

Zhixin Jia

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5156200/publications.pdf>

Version: 2024-02-01

96
papers

4,081
citations

136740

32
h-index

118652

62
g-index

98
all docs

98
docs citations

98
times ranked

3557
citing authors

#	ARTICLE	IF	CITATIONS
1	Newly emerging applications of halloysite nanotubes: a review. <i>Polymer International</i> , 2010, 59, 574-582.	1.6	605
2	Thermal stability and flame retardant effects of halloysite nanotubes on poly(propylene). <i>European Polymer Journal</i> , 2006, 42, 1362-1369.	2.6	429
3	Preparation of butadiene-styrene-vinyl pyridine rubber-graphene oxide hybrids through co-coagulation process and in situ interface tailoring. <i>Journal of Materials Chemistry</i> , 2012, 22, 7492.	6.7	167
4	Rational Design of Graphene Surface Chemistry for High-Performance Rubber/Graphene Composites. <i>Macromolecules</i> , 2014, 47, 8663-8673.	2.2	164
5	Interfacial interaction between the epoxidized natural rubber and silica in natural rubber/silica composites. <i>Applied Surface Science</i> , 2015, 328, 306-313.	3.1	150
6	Toughness and strength improvement of diglycidyl ether of bisphenol-A by low viscosity liquid hyperbranched epoxy resin. <i>Journal of Applied Polymer Science</i> , 2006, 101, 2504-2511.	1.3	148
7	Natural inorganic nanotubes reinforced epoxy resin nