2009, 94, 625-631.	5.8	154
121	Mechanism on flame retardancy of polystyrene/clay composites-The effect of surfactants and aggregate state of organoclay. Polymer, 2009, 50, 5794-5802.	3.8	42
122	Flame retardant mechanism of organo-bentonite in polypropylene. Applied Clay Science, 2009, 45, 178-184.	5.2	70
123	Study of thermal properties of intumescent additive. Journal of Thermal Analysis and Calorimetry, 2010, 102, 1071-1077.	3.6	13
124	Ignifugation Des PolymÃ¨res Thermoplastiques. Formulations Intumescentes: CaractÃ©risation Des RevÃªtements Carbones Et MÃ©canisme De Leurs DÃ©veloppements. Bulletin Des SociÃ©tÃ©s Chimiques Belges, 1989, 98, 735-740.	0.0	1
125	Synthesis, thermal degradation, and flame retardance of novel triazine ringâ€containing macromolecules for intumescent flame retardant polypropylene. Journal of Applied Polymer Science, 2010, 116, 2157-2165.	2.6	56
126	Studies on the effect of different levels of toughener and flame retardants on thermal stability of epoxy resin. Polymer Degradation and Stability, 2010, 95, 144-152.	5.8	100
127	Effect of anionic organoclay with special aggregate structure on the flame retardancy of acrylonitrileâ€“butadieneâ€“styrene/clay composites. Polymer Degradation and Stability, 2010, 95, 587-592.	5.8	13
128	The synergistic flameâ€retardant effect of Oâ€MMT on the intumescent flameâ€retardant PP/CA/APP systems. Polymers for Advanced Technologies, 2010, 21, 789-796.	3.2	83
129	Phosphorus-based Flame Retardancy Mechanismsâ€”Old Hat or a Starting Point for Future Development?. Materials, 2010, 3, 4710-4745.	2.9	486
130	Structural Basis for Intumescence â€“ Part III â€“ Thermal Degradation Study of Intumescent Polymers Containing Spirophosphorus Moiety in the Backbone. Polymer-Plastics Technology and Engineering, 2010, 49, 316-324.	1.9	2
131	Diffusion of Polyphosphates into (Poly(allylamine)-montmorillonite) Multilayer Films: Flame Retardant-Intumescent Films with Improved Oxygen Barrier. Langmuir, 2011, 27, 13879-13887.	3.5	104
132	UV-cured organicâ€“inorganic hybrid nanocomposite initiated by trimethoxysilane-modified fragmental photoinitiator. Composites Part A: Applied Science and Manufacturing, 2011, 42, 631-638.	7.6	11
133	Intumescent coatings based on an organicâ€inorganic hybrid resin and the effect of mineral fibres on fireâ€resistant properties of intumescent coatings. Pigment and Resin Technology, 2011, 40, 247-253.	0.9	12
134	Synthesis of three novel phosphorus-containing flame retardants and their application in epoxy resins. Polymer Degradation and Stability, 2011, 96, 1720-1724.	5.8	135

#	Article	IF	Citations
135	How nanoâ€fillers affect thermal stability and flame retardancy of intumescent flame retarded polypropylene. Polymers for Advanced Technologies, 2011, 22, 1139-1146.	3.2	55
136	UVâ€irradiation Cured Organicâ€inorganic Hybrid Nanocomposite Initiated by Ethoxysilaneâ€modified Multifunctional Polymeric Photoinitiator through Solâ€gel Process. Chinese Journal of Chemistry, 2011, 29, 1961-1968.	4.9	4
137	Flame Retardance and Thermal Decomposition of EVA Composites Containing Melamine Phosphate and Dipentaerythritol. Advanced Materials Research, 2011, 284-286, 1831-1835.	0.3	0
138	Synthesis and Properties of a Novel Flame-Retardant Epoxy Resin Containing Biphenylyl/Phenyl Phosphonic Moieties. Polymer-Plastics Technology and Engineering, 2012, 51, 896-903.	1.9	16
139	Synergistic Effects of Ni²⁺-Fe³⁺ Layered Double Hydroxide on Intumescent Flame-Retarded Polypropylene Composites Containing Melamine Phosphate and Pentaerythritol Phosphate. ACS Symposium Series, 2012, , 51-68.	0.5	2
140	Catalyzing carbonization of poly(l-lactide) by nanosized carbon black combined with Ni2O3 for improving flame retardancy. Journal of Materials Chemistry, 2012, 22, 19974.	6.7	83
141	Structural characteristics and flammability of fire retarding EPDM/layered double hydroxide (LDH) nanocomposites. RSC Advances, 2012, 2, 3927.	3.6	91
142	Fire structural modelling of fibreâ€"polymer laminates protected with an intumescent coating. Composites Part A: Applied Science and Manufacturing, 2012, 43, 793-802.	7.6	45
144	Design and optimization of an intumescent flame retardant coating using thermal degradation kinetics and Taguchi's experimental design. Polymer International, 2012, 61, 926-933.	3.1	9
145	Flammability of layered silicate epoxy nanocomposites combined with lowâ€melting inorganic ceepree glass. Polymer Engineering and Science, 2012, 52, 507-517.	3.1	24
146	Synergistic effect of ammonium polyphosphate and expandable graphite on flameâ€retardant properties of acrylonitrileâ€butadieneâ€styrene. Journal of Applied Polymer Science, 2012, 126, 1337-1343.	2.6	67
147	Effect of borates on thermal degradation and flame retardancy of epoxy resins using polyhedral oligomeric silsesquioxane as a curing agent. Thermochimica Acta, 2012, 535, 71-78.	2.7	63
148	Study on the thermal degradation of mixtures of ammonium polyphosphate and a novel caged bicyclic phosphate and their flame retardant effect in polypropylene. Polymer Degradation and Stability, 2012, 97, 632-637.	5.8	105
149	Triazene compounds as a novel and effective class of flame retardants for polypropylene. Polymer Degradation and Stability, 2012, 97, 948-954.	5.8	29
150	SEM/EDX: Advanced investigation of structured fire residues and residue formation. Polymer Testing, 2012, 31, 606-619.	4.8	35
151	Evaluation of nonconventional additives as fire retardants on polyamide 6,6: Phosphorousâ€based master batch, Î±â€zirconium dihydrogen phosphate, and Î²â€cyclodextrin based nanosponges. Journal of Applied Polymer Science, 2012, 123, 3545-3555.	2.6	21
152	Study on thermal degradation and flame retardant property of halogenâ€free polypropylene composites using XPS and cone calorimeter. Journal of Applied Polymer Science, 2013, 127, 1084-1091.	2.6	30
153	Synthesis, thermal degradation, and flame retardancy of a novel charring agent aliphaticâ€"aromatic polyamide for intumescent flame retardant polypropylene. Journal of Applied Polymer Science, 2013, 127, 1061-1068.	2.6	27

#	Article	IF	Citations
154	The synergistic effect of adjuvant on the intumescent flame-retardant ABS with a novel charring agent. Journal of Thermal Analysis and Calorimetry, 2013, 113, 753-761.	3.6	9
155	Effects of melamine phosphate on the thermal decomposition and combustion behavior of reconstituted tobacco sheet. Journal of Thermal Analysis and Calorimetry, 2013, 112, 1269-1276.	3.6	18
156	Fire retardancy and CO/CO2 emission of intumescent coatings on thin plywood panel with waterborne vinyl acetate-acrylic resin. Wood Science and Technology, 2013, 47, 353-367.	3.2	9
157	Synergistic Effect between a Novel Char Forming Agent and Ammonium Polyphosphate on Flame Retardancy and Thermal Properties of Polypropylene. Industrial & Engineering Chemistry Research, 2013, 52, 10905-10915.	3.7	45
158	Microencapsulated Ammonium Polyphosphate with Glycidyl Methacrylate Shell: Application to Flame Retardant Epoxy Resin. Industrial & Engineering Chemistry Research, 2013, 52, 5640-5647.	3.7	85
159	Textile flammability research since 1980 â€“ Personal challenges and partial solutions. Polymer Degradation and Stability, 2013, 98, 2813-2824.	5.8	65
160	Prediction and optimization of fireproofing properties of intumescent flame retardant coatings using artificial intelligence techniques. Fire Safety Journal, 2013, 61, 193-199.	3.1	18
161	Effects of common synergistic agents on intumescent flame retardant polypropylene with a novel charring agent. Journal of Thermal Analysis and Calorimetry, 2013, 111, 725-734.	3.6	47
162	Thermal degradation and combustion behavior of reconstituted tobacco sheet treated with ammonium polyphosphate. Journal of Analytical and Applied Pyrolysis, 2013, 100, 223-229.	5.5	26
163	Recent developments in the fire retardancy of polymeric materials. Progress in Polymer Science, 2013, 38, 1357-1387.	24.7	517
164	Effect of boric acid and melamine on the intumescent fireâ€retardant coating composition for the fire protection of structural steel substrates. Journal of Applied Polymer Science, 2013, 128, 2983-2993.	2.6	71
165	A novel polyurethane prepolymer as toughening agent: Preparation, characterization, and its influence on mechanical and flame retardant properties of phenolic foam. Journal of Applied Polymer Science, 2013, 128, 2720-2728.	2.6	62
166	Synergistic Effect of Nano Fe₂O₃ on Intumescent Flame Retardant Polypropylene Systems. Advanced Materials Research, 0, 669, 233-238.	0.3	5
167	Synthesis of a novel ionic liquid containing phosphorus and its application in intumescent flame retardant polypropylene system. Polymers for Advanced Technologies, 2013, 24, 568-575.	3.2	33
168	Extrusion with ultrasound applied on intumescent flameâ€retardant polypropylene. Polymer Engineering and Science, 2013, 53, 2018-2026.	3.1	21
169	Design and Utilization ofÂNitrogen Containing Flame Retardants Based on N-Alkoxyamines, Azoalkanes and Related Compounds. , 2014, , 267-288.		14
170	Cone calorimeter study of polyethylene flame retarded with expandable graphite and intumescent fire-retardant additives. Journal of Fire Sciences, 2014, 32, 498-517.	2.0	22
171	(Photo)oxidative Stabilization of Flame-Retarded Polymers. , 2014, , 419-439.		4

#	Article	IF	Citations
172	Fire retardancy of ethylene vinyl acetate/ultrafine kaolinite composites. Polymer Degradation and Stability, 2014, 100, 54-62.	5.8	40
173	Synergistic flameâ€retardant effect of halloysite nanotubes on intumescent flame retardant in LDPE. Journal of Applied Polymer Science, 2014, 131, .	2.6	23
174	Influence of nano-boron nitride on fire protection of waterborne fire-resistive coatings. Journal of Coatings Technology Research, 2014, 11, 265-272.	2.5	19
175	Polyethylene flame retarded with expandable graphite and a novel intumescent additive. Journal of Applied Polymer Science, 2014, 131, .	2.6	11
176	Synthesis of 1-hydroxy ethylidene-1,1-diphosphonic ammonium and the promise of this ammonium salt as an intumescent flame retardant in polystyrene. Polymer Degradation and Stability, 2014, 102, 186-194.	5.8	20
177	Effects of kaolin on the thermal stability and flame retardancy of polypropylene composite. Polymers for Advanced Technologies, 2014, 25, 912-919.	3.2	24
178	Ammonium polyphosphate chemically-modified with ethanolamine as an efficient intumescent flame retardant for polypropylene. Journal of Materials Chemistry A, 2014, 2, 13955.	10.3	220
179	Fire Safety Performance of Flame Retardants Compared with Toxic and Environmental Hazards. , 2014, , 45-86.		1
180	The influence of the phosphorus-based flame retardant on the flame retardancy of the epoxy resins. Polymer Degradation and Stability, 2014, 109, 209-217.	5.8	139
181	Intumescent coating of (polyallylamine-polyphosphates) deposited on polyamide fabrics via layer-by-layer technique. Polymer Degradation and Stability, 2014, 106, 158-164.	5.8	56
182	Effects of ammonium polyphosphate to pentaerythritol ratio on composition and properties of carbonaceous foam deriving from intumescent flame-retardant polypropylene. Polymer Degradation and Stability, 2014, 107, 64-73.	5.8	74
183	Two novel phosphorusâ€“nitrogen-containing halogen-free flame retardants of high performance for epoxy resin. Polymer Degradation and Stability, 2014, 108, 68-75.	5.8	110
184	The Effect of Particle Size of Wollastonite Filler on Thermal Performance of Intumescent Fire Retardant Coating. MATEC Web of Conferences, 2014, 13, 03012.	0.2	1
185	Flame retarding effect of graphite in rotationally molded polyethylene/graphite composites. Journal of Applied Polymer Science, 2015, 132, .	2.6	18
186	Influence of the pentaerythritol phosphate melamine salt content on the combustion and thermal decomposition process of intumescent flameâ€retardant ethyleneâ€“vinyl acetate copolymer composites. Journal of Applied Polymer Science, 2015, 132, .	2.6	9
187	Intumescing multilayer thin film deposited on clay-based nanobrick wall to produce self-extinguishing flame retardant polyurethane. Journal of Materials Science, 2015, 50, 2451-2458.	3.7	58
189	Flameâ€retardancy properties of tris(2â€hydroxyethyl) isocyanurate based charring agents on polypropylene. Journal of Applied Polymer Science, 2015, 132, .	2.6	3
190	Flame-retardant mechanism of a novel polymeric intumescent flame retardant containing caged bicyclic phosphate for polypropylene. Polymer Degradation and Stability, 2015, 113, 22-31.	5.8	123

#	Article	IF	Citations
191	Flammable and mechanical effects of silica on intumescent flame retardant/ethyleneâ€“octene copolymer/polypropylene composites. Journal of Thermoplastic Composite Materials, 2015, 28, 981-994.	4.2	23
192	Recent advances for microencapsulation of flame retardant. Polymer Degradation and Stability, 2015, 113, 96-109.	5.8	97
193	Flame retardant polymer composites. Fibers and Polymers, 2015, 16, 705-717.	2.1	164
194	Effects of wool fibres, ammonium polyphosphate and polymer viscosity on the flammability and mechanical performance of PP/woolÂcomposites. Polymer Degradation and Stability, 2015, 119, 167-177.	5.8	56
195	Surface modification of ammonium polyphosphate with vinyltrimethoxysilane: Preparation, characterization, and its flame retardancy in polypropylene. Polymer Degradation and Stability, 2015, 119, 139-150.	5.8	62
196	Synthesis of novel intumescent flame retardant containing phosphorus, nitrogen and boron and its application in polyethylene. Polymer Bulletin, 2015, 72, 2967-2978.	3.3	41
197	Novel Multifunctional Organicâ€“Inorganic Hybrid Curing Agent with High Flame-Retardant Efficiency for Epoxy Resin. ACS Applied Materials & Interfaces, 2015, 7, 17919-17928.	8.0	213
198	Modification of poly(styrene-block-butadiene-block-styrene) [SBS] with phosphorus containing fire retardants. European Polymer Journal, 2015, 70, 136-146.	5.4	18
199	Advances in Flame Retardant of Different Types of Nanocomposites. Engineering Materials, 2015, , 1-13.	0.6	3
200	DNA coatings on cotton fabrics: Effect of molecular size and pH on flame retardancy. Surface and Coatings Technology, 2015, 272, 86-95.	4.8	34
201	Flame retardancy of clayâ€“sodium silicate composite coatings on wood for construction purposes. RSC Advances, 2015, 5, 34109-34116.	3.6	49
202	Microencapsulation of ammonium polyphosphate with melamine-formaldehyde-tris(2-hydroxyethyl)isocyanurate resin and its flame retardancy in polypropylene. RSC Advances, 2015, 5, 88445-88455.	3.6	50
203	Effect of Surface-Modified Ammonium Polyphosphate with KH550 and Silicon Resin on the Flame Retardancy, Water Resistance, Mechanical and Thermal Properties of Intumescent Flame Retardant Polypropylene. Industrial & Engineering Chemistry Research, 2015, 54, 9733-9741.	3.7	73
204	Flame-Retardant Paper from Wood Fibers Functionalized via Layer-by-Layer Assembly. ACS Applied Materials & Interfaces, 2015, 7, 23750-23759.	8.0	92
205	Experimental Analysis of Thermal Runaway and Propagation in Lithium-Ion Battery Modules. Journal of the Electrochemical Society, 2015, 162, A1905-A1915.	2.9	249
206	Effect of charring agent THEIC on flame retardant properties of polypropylene. Journal of Applied Polymer Science, 2015, 132, .	2.6	13
207	Elucidating the Thermal Decomposition of Dimethyl Methylphosphonate by Vacuum Ultraviolet (VUV) Photoionization: Pathways to the PO Radical, a Key Species in Flameâ€Retardant Mechanisms. Chemistry - A European Journal, 2015, 21, 1073-1080.	3.3	102
208	Reactionâ€toâ€fire properties of polymer matrix composites with integrated intumescent barriers. Fire and Materials, 2015, 39, 658-674.	2.0	6

#	Article	IF	Citations
209	Experimental investigation and characterization of an efficient nanopowder-based flame retardant coating for atmospheric-metallic substrates. Powder Technology, 2015, 269, 22-29.	4.2	44
210	Clay Minerals and Clay Mineral Water Dispersions â€" Properties and Applications. , 2016, , .		1
211	Influence of modified mesoporous silica SBAâ€15 on the flammability of intumescent highâ€density polyethylene. Polymers for Advanced Technologies, 2016, 27, 1363-1375.	3.2	19
212	A review on flammability of epoxy polymer, cellulosic and non-cellulosic fiber reinforced epoxy composites. Polymers for Advanced Technologies, 2016, 27, 577-590.	3.2	86
213	Influence of PEPA-containing polyether structure on fire protection of transparent fire-resistant coatings. Journal of Coatings Technology Research, 2016, 13, 457-468.	2.5	14
214	UV-curable behavior of phosphorus- and nitrogen-based reactive diluent for epoxy acrylate oligomer used for flame-retardant wood coating. Journal of Coatings Technology Research, 2016, 13, 703-714.	2.5	15
215	Synergistic effect of chitosan-based flame retardant and modified clay on the flammability properties of LLDPE. Polymer Degradation and Stability, 2016, 133, 8-15.	5.8	76
216	A Novel Linear-Chain Polyamide Charring Agent for the Fire Safety of Noncharring Polyolefin. Industrial & Engineering Chemistry Research, 2016, 55, 7132-7141.	3.7	29
217	PREPARATION AND PROPERTIES STUDIES OF HALOGEN-FREE FLAME RETARDANT STYRENEâ€"BUTADIENE RUBBER BASED ON APP AND PUMAPP. Rubber Chemistry and Technology, 2016, 89, 689-699.	1.2	0
218	Preparation of nucleotide-based microsphere and its application in intumescent flame retardant polypropylene. Journal of Analytical and Applied Pyrolysis, 2016, 121, 394-402.	5.5	28
219	Hydrocarbon timeâ€"temperature curve under airjet perturbation: An in situ method to probe char stability and integrity in reactive fire protection coatings. Journal of Fire Sciences, 2016, 34, 385-397.	2.0	22
220	Synthesis of a novel phosphorus-containing epoxy curing agent and the thermal, mechanical and flame-retardant properties of the cured products. Polymer Degradation and Stability, 2016, 130, 143-154.	5.8	51
221	A facile and novel modification method of Î²-cyclodextrin and its application in intumescent flame-retarding polypropylene with melamine phosphate and expandable graphite. Journal of Polymer Research, 2016, 23, 1.	2.4	19
222	Development of fire resistant wool polymer composites: Mechanical performance and fire simulation with design perspectives. Materials and Design, 2016, 106, 391-403.	7.0	62
223	Synergistic effect of graphitic carbon nitride and ammonium polyphosphate for enhanced thermal and flame retardant properties of polystyrene. Materials Chemistry and Physics, 2016, 177, 283-292.	4.0	50
224	Poly(piperazinyl phosphamide): a novel highly-efficient charring agent for an EVA/APP intumescent flame retardant system. RSC Advances, 2016, 6, 30436-30444.	3.6	51
225	Recent developments of intumescent fire protection coatings for structural steel: A review. Journal of Fire Sciences, 2016, 34, 120-163.	2.0	130
226	Study on inorganic modified ammonium polyphosphate with precipitation method and its effect in flame retardant polypropylene. Polymer Degradation and Stability, 2016, 126, 117-124.	5.8	37

#	Article	IF	Citations
227	Variation of Intumescent Coatings Revealing Different Modes of Action for Good Protection Performance. Fire Technology, 2017, 53, 1569-1587.	3.0	36
228	Thermal properties of polyethylene flame retarded with expandable graphite and intumescent fire retardant additives. Fire and Materials, 2017, 41, 573-586.	2.0	22
229	Synthesis of tris(2â€hydroxyethyl) isocyanurate homopolymer and its application in intumescent flame retarded polypropylene. Journal of Applied Polymer Science, 2017, 134, .	2.6	9
230	Effect of intumescent compositions on flammable properties of ethylene vinyl acetate and polypropylene. Fire and Materials, 2017, 41, 857-863.	2.0	1
231	Synthesis of a hydrogen-bonded complex intumescent flame retardant through supramolecular complexation and its application in LDPE foam. RSC Advances, 2017, 7, 31298-31309.	3.6	11
232	Study of a novel co-rotating non-twin screw extruder in processing flame retardant polymer materials. Journal of Polymer Engineering, 2017, 37, 827-835.	1.4	0
233	Size is not all that matters: Residue thickness and protection performance of intumescent coatings made from different binders. Journal of Fire Sciences, 2017, 35, 284-302.	2.0	31
234	Functional organoclay with high thermal stability and its synergistic effect on intumescent flame retardant polypropylene. Applied Clay Science, 2017, 143, 192-198.	5.2	30
235	Flame-retardant, non-irritating and self-healing multilayer films with double-network structure. Composites Science and Technology, 2017, 145, 15-23.	7.8	29
236	Effects of Zinc Phytate on Flame Retardancy and Thermal Degradation Behaviors of Intumescent Flame-retardant Polypropylene. Polymer-Plastics Technology and Engineering, 2017, 56, 1167-1176.	1.9	34
237	Impact of selective dispersion of intumescent flame retardant on properties of polypropylene blends. Journal of Materials Science, 2017, 52, 3269-3280.	3.7	21
238	Bisphenol-S bridged penta(anilino)cyclotriphosphazene and its application in epoxy resins: Synthesis, thermal degradation, and flame retardancy. Polymer Degradation and Stability, 2017, 135, 140-151.	5.8	108
239	Functionalized allylamine polyphosphate as a novel multifunctional highly efficient fire retardant for polypropylene. Polymer Chemistry, 2017, 8, 6309-6318.	3.9	30
240	Effect of char sulfonic acid and ammonium polyphosphate on flame retardancy and thermal properties of epoxy resin and polyamide composites. Journal of Fire Sciences, 2017, 35, 521-534.	2.0	7
241	Phosphorusâ€containing thermoplastic poly(ether ester) elastomers showing intrinsic flame retardancy. Journal of Applied Polymer Science, 2017, 134, 45478.	2.6	5
242	Revealing the inner secrets of intumescence: Advanced standard time temperature oven (STT) Tj ETQq1 1 0.784314 rgBT /Overlock 1	2.0	35
243	Fire-retardant carbon-fiber-reinforced thermoset composites. , 2017, , 271-293.		12
244	Design and UV-curable behaviour of boron based reactive diluent for epoxy acrylate oligomer used for flame retardant wood coating. Designed Monomers and Polymers, 2017, 20, 125-135.	1.6	18

#	Article	IF	Citations
245	Intumescent coatings: A review on recent progress. Journal of Coatings Technology Research, 2017, 14, 1-20.	2.5	175
246	Flame retardant performance of a carbon source containing <scp>DOPO</scp> derivative in <scp>PET</scp> and epoxy. Journal of Applied Polymer Science, 2017, 134, .	2.6	26
247	A review of flammability of natural fibre reinforced polymeric composites. Composites Science and Technology, 2018, 162, 64-78.	7.8	133
248	Synthesis of amino trimethylene phosphonic acid melamine salt and its application in flameâ€retarded polypropylene. Journal of Applied Polymer Science, 2018, 135, 46274.	2.6	22
249	Preparation and characterization of polyamide 6 fibre based on a phosphorus-containing flame retardant. RSC Advances, 2018, 8, 9261-9271.	3.6	56
250	A review on the environmental durability of intumescent coatings for steels. Journal of Materials Science, 2018, 53, 124-145.	3.7	43
251	The bio-touch: Increasing coating functionalities via biomass-derived components. Surface and Coatings Technology, 2018, 341, 2-14.	4.8	6
252	Chemical Foaming Coupled Self-Etching: A Multiscale Processing Strategy for Ultrahigh-Surface-Area Carbon Aerogels. ACS Applied Materials & Interfaces, 2018, 10, 2819-2827.	8.0	5
253	Cone calorimeter testing of foam core sandwich panels treated with intumescent paper underneath the veneer (<scp>FRV</scp>). Fire and Materials, 2018, 42, 296-305.	2.0	3
254	The synergistic action between anhydride grafted carbon fiber and intumescent flame retardant enhances flame retardancy and mechanical properties of polypropylene composites. Science and Technology of Advanced Materials, 2018, 19, 718-731.	6.1	13
255	Effects of intumescent flame retardant system consisting of tris (2-hydroxyethyl) isocyanurate and ammonium polyphosphate on the flame retardant properties of high-density polyethylene composites. Composites Part A: Applied Science and Manufacturing, 2018, 112, 444-451.	7.6	69
256	Graphitization induced by KOH etching for the fabrication of hierarchical porous graphitic carbon sheets for high performance supercapacitors. Journal of Materials Chemistry A, 2018, 6, 14170-14177.	10.3	66
257	The Effects of a Macromolecular Charring Agent with Gas Phase and Condense Phase Synergistic Flame Retardant Capability on the Properties of PP/IFR Composites. Materials, 2018, 11, 111.	2.9	42
259	Synthesis of a novel mono-component intumescent flame retardant and its high efficiency for flame retardant polyethylene. Journal of Analytical and Applied Pyrolysis, 2018, 134, 632-640.	5.5	46
260	2.19 Thermosetting Resin â€“ Properties. , 2018, , 401-468.		8
261	Intumescent coatings used for the fire-safe design of steel structures: A review. Journal of Constructional Steel Research, 2019, 162, 105712.	3.9	70
262	NMR evaluation of montmorillonite's d â€spacings on the formation of phosphocarbonaceous species in intumescent systems. Journal of Applied Polymer Science, 2019, 136, 48053.	2.6	6
263	Influence of eco-friendly calcium gluconate on the intumescent flame-retardant epoxy resin: Flame retardancy, smoke suppression and mechanical properties. Composites Part B: Engineering, 2019, 176, 107200.	12.0	78

#	Article	IF	Citations
264	Synthesis of intrinsically flameâ€retardant copolyamides and their employment in PA6â€fibers. Polymers for Advanced Technologies, 2019, 30, 2872-2882.	3.2	9
266	Layer-by-layer assembly flame-retardant and anti-dripping treatment of polyethylene terephthalate fabrics. Journal of Engineered Fibers and Fabrics, 2019, 14, 155892501987030.	1.0	3
267	Synthesis of a novel phosphorus-nitrogen flame retardant and its application in epoxy resin. Polymer Degradation and Stability, 2019, 169, 108981.	5.8	112
268	Synergistic barrier effect of aluminum phosphate on flame retardant polypropylene based on ammonium polyphosphate/dipentaerythritol system. Materials and Design, 2019, 181, 107913.	7.0	46
269	Synergistic effect of nanoscale carbon black and ammonium polyphosphate on improving thermal stability and flame retardancy of polypropylene: A reactive network for strengthening carbon layer. Composites Part B: Engineering, 2019, 174, 107038.	12.0	34
270	Novel synthesis of flame-retardant magnetic nanoparticles/hydroxy acid cellulose-6-phosphate composite. Materials Research Express, 2019, 6, 085310.	1.6	7
271	Intumescent flame retardant and anti-dripping of PET fabrics through layer-by-layer assembly of chitosan and ammonium polyphosphate. Progress in Organic Coatings, 2019, 134, 162-168.	3.9	83
272	Nano-TiO2-Engineered Cementitious Composites. , 2019, , 561-599.		1
273	Fabrication of cellulose-based halogen-free flame retardant and its synergistic effect with expandable graphite in polypropylene. Carbohydrate Polymers, 2019, 213, 257-265.	10.2	58
274	Single component phosphamide-based intumescent flame retardant with potential reactivity towards low flammability and smoke epoxy resins. Journal of Hazardous Materials, 2019, 371, 529-539.	12.4	166
275	A Facile Technique to Extract the Cross-Sectional Structure of Brittle Porous Chars from Intumescent Coatings. Polymers, 2019, 11, 640.	4.5	7
276	Sulfenamides in synergistic combination with halogen free flame retardants in polypropylene. Polymer Degradation and Stability, 2019, 164, 75-89.	5.8	26
277	Flame retardant and its influence on the performance of asphalt â€“ A review. Construction and Building Materials, 2019, 212, 841-861.	7.2	58
278	Phosphorylated sodium alginate/APP/DPER intumescent flame retardant used for polypropylene. Journal of Applied Polymer Science, 2019, 136, 47794.	2.6	37
279	Manufacturing, thermal stability, and flammability properties of polypropylene containing new single molecule intumescent flame retardant. Polymers for Advanced Technologies, 2019, 30, 1403-1414.	3.2	28
280	Fractal conceptualization of intumescent fire barriers, toward simulations of virtual morphologies. Scientific Reports, 2019, 9, 1872.	3.3	16
281	Numerical model for the fire protection performance and the design of intumescent coatings on structural steel exposed to natural fires. Journal of Structural Fire Engineering, 2019, 11, 33-50.	0.8	6
282	Synergistic effect of Nanoâ€ZnO and intumescent flame retardant on flame retardancy of polypropylene/ethyleneâ€propyleneâ€diene monomer composites using elongational flow field. Polymer Composites, 2019, 40, 2819-2833.	4.6	13

#	Article	IF	Citations
283	Metal compounds as catalysts in the intumescent flame retardant system for polyethylene terephthalate fabrics. Textile Reseach Journal, 2019, 89, 2983-2997.	2.2	16
284	Effects of added nanoclay for styrene-acrylic resin on intumescent fire retardancy and CO/CO2 emission. Journal of Coatings Technology Research, 2020, 17, 115-125.	2.5	10
285	Nanosized carbon black as synergist in PP/POE-MA/IFR system for simultaneously improving thermal, electrical and mechanical properties. Journal of Thermal Analysis and Calorimetry, 2020, 139, 1091-1098.	3.6	16
286	Improving the flame retardancy of polypropylene foam with piperazine pyrophosphate via multilayering coextrusion of film/foam composites. Journal of Applied Polymer Science, 2020, 137, 48552.	2.6	19
287	Flame retardant effect of cytosine pyrophosphate and pentaerythritol on polypropylene. Composites Part B: Engineering, 2020, 180, 107520.	12.0	40
288	Synergistic effect of zeolite 4A on thermal, mechanical and flame retardant properties of intumescent flame retardant HDPE composites. Polymer Testing, 2020, 81, 106177.	4.8	26
289	Improved pyrolysis behavior of ammonium polyphosphate-melamine-expandable (APP-MEL-EG) intumescent fire retardant coating system using ceria and dolomite as additives for I-beam steel application. Heliyon, 2020, 6, e03119.	3.2	15
290	Study on the effects of aging by accelerated weathering on the intumescent fire retardant coating for steel elements. Engineering Failure Analysis, 2020, 118, 104920.	4.0	24
291	Enhancement of the intumescent flame retardant efficiency in polypropylene by synergistic charring effect of a hypophosphite/cyclotetrasiloxane bi-group compound. Polymer Degradation and Stability, 2020, 181, 109281.	5.8	30
292	Thermal Degradation of Cellulose Filaments and Nanocrystals. Biomacromolecules, 2020, 21, 3374-3386.	5.4	62
293	Synthesis, structure, optical and thermal analysis of the new compound (C3N6H7)2Te(OH)6.2Cl. Journal of Molecular Structure, 2020, 1217, 128427.	3.6	6
294	Reactive and Additive Modifications of Styrenic Polymers with Phosphorus-Containing Compounds and Their Effects on Fire Retardance. Molecules, 2020, 25, 3779.	3.8	14
295	Basic Ingredients of Intumescent Compositions. Springer Series on Polymer and Composite Materials, 2020, , 1-51.	0.7	1
296	A facile one-step synthesis of highly efficient melamine salt reactive flame retardant for epoxy resin. Journal of Materials Science, 2020, 55, 12836-12847.	3.7	70
297	Study on the char-forming and synergistic flame retardant performance of SEBS/HIPS/PPO composites applied for cable. Plastics, Rubber and Composites, 2020, 49, 222-229.	2.0	12
298	Flame-Retardant Wood Composites Based on Immobilizing with Chitosan/Sodium Phytate/Nano-TiO2-ZnO Coatings via Layer-by-Layer Self-Assembly. Coatings, 2020, 10, 296.	2.6	49
299	Flame retardancy, thermal properties, and combustion behaviors of intumescent flameâ€retardant polypropylene containing (poly) piperazine pyrophosphate and melamine polyphosphate. Polymers for Advanced Technologies, 2020, 31, 2701-2710.	3.2	25
300	The flame retardant and thermal performances of polypropylene with a novel intumescent flame retardant. Journal of Applied Polymer Science, 2020, 137, 49047.	2.6	20

#	Article	IF	Citations
301	Base Promoted Intumescence of Phenols. Polymers, 2020, 12, 261.	4.5	3
302	Flame retardancy of waterâ€based intumescent coatings with etherified melamineâ€“formaldehyde and polyvinyl acetate copolymer hybrid resin. Journal of Applied Polymer Science, 2020, 137, 49279.	2.6	9
303	Design, synthesis and application of a highly efficient mono-component intumescent flame retardant for non-charring polyethylene composites. Polymer Bulletin, 2021, 78, 643-662.	3.3	12
