Anna A Stec

List of Publications by Year
in descending order

75 papers	2,587 citations	136950 32 h-index	197818 49 g-index
79 all docs	79 docs citations	79 times ranked	2422 citing authors

#	Article	IF	Citations
1	Assessment of the fire toxicity of building insulation materials. Energy and Buildings, 2011, 43, 498-506.	6.7	177
2	Synthesis of Mesoporous Silica@Coâ€“Al Layered Double Hydroxide Spheres: Layer-by-Layer Method and Their Effects on the Flame Retardancy of Epoxy Resins. ACS Applied Materials & Interfaces, 2014, 6, 14076-14086.	8.0	143
3	Fire behaviour of modern faÃ§ade materials â€“ Understanding the Grenfell Tower fire. Journal of Hazardous Materials, 2019, 368, 115-123.	12.4	118
4	Occupational Exposure to Polycyclic Aromatic Hydrocarbons and Elevated Cancer Incidence in Firefighters. Scientific Reports, 2018, 8, 2476.	3.3	109
5	Preparation and characterisation of a novel fire retardant PET/Î±-zirconium phosphate nanocomposite. Polymer Degradation and Stability, 2009, 94, 544-549.	5.8	99
6	Enhanced mechanical, thermal and flame retardant properties by combining graphene nanosheets and metal hydroxide nanorods for Acrylonitrileâ€“Butadieneâ€“Styrene copolymer composite. Composites Part A: Applied Science and Manufacturing, 2014, 64, 203-210.	7.6	91
7	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
8	Co-precipitation synthesis of reduced graphene oxide/NiAl-layered double hydroxide hybrid and its application in flame retarding poly(methyl methacrylate). Materials Research Bulletin, 2014, 49, 657-664.	5.2	82
9	Cone calorimetry studies of fire retardant soybean-oil-based copolymers containing silicon or boron: Comparison of additive and reactive approaches. Polymer Degradation and Stability, 2010, 95, 1269-1274.	5.8	78
10	Fabrication of Ce-doped MnO₂decorated graphene sheets for fire safety applications of epoxy composites: flame retardancy, smoke suppression and mechanism. Journal of Materials Chemistry A, 2014, 2, 17341-17351.	10.3	78
11	The effect of temperature and ventilation condition on the toxic product yields from burning polymers. Fire and Materials, 2008, 32, 49-60.	2.0	68
12	Fire toxicity â€“ The elephant in the room?. Fire Safety Journal, 2017, 91, 79-90.	3.1	66
13	Effect of Functionalized Graphene Oxide with Hyper-Branched Flame Retardant on Flammability and Thermal Stability of Cross-Linked Polyethylene. Industrial & Engineering Chemistry Research, 2014, 53, 3073-3083.	3.7	64
14	Factors affecting the combustion toxicity of polymeric materials. Polymer Degradation and Stability, 2007, 92, 2239-2246.	5.8	60
15	Facile preparation of graphene supported Co3O4 and NiO for reducing fire hazards of polyamide 6 composites. Materials Chemistry and Physics, 2013, 142, 531-538.	4.0	59
16	Analysis of fire deaths in Poland and influence of smoke toxicity. Forensic Science International, 2017, 277, 77-87.	2.2	57
17	The effect of gas phase flame retardants on fire effluent toxicity. Polymer Degradation and Stability, 2014, 106, 36-46.	5.8	54
18	The influence of metal hydroxide fire retardants and nanoclay on the thermal decomposition of EVA. Polymer Degradation and Stability, 2012, 97, 2231-2240.	5.8	53

