# Serge Bourbigot

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 317 papers | 18,426 citations | 9234 74 h-index | 19136 118 g-index |
| 326 all docs | 326 docs citations | 326 times ranked | 8800 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Recent Advances for Intumescent Polymers. Macromolecular Materials and Engineering, 2004, 289, 499-511. | 1.7 | 642 |
| 2 | Fire retardant polymers: recent developments and opportunities. Journal of Materials Chemistry, 2007, 17, 2283. | 6.7 | 558 |
| 3 | Intumescence: Tradition versus novelty. A comprehensive review. Progress in Polymer Science, 2015, 51, 28-73. | 11.8 | 410 |
| 4 | PA-6 clay nanocomposite hybrid as char forming agent in intumescent formulations. Fire and Materials, 2000, 24, 201-208. | 0.9 | 315 |
| 5 | Flammability properties of intumescent PLA including starch and lignin. Polymers for Advanced Technologies, 2008, 19, 628-635. | 1.6 | 290 |
| 6 | Intumescent fire protective coating: Toward a better understanding of their mechanism of action. Thermochimica Acta, 2006, 449, 16-26. | 1.2 | 275 |
| 7 | Carbonization mechanisms resulting from intumescence-part II. Association with an ethylene terpolymer and the ammonium polyphosphate-pentaerythritol fire retardant system. Carbon, 1995, 33, 283-294. | 5.4 | 254 |
| 8 | Lignin-derived bio-based flame retardants toward high-performance sustainable polymeric materials. Green Chemistry, 2020, 22, 2129-2161. | 4.6 | 249 |
| 9 | Flame retardancy of polylactide: an overview. Polymer Chemistry, 2010, 1, 1413. | 1.9 | 247 |
| 10 | The production and properties of polylactide composites filled with expanded graphite. Polymer Degradation and Stability, 2010, 95, 889-900. | 2.7 | 244 |
| 11 | Effect of fillers on the fire retardancy of intumescent polypropylene compounds. Polymer Degradation and Stability, 2003, 82, 325-331. | 2.7 | 216 |
| 12 | Preparation of Homogeneously Dispersed Multiwalled Carbon Nanotube/Polystyrene Nanocomposites via Melt Extrusion Using Trialkyl Imidazolium Compatibilizer. Advanced Functional Materials, 2005, 15, 910-916. | 7.8 | 209 |
| 13 | Characterization of the performance of an intumescent fire protective coating. Surface and Coatings Technology, 2006, 201, 979-987. | 2.2 | 200 |
| 14 | Kinetic analysis of the thermal degradation of polystyreneâ€“montmorillonite nanocomposite. Polymer Degradation and Stability, 2004, 84, 483-492. | 2.7 | 196 |
| 15 | Recent advances in the use of zinc borates in flame retardancy of EVA. Polymer Degradation and Stability, 1999, 64, 419-425. | 2.7 | 190 |
| 16 | The facts and hypotheses relating to the phenomenological model of cellulose pyrolysis. Journal of Analytical and Applied Pyrolysis, 2009, 84, 1-17. | 2.6 | 185 |
| 17 | The origin and nature of flame retardance in ethylene-vinyl acetate copolymers containing hostaflam AP 750. Polymer International, 1999, 48, 264-270. | 1.6 | 183 |
| 18 | Flammability of polyamide-6/clay hybrid nanocomposite textiles. Polymer Degradation and Stability, 2002, 75, 397-402. | 2.7 | 174 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Thermal degradation of polyurethane and polyurethane/expandable graphite coatings. Polymer Degradation and Stability, 2001, 74, 493-499. | 2.7 | 170 |
| 20 | Starch-Based Layer by Layer Assembly: Efficient and Sustainable Approach to Cotton Fire Protection. ACS Applied Materials & Interfaces, 2015, 7, 12158-12167. | 4.0 | 170 |
| 21 | Carbonization mechanisms resulting from intumescence association with the ammonium polyphosphate-pentaerythritol fire retardant system. Carbon, 1993, 31, 1219-1230. | 5.4 | 169 |
| 22 | Mechanism of fire retardancy of polyurethanes using ammonium polyphosphate. Journal of Applied Polymer Science, 2001, 82, 3262-3274. | 1.3 | 166 |
| 23 | Synergistic effect of zeolite in an intumescence process: study of the carbonaceous structures using solid-state NMR. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 149. | 1.7 | 163 |
| 24 | XPS study of an intumescent coating. Applied Surface Science, 1997, 120, 15-29. | 3.1 | 163 |
| 25 | Expandable graphite: A fire retardant additive for polyurethane coatings. Fire and Materials, 2003, 27, 103-117. | 0.9 | 163 |
| 26 | Polyhedral oligomeric silsesquioxane as flame retardant for thermoplastic polyurethane. Polymer Degradation and Stability, 2009, 94, 1230-1237. | 2.7 | 161 |
| 27 | Kinetic analysis of the thermal decomposition of cellulose: The main step of mass loss. Journal of Analytical and Applied Pyrolysis, 2007, 80, 151-165. | 2.6 | 159 |
| 28 | Charring of fire retarded ethylene vinyl acetate copolymerÂâ€" magnesium hydroxide/zinc borate formulations. Polymer Degradation and Stability, 2000, 69, 83-92. | 2.7 | 157 |
| 29 | New Intumescent Formulations of Fire-retardant Polypropyleneâ€"Discussion of the Free Radical Mechanism of the Formation of Carbonaceous Protective Material During the Thermo-oxidative Treatment of the Additives. Fire and Materials, 1996, 20, 191-203. | 0.9 | 153 |
| 30 | New trends in polylactide (PLA)-based materials: â€œGreenâ€•PLAâ€"Calcium sulfate (nano)composites tailored with flame retardant properties. Polymer Degradation and Stability, 2010, 95, 374-381. | 2.7 | 153 |
| 31 | Use of polyurethanes as char-forming agents in polypropylene intumescent formulations. Polymer International, 2000, 49, 1115-1124. | 1.6 | 146 |
| 32 | Synergistic effect of zeolite in an intumescence process. Study of the interactions between the polymer and the additives. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 3435-3444. | 1.7 | 142 |
| 33 | Polymer Nanocomposites: How to Reach Low Flammability?. Macromolecular Symposia, 2006, 233, 180-190. | 0.4 | 140 |
| 34 | XPS study of an intumescent coating application to the ammonium polyphosphate/pentaerythritol fire-retardant system. Applied Surface Science, 1994, 81, 299-307. | 3.1 | 139 |
| 35 | Effect of zinc borate on the thermal degradation of ammonium polyphosphate. Thermochimica Acta, 2007, 456, 134-144. | 1.2 | 139 |
| 36 | The use of POSS as synergist in intumescent recycled poly(ethylene terephthalate). Polymer Degradation and Stability, 2008, 93, 818-826. | 2.7 | 130 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Comprehensive study of the degradation of an intumescent EVA-based material during combustion. Journal of Materials Science, 1999, 34, 5777-5782. | 1.7 | 129 |
| 38 | Flame retarded polyurea with microencapsulated ammonium phosphate for textile coating. Polymer Degradation and Stability, 2005, 88, 106-113. | 2.7 | 126 |
| 39 | Investigation of nanodispersion in polystyrene-montmorillonite nanocomposites by solid-state NMR. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 3188-3213. | 2.4 | 122 |
| 40 | Thermoregulating response of cotton fabric containing microencapsulated phase change materials. Thermochimica Acta, 2010, 506, 82-93. | 1.2 | 118 |
| 41 | Polyallylamineâ€“montmorillonite as super flame retardant coating assemblies byÂlayer-by layer deposition on polyamide. Polymer Degradation and Stability, 2013, 98, 627-634. | 2.7 | 118 |
| 42 | Preparation of a Novel Intumescent Flame Retardant Based on Supramolecular Interactions and Its Application in Polyamide 11. ACS Applied Materials & Interfaces, 2017, 9, 24964-24975. | 4.0 | 117 |
| 43 | Influence of process parameters on microcapsules loaded with n-hexadecane prepared by in situ polymerization. Chemical Engineering Journal, 2009, 155, 457-465. | 6.6 | 116 |
| 44 | Microencapsulation of ammonium phosphate with a polyurethane shell part I: Coacervation technique. Reactive and Functional Polymers, 2005, 64, 127-138. | 2.0 | 115 |
| 45 | Microencapsulation of ammonium phosphate with a polyurethane shell. Part II. Interfacial polymerization technique. Reactive and Functional Polymers, 2006, 66, 1118-1125. | 2.0 | 113 |
| 46 | Crystallization behavior of PA-6 clay nanocomposite hybrid. Journal of Applied Polymer Science, 2002, 86, 2416-2423. | 1.3 | 111 |
| 47 | Water-assisted extrusion as a novel processing route to prepare polypropylene/halloysite nanotube nanocomposites: Structure and properties. Polymer, 2011, 52, 4284-4295. | 1.8 | 111 |
| 48 | Structure and Properties of PHA/Clay Nanoâ€Biocomposites Prepared by Melt Intercalation. Macromolecular Chemistry and Physics, 2008, 209, 1473-1484. | 1.1 | 110 |
| 49 | Multiscale Experimental Approach for Developing High-Performance Intumescent Coatings. Industrial & Engineering Chemistry Research, 2006, 45, 4500-4508. | 1.8 | 108 |
| 50 | Characterization and Reaction to Fire of Polymer Nanocomposites with and without Conventional Flame Retardants. Molecular Crystals and Liquid Crystals, 2008, 486, 325/[1367]-339/[1381]. | 0.4 | 108 |
| 51 | The fire performance of polylactic acid containing a novel intumescent flame retardant and intercalated layered double hydroxides. Journal of Materials Science, 2017, 52, 12235-12250. | 1.7 | 108 |
| 52 | A comprehensive study of the synergistic flame retardant mechanisms of halloysite in intumescent polypropylene. Polymer Degradation and Stability, 2013, 98, 2268-2281. | 2.7 | 106 |
| 53 | Fire Degradation of an Intumescent Flame Retardant Polypropylene Using the Cone Calorimeter. Journal of Fire Sciences, 1995, 13, 3-22. | 0.9 | 105 |
| 54 | Thermal degradation of DNA, an all-in-one natural intumescent flame retardant. Polymer Degradation and Stability, 2015, 113, 110-118. | 2.7 | 105 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Microencapsulation of phosphate. Polymer Degradation and Stability, 2002, 77, 285-297. | 2.7 | 103 |
| 56 | Reactive extrusion of PLA and of PLA/carbon nanotubes nanocomposite: processing, characterization and flame retardancy. Polymers for Advanced Technologies, 2011, 22, 30-37. | 1.6 | 103 |
| 57 | Influence of exfoliated graphene nanoplatelets on flame retardancy of kenaf flour polypropylene hybrid nanocomposites. Journal of Analytical and Applied Pyrolysis, 2017, 123, 65-72. | 2.6 | 102 |
| 58 | Kinetic modelling of the thermal degradation. European Polymer Journal, 2000, 36, 273-284. | 2.6 | 98 |
| 59 | Nanomorphology and reaction to fire of polyurethane and polyamide nanocomposites containing flame retardants. Polymer Degradation and Stability, 2010, 95, 320-326. | 2.7 | 98 |
| 60 | Phosphorylation of lignin to flame retard acrylonitrile butadiene styrene (ABS). Polymer Degradation and Stability, 2016, 127, 32-43. | 2.7 | 97 |
| 61 | Solid state NMR characterization and flammability of styreneâ€"acrylonitrile copolymer montmorillonite nanocomposite. Polymer, 2004, 45, 7627-7638. | 1.8 | 96 |
| 62 | Thermal decomposition of flame retarded formulations PA6/aluminum phosphinate/melamine polyphosphate/organomodified clay: Interactions between the constituents?. Polymer Degradation and Stability, 2012, 97, 2217-2230. | 2.7 | 96 |
| 63 | (Plasticized) Polylactide/clay nanocomposite textile: thermal, mechanical, shrinkage and fire properties. Journal of Materials Science, 2007, 42, 5105-5117. | 1.7 | 95 |
| 64 | Neutralized flame retardant phosphorus agent: Facile synthesis, reaction to fire in PP and synergy with zinc borate. Polymer Degradation and Stability, 2008, 93, 68-76. | 2.7 | 94 |
| 65 | Thermal oxidative degradation of epoxy resins: evaluation of their heat resistance using invariant kinetic parameters. Polymer Degradation and Stability, 1994, 45, 387-397. | 2.7 | 92 |
| 66 | Intumescent flame retardant systems of modified rheology. Polymer Degradation and Stability, 2002, 77, 243-247. | 2.7 | 85 |
| 67 | Effect of Nanoclay Hydration on Barrier Properties of PLA/Montmorillonite Based Nanocomposites. Journal of Physical Chemistry C, 2013, 117, 12117-12135. | 1.5 | 85 |
| 68 | Kinetic analysis of the thermal decomposition of a carbon fibre-reinforced epoxy resin laminate. Journal of Analytical and Applied Pyrolysis, 2017, 126, 14-21. | 2.6 | 84 |
| 69 | Fire retardancy of polymer clay nanocomposites: Is there an influence of the nanomorphology?. Polymer Degradation and Stability, 2008, 93, 2019-2024. | 2.7 | 83 |
| 70 | Thermal degradation of DNA-treated cotton fabrics under different heating conditions. Journal of Analytical and Applied Pyrolysis, 2014, 108, 212-221. | 2.6 | 82 |
| 71 | Extreme Heat Shielding of Clay/Chitosan Nanobrick Wall on Flexible Foam. ACS Applied Materials & Interfaces, 2018, 10, 31686-31696. | 4.0 | 81 |
| 72 | Zeolites: New Synergistic Agents for Intumescent Fire Retardant Thermoplastic Formulations?Criteria for the Choice of the Zeolite. Fire and Materials, 1996, 20, 145-154. | 0.9 | 79 |

| # | Article | IF | Citations |
| --- | --- | --- | --- |
| 73 | Effects of nanoclay and fire retardants on fire retardancy of a polymer blend of EVA and LDPE. Fire Safety Journal, 2009, 44, 504-513. | 1.4 | 79 |
| 74 | The preparation of a bio-polyelectrolytes based core-shell structure and its application in flame retardant polylactic acid composites. Composites Part A: Applied Science and Manufacturing, 2019, 124, 105485. | 3.8 | 79 |
| 75 | Intumescent polylactide: A nonflammable material. Journal of Applied Polymer Science, 2009, 113, 3860-3865. | 1.3 | 78 |
| 76 | Designing polylactide/clay nanocomposites for textile applications: Effect of processing conditions, spinning, and characterization. Journal of Applied Polymer Science, 2008, 109, 841-851. | 1.3 | 74 |
| 77 | Melamine integrated metal phosphates as non-halogenated flame retardants: Synergism with aluminium phosphinate for flame retardancy in glass fiber reinforced polyamide 66. Polymer Degradation and Stability, 2013, 98, 2653-2662. | 2.7 | 74 |
