Henri Vahabi

List of Publications by Citations

123 papers	2,684 citations	30 h-index	45 g-index
130 ext. papers	3,514 ext. citations	4.6 avg, IF	5.88 L-index

#	Paper	IF	Citations
123	for Thermoplastic Composites. *Polymers*, **2019**, 11,	4.5	89
122	Bushy-surface hybrid nanoparticles for developing epoxy superadhesives. *Applied Surface Science*, **2019**, 479, 1148-1160	6.7	86
121	Epoxy/starch-modified nano-zinc oxide transparent nanocomposite coatings: A showcase of superior curing behavior. *Progress in Organic Coatings*, **2018**, 115, 143-150	4.8	86
120	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	6.7	84
119	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	11.7	82
118	Properties of nano-Fe3O4 incorporated epoxy coatings from Cure Index perspective. *Progress in Organic Coatings*, **2019**, 133, 220-228	4.8	78
117	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	4.8	78
116	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	4.8	77
115	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	4.8	69
114	Bio-epoxy resins with inherent flame retardancy. *Progress in Organic Coatings*, **2019**, 135, 608-612	4.8	69
113	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	4.8	69
112	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	4.8	66
111	Hyperbranched poly(ethyleneimine) physically attached to silica nanoparticles to facilitate curing of epoxy nanocomposite coatings. *Progress in Organic Coatings*, **2018**, 120, 100-109	4.8	63
110	Flame retardant polymer materials: An update and the future for 3D printing developments. *Materials Science and Engineering Reports*, **2021**, 144, 100604	30.9	52
109	Metal-Organic Framework (MOF)/Epoxy Coatings: A Review. *Materials*, **2020**, 13,	3.5	50
108	Flame Retardant Epoxy Composites on the Road of Innovation: An Analysis with Flame Retardancy Index for Future Development. *Molecules*, **2019**, 24,	4.8	49
107	Surface chemistry of halloysite nanotubes controls the curability of low filled epoxy nanocomposites. *Progress in Organic Coatings*, **2019**, 135, 555-564	4.8	46

106	Flame retardancy of phosphorus-containing ionic liquid based epoxy networks. *Polymer Degradation and Stability*, **2016**, 134, 186-193	4.7	45
105	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	6.7	43
104	Effects of ageing on the fire behaviour of flame-retarded polymers: a review. *Polymer International*, **2015**, 64, 313-328	3.3	42
103	Synthesis, characterization, and high potential of 3D metal□rganic framework (MOF) nanoparticles for curing with epoxy. *Journal of Alloys and Compounds*, **2020**, 829, 154547	5.7	42
102	Magnetron-sputtered copper/diamond-like carbon composite thin films with super anti-corrosion properties. *Surface and Coatings Technology*, **2018**, 333, 148-157	4.4	41
101	Flame Retardancy of Bio-Based Polyurethanes: Opportunities and Challenges. *Polymers*, **2020**, 12,	4.5	40
100	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	7.9	38
99	An attempt to mechanistically explain the viscoelastic behavior of transparent epoxy/starch-modified ZnO nanocomposite coatings. *Progress in Organic Coatings*, **2018**, 119, 171-182	4.8	36
98	Thermal decomposition kinetics of dynamically vulcanized polyamide 6□crylonitrile butadiene rubber□alloysite nanotube nanocomposites. *Journal of Applied Polymer Science*, **2019**, 136, 47483	2.9	35
97	Curing Kinetics and Thermal Stability of Epoxy Composites Containing Newly Obtained Nano-Scale Aluminum Hypophosphite (AlPO). *Polymers*, **2020**, 12,	4.5	34
96	A new direction in design of bio-based flame retardants for poly(lactic acid). *Fire and Materials*, **2018**, 42, 914-924	1.8	33
95	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	2.9	30
94	Relationships between the molecular structure and the flammability of polymers: Study of phosphonate functions using microscale combustion calorimeter. *Polymer*, **2012**, 53, 1258-1266	3.9	30
93	Polyaniline in retrospect and prospect. *Materials Today: Proceedings*, **2018**, 5, 15852-15860	1.4	30
92	Description of complementary actions of mineral and organic additives in thermoplastic polymer composites by Flame Retardancy Index. *Polymers for Advanced Technologies*, **2019**, 30, 2056-2066	3.2	27
91	High-performance hybrid coatings based on diamond-like carbon and copper for carbon steel protection. *Diamond and Related Materials*, **2017**, 80, 84-92	3.5	25
90	Three in one: □yclodextrin, nanohydroxyapatite, and a nitrogen-rich polymer integrated into a new flame retardant for poly (lactic acid). *Fire and Materials*, **2018**, 42, 593-602	1.8	25
89	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	25

