Henri Vahabi

List of Publications by Year
in descending order

126 papers	4,439 citations	101543 36 h-index	133252 59 g-index
130 all docs	130 docs citations	130 times ranked	2662 citing authors

#	Article	IF	Citations
1	Structureâ€“propertiesâ€performance relationships in complex epoxy nanocomposites: A complete picture applying chemorheological and thermoâ€mechanical kinetic analyses. Journal of Applied Polymer Science, 2022, 139, 51446.	2.6	7
2	Green composites in bone tissue engineering. Emergent Materials, 2022, 5, 603-620.	5.7	11
3	Green carbon-based nanocompositeÂbiomaterials through the lens of microscopes. Emergent Materials, 2022, 5, 665-671.	5.7	12
4	Crystalline polysaccharides: A review. Carbohydrate Polymers, 2022, 275, 118624.	10.2	41
5	GTR/Thermoplastics Blends: How Do Interfacial Interactions Govern Processing and Physico-Mechanical Properties?. Materials, 2022, 15, 841.	2.9	13
6	Fire Protection and Materials Flammability Control by Artificial Intelligence. Fire Technology, 2022, 58, 1071-1073.	3.0	4
7	A recent advancement on preparation, characterization and application of nanolignin. International Journal of Biological Macromolecules, 2022, 200, 303-326.	7.5	29
8	Improved Processability and Antioxidant Behavior of Poly(3-hydroxybutyrate) in Presence of Ferulic Acid-Based Additives. Bioengineering, 2022, 9, 100.	3.5	4
9	Flame-Retardant Polymer Materials Developed by Reactive Extrusion: Present Status and Future Perspectives. Polymer Reviews, 2022, 62, 919-949.	10.9	9
10	Layer-by-layer polymer deposited fabrics with superior flame retardancy and electrical conductivity. Reactive and Functional Polymers, 2022, 173, 105221.	4.1	13
11	Novel electrically conductive nanocomposites based on polyaniline and poly(aniline-co-melamine) copolymers grafted on melamineâ€“formaldehyde resin. Iranian Polymer Journal (English Edition), 2022, 31, 1033-1045.	2.4	3
12	Thermal degradation of polylactic acid (PLA)/polyhydroxybutyrate (PHB) blends: A systematic review. Polymer Degradation and Stability, 2022, 201, 109995.	5.8	58
13	Poly(butylene succinate) (PBS): Materials, processing, and industrial applications. Progress in Polymer Science, 2022, 132, 101579.	24.7	82
14	Design and preparation of new polypropylene/magnesium oxide micro particles composites reinforced with hydroxyapatite nanoparticles: A study of thermal stability, flame retardancy and mechanical properties. Materials Chemistry and Physics, 2021, 258, 123917.	4.0	7
15	Flame Retardancy of Reactive and Functional Polymers. , 2021, , 165-195.		3
16	Imidazole-functionalized nitrogen-rich Mg-Al-CO3 layered double hydroxide for developing highly crosslinkable epoxy with high thermal and mechanical properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 611, 125826.	4.7	22
17	Calcium carbonate and ammonium polyphosphate flame retardant additives formulated to protect ethylene vinyl acetate copolymer against fire: Hydrated or carbonated calcium?. Journal of Vinyl and Additive Technology, 2021, 27, 264-274.	3.4	3
18	Correlating the Photophysical Properties with the Cure Index of Epoxy Nanocomposite Coatings. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 923-933.	3.7	7