304	UV curable flame retardant coating: a novel synthetic approach of trispiperazido phosphate based reactive diluent. Pigment and Resin Technology, 2021, 50, 271-283.	0.9	11
305	Intumescent fire-retardant acrylic coatings: Effects of additive loading ratio and scale of testing. Progress in Organic Coatings, 2021, 150, 105985.	3.9	15
306	Development of valueâ€added polyethylene grades with extended service lifetime: Weathering resistant flame retarded materials for outdoor applications. Journal of Applied Polymer Science, 2021, 138, 50370.	2.6	3
307	A chain is no stronger than its weakest link: Weathering resistance of water-based intumescent coatings for steel applications. Journal of Fire Sciences, 2021, 39, 72-102.	2.0	7
308	Effect of Layered Double Hydroxide on Rheological and Flame-Retardant Properties of Styrene-Butadiene-Styreneâ€“Modified Asphalt. Journal of Materials in Civil Engineering, 2021, 33, .	2.9	13
309	Combustion Behavior and Thermal Degradation Properties of Wood Impregnated with Intumescent Biomass Flame Retardants: Phytic Acid, Hydrolyzed Collagen, and Glycerol. ACS Omega, 2021, 6, 3921-3930.	3.5	45
310	Effect of nano titanium dioxide in intumescent fireproof coating on thermal performance and char morphology. Materials Today: Proceedings, 2021, 47, 3462-3467.	1.8	11
311	Tannic acid based <scp>superâ€intumescent</scp> coatings for prolonged fire protection of cardboard and wood. SPE Polymers, 2021, 2, 153-168.	3.3	6
312	Fire blanket and intumescent coating materials for failure resistance. MRS Bulletin, 2021, 46, 429-434.	3.5	7
313	Core-shell ammonium polyphosphate@nanoscopic aluminum hydroxide microcapsules: Preparation, characterization, and its flame retardancy performance on wood pulp paper. Chemical Engineering Journal Advances, 2021, 6, 100096.	5.2	6
314	Rigid Polyurethane Foams Containing Modified Ammonium Polyphosphate Having Outstanding Charring Ability and Increased Flame Retardancy. Frontiers in Materials, 2021, 8, .	2.4	10
315	Characterization and fire protection properties of rubberwood biomass ash formulated intumescent coatings for steel. Journal of Materials Research and Technology, 2021, 14, 2096-2106.	5.8	6
316	Bench-scale fire stability testing â€“ Assessment of protective systems on carbon fibre reinforced polymer composites. Polymer Testing, 2021, 102, 107340.	4.8	4
317	Synthesis and characterization of PEDMCD as a flame retardant and its application in epoxy resins. RSC Advances, 2021, 11, 2756-2766.	3.6	9
318	Types of Flame Retardants Used for the Synthesis of Flame-Retardant Polymers. Springer Series in Materials Science, 2020, , 15-45.	0.6	1

#	Article	IF	Citations
319	Development of led-curable intumescent polymer coatings for fire protection of building constructions. IOP Conference Series: Materials Science and Engineering, 0, 666, 012089.	0.6	3
320	Uses of Fire Tests in Materials Flammability Development. , 2009, , 387-420.		7
321	SOME ASPECTS OF MECHANICAL STABILITY OF INTUMESCENT CHARS. , 1998, , 104-112.		11
322	SPECIAL FEATURES OF BUBBLE FORMATION DURING INTUMESCENT SYSTEMS BURNING. , 1998, , 140-151.		6
323	INTUMESCENT CHARS. , 1998, , 88-103.		7
324	ROLE OF MIGRATION PROCESS IN THE EFFICIENCY OF INTUMESCENT FLAME RETARDANT ADDITIVES IN POLYPROPYLENE. , 1998, , 325-340.		11
325	Effect of Metal Oxides on Fire Resistance and Char Formation of Intumescent Flame Retardant Coating. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2014, 29, 972.	1.3	9
326	Flame Retardancy Effects on Intumescent Coatings with Vinyl Acetate Copolymers. International Polymer Processing, 2019, 34, 541-550.	0.5	4
327	Effect of Cyclotriphosphazene-Based Curing Agents on the Flame Resistance of Epoxy Resins. Polymers, 2021, 13, 8.	4.5	10
328	SYNERGISTIC EFFECT OF METAL OXIDES ON INTUMESCENT FLAME-RETARDANT PP SYSTEMS. Acta Polymerica Sinica, 2009, 009, 1205-1210.	0.0	11
329	Structure-char Forming Relastionship In Intumescent Fire Retardant Systems. Fire Safety Science, 1991, 3, 537-546.	0.3	2
330	Three-dimensional Modeling Of Intumescent Behavior In Fires. Fire Safety Science, 1997, 5, 523-534.	0.3	15
331	A Study of Bonding Mechanism of Expandable Graphite Based Intumescent Coating on Steel Substrate. Journal of Applied Sciences, 2011, 11, 1630-1635.	0.3	18
332	PREPARATION OF TRIAZINE BASED CROSSLINKED POLYMERS AND THEIR CHARRING PROPERTIES. Acta Polymerica Sinica, 2009, 009, 325-330.	0.0	0
333	THERMAL DEGRADATION OF AN INTUMESCENT (STYRENE - BUTADIENE COPOLYMER / AMMONIUM) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		0
334	Synthesis of Melamine Phosphate-Polyurethane Composite Foam Blown by Water and Characterization of Its Thermal Properties. Porrime, 2014, 38, 441-448.	0.2	0
336	Structural Behaviour of Composite Materials in Fire. , 2020, , 149-168.		0
337	From Waste to Chemicals: Bio-Oils Production Through Microwave-Assisted Pyrolysis. Biofuels and Biorefineries, 2020, , 207-231.	0.5	1

#	Article	IF	Citations
338	Using recombinant adhesive proteins as durable and green flame-retardant coatings. Synthetic and Systems Biotechnology, 2021, 6, 369-376.	3.7	14
339	Sequence Does Not Matter: The Biomedical Applications of DNA-Based Coatings and Cores. International Journal of Molecular Sciences, 2021, 22, 12884.	4.1	6
340	Brominated flame retardants, a cornelian dilemma. Environmental Chemistry Letters, 2023, 21, 9-14.	16.2	6
341	Intumescent flame retardants inspired template-assistant synthesis of N/P dual-doped three-dimensional porous carbons for high-performance supercapacitors. Journal of Colloid and Interface Science, 2022, 613, 35-46.	9.4	15
342	Effect of titania, barite, and kaolinite fillers on char layer formation in water-based intumescent fire-retardant coatings. Journal of Coatings Technology Research, 2022, 19, 1067-1075.	2.5	3
343	Material-scale flammability characteristics of epoxy-based coating systems. Journal of Fire Sciences, 0, , 073490412210858.	2.0	0
344	Poly(ethyl methacrylate) Composite Coatings Containing Halogen-Free Inorganic Additives with Flame-Retardant Properties. Journal of Composites Science, 2022, 6, 104.	3.0	1
345	Some recent developments and testing strategies relating to the passive fire protection of concrete using intumescent coatings: a review. Journal of Structural Fire Engineering, 2022, ahead-of-print, .	0.8	2
346	Microbial production of 2-pyrone-4,6-dicarboxylic acid from lignin derivatives in an engineered Pseudomonas putida and its application for the synthesis of bio-based polyester. Bioresource Technology, 2022, 352, 127106.	9.6	15
347	Bio-based coating of phytic acid, chitosan, and biochar for flame-retardant cotton fabrics. Polymer Degradation and Stability, 2022, 199, 109898.	5.8	31
348	Thermal decomposition behaviors of a selfâ€intumescent flame retardant epoxy resin. Journal of Applied Polymer Science, 2022, 139, .	2.6	4
349	Morphology of wood degradation and flame retardants wood coating technology: an overview. International Wood Products Journal, 2022, 13, 21-40.	1.1	10
350	Kinetic analysis of the thermal degradation of an intumescent fire retardant coated green biocomposite. Thermochimica Acta, 2022, 711, 179211.	2.7	10
351	A novel highly efficient intumescent flame-retardant polypropylene: Thermal degradation, flame retardance and mechanism. Journal of Polymer Research, 2022, 29, .	2.4	12
352	Expandable Graphite for Flame-Retardant Polyurethane Foams. ACS Symposium Series, 0, , 65-86.	0.5	0
353	Study of Intumescent Coatings Growth for Fire Retardant Systems in Naval Applications: Experimental Test and Mathematical Model. Coatings, 2022, 12, 1180.	2.6	7
354	A novel bioâ€based, flame retardant and latent imidazole compoundâ€”Its synthesis and uses as curing agent for epoxy resins. Journal of Applied Polymer Science, 2022, 139, .	2.6	6
355	Influence of chicken feather fibre processing technique on mechanical and fire performances of flame-retardant polypropylene composites. Composites Part A: Applied Science and Manufacturing, 2023, 165, 107338.	7.6	6

#	Article	IF	Citations
356	Synergistic action of expandable graphite on fire safety of a selfâ€intumescent flame retardant epoxy resin. Journal of Applied Polymer Science, 2023, 140, .	2.6	2
357	Thermal properties of intumescent coating with waterborne melamine-acrylic emulsion resin for plywood. Journal of Coatings Technology Research, 0, , .	2.5	0
358	Use of fly ash as synergistic and reactive component of flame retardant system in polylactide. Polymer Degradation and Stability, 2023, 211, 110314.	5.8	2
359	Waterborne etherified MF and PVAc hybrid resin containing nanoclay as intumescent flame-retardant plywood coatings. Journal of Coatings Technology Research, 2023, 20, 843-856.	2.5	2
360	Micro combustion calorimeter for development of fire protective paints. Journal of Thermal Analysis and Calorimetry, 2023, 148, 3993-4000.	3.6	2
361	Evaluation of the thermal degradation and cone calorimeter parameters of an intumescent composite containing acidic montmorillonites. Journal of Thermal Analysis and Calorimetry, 2023, 148, 7669-7686.	3.6	1
362	Synergistic fire retardancy of melamine resin modified with pentaerythritol and ammonium polyphosphate in <scp>PP</scp>. Journal of Vinyl and Additive Technology, 2024, 30, 244-262.	3.4	1
363	Synthesis of phytic acid-layered zinc oxide hybrid nanoparticles and their flame-retardant applications in polyurethane coatings. Journal of Coatings Technology Research, 2024, 21, 369-382.	2.5	0
364	Design of 2d charring-foaming agent for highly efficient intumescent flame retardant polylactic acid composites. Composites Communications, 2023, 43, 101720.	6.3	2
365	Flame Retardancy of Textilesâ€"New Strategies and Mechanisms. Advanced Structured Materials, 2023, , 279-317.	0.5	0
366	Synergistic flame retardancy of 4A-zeolite/MF-THEIC/ammonium polyphosphate in PP. Polymer Testing, 2023, 129, 108276.	4.8	0
367	Green Synthesis of Organicâ€"Inorganic Hybrid Fire Retardants. , 2023, , 295-355.		0
368	Flame retardancy of acrylic emulsion resin intumescent coatings added with alkaline lignin on plywood. Journal of Coatings Technology Research, 2024, 21, 611-622.	2.5	0
369	Investigation of combustion and mechanical properties of huntite-hydromagnesite and intumescent flame retardants in polypropylene composites. Journal of Composite Materials, 0, , .	2.4	0
370	Thermochemical Foaming of Mixed Single-Use Plastics Toward Flame Retardant Potential Foams. ACS Sustainable Chemistry and Engineering, 2024, 12, 1151-1160.	6.7	0
371	Real-time char layer resistance monitoring for the study of expanded char layer morphology formed by IFR/SBS during combustion processes. Polymer Testing, 2024, 132, 108385.	4.8	0
372	Mechanistic study of a silicon-based intumescent coating system. Progress in Organic Coatings, 2024, 190, 108354.	3.9	0