88	Thermal Stability and Flammability Behavior of Poly(3-hydroxybutyrate) (PHB) Based Composites. *Materials*, **2019**, 12,	3.5	24
87	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	5.2	24
86	Nonisothermal cure kinetics of epoxy/MnxFe3-xO4 nanocomposites. *Progress in Organic Coatings*, **2020**, 140, 105505	4.8	24
85	Polycarbonate nanocomposite with improved fire behavior, physical and psychophysical transparency. *European Polymer Journal*, **2013**, 49, 319-327	5.2	23
84	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	4.8	22
83	Well-cured silicone/halloysite nanotubes nanocomposite coatings. *Progress in Organic Coatings*, **2019**, 129, 357-365	4.8	22
82	Effect of Surface Treatment of Halloysite Nanotubes (HNTs) on the Kinetics of Epoxy Resin Cure with Amines. *Polymers*, **2020**, 12,	4.5	22
81	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	4.7	22
80	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	8.3	22
79	Super-crosslinked ionic liquid-intercalated montmorillonite/epoxy nanocomposites: Cure kinetics, viscoelastic behavior and thermal degradation mechanism. *Polymer Engineering and Science*, **2020**, 60, 1940-1957	2.3	20
78	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	4.4	20
77	Nonisothermal cure kinetics of epoxy/Zn Fe3-O4 nanocomposites. *Progress in Organic Coatings*, **2019**, 136, 105290	4.8	19
76	Competitiveness and synergy between three flame retardants in poly(ethylene-co-vinyl acetate). *Polymer Degradation and Stability*, **2017**, 143, 164-175	4.7	19
75	Effect of aminobisphosphonated copolymer on the thermal stability and flammability of poly(methyl methacrylate). *Polymer International*, **2012**, 61, 129-134	3.3	19
74	Electrospinning for developing flame retardant polymer materials: Current status and future perspectives. *Polymer*, **2021**, 217, 123466	3.9	19
73	4D printing of shape memory polylactic acid (PLA). *Polymer*, **2021**, 230, 124080	3.9	19
72	Curing epoxy with polyethylene glycol (PEG) surface-functionalized NixFe3-xO4magnetic nanoparticles. *Progress in Organic Coatings*, **2019**, 136, 105250	4.8	18
71	Injectable poloxamer/graphene oxide hydrogels with well-controlled mechanical and rheological properties. *Polymers for Advanced Technologies*, **2019**, 30, 2250-2260	3.2	18

70	Crystallization kinetics study of dynamically vulcanized PA6/NBR/HNTs nanocomposites by nonisothermal differential scanning calorimetry. *Journal of Applied Polymer Science*, **2018**, 135, 46488	2.9	18
69	Biodegradable polyester thin films and coatings in the line of fire: the time of polyhydroxyalkanoate (PHA)?. *Progress in Organic Coatings*, **2019**, 133, 85-89	4.8	17
68	Towards advanced flame retardant organic coatings: Expecting a new function from polyaniline. *Progress in Organic Coatings*, **2019**, 130, 144-148	4.8	17
67	Chitosan and imide-functional Fe3O4 nanoparticles to prepare new xanthene based poly(ether-imide) nanocomposites. *RSC Advances*, **2016**, 6, 112568-112575	3.7	17
66	FTIR–PCFC coupling: A new method for studying the combustion of polymers. *Combustion and Flame*, **2014**, 161, 1398-1407	5.3	16
65	Influence of a treated kaolinite on the thermal degradation and flame retardancy of poly(methyl methacrylate). *Applied Clay Science*, **2012**, 70, 58-66	5.2	16
64	Copper-enriched diamond-like carbon coatings promote regeneration at the bone-implant interface. *Heliyon*, **2020**, 6, e03798	3.6	15
63	Epoxy/Zn-Al-CO3 LDH nanocomposites: Curability assessment. *Progress in Organic Coatings*, **2020**, 138, 105355	4.8	15
62	Additive manufacturing of polyhydroxyalkanoates (PHAs) biopolymers: Materials, printing techniques, and applications. *Materials Science and Engineering C*, **2021**, 127, 112216	8.3	15
61	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	4.5	14
60	Influence of modified mesoporous silica SBA-15 on the flammability of intumescent high-density polyethylene. *Polymers for Advanced Technologies*, **2016**, 27, 1363-1375	3.2	14
59	Nanocomposites of polypropylene/polyamide 6 blends based on three different nanoclays: thermal stability and flame retardancy. *Polimery*, **2013**, 58, 350-360	3.4	13
58	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	5.1	13
57	Zeolite-based catalysts for exergy efficiency enhancement: The insights gained from nanotechnology. *Materials Today: Proceedings*, **2018**, 5, 15868-15876	1.4	13
56	Flame Retardant Polypropylenes: A Review. *Polymers*, **2020**, 12,	4.5	12
55	Improving the resistance to hydrothermal ageing of flame-retarded PLA by incorporating miscible PMMA. *Polymer Degradation and Stability*, **2018**, 155, 52-66	4.7	11
54	Preliminary Investigation on Auto-Thermal Extrusion of Ground Tire Rubber. *Materials*, **2019**, 12,	3.5	11
53	Tailoring hardness and electrochemical performance of TC4 coated Cu/a-C thin coating with introducing second metal Zr. *Corrosion Science*, **2020**, 172, 108713	6.8	11