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19	Nanocomposite biomaterials made by 3D printing: Achievements and challenges. , 2021, , 675-685.		3
20	Dual UV-Thermal Curing of Biobased Resorcinol Epoxy Resin-Diatomite Composites with Improved Acoustic Performance and Attractive Flame Retardancy Behavior. Sustainable Chemistry, 2021, 2, 24-48.	4.7	7
21	Polymer nanocomposites from the flame retardancy viewpoint: A comprehensive classification of nanoparticle performance using the flame retardancy index. , 2021, , 61-146.		5
22	Immobilizing palladium on melamineâ€functionalized magnetic nanoparticles: An efficient and reusable phosphineâ€free catalyst for Mizorokiâ€"Heck reaction. Applied Organometallic Chemistry, 2021, 35, e6198.	3.5	11
23	Electrospinning for developing flame retardant polymer materials: Current status and future perspectives. Polymer, 2021, 217, 123466.	3.8	43
24	Flame retardant polymer materials: An update and the future for 3D printing developments. Materials Science and Engineering Reports, 2021, 144, 100604.	31.8	141
25	Amineâ€functionalized <scp>metalâ€"organic</scp> frameworks/epoxy nanocomposites: <scp>Structureâ€properties</scp> relationships. Journal of Applied Polymer Science, 2021, 138, 51005.	2.6	12
26	Flame retardancy effect of phosphorus graphite nanoplatelets on ethyleneâ€vinyl acetate copolymer: Physical blending versus chemical modification. Polymers for Advanced Technologies, 2021, 32, 4296-4305.	3.2	7
27	Editorial: Bioengineered Nanoparticles in Cancer Therapy. Frontiers in Molecular Biosciences, 2021, 8, 706277.	3.5	2
28	Coffee Wastes as Sustainable Flame Retardants for Polymer Materials. Coatings, 2021, 11, 1021.	2.6	19
29	Additive manufacturing of polyhydroxyalkanoates (PHAs) biopolymers: Materials, printing techniques, and applications. Materials Science and Engineering C, 2021, 127, 112216.	7.3	63
30	Epoxy/Ionic Liquid-Modified Mica Nanocomposites: Network Formationâ€"Network Degradation Correlation. Nanomaterials, 2021, 11, 1990.	4.1	9
31	4D printing of shape memory polylactic acid (PLA). Polymer, 2021, 230, 124080.	3.8	103
32	Nanolignin in materials science and technologyâ€" does flame retardancy matter?. , 2021, , 515-559.		6
33	Interface analysis of compatibilized polymer blends. , 2020, , 349-371.		8
34	Epoxy/Zn-Al-CO3 LDH nanocomposites: Curability assessment. Progress in Organic Coatings, 2020, 138, 105355.	3.9	19
35	Nonisothermal cure kinetics of epoxy/MnxFe3-xO4 nanocomposites. Progress in Organic Coatings, 2020, 140, 105505.	3.9	34
36	The effect of phosphorus based melamine-terephthaldehyde resin and Mg-Al layered double hydroxide on the thermal stability, flame retardancy and mechanical properties of polypropylene MgO composites. Materials Today Communications, 2020, 23, 100880.	1.9	14

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37	Novel nanocomposite based on EVA/PHBV/[60]Fullerene with improved thermal properties. Polymer Testing, 2020, 81, 106277.	4.8	7
38	Thermal-Resistant Polyurethane/Nanoclay Powder Coatings: Degradation Kinetics Study. Coatings, 2020, 10, 871.	2.6	13
39	Flame Retardant Polypropylenes: A Review. Polymers, 2020, 12, 1701.	4.5	39
40	Resorcinol-Based Epoxy Resins Hardened with Limonene and Eugenol Derivatives: From the Synthesis of Renewable Diamines to the Mechanical Properties of Biobased Thermosets. ACS Sustainable Chemistry and Engineering, 2020, 8, 13064-13075.	6.7	37
41	Silaneâ€functionalized Al 2 O 3 â€modified polyurethane powder coatings: Nonisothermal degradation kinetics and mechanistic insights. Journal of Applied Polymer Science, 2020, 137, 49412.	2.6	12
42	Phosphorization of exfoliated graphite for developing flame retardant ethylene vinyl acetate composites. Journal of Materials Research and Technology, 2020, 9, 7341-7353.	5.8	14
43	Superâ€crosslinked ionic liquidâ€intercalated montmorillonite/epoxy nanocomposites: Cure kinetics, viscoelastic behavior and thermal degradation mechanism. Polymer Engineering and Science, 2020, 60, 1940-1957.	3.1	37
44	Flame Retardancy of Bio-Based Polyurethanes: Opportunities and Challenges. Polymers, 2020, 12, 1234.	4.5	79
45	Halloysite nanotubes (HNTs)/polymer nanocomposites: thermal degradation and flame retardancy. , 2020, , 67-93.		13
46	Electroactive poly (p-phenylene sulfide)/r-graphene oxide/chitosan as a novel potential candidate for tissue engineering. International Journal of Biological Macromolecules, 2020, 154, 18-24.	7.5	51
47	Curing Kinetics and Thermal Stability of Epoxy Composites Containing Newly Obtained Nano-Scale Aluminum Hypophosphite (AlPO2). Polymers, 2020, 12, 644.	4.5	47
48	New nitrogen-rich flame retardant based on conductive poly(aniline-co-melamine). Reactive and Functional Polymers, 2020, 150, 104548.	4.1	15
49	Metal-Organic Framework (MOF)/Epoxy Coatings: A Review. Materials, 2020, 13, 2881.	2.9	99
50	Nonisothermal Crystallization Kinetics of Polylactic Acid under the Influence of Polyolefin Elastomers. Journal of Composites Science, 2020, 4, 65.	3.0	3
51	Assessment of the protective effect of PMMA on water immersion ageing of flame retarded PLA/PMMA blends. Polymer Degradation and Stability, 2020, 174, 109104.	5.8	10
52	Synthesis, characterization, and high potential of 3D metalâ€“organic framework (MOF) nanoparticles for curing with epoxy. Journal of Alloys and Compounds, 2020, 829, 154547.	5.5	71
53	Copper-enriched diamond-like carbon coatings promote regeneration at the boneâ€“implant interface. Heliyon, 2020, 6, e03798.	3.2	33
54	Effect of Surface Treatment of Halloysite Nanotubes (HNTs) on the Kinetics of Epoxy Resin Cure with Amines. Polymers, 2020, 12, 930.	4.5	32

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55	Polyurethane/Silane-Functionalized ZrO2 Nanocomposite Powder Coatings: Thermal Degradation Kinetics. Coatings, 2020, 10, 413.	2.6	15
56	Tailoring hardness and electrochemical performance of TC4 coated Cu/a-C thin coating with introducing second metal Zr. Corrosion Science, 2020, 172, 108713.	6.6	25
57	Hopes Beyond PET Recycling: Environmentally Clean and Engineeringly Applicable. Journal of Polymers and the Environment, 2019, 27, 2490-2508.	5.0	11
58	Synergistic flame-retardant effect between lignin and magnesium hydroxide in poly(ethylene-co-vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.1	10
59	Flame retardant PP/PA6 blends: A recipe for recycled wastes. Flame Retardancy and Thermal Stability of Materials, 2019, 2, 1-8.	1.1	4
60	Bio-epoxy resins with inherent flame retardancy. Progress in Organic Coatings, 2019, 135, 608-612.	3.9	121
61	Thermal Stability and Flammability Behavior of Poly(3-hydroxybutyrate) (PHB) Based Composites. Materials, 2019, 12, 2239.	2.9	44
62	Surface chemistry of halloysite nanotubes controls the curability of low filled epoxy nanocomposites. Progress in Organic Coatings, 2019, 135, 555-564.	3.9	65
63	Preliminary Investigation on Auto-Thermal Extrusion of Ground Tire Rubber. Materials, 2019, 12, 2090.	2.9	23
64	Nonisothermal cure kinetics of epoxy/Zn Fe3-O4 nanocomposites. Progress in Organic Coatings, 2019, 136, 105290.	3.9	23
65	Polyaniline/metal oxides nanocomposites. , 2019, , 131-141.		9
66	Application of polyaniline and its derivatives. , 2019, , 259-272.		17
67	Exploring the Contribution of Two Phosphorus-Based Groups to Polymer Flammability via Pyrolysisâ€"Combustion Flow Calorimetry. Materials, 2019, 12, 2961.	2.9	8
68	The Taste of Waste: The Edge of Eggshell Over Calcium Carbonate in Acrylonitrile Butadiene Rubber. Journal of Polymers and the Environment, 2019, 27, 2478-2489.	5.0	31
69	Curing epoxy with polyethylene glycol (PEG) surface-functionalized NixFe3-xO4magnetic nanoparticles. Progress in Organic Coatings, 2019, 136, 105250.	3.9	22
70	Synthesis of new aromatic polyamides containing Î±-amino phosphonate with high thermal stability and low heat release rate. Journal of Thermal Analysis and Calorimetry, 2019, 138, 3949-3959.	3.6	6
71	Description of complementary actions of mineral and organic additives in thermoplastic polymer composites by <i>Flame Retardancy Index</i>. Polymers for Advanced Technologies, 2019, 30, 2056-2066.	3.2	36
72	Injectable poloxamer/graphene oxide hydrogels with wellâ€controlled mechanical and rheological properties. Polymers for Advanced Technologies, 2019, 30, 2250-2260.	3.2	31

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73	Biodegradable polyester thin films and coatings in the line of fire: the time of polyhydroxyalkanoate (PHA)?. Progress in Organic Coatings, 2019, 133, 85-89.	3.9	27
74	Properties of nano-Fe3O4 incorporated epoxy coatings from Cure Index perspective. Progress in Organic Coatings, 2019, 133, 220-228.	3.9	92
75	Flame Retardancy Index for Thermoplastic Composites. Polymers, 2019, 11, 407.	4.5	195
76	Tripleâ€faced polypropylene: Fire retardant, thermally stable, and antioxidative. Journal of Vinyl and Additive Technology, 2019, 25, 366-376.	3.4	13
77	Well-cured silicone/halloysite nanotubes nanocomposite coatings. Progress in Organic Coatings, 2019, 129, 357-365.	3.9	34
78	Towards advanced flame retardant organic coatings: Expecting a new function from polyaniline. Progress in Organic Coatings, 2019, 130, 144-148.	3.9	33
79	Bushy-surface hybrid nanoparticles for developing epoxy superadhesives. Applied Surface Science, 2019, 479, 1148-1160.	6.1	112
80	Flame Retardant Epoxy Composites on the Road of Innovation: An Analysis with Flame Retardancy Index for Future Development. Molecules, 2019, 24, 3964.	3.8	101
81	Niobium-Treated Titanium Implants with Improved Cellular and Molecular Activities at the Tissueâ€“Implant Interface. Materials, 2019, 12, 3861.	2.9	24
82	New Insights into the Investigation of Smoke Production Using a Cone Calorimeter. Fire Technology, 2019, 55, 853-873.	3.0	19
83	Thermal decomposition kinetics of dynamically vulcanized polyamide 6â€“acrylonitrile butadiene rubberâ€“halloysite nanotube nanocomposites. Journal of Applied Polymer Science, 2019, 136, 47483.	2.6	44
84	Three in one: <i>Î²</i>â€cyclodextrin, nanohydroxyapatite, and a nitrogenâ€rich polymer integrated into a new flame retardant for poly (lactic acid). Fire and Materials, 2018, 42, 593-602.	2.0	35
85	Novel poly(amide-azomethine) nanocomposites reinforced with polyacrylic acid- co -2-acrylamido-2-methylpropanesulfonic acid modified LDH: Synthesis and properties. Applied Clay Science, 2018, 157, 165-176.	5.2	36
86	Crystallization kinetics study of dynamically vulcanized PA6/NBR/HNTs nanocomposites by nonisothermal differential scanning calorimetry. Journal of Applied Polymer Science, 2018, 135, 46488.	2.6	20
87	New polyvinyl chloride (PVC) nanocomposite consisting of aromatic polyamide and chitosan modified ZnO nanoparticles with enhanced thermal stability, low heat release rate and improved mechanical properties. Applied Surface Science, 2018, 439, 1163-1179.	6.1	63
88	Surface engineering of nanoparticles with macromolecules for epoxy curing: Development of super-reactive nitrogen-rich nanosilica through surface chemistry manipulation. Applied Surface Science, 2018, 447, 152-164.	6.1	112
89	Hyperbranched poly(ethyleneimine) physically attached to silica nanoparticles to facilitate curing of epoxy nanocomposite coatings. Progress in Organic Coatings, 2018, 120, 100-109.	3.9	83
90	An attempt to mechanistically explain the viscoelastic behavior of transparent epoxy/starch-modified ZnO nanocomposite coatings. Progress in Organic Coatings, 2018, 119, 171-182.	3.9	41

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91	Flame retardant epoxy/halloysite nanotubes nanocomposite coatings: Exploring low-concentration threshold for flammability compared to expandable graphite as superior fire retardant. Progress in Organic Coatings, 2018, 119, 8-14.	3.9	98
92	Epoxy/starch-modified nano-zinc oxide transparent nanocomposite coatings: A showcase of superior curing behavior. Progress in Organic Coatings, 2018, 115, 143-150.	3.9	99
93	Magnetron-sputtered copper/diamond-like carbon composite thin films with super anti-corrosion properties. Surface and Coatings Technology, 2018, 333, 148-157.	4.8	59
94	Polyaniline in retrospect and prospect. Materials Today: Proceedings, 2018, 5, 15852-15860.	1.8	39
95	Zeolite-based catalysts for exergy efficiency enhancement: The insights gained from nanotechnology. Materials Today: Proceedings, 2018, 5, 15868-15876.	1.8	18
96	Acid-aided epoxy-amine curing reaction as reflected in epoxy/Fe3O4 nanocomposites: Chemistry, mechanism, and fracture behavior. Progress in Organic Coatings, 2018, 125, 384-392.	3.9	77
97	Curing behavior of epoxy/Fe3O4 nanocomposites: A comparison between the effects of bare Fe3O4, Fe3O4/SiO2/chitosan and Fe3O4/SiO2/chitosan/imide/phenylalanine-modified nanofillers. Progress in Organic Coatings, 2018, 123, 10-19.	3.9	89
98	Improving the resistance to hydrothermal ageing of flame-retarded PLA by incorporating miscible PMMA. Polymer Degradation and Stability, 2018, 155, 52-66.	5.8	17
99	A new direction in design of bioâ€based flame retardants for poly(lactic acid). Fire and Materials, 2018, 42, 914-924.	2.0	45
100	Investigation of structureâ€performance properties of a special type of polysulfone blended membranes. Polymers for Advanced Technologies, 2018, 29, 2690-2700.	3.2	13
101	Short-lasting fire in partially and completely cured epoxy coatings containing expandable graphite and halloysite nanotube additives. Progress in Organic Coatings, 2018, 123, 160-167.	3.9	97
102	Promising effect of combining [60]Fullerene nanoparticles and calcium hydroxide on thermal stability and flammability of Poly(ethylene-co-vinyl acetate). Thermochimica Acta, 2018, 668, 73-79.	2.7	11
103	Inclusion of modified lignocellulose and nano-hydroxyapatite in development of new bio-based adjuvant flame retardant for poly(lactic acid). Thermochimica Acta, 2018, 666, 51-59.	2.7	52
104	High-performance hybrid coatings based on diamond-like carbon and copper for carbon steel protection. Diamond and Related Materials, 2017, 80, 84-92.	3.9	33
105	Novel nanocomposites based on poly(ethylene- co -vinyl acetate) for coating applications: The complementary actions of hydroxyapatite, MWCNTs and ammonium polyphosphate on flame retardancy. Progress in Organic Coatings, 2017, 113, 207-217.	3.9	31
106	Transparent nanocomposite coatings based on epoxy and layered double hydroxide: Nonisothermal cure kinetics and viscoelastic behavior assessments. Progress in Organic Coatings, 2017, 113, 126-135.	3.9	76
107	Competitiveness and synergy between three flame retardants in poly(ethylene- co -vinyl acetate). Polymer Degradation and Stability, 2017, 143, 164-175.	5.8	27
108	Antibacterial glass-ionomer cement restorative materials: A critical review on the current status of extended release formulations. Journal of Controlled Release, 2017, 262, 317-328.	9.9	104