| 78 | Using polyamide-6 as charring agent in intumescent polypropylene formulationsI. Effect of the compatibilising agent on the fire retardancy performance. Polymer Degradation and Stability, 2002, 77, 305-313. | 2.7 | 73 |
| 79 | Modeling of Heat Transfer of a Polypropylene-Based Intumescent System during Combustion. Journal of Fire Sciences, 1999, 17, 42-56. | 0.9 | 72 |
| 80 | Modelling of nonisothermal kinetics in thermogravimetry. Physical Chemistry Chemical Physics, 2000, 2, 4708-4716. | 1.3 | 72 |
| 81 | Study of the thermal degradation of high performance fibresâ€"application to polybenzazole and p-aramid fibres. Polymer Degradation and Stability, 2001, 74, 283-290. | 2.7 | 71 |
| 82 | Using polyamide 6 as charring agent in intumescent polypropylene formulations II. Thermal degradation. Polymer Degradation and Stability, 2002, 77, 315-323. | 2.7 | 69 |
| 83 | Characterisation of the dispersion in polymer flame retarded nanocomposites. European Polymer Journal, 2008, 44, 1631-1641. | 2.6 | 68 |
| 84 | Effect of fillers on fire retardancy of intumescent polypropylene blends. Macromolecular Symposia, 2003, 198, 435-448. | 0.4 | 65 |
| 85 | Model-free method for evaluation of activation energies in modulated thermogravimetry and analysis of cellulose decomposition. Chemical Engineering Science, 2006, 61, 1276-1292. | 1.9 | 65 |
| 86 | Flame retardant formulations for cotton. Polymer Degradation and Stability, 2001, 74, 487-492. | 2.7 | 64 |
| 87 | Comprehensive Study of the Influence of Different Aging Scenarios on the Fire Protective Behavior of an Epoxy Based Intumescent Coating. Industrial & Engineering Chemistry Research, 2013, 52, 729-743. | 1.8 | 62 |
| 88 | Effect of Highly Exfoliated and Oriented Organoclays on the Barrier Properties of Polyamide 6 Based Nanocomposites. Journal of Physical Chemistry C, 2012, 116, 4937-4947. | 1.5 | 61 |
| 89 | Reaction to fire of an intumescent epoxy resin: Protection mechanisms and synergy. Polymer Degradation and Stability, 2012, 97, 1366-1386. | 2.7 | 60 |
| 90 | Rheological investigations in fire retardancy: application to ethylene-vinyl-acetate copolymer-magnesium hydroxide/zinc borate formulations. Polymer International, 2000, 49, 1216-1221. | 1.6 | 58 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | The Use of Clay in an EVA-Based Intumescent Formulation. Comparison with the Intumescent Formulation Using Polyamide-6 Clay Nanocomposite As Carbonisation Agent. Journal of Fire Sciences, 2001, 19, 219-241. | 0.9 | 58 |
| 92 | Kinetic analysis of the thermal decomposition of cellulose: The change of the rate limitation. Journal of Analytical and Applied Pyrolysis, 2007, 80, 141-150. | 2.6 | 58 |
| 93 | Elaboration of poly(lactic acid)/halloysite nanocomposites by means of water assisted extrusion: structure, mechanical properties and fire performance. RSC Advances, 2014, 4, 57553-57563. | 1.7 | 58 |
| 94 | Mineral Fillers in Intumescent Fire Retardant Formulations ? Criteria for the Choice of a Natural Clay Filler for the Ammonium Polyphosphate/Pentaerythritol/Polypropylene System. Fire and Materials, 1996, 20, 39-49. | 0.9 | 56 |
| 95 | Thermal degradation and fire performance of intumescent siliconeâ€based coatings. Polymers for Advanced Technologies, 2013, 24, 62-69. | 1.6 | 56 |
| 96 | Intumescent coating of (polyallylamine-polyphosphates) deposited on polyamide fabrics via layer-by-layer technique. Polymer Degradation and Stability, 2014, 106, 158-164. | 2.7 | 56 |
| 97 | Flammability and thermal properties of polycarbonate /acrylonitrile-butadiene-styrene nanocomposites reinforced with multilayer graphene. Polymer Degradation and Stability, 2015, 120, 88-97. | 2.7 | 56 |
| 98 | Analysis of Fire Gases Released from Polyurethane and Fire-Retarded Polyurethane Coatings. Journal of Fire Sciences, 2000, 18, 456-482. | 0.9 | 55 |
| 99 | Thermal degradation of poly(p-phenylenebenzobisoxazole) and poly(p-phenylenediamine) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 | 1.6 | 55 |
| 100 | Characterization of the carbonization process of expandable graphite/silicone formulations in a simulated fire. Polymer Degradation and Stability, 2013, 98, 1052-1063. | 2.7 | 54 |
| 101 | Microstructure and barrier properties of PHBV/organoclays bionanocomposites. Journal of Membrane Science, 2014, 467, 56-66. | 4.1 | 54 |
| 102 | Surface grafting of sepiolite with a phosphaphenanthrene derivative and its flame-retardant mechanism on PLA nanocomposites. Polymer Degradation and Stability, 2019, 165, 68-79. | 2.7 | 54 |
| 103 | Thermal and flammability properties of polyethersulfone/halloysite nanocomposites prepared by melt compounding. Polymer Degradation and Stability, 2013, 98, 1993-2004. | 2.7 | 53 |
| 104 | Fire behaviour of carbon fibre epoxy composite for aircraft: Novel test bench and experimental study. Journal of Fire Sciences, 2015, 33, 247-266. | 0.9 | 53 |
| 105 | The Preparation of an Intumescent Flame Retardant by Ion Exchange and Its Application in Polylactic Acid. ACS Applied Polymer Materials, 2019, 1, 755-764. | 2.0 | 53 |
| 106 | Characterization of a polyamide-6-based intumescent additive for thermoplastic formulations. Polymer, 2000, 41, 5283-5296. | 1.8 | 52 |
| 107 | High-Throughput Fire Testing for Intumescent Coatings. Industrial & Engineering Chemistry Research, 2006, 45, 7475-7481. | 1.8 | 52 |
| 108 | Experimental and numerical study of the effects of nanoparticles on pyrolysis of a polyamide 6 (PA6) nanocomposite in the cone calorimeter. Combustion and Flame, 2009, 156, 2056-2062. | 2.8 | 52 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 109 | Phosphorylation of lignin: characterization and investigation of the thermal decomposition. RSC Advances, 2017, 7, 16866-16877. | 1.7 | 52 |
| 110 | New Trends in Reaction and Resistance to Fire of Fire-retardant Epoxies. Materials, 2010, 3, 4476-4499. | 1.3 | 51 |
| 111 | Title is missing!. Journal of Materials Science, 2003, 38, 4451-4460. | 1.7 | 50 |
| 112 | Processing and nanodispersion: A quantitative approach for polylactide nanocomposite. Polymer Testing, 2008, 27, 2-10. | 2.3 | 50 |
| 113 | Crossed characterisation of polymer-layered silicate (PLS) nanocomposite morphology: TEM, X-ray diffraction, rheology and solid-state nuclear magnetic resonance measurements. European Polymer Journal, 2008, 44, 1642-1653. | 2.6 | 50 |
| 114 | Layer-by-layer deposition of a TiO2-filled intumescent coating and its effect on the flame retardancy of polyamide and polyester fabrics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 469, 1-10. | 2.3 | 50 |
| 115 | Thermal Degradation and Fire Behavior of High Performance Polymers. Polymer Reviews, 2019, 59, 55-123. | 5.3 | 50 |
| 116 | Influence of the solvent on the microencapsulation of an hydrated salt. Carbohydrate Polymers, 2010, 79, 964-974. | 5.1 | 49 |