52	Niobium-Treated Titanium Implants with Improved Cellular and Molecular Activities at the Tissue-Implant Interface. *Materials*, **2019**, 12,	3.5	11
51	Investigation of structure-performance properties of a special type of polysulfone blended membranes. *Polymers for Advanced Technologies*, **2018**, 29, 2690-2700	3.2	9
50	Pyrolysis-Combustion Flow Calorimetry: A Powerful Tool To Evaluate the Flame Retardancy of Polymers. *ACS Symposium Series*, **2012**, 361-390	0.4	9
49	New Insights into the Investigation of Smoke Production Using a Cone Calorimeter. *Fire Technology*, **2019**, 55, 853-873	3	9
48	Polyurethane/Silane-Functionalized ZrO2 Nanocomposite Powder Coatings: Thermal Degradation Kinetics. *Coatings*, **2020**, 10, 413	2.9	9
47	Triple-faced polypropylene: Fire retardant, thermally stable, and antioxidative. *Journal of Vinyl and Additive Technology*, **2019**, 25, 366-376	2	8
46	Phosphorization of exfoliated graphite for developing flame retardant ethylene vinyl acetate composites. *Journal of Materials Research and Technology*, **2020**, 9, 7341-7353	5.5	8
45	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	2.9	8
44	Synergistic flame-retardant effect between lignin and magnesium hydroxide in poly(ethylene-co-vinyl acetate) **2019**, 2, 9-18		8
43	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	2.5	8
42	Thermal-Resistant Polyurethane/Nanoclay Powder Coatings: Degradation Kinetics Study. *Coatings*, **2020**, 10, 871	2.9	8
41	Amine-functionalized metal□rganic frameworks/epoxy nanocomposites: Structure-properties relationships. *Journal of Applied Polymer Science*, **2021**, 138, 51005	2.9	8
40	Crystalline polysaccharides: A review. *Carbohydrate Polymers*, **2022**, 275, 118624	10.3	8
39	Silane-functionalized Al2O3-modified polyurethane powder coatings: Nonisothermal degradation kinetics and mechanistic insights. *Journal of Applied Polymer Science*, **2020**, 137, 49412	2.9	7
38	Studying the thermo-oxidative stability of chars using pyrolysis-combustion flow calorimetry. *Polymer Degradation and Stability*, **2016**, 134, 340-348	4.7	7
37	Halloysite nanotubes (HNTs)/polymer nanocomposites: thermal degradation and flame retardancy **2020**, 67-93		6
36	New nitrogen-rich flame retardant based on conductive poly(aniline-co-melamine). *Reactive and Functional Polymers*, **2020**, 150, 104548	4.6	6
35	A recent advancement on preparation, characterization and application of nanolignin.. *International Journal of Biological Macromolecules*, **2022**, 200, 303-326	7.9	6