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109	High-performance fire-retardant polyamide materials. , 2017, , 147-170.		4
110	Continuous fiberâ€reinforced thermoplastic composites: influence of processing on fire retardant properties. Fire and Materials, 2017, 41, 646-653.	2.0	4
111	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
112	Chitosan and imide-functional Fe₃O₄ nanoparticles to prepare new xanthene based poly(ether-imide) nanocomposites. RSC Advances, 2016, 6, 112568-112575.	3.6	20
113	Studying the thermo-oxidative stability of chars using pyrolysis-combustion flow calorimetry. Polymer Degradation and Stability, 2016, 134, 340-348.	5.8	8
114	Flame retardancy of phosphorus-containing ionic liquid based epoxy networks. Polymer Degradation and Stability, 2016, 134, 186-193.	5.8	67
115	Investigation of thermal stability and flammability of poly(methyl methacrylate) composites by combination of APP with ZrO 2 , sepiolite or MMT. Polymer Degradation and Stability, 2016, 124, 60-67.	5.8	30
116	Effects of ageing on the fire behaviour of flame-retarded polymers: a review. Polymer International, 2015, 64, 313-328.	3.1	59
117	FTIRâ€“PCFC coupling: A new method for studying the combustion of polymers. Combustion and Flame, 2014, 161, 1398-1407.	5.2	19
118	Polycarbonate nanocomposite with improved fire behavior, physical and psychophysical transparency. European Polymer Journal, 2013, 49, 319-327.	5.4	30
119	Nanocomposites of polypropylene/polyamide 6 blends based on three different nanoclays: thermal stability and flame retardancy. Polimery, 2013, 58, 350-360.	0.7	16
120	Pyrolysis-Combustion Flow Calorimetry: A Powerful Tool To Evaluate the Flame Retardancy of Polymers. ACS Symposium Series, 2012, , 361-390.	0.5	21
121	Influence of a treated kaolinite on the thermal degradation and flame retardancy of poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1	5.2	19
122	Combination effect of polyhedral oligomeric silsesquioxane (POSS) and a phosphorus modified PMMA, flammability and thermal stability properties. Materials Chemistry and Physics, 2012, 136, 762-770.	4.0	28
123	Effect of aminobisphosphonated copolymer on the thermal stability and flammability of poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlo	3.1	19
124	Theoretical and empirical approaches to understanding the effect of phosphonate groups on the thermal degradation for two chemically modified PMMA. European Polymer Journal, 2012, 48, 604-612.	5.4	28
125	Relationships between the molecular structure and the flammability of polymers: Study of phosphonate functions using microscale combustion calorimeter. Polymer, 2012, 53, 1258-1266.	3.8	32
126	Improved Flame Retardancy in Polyurethanes Using Layered Double Hydroxides. ACS Symposium Series, 0, , 137-160.	0.5	0