| 117 | Progress in safety, flame retardant textiles and flexible fire barriers for seats in transportation. Polymer Degradation and Stability, 2005, 88, 98-105. | 2.7 | 48 |
| 118 | Kinetic analysis of the thermal degradation of an epoxy-based intumescent coating. Polymer Degradation and Stability, 2009, 94, 404-409. | 2.7 | 48 |
| 119 | Influence of talc on the fire retardant properties of highly filled intumescent polypropylene composites. Polymers for Advanced Technologies, 2008, 19, 620-627. | 1.6 | 46 |
| 120 | Synergistic and antagonistic effects in flame retardancy of an intumescent epoxy resin. Polymers for Advanced Technologies, 2011, 22, 1085-1090. | 1.6 | 45 |
| 121 | Investigation of the decomposition pathway of polyamide 6/ammonium sulfamate fibers. Polymer Degradation and Stability, 2014, 106, 150-157. | 2.7 | 45 |
| 122 | Thermal degradation and fire performance of polysilazane-based coatings. Thermochimica Acta, 2011, 519, 28-37. | 1.2 | 43 |
| 123 | The combination of aluminum trihydroxide (ATH) and melamine borate (MB) as fire retardant additives for elastomeric ethylene vinyl acetate (EVA). Polymer Degradation and Stability, 2015, 115, 77-88. | 2.7 | 43 |
| 124 | Thermoplastic Polyurethanes as Carbonization Agents in Intumescent Blends. Part 1: Fire Retardancy of Polypropylene/Thermoplastic Polyurethane/Ammonium Polyphosphate Blends. Journal of Fire Sciences, 1999, 17, 494-513. | 0.9 | 42 |
| 125 | New approach to flame retardancy using plasma assisted surface polymerisation techniques. Polymer Degradation and Stability, 1999, 66, 153-155. | 2.7 | 42 |
| 126 | Novel flame retardant flexible polyurethane foam: plasma induced graft-polymerization of phosphonates. RSC Advances, 2015, 5, 63853-63865. | 1.7 | 42 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Crossing the Traditional Boundaries: Salen-Based Schiff Bases for Thermal Protective Applications. ACS Applied Materials & Interfaces, 2015, 7, 21208-21217. | 4.0 | 42 |
| 128 | Mechanical and Optical Properties of Polyamide 6/Clay Nanocomposite Cast Films: Influence of the Degree of Exfoliation. Macromolecular Materials and Engineering, 2012, 297, 444-454. | 1.7 | 41 |
| 129 | Resistance to fire of intumescent silicone based coating: The role of organoclay. Progress in Organic Coatings, 2013, 76, 1633-1641. | 1.9 | 41 |
| 130 | Mechanically robust and flame-retardant polylactide composites based on molecularly-engineered polyphosphoramides. Composites Part A: Applied Science and Manufacturing, 2021, 144, 106317. | 3.8 | 41 |
| 131 | Heat Transfer Study of Polypropylene-Based Intumescent Systems during Combustion. Journal of Fire Sciences, 1997, 15, 358-374. | 0.9 | 40 |
| 132 | Combustion behaviour of ethylene vinyl acetate copolymer-based intumescent formulations using oxygen consumption calorimetry. Fire and Materials, 1998, 22, 119-128. | 0.9 | 40 |
| 133 | Influence of modified rheology on the efficiency of intumescent flame retardant systems. Polymer Degradation and Stability, 2001, 74, 423-426. | 2.7 | 40 |
| 134 | Investigation of the thermal degradation of PET, zinc phosphinate, OMPOSS and their blendsâ€"Identification of the formed species. Thermochimica Acta, 2009, 495, 155-166. | 1.2 | 40 |
| 135 | Chitosan-grafted nonwoven geotextile for heavy metals sorption in sediments. Reactive and Functional Polymers, 2013, 73, 53-59. | 2.0 | 39 |
| 136 | Influence of inorganic fillers on the fire protection of intumescent coatings. Journal of Fire Sciences, 2013, 31, 258-275. | 0.9 | 39 |
| 137 | New approach to the dynamic properties of an intumescent material. Fire and Materials, 1999, 23, 49-51. | 0.9 | 38 |
| 138 | Flame Behavior of Cotton Coated with Polyurethane Containing Microencapsulated Flame Retardant Agent. Journal of Industrial Textiles, 2001, 31, 11-26. | 1.1 | 38 |
| 139 | Mechanism of intumescence of a polyethylene/calcium carbonate/stearic acid system. Polymer Degradation and Stability, 2009, 94, 797-803. | 2.7 | 38 |
| 140 | Polypropylene fabrics padded with microencapsulated ammonium phosphate: Effect of the shell structure on the thermal stability and fire performance. Polymer Degradation and Stability, 2010, 95, 1716-1720. | 2.7 | 38 |
| 141 | Improving the flame retardancy of polyamide 6 by incorporating hexachlorocyclotriphosphazene modified MWNT. Polymers for Advanced Technologies, 2014, 25, 1099-1107. | 1.6 | 38 |
| 142 | Flame Retardancy of PA6 Using a Guanidine Sulfamate/Melamine Polyphosphate Mixture. Polymers, 2015, 7, 316-332. | 2.0 | 38 |
| 143 | Synthesis of isosorbide based flame retardants: Application for polybutylene succinate. Polymer Degradation and Stability, 2019, 164, 9-17. | 2.7 | 38 |
| 144 | Fire behaviour related to the thermal degradation of unsaturated polyesters. Polymer Degradation and Stability, 1999, 64, 443-448. | 2.7 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Thermal behaviour of cotton-modacrylic fibre blends: kinetic study using the invariant kinetic parameters method. Thermochimica Acta, 1996, 275, 37-49. | 1.2 | 36 |
| 146 | Thermal degradation of cotton under linear heating. Polymer Degradation and Stability, 2002, 78, 57-62. | 2.7 | 36 |
| 147 | Characterisation of poly(p-phenylenebenzobisoxazole) fibres by solid state NMR. European Polymer Journal, 2002, 38, 1645-1651. | 2.6 | 36 |
| 148 | Towards scalable production of polyamide 12/halloysite nanocomposites via water-assisted extrusion: mechanical modeling, thermal and fire properties. Polymers for Advanced Technologies, 2014, 25, 137-151. | 1.6 | 36 |
| 149 | Salen based Schiff bases to flame retard thermoplastic polyurethane mimicking operational strategies of thermosetting resin. RSC Advances, 2015, 5, 48224-48235. | 1.7 | 36 |
| 150 | Development and characterisation of flame-retardant fibres from isotactic polypropylene melt-compounded with melamine-formaldehyde microcapsules. Polymer Degradation and Stability, 2011, 96, 131-143. | 2.7 | 35 |
| 151 | Investigation of the synergy in intumescent polyurethane byÂ3DÂcomputed tomography. Polymer Degradation and Stability, 2013, 98, 1638-1647. | 2.7 | 35 |
| 152 | Flammability and thermal degradation of poly (lactic acid)/polycarbonate alloys containing a phosphazene derivative and trisilanollsobutyl POSS. Polymer, 2015, 79, 221-231. | 1.8 | 35 |
| 153 | Intumescent ethylene-vinyl acetate copolymer: Reaction to fire and mechanistic aspects. Polymer Degradation and Stability, 2019, 161, 235-244. | 2.7 | 35 |
| 154 | Effect of manganese nanoparticles on the mechanical, thermal and fire properties of polypropylene multifilament yarn. Polymer Degradation and Stability, 2009, 94, 955-964. | 2.7 | 34 |
| 155 | Outlining the mechanism of flame retardancy in polyamide 66 blended with melamine-poly(zinc) Tj ETQq1 1 0.784314 rgBT /Overlock 1 | 1.4 | 34 |
| 156 | Kinetics of the thermal and thermo-oxidative degradation of polypropylene/halloysite nanocomposites. Polymer Degradation and Stability, 2012, 97, 1745-1754. | 2.7 | 33 |
| 157 | Thermal Stability and Fire Properties of Salen and Metallosalens as Fire Retardants in Thermoplastic Polyurethane (TPU). Materials, 2017, 10, 665. | 1.3 | 33 |
| 158 | Salen Complexes as Fire Protective Agents for Thermoplastic Polyurethane: Deep Electron Paramagnetic Resonance Spectroscopy Investigation. ACS Applied Materials & Interfaces, 2018, 10, 24860-24875. | 4.0 | 33 |
| 159 | Study of the thermal degradation of an aluminium phosphinateâ€"aluminium trihydrate combination. Thermochimica Acta, 2013, 551, 175-183. | 1.2 | 32 |
| 160 | An effective flame retardant containing hypophosphorous acid for poly (lactic acid): Fire performance, thermal stability and mechanical properties. Polymer Testing, 2019, 78, 105940. | 2.3 | 32 |
| 161 | Heat and fire resistance of polyurethane-polydimethylsiloxane hybrid material. Polymers for Advanced Technologies, 2006, 17, 304-311. | 1.6 | 31 |
| 162 | The Effects of Thermophysical Properties and Environmental Conditions on Fire Performance of Intumescent Coatings on Glass Fibre-Reinforced Epoxy Composites. Materials, 2015, 8, 5216-5237. | 1.3 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Latest progresses in the preparation of tannin-based cellular solids. Journal of Cellular Plastics, 2015, 51, 89-102. | 1.2 | 31 |
| 164 | Modulated thermogravimetry in analysis of decomposition kinetics. Chemical Engineering Science, 2005, 60, 747-766. | 1.9 | 30 |
| 165 | Polymer nanoparticles to decrease thermal conductivity of phase change materials. Thermochimica Acta, 2008, 477, 25-31. | 1.2 | 30 |
| 166 | Morphology and properties of SANâ€clay nanocomposites prepared principally by waterâ€assisted extrusion. Polymer Engineering and Science, 2010, 50, 10-21. | 1.5 | 30 |
| 167 | Bulk vs. surface flame retardancy of fully bio-based polyamide 10,10. RSC Advances, 2015, 5, 39424-39432. | 1.7 | 30 |
| 168 | Decomposition mechanism of fire retarded ethylene vinyl acetate elastomer (EVA) containing aluminum trihydroxide and melamine. Polymer Degradation and Stability, 2015, 113, 168-179. | 2.7 | 30 |
| 169 | Modelling Behaviour of a Carbon Epoxy Composite Exposed to Fire: Part Iâ€"Characterisation of Thermophysical Properties. Materials, 2017, 10, 494. | 1.3 | 30 |
| 170 | Hexagonal Boron Nitride Platelet-Based Nanocoating for Fire Protection. ACS Applied Nano Materials, 2019, 2, 5450-5459. | 2.4 | 30 |
| 171 | Pyrolysis modeling, sensitivity analysis, and optimization techniques for combustible materials: A review. Journal of Fire Sciences, 2019, 37, 377-433. | 0.9 | 30 |
| 172 | Thin coatings for fire protection: An overview of the existing strategies, with an emphasis on layer-by-layer surface treatments and promising new solutions. Progress in Organic Coatings, 2021, 154, 106217. | 1.9 | 29 |
| 173 | Flame retardancy of microcellular poly(lactic acid) foams prepared by supercritical CO2-assisted extrusion. Polymer Degradation and Stability, 2018, 153, 100-108. | 2.7 | 28 |
| 174 | Cone calorimeter study of high performance fibresâ€"application to polybenzazole and p-aramid fibres. Polymer Degradation and Stability, 2001, 74, 481-486. | 2.7 | 27 |
| 175 | Supercritical CO2 as an efficient medium for layered silicate organomodification: Preparation of thermally stable organoclays and dispersion in polyamide 6. Polymer, 2009, 50, 1438-1446. | 1.8 | 27 |
| 176 | New routes to flame retard polyamide 6,6 for electrical applications. Journal of Fire Sciences, 2012, 30, 535-551. | 0.9 | 27 |
| 177 | Flame retardancy and degradation mechanism of poly(vinyl acetate) in combination with intumescent flame retardants: I. Ammonium poly(phosphate). Polymer Degradation and Stability, 2015, 121, 321-330. | 2.7 | 27 |
| 178 | Development of Bioepoxy Resin Microencapsulated Ammonium-Polyphosphate for Flame Retardancy of Polylactic Acid. Molecules, 2019, 24, 4123. | 1.7 | 27 |
| 179 | Optimization of monoguanidine dihydrogen phosphate and amino propylethoxysilane based flame retardant formulations for cotton. Polymer Degradation and Stability, 2006, 91, 1909-1914. | 2.7 | 26 |
| 180 | PLA nanocomposites: quantification of clay nanodispersion and reaction to fire. International Journal of Nanotechnology, 2008, 5, 683. | 0.1 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Influence of chemical shell structure on the thermal properties of microcapsules containing a flame retardant agent. Polymer Degradation and Stability, 2010, 95, 315-319. | 2.7 | 26 |
| 182 | Fire protection of polypropylene and polycarbonate by intumescent coatings. Polymers for Advanced Technologies, 2012, 23, 130-135. | 1.6 | 26 |
| 183 | Continuous cyclo-polymerisation of <scp>l</scp>-lactide by reactive extrusion using atoxic metal-based catalysts: easy access to well-defined polylactide macrocycles. RSC Advances, 2015, 5, 31303-31310. | 1.7 | 26 |
| 184 | Calculation of activation energies using the sinusoidally modulated temperature. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2002, 70, 565-579. | 1.4 | 25 |
| 185 | Flame retardancy of bio-based polyether-block-amide polymer (PEBAX). Polymer Degradation and Stability, 2013, 98, 1247-1255. | 2.7 | 25 |
| 186 | Instrumentation of ULâ€94 test: understanding of mechanisms involved in fire retardancy of polymers. Polymers for Advanced Technologies, 2015, 26, 865-873. | 1.6 | 25 |
| 187 | How much the fabric grammage may affect cotton combustion?. Cellulose, 2015, 22, 3477-3489. | 2.4 | 25 |
| 188 | A theoretical model for quantifying expansion of intumescent coating under different heating conditions. Polymer Engineering and Science, 2016, 56, 798-809. | 1.5 | 25 |
| 189 | Advanced functional materials based on bamboo cellulose fibers with different crystal structures. Composites Part A: Applied Science and Manufacturing, 2022, 154, 106758. | 3.8 | 25 |
| 190 | The Degradation Front Model- A Tool for the Chemical Study of the Degradation of Epoxy Resins in Fire. Journal of Fire Sciences, 1996, 14, 199-234. | 0.9 | 24 |
| 191 | Interactions between chlorinated paraffins and melamine in intumescent paintâ€"investing a way to suppress chlorinated paraffins from the formulations. Progress in Organic Coatings, 2006, 57, 430-438. | 1.9 | 24 |
| 192 | Development of a precipitation method intended for the entrapment of hydrated salt. Carbohydrate Polymers, 2008, 73, 231-240. | 5.1 | 24 |
| 193 | Effects of melamine polyphosphate and halloysite nanotubes on the flammability and thermal behavior of polyamide 6. Polymers for Advanced Technologies, 2014, 25, 1552-1559. | 1.6 | 24 |
| 194 | Resistance to fire of silicone-based coatings: Fire protection of steel against cellulosic fire. Journal of Fire Sciences, 2014, 32, 374-387. | 0.9 | 24 |