34	A review on thermal degradation of polylactic acid (PLA)/polyhydroxybutyrate (PHB) blends. *Polymer Degradation and Stability*, **2022**, 109995	4.7	6
33	Synthesis of new aromatic polyamides containing □amino phosphonate with high thermal stability and low heat release rate. *Journal of Thermal Analysis and Calorimetry*, **2019**, 138, 3949-3959	4.1	5
32	Hopes Beyond PET Recycling: Environmentally Clean and Engineeringly Applicable. *Journal of Polymers and the Environment*, **2019**, 27, 2490-2508	4.5	5
31	Application of polyaniline and its derivatives **2019**, 259-272		5
30	Exploring the Contribution of Two Phosphorus-Based Groups to Polymer Flammability via Pyrolysis-Combustion Flow Calorimetry. *Materials*, **2019**, 12,	3.5	4
29	Novel nanocomposite based on EVA/PHBV/[60]Fullerene with improved thermal properties. *Polymer Testing*, **2020**, 81, 106277	4.5	4
28	Interface analysis of compatibilized polymer blends **2020**, 349-371		4
27	Correlating the Photophysical Properties with the Cure Index of Epoxy Nanocomposite Coatings. *Journal of Inorganic and Organometallic Polymers and Materials*, **2021**, 31, 923-933	3.2	4
26	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	3.6	4
25	Coffee Wastes as Sustainable Flame Retardants for Polymer Materials. *Coatings*, **2021**, 11, 1021	2.9	4
24	Epoxy/Ionic Liquid-Modified Mica Nanocomposites: Network Formation-Network Degradation Correlation. *Nanomaterials*, **2021**, 11,	5.4	4
23	Assessment of the protective effect of PMMA on water immersion ageing of flame retarded PLA/PMMA blends. *Polymer Degradation and Stability*, **2020**, 174, 109104	4.7	3
22	Flame retardant PP/PA6 blends: A recipe for recycled wastes **2019**, 2, 1-8		3
21	Polyaniline/metal oxides nanocomposites **2019**, 131-141		3
20	Continuous fiber-reinforced thermoplastic composites: influence of processing on fire retardant properties. *Fire and Materials*, **2017**, 41, 646-653	1.8	3
19	GTR/Thermoplastics Blends: How Do Interfacial Interactions Govern Processing and Physico-Mechanical Properties?. *Materials*, **2022**, 15,	3.5	3
18	Flame Retardancy of Reactive and Functional Polymers **2021**, 165-195		3
17	Polymer nanocomposites from the flame retardancy viewpoint: A comprehensive classification of nanoparticle performance using the flame retardancy index **2021**, 61-146		3

16	Immobilizing palladium on melamine-functionalized magnetic nanoparticles: An efficient and reusable phosphine-free catalyst for Mizoroki–Heck reaction. *Applied Organometallic Chemistry*, **2021**, 35, e6198	3.1	3
15	Nonisothermal Crystallization Kinetics of Polylactic Acid under the Influence of Polyolefin Elastomers. *Journal of Composites Science*, **2020**, 4, 65	3	2
14	High-performance fire-retardant polyamide materials **2017**, 147-170		2
13	Green carbon-based nanocomposite biomaterials through the lens of microscopes. *Emergent Materials*, **2021**, 1	3.5	2
12	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	4.4	1
11	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	2	1
10	Nanocomposite biomaterials made by 3D printing: Achievements and challenges **2021**, 675-685		1
9	Structure–properties-performance relationships in complex epoxy nanocomposites: A complete picture applying chemorheological and thermo-mechanical kinetic analyses. *Journal of Applied Polymer Science*, **2022**, 139, 51446	2.9	1
8	Green composites in bone tissue engineering. *Emergent Materials*, **2021**, 1	3.5	1
7	Nanolignin in materials science and technology: does flame retardancy matter? **2021**, 515-559		1
6	Flame-Retardant Polymer Materials Developed by Reactive Extrusion: Present Status and Future Perspectives. *Polymer Reviews*,1-31	14	1
5	Fire Protection and Materials Flammability Control by Artificial Intelligence. *Fire Technology*,1	3	0
4	Flame retardancy effect of phosphorus graphite nanoplatelets on ethylene-vinyl acetate copolymer: Physical blending versus chemical modification. *Polymers for Advanced Technologies*, **2021**, 32, 4296	3.2	0
3	Layer-by-layer polymer deposited fabrics with superior flame retardancy and electrical conductivity. *Reactive and Functional Polymers*, **2022**, 173, 105221	4.6	0
2	Novel electrically conductive nanocomposites based on polyaniline and poly(aniline-co-melamine) copolymers grafted on melamine–formaldehyde resin. *Iranian Polymer Journal (English Edition)*,1	2.3	0
1	Improved Flame Retardancy in Polyurethanes Using Layered Double Hydroxides. *ACS Symposium Series*,137-160	0.4	