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19	Characterisation of the steady state tube furnace (ISO TS 19700) for fire toxicity assessment. Polymer Degradation and Stability, 2008, 93, 2058-2065.	5.8	48
20	Self-Assembly Fabrication of Hollow Mesoporous Silica@Coâ€“Al Layered Double Hydroxide@Graphene and Application in Toxic Effluents Elimination. ACS Applied Materials & Interfaces, 2015, 7, 8506-8514.	8.0	48
21	Influence of physical properties on polymer flammability in the cone calorimeter. Polymers for Advanced Technologies, 2011, 22, 1100-1107.	3.2	47
22	The influence of carbon nanotubes on the combustion toxicity of PP/intumescent flame retardant composites. Polymer Degradation and Stability, 2015, 115, 38-44.	5.8	47
23	Mechanism of enhancement of intumescent fire retardancy by metal acetates in polypropylene. Polymer Degradation and Stability, 2017, 136, 139-145.	5.8	43
24	Flame retardants in UK furniture increase smoke toxicity more than they reduce fire growth rate. Chemosphere, 2018, 196, 429-439.	8.2	42
25	Nebulization of ultradeformable liposomes: The influence of aerosolization mechanism and formulation excipients. International Journal of Pharmaceutics, 2012, 436, 519-526.	5.2	40
26	Flammability properties of PEEK and carbon nanotube composites. Polymer Degradation and Stability, 2012, 97, 2492-2502.	5.8	39
27	Fire smoke toxicity: The effect of nitrogen oxides. Fire Safety Journal, 2008, 43, 243-251.	3.1	37
28	Synthesis of Zinc Phosphonated Poly(ethylene imine) and Its Fire-Retardant Effect in Low-Density Polyethylene. Industrial & Engineering Chemistry Research, 2015, 54, 3247-3256.	3.7	36
29	Characterisation of soot particulates from fire retarded and nanocomposite materials, and their toxicological impact. Polymer Degradation and Stability, 2011, 96, 277-284.	5.8	35
30	Quantification of fire gases by FTIR: Experimental characterisation of calibration systems. Fire Safety Journal, 2011, 46, 225-233.	3.1	34
31	Comparison of toxic product yields from bench-scale to ISO room. Fire Safety Journal, 2009, 44, 62-70.	3.1	33
32	The role of isocyanates in fire toxicity. Fire Science Reviews, 2016, 5, .	0.9	32
33	Thermal Decomposition of Polymeric Materials. , 2016, , 167-254.		32
34	Environmental contamination following the Grenfell Tower fire. Chemosphere, 2019, 226, 576-586.	8.2	31
35	Flame retardant polystyrene copolymers: preparation, thermal properties, and fire toxicities. Polymers for Advanced Technologies, 2014, 25, 631-637.	3.2	29
36	Fire Retardant Effects of Polymer Nanocomposites. Journal of Nanoscience and Nanotechnology, 2009, 9, 4478-4486.	0.9	28

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37	Experimental Results of a Residential House Fire Test on Tenability: Temperature, Smoke, and Gas Analyses. Journal of Forensic Sciences, 2014, 59, 139-154.	1.6	24
38	Smoke and hydrocarbon yields from fire retarded polymer nanocomposites. Polymer Degradation and Stability, 2011, 96, 295-300.	5.8	23
39	Repeatability and reproducibility of the ISO/TS 19700 steady state tube furnace. Fire Safety Journal, 2013, 55, 22-34.	3.1	22
40	Hydrogen Chloride in Fires. Fire Safety Science, 2008, 9, 665-676.	0.3	22
41	Double In Situ Approach for the Preparation of Polymer Nanocomposite with Multi-functionality. Nanoscale Research Letters, 2009, 4, 303-306.	5.7	21
42	Fire Toxicity Assessment: Comparison of Asphyxiant Yields from Laboratory and Large Scale Flaming Fires. Fire Safety Science, 2014, 11, 404-418.	0.3	21
43	Analysis of toxic effluents released from PVC carpet under different fire conditions. Chemosphere, 2013, 90, 65-71.	8.2	18
44	Detailed study of distribution patterns of polycyclic aromatic hydrocarbons and isocyanates under different fire conditions. Fire and Materials, 2014, 38, 125-144.	2.0	16
45	Classification and identification of soot source with principal component analysis and back-propagation neural network. Australian Journal of Forensic Sciences, 2014, 46, 224-233.	1.2	15
46	Quantification of toxic hazard from fires in buildings. Journal of Building Engineering, 2016, 8, 313-318.	3.4	15
47	Study of the fire resistant behavior of unfilled and carbon nanofibers reinforced polybenzimidazole coating for structural applications. Polymers for Advanced Technologies, 2014, 25, 29-35.	3.2	13
48	Fire Performance of Sandwich Panels in a Modified ISO 13784-1 Small Room Test: The Influence of Increased Fire Load for Different Insulation Materials. Fire Technology, 2018, 54, 819-852.	3.0	13
49	Introduction to fire toxicity. , 2010, , 3-25.		12
50	A review of exposure and toxicological aspects of carbon nanotubes, and as additives to fire retardants in polymers. Critical Reviews in Toxicology, 2016, 46, 74-95.	3.9	11
51	Release of volatile and semi-volatile toxicants during house fires. Chemosphere, 2017, 173, 580-593.	8.2	11
52	A Comparison of Toxic Product Yields Obtained From Five Laboratories Using the Steady State Tube Furnace (ISO TS 19700). Fire Safety Science, 2008, 9, 653-664.	0.3	10
53	Investigation of thermal decomposition of polymer nanocomposites with different char residues. Polymers for Advanced Technologies, 2015, 26, 1027-1033.	3.2	9
54	Carbon Monoxide Generation in Fires: Effect of Temperature on Halogenated and Aromatic Fuels. Fire Safety Science, 2011, 10, 253-263.	0.3	9