| 195 | Characterization of a plasma polymer coating from an organophosphorus silane deposited at atmospheric pressure for fire-retardant purposes. Progress in Organic Coatings, 2015, 88, 39-47. | 1.9 | 24 |
| 196 | Thermoplastic matrixâ€based composites produced by resin transfer molding: A review. Polymer Composites, 2022, 43, 2485-2506. | 2.3 | 24 |
| 197 | Thermogravimetric analysis of multistage decomposition of materials. Physical Chemistry Chemical Physics, 2000, 2, 4796-4803. | 1.3 | 23 |
| 198 | Structure and morphology of an intumescent polypropylene blend. Journal of Applied Polymer Science, 2004, 93, 402-411. | 1.3 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Intumescent polypropylene: Reaction to fire and mechanistic aspects. Fire Safety Journal, 2019, 105, 261-269. | 1.4 | 23 |
| 200 | Advances and challenges in eco-benign fire-retardant polylactide. Materials Today Physics, 2021, 21, 100568. | 2.9 | 23 |
| 201 | Improvement of Flame Retardancy and Antidripping Properties of Intumescent Polybutylene Succinate Combining Piperazine Pyrophosphate and Zinc Borate. ACS Applied Polymer Materials, 2022, 4, 1911-1921. | 2.0 | 23 |
| 202 | Kinetic analysis of pyrolysis of cross-linked polymers. Polymer Degradation and Stability, 2005, 88, 85-91. | 2.7 | 22 |
| 203 | Flame retardancy of textiles: new approaches. , 2008, , 9-40. | | 22 |
| 204 | Resistance to fire of curable silicone/expandable graphite based coating: Effect of the catalyst. European Polymer Journal, 2013, 49, 2031-2041. | 2.6 | 22 |
| 205 | Measurement and investigation of intumescent char strength: Application to polyurethanes. Journal of Fire Sciences, 2013, 31, 293-308. | 0.9 | 22 |
| 206 | Mechanistic investigation of a flame retardant coating made by layer-by-layer assembly. RSC Advances, 2014, 4, 43326-43334. | 1.7 | 22 |
| 207 | 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. | 0.9 | 22 |
| 208 | A Case Study of Polyether Ether Ketone (I): Investigating the Thermal and Fire Behavior of a High-Performance Material. Polymers, 2020, 12, 1789. | 2.0 | 22 |
| 209 | Mapping the multimodal action of melamine-poly(aluminium phosphate) in the flame retardancy of polyamide 66. RSC Advances, 2014, 4, 18406-18418. | 1.7 | 21 |
| 210 | Characterization of Thermo-Physical Properties of EVA/ATH: Application to Gasification Experiments and Pyrolysis Modeling. Materials, 2015, 8, 7837-7863. | 1.3 | 21 |
| 211 | In-situ investigation of temperature evolution of drippings via an optimized UL-94 instrumentation: Application to flame retarded polybutylene succinate. Polymer Degradation and Stability, 2018, 155, 145-152. | 2.7 | 21 |
| 212 | Blends of Wool with High Performance Fibers as Heat and Fire Resistant Fabrics. Journal of Fire Sciences, 2002, 20, 3-22. | 0.9 | 20 |
| 213 | Aging of the flameâ€retardant properties of polycarbonate and polypropylene protected by an intumescent coating. Journal of Applied Polymer Science, 2014, 131, . | 1.3 | 20 |
| 214 | Flame retardancy and mechanical properties of flax reinforced woven for composite applications. Journal of Industrial Textiles, 2015, 44, 665-681. | 1.1 | 20 |
| 215 | Topcoats versus Durability of an Intumescent Coating. Industrial & Engineering Chemistry Research, 2016, 55, 9625-9632. | 1.8 | 20 |
| 216 | Preparation of multinuclear microparticles using a polymerization in emulsion process. Journal of Applied Polymer Science, 2008, 107, 2444-2452. | 1.3 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Salen Copper Complexes: A Novel Flame Retardant for Thermoplastic Polyurethane. ACS Symposium Series, 2009, , 329-340. | 0.5 | 19 |
| 218 | The fire retardant mechanism of ethylene vinyl acetate elastomer (EVM) containing aluminium trihydroxide and melamine phosphate. RSC Advances, 2014, 4, 20185-20199. | 1.7 | 19 |
| 219 | Revisited investigation of fire behavior of ethylene vinyl acetate/aluminum trihydroxide using a combination of mass loss cone, Fourier transform infrared spectroscopy and electrical low pressure impactor. Polymer Degradation and Stability, 2014, 106, 26-35. | 2.7 | 19 |
| 220 | Thermal and flame retardant properties of ethylene vinyl acetate copolymers containing deoxyribose nucleic acid or ammonium polyphosphate. Journal of Thermal Analysis and Calorimetry, 2015, 122, 705-715. | 2.0 | 19 |
| 221 | Fire retardant solâ€"gel coatings for flexible polyurethane foams. RSC Advances, 2016, 6, 28543-28554. | 1.7 | 19 |
| 222 | Measurement of kinetics and thermodynamics of the thermal degradation for flame retarded materials: Application to EVA/ATH/NC. Journal of Analytical and Applied Pyrolysis, 2017, 124, 130-148. | 2.6 | 19 |
| 223 | Guanidine Hydrogen Phosphate-Based Flame-Retardant Formulations for Cotton. Journal of Industrial Textiles, 2004, 34, 27-38. | 1.1 | 18 |
| 224 | Enhanced fire retardant properties of glass-fiber reinforced Polyamide 6,6 by combining bulk and surface treatments: Toward a better understanding of the fire-retardant mechanism. Polymer Degradation and Stability, 2013, 98, 1378-1388. | 2.7 | 18 |
| 225 | Decomposition mechanism of melamine borate in pyrolytic and thermo-oxidative conditions. Thermochimica Acta, 2014, 590, 73-83. | 1.2 | 18 |
| 226 | Impact of the formulation of biosourced phenolic foams on their fire properties. Polymer Degradation and Stability, 2018, 153, 1-14. | 2.7 | 18 |
| 227 | Intumescence and Nanocomposites: a Novel Route for Flame-Retarding Polymeric Materials. , 0, , 131-162. | | 17 |
| 228 | Non-isothermal crystallization kinetics of iPP/sPP blends. Thermochimica Acta, 2009, 481, 32-45. | 1.2 | 17 |
| 229 | Improvement of heat resistance of high performance fibers using a cold plasma polymerization process. Surface and Coatings Technology, 2010, 205, 745-758. | 2.2 | 17 |
| 230 | Preparation of fire-resistant poly(styrene-co-acrylonitrile) foams using supercritical CO2 technology. Journal of Materials Chemistry, 2010, 20, 1567. | 6.7 | 17 |
| 231 | Smoke composition using MLC/FTIR/ELPI: Application to flame retarded ethylene vinyl acetate. Polymer Degradation and Stability, 2015, 115, 89-109. | 2.7 | 17 |
| 232 | Poly(3-hydroxybutyrate-co-4-hydroxybutyrate) based nanocomposites: influence of the microstructure on the barrier properties. Physical Chemistry Chemical Physics, 2015, 17, 11313-11323. | 1.3 | 17 |
| 233 | Getting a better insight into the chemistry of decomposition of complex flame retarded formulation: New insights using solid state NMR. Polymer Degradation and Stability, 2018, 153, 145-154. | 2.7 | 17 |
| 234 | Eugenol-based thermally stable thermosets by Alder-ene reaction: From synthesis to thermal degradation. European Polymer Journal, 2019, 117, 337-346. | 2.6 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Additive manufacturing of fireâ€retardant ethyleneâ€vinyl acetate. Polymers for Advanced Technologies, 2019, 30, 1878-1890. | 1.6 | 17 |
| 236 | Burning behavior and thermal degradation kinetics of surface photografted polyamide 6.6 fabric. Polymers for Advanced Technologies, 2012, 23, 1550-1554. | 1.6 | 16 |
| 237 | Reactive Extrusion of Stereocomplexed Polyâ€<scp>L</scp>,<scp>D</scp>â€lactides: Processing, Characterization, and Properties. Macromolecular Materials and Engineering, 2013, 298, 1016-1023. | 1.7 | 16 |
| 238 | Characterization of the morphology of iPP/sPP blends with various compositions. EXPRESS Polymer Letters, 2013, 7, 224-237. | 1.1 | 16 |
| 239 | Protection mechanism of a flame-retarded polyamide 6 nanocomposite. Journal of Fire Sciences, 2014, 32, 241-256. | 0.9 | 16 |
| 240 | Fractal conceptualization of intumescent fire barriers, toward simulations of virtual morphologies. Scientific Reports, 2019, 9, 1872. | 1.6 | 16 |
| 241 | Improving the flame retardant properties of polyesterâ€cotton blend fabrics by introducing an intumescent coating via layer by layer assembly. Journal of Applied Polymer Science, 2020, 137, 49253. | 1.3 | 16 |
| 242 | Poly(caprolactone)/clay masterbatches prepared in supercritical CO2 as efficient clay delamination promoters in poly(styrene-co-acrylonitrile). Journal of Materials Chemistry, 2008, 18, 4623. | 6.7 | 15 |
| 243 | Melt spinning of silaneâ€“water cross-linked polyethyleneâ€“octene through a reactive extrusion process. Reactive and Functional Polymers, 2010, 70, 775-783. | 2.0 | 15 |
| 244 | Reactive extrusion of intumescent stereocomplexed polyâ€L,Dâ€lactide: characterization and reaction to fire. Polymers for Advanced Technologies, 2013, 24, 130-133. | 1.6 | 15 |
| 245 | Intumescence as method for providing fire resistance to structural composites: application to poly(ethylene terephtalate) foam sandwichâ€“structured composite. Composite Interfaces, 2013, 20, 269-277. | 1.3 | 15 |
| 246 | Influence of two kinds of low dimensional nano-sized silicate clay on the flame retardancy of polypropylene. Materials Chemistry and Physics, 2020, 256, 123743. | 2.0 | 15 |
| 247 | Investigation of the thermal stability and fire behavior of high performance polymer: A case study of polyimide. Fire Safety Journal, 2021, 120, 103060. | 1.4 | 15 |
| 248 | Intumescent polybutylene succinate: Ethylenediamine phosphate and synergists. Polymer Degradation and Stability, 2021, 192, 109707. | 2.7 | 15 |
| 249 | Co-pyrolysis characteristics and flammability of polylactic acid and acrylonitrile-butadiene-styrene plastic blend using TG, temperature-dependent FTIR, Py-GC/MS and cone calorimeter analyses. Fire Safety Journal, 2022, 128, 103543. | 1.4 | 15 |
| 250 | Characterization of SWCNT and PAN/SWCNT films. Carbon, 2007, 45, 2417-2423. | 5.4 | 14 |
| 251 | Intumescent Polymer Metal Laminates for Fire Protection. Polymers, 2018, 10, 995. | 2.0 | 14 |
| 252 | 3D printed sandwich materials filled with hydrogels for extremely low heat release rate. Polymer Degradation and Stability, 2020, 179, 109269. | 2.7 | 14 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 253 | Wool/para-aramid fibres blended in spun yarns as heat and fire resistant fabrics. Polymer Degradation and Stability, 2002, 77, 279-284. | 2.7 | 13 |
| 254 | Fire and Gas Barrier Properties of Poly(styrene-co-acrylonitrile) Nanocomposites Using Polycaprolactone/Clay Nanohybrid Based-Masterbatch. Advances in Materials Science and Engineering, 2008, 2008, 1-11. | 1.0 | 13 |
| 255 | Thermal degradation of elastomeric vulcanized poly(ethylene-co-vinyl acetate) (EVM): Chemical and kinetic investigations. Polymer Degradation and Stability, 2011, 96, 1812-1820. | 2.7 | 13 |
| 256 | Highly loaded nanocomposite films as fire protective coating for polymeric substrates. Journal of Fire Sciences, 2014, 32, 145-164. | 0.9 | 13 |
| 257 | Innovative 3D printed design to conceive highly fire-retardant multi-material. Polymer Degradation and Stability, 2019, 169, 108992. | 2.7 | 13 |
| 258 | Pressure effects on morphology of isotropic char layer, shrinkage, cracking and reduced heat transfer of wooden material. Proceedings of the Combustion Institute, 2021, 38, 5063-5071. | 2.4 | 13 |
| 259 | Characterisation and reaction to fire of â€œM5â€• rigid rod polymer fibres. Journal of Materials Science, 2003, 38, 2187-2194. | 1.7 | 12 |
| 260 | Quantification of Thermal Barrier Efficiency of Intumescent Coatings on Glass Fibre-Reinforced Epoxy Composites. Coatings, 2018, 8, 347. | 1.2 | 12 |
| 261 | A new approach on improving the fire resistance of polyamide 11 by incorporating sulfurâ€based flame retardant. Polymers for Advanced Technologies, 2019, 30, 1605-1615. | 1.6 | 12 |
| 262 | The Thermal Behaviour of a Blend of Cotton and Fire-retardant Polyester Fibres: A Kinetic Study. Journal of the Textile Institute, 1997, 88, 64-75. | 1.0 | 11 |
| 263 | Flame retardancy of bitumen: A calorimetry study. Journal of Fire Sciences, 2013, 31, 112-130. | 0.9 | 11 |
| 264 | Fire retardancy of a new polypropylene-grafted starch: Part II: investigation of mechanisms. Journal of Fire Sciences, 2014, 32, 210-229. | 0.9 | 11 |
| 265 | Preparation of Glass Fabric/Poly(l-lactide) Composites by Thermoplastic Resin Transfer Molding. Polymers, 2019, 11, 339. | 2.0 | 11 |
| 266 | Kinetic analysis of the thermal degradation of polystyrene?montmorillonite nanocomposite. Polymer Degradation and Stability, 2004, 84, 483-483. | 2.7 | 10 |
| 267 | Pathways to Biodegradable Flame Retardant Polymer (Nano)Composites. , 2014, , 709-773. | | 10 |
| 268 | A Case Study of Polyetheretherketone (II): Playing with Oxygen Concentration and Modeling Thermal Decomposition of a High-Performance Material. Polymers, 2020, 12, 1577. | 2.0 | 10 |
| 269 | Design of fire resistant, sound-absorbing and thermal-insulated expandable polystyrene based lightweight particleboard composites. Construction and Building Materials, 2021, 305, 124773. | 3.2 | 10 |
| 270 | 13 C, 25 Mg and 11 B solid-state NMR study of a fire retarded ethylene-vinyl acetate copolymer. Macromolecular Symposia, 1997, 119, 309-315. | 0.4 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 271 | Influence of the Recycling Process on the Fireâ€Retardant Properties of PP/EPR Blends. Macromolecular Materials and Engineering, 2011, 296, 494-505. | 1.7 | 9 |
| 272 | Modelling Behaviour of a Carbon Epoxy Composite Exposed to Fire: Part IIâ€"Comparison with Experimental Results. Materials, 2017, 10, 470. | 1.3 | 9 |
| 273 | Intumescent polypropylene in extreme fire conditions. Fire Safety Journal, 2021, 120, 103082. | 1.4 | 9 |
| 274 | Novel synergists for flame retarded glass-fiber reinforced poly(1,4-butylene terephthalate). Polimery, 2013, 58, 403-412. | 0.4 | 9 |
| 275 | Natural mineral fire retardant fillers for polyethylene. Fire and Materials, 2011, 35, 183-192. | 0.9 | 8 |
| 276 | Simultaneously improving the thermal conductive and flame retardant performance for epoxy resins thermosets by constructing coreâ€shellâ€brush structure and distributing of MWCNTs in brush intervals. Polymers for Advanced Technologies, 2020, 31, 589-601. | 1.6 | 8 |
| 277 | Low-Emissivity Metal/Dielectric Coatings as Radiative Barriers for the Fire Protection of Raw and Formulated Polymers. ACS Applied Polymer Materials, 2020, 2, 2880-2889. | 2.0 | 8 |
| 278 | Flammability properties of intumescent vinyl acetateâ€"ethylene copolymer emulsion including natural carbonization agent. Polymer, 2022, 245, 124709. | 1.8 | 8 |
| 279 | Intumescent PP Blends. Polymers and Polymer Composites, 2003, 11, 691-702. | 1.0 | 7 |
| 280 | Effects of Fire Retardants and Nanofillers on the Fire Toxicity. ACS Symposium Series, 2009, , 342-366. | 0.5 | 7 |
| 281 | Fire retardancy of a new polypropylene-grafted starch. Journal of Fire Sciences, 2013, 31, 563-575. | 0.9 | 7 |
| 282 | Influence of model assumptions on charring polymer decomposition in the cone calorimeter. Journal of Fire Sciences, 2018, 36, 181-201. | 0.9 | 7 |
| 283 | A Facile Technique to Extract the Cross-Sectional Structure of Brittle Porous Chars from Intumescent Coatings. Polymers, 2019, 11, 640. | 2.0 | 7 |
| 284 | Fabrication of Fly Ashâ€Based Mesoporous Aluminosilicate Oxides Loaded with Zinc and its Synergistic Fire Resistancy in Polypropylene. Journal of Vinyl and Additive Technology, 2020, 26, 135-143. | 1.8 | 7 |
| 285 | Intumescent polypropylene: Interactions between physical and chemical expansion. Fire and Materials, 2021, 45, 387-395. | 0.9 | 7 |
| 286 | Nonwoven as heat barrier: Modeling of the efficiency of Carbtex fibers. Journal of Applied Polymer Science, 2008, 108, 3245-3255. | 1.3 | 6 |
| 287 | Fire behavior of simulated low voltage intumescent cables with and without electric current. Journal of Fire Sciences, 2017, 35, 179-194. | 0.9 | 6 |
| 288 | Three model-Free methods for calculation of activation energy in TG. Journal of Thermal Analysis and Calorimetry, 2004, 78, 1009-1027. | 2.0 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 289 | Thermoplastic Polyurethanes as Carbonization Agents in Intumescent Blends. Part 2: Thermal Behavior of Polypropylene/Thermoplastic Polyurethane/Ammonium Polyphosphate Blends. Journal of Fire Sciences, 2000, 18, 7-27. | 0.9 | 6 |
| 290 | USE OF INORGANIC PHOSPHATES IN FIRE RETARDED THERMOPLASTICS-A REVIEW. Phosphorus Research Bulletin, 1999, 10, 88-93. | 0.1 | 5 |
| 291 | Rheological and thermogravimetric studies of the crosslinking process of functionalized acrylic latexes. Journal of Applied Polymer Science, 2006, 99, 1117-1123. | 1.3 | 5 |
| 292 | Thermal and fire degradation of recycled and polluted polypropyleneâ€based materials. Journal of Applied Polymer Science, 2009, 112, 2270-2279. | 1.3 | 5 |
| 293 | Functionalized-Carbon Multiwall Nanotube as Flame Retardant for Polylactic Acid. ACS Symposium Series, 2009, , 25-34. | 0.5 | 5 |
| 294 | Thermally Stable and Flame Retardant Elastomeric Nanocomposites. Advanced Structured Materials, 2011, , 155-178. | 0.3 | 5 |
| 295 | Combining Low-Emissivity Thin Coating and 3D-Printed Original Designs for Superior Fire-Protective Performance. ACS Omega, 2020, 5, 27857-27863. | 1.6 | 5 |
| 296 | Formulation of eco-friendly solâ€“gel coatings to flame-retard flexible polyurethane foam. Green Materials, 2020, 8, 139-149. | 1.1 | 5 |
| 297 | Bilayer Intumescent Paint Metal Laminates: A Novel Design for a High-Performance Fire Barrier. Industrial & Engineering Chemistry Research, 2020, 59, 2988-2997. | 1.8 | 5 |
| 298 | Fire Performance of Curable Silicone-Based Coatings. ACS Symposium Series, 2012, , 205-221. | 0.5 | 4 |
| 299 | Flame retardancy and thermal and mechanical performance of intercalated, layered double hydroxide composites of polyamide 11, aluminum phosphinate, and sulfamic acid. Journal of Applied Polymer Science, 2016, 133, . | 1.3 | 4 |
| 300 | Fire tests at reduced scale as powerful tool to fasten the development of flame-retarded material: Application to cables. Journal of Fire Sciences, 2016, 34, 240-264. | 0.9 | 4 |
| 301 | Characterization of in-flame soot from balsa composite combustion during mass loss cone calorimeter tests. Polymer Degradation and Stability, 2018, 154, 304-311. | 2.7 | 4 |
| 302 | Intumescent silicone-based coatings for the fire protection of carbon fiber reinforced composites. Fire Safety Science, 2014, 11, 781-793. | 0.3 | 4 |
| 303 | Flame Retardancy of Lightweight Sandwich Composites. Journal of Composites Science, 2021, 5, 274. | 1.4 | 4 |
| 304 | The preparation of polyamide 11 composites with extremely long ignition time. Polymers for Advanced Technologies, 0, , . | 1.6 | 3 |
| 305 | Flame retardant nanocomposites with polymer blends. , 2011, , 186-209. | | 2 |
| 306 | Effect of spin finish on fiber/binder adhesion in chemically bonded nonwovens. Journal of Applied Polymer Science, 2006, 102, 4092-4100. | 1.3 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 307 | Quantitative analysis of automotive exhaust gas by Fourier Transform Infrared spectroscopy. International Journal of Environmental Technology and Management, 2010, 13, 188. | 0.1 | 2 |
| 308 | The electron microanalyzer (EPMA): a powerful device for the microanalysis of filled polymeric materials. Polymers for Advanced Technologies, 2015, 26, 1020-1026. | 1.6 | 2 |
| 309 | New approach for the efficient attainment of flame retardancy using multi component injection molding. AIP Conference Proceedings, 2019, , . | 0.3 | 2 |
| 310 | Anisotropy of expandable graphite to explain its behavior as a flame-retardant. Journal of Fire Sciences, 2021, 39, 109-118. | 0.9 | 2 |
| 311 | Reaction to fire of polymethylmethacrylate and polyvinylchloride under reduced oxygen concentrations in a controlled-atmospherecone calorimeter. Journal of Fire Sciences, 2022, 40, 274-292. | 0.9 | 2 |
| 312 | Oxygen concentration and modeling thermal decomposition of a highâ€performance material: A case study of polyimide (Cirlex). Polymers for Advanced Technologies, 2021, 32, 54-66. | 1.6 | 1 |
| 313 | Jetfire lab: Jetfire at reduced scale. Journal of Fire Sciences, 2021, 39, 455-476. | 0.9 | 1 |
| 314 | Prof. Menachem Lewin. Polymers for Advanced Technologies, 2008, 19, 443-445. | 1.6 | 0 |
| 315 | Reprocessed High Impact Polypropylene Containing Oil Pollutant Exhibiting Flame Retardant Properties. Macromolecular Symposia, 2011, 301, 31-39. | 0.4 | 0 |
| 316 | An efficient bi-layer intumescent paint metal laminate fire barrier for various substrates: Extension to other application. European Journal of Materials, 2021, 1, 19-33. | 0.8 | 0 |
| 317 | Foamed geopolymers for fire protection: Burnâ€through testing and modeling. Fire and Materials, 0, , . | 0.9 | 0 |