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55	Fire scenarios and combustion conditions. , 2010, , 26-47.		8
56	Experimental study on polystyrene with intumescent flame retardants from different scale experiments. Fire and Materials, 2016, 40, 18-26.	2.0	8
57	Burning behaviour of rainscreen faÃ§ades. Journal of Hazardous Materials, 2021, 403, 123894.	12.4	8
58	Effects of Fire Retardants and Nanofillers on the Fire Toxicity. ACS Symposium Series, 2009, , 342-366.	0.5	7
59	Effects of the material and fire conditions on toxic product yields. , 2010, , 515-540.		7
60	Smoke toxicity of rainscreen faÃ§ades. Journal of Hazardous Materials, 2021, 403, 123694.	12.4	7
61	Asphyxiant yields from common polymers in under-ventilated fires in the large instrumented fire enclosure (LIFE). Fire Safety Journal, 2017, 91, 982-988.	3.1	5
62	The correlation between carbon monoxide and hydrogen cyanide in fire effluents of flame retarded polymers. Fire Safety Science, 2014, 11, 389-403.	0.3	5
63	Effect of Functionalized Graphene Oxide with Hyper-Branched Flame Retardant on Flammability and Thermal Stability of Cross-Linked Polyethylene. Industrial & Engineering Chemistry Research, 2014, 53, 5622-5622.	3.7	4
64	Experimental methods in combustion toxicology. , 2010, , 217-228.		3
65	Combustion and <scp>T</scp>oxic <scp>G</scp>as <scp>P</scp>roduction from <scp>D</scp>isposable <scp>B</scp>arbecues in <scp>E</scp>nclosures. Journal of Forensic Sciences, 2014, 59, 127-138.	1.6	3
66	Numerical Simulation of Decomposition of Polymer Nano-composites: Investigation of the Influence of the Char Structure. Energy Procedia, 2015, 66, 165-168.	1.8	3
67	Bench Scale Generation of Smoke Particulates and Hydrocarbons from Burning Polymers. Fire Safety Science, 2011, 10, 629-639.	0.3	3
68	Chapter 25. Assessment of Fire Toxicity from Polymer Nanocomposites. , 0, , 405-417.		2
69	Estimation of toxicity during burning of common materials. , 2010, , 541-558.		2
70	Influence of Fire Retardants and Nanofillers on Fire Toxicity. , 2014, , 837-867.		1
71	Stability of Isocyanates Sampled in Fire Smokes. Annals of Work Exposures and Health, 2018, 62, 1171-1175.	1.4	1
72	Fire-Retardant Mechanism of Acrylonitrile Copolymers Containing Nanoclay. ACS Symposium Series, 2009, , 118-147.	0.5	0

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73	An international standardised framework for prediction of fire gas toxicity. , 2010, , 583-603.		0
74	Authorsâ€™ response to comments on â€œFlame retardants in UK furniture increase smoke toxicity more than they reduce fire growth rateâ€• Chemosphere, 2019, 232, 512-515.	8.2	0
75	Generation, Sampling and Quantification of Toxic Combustion Products. Issues in Toxicology, 2015, , 108-138.	0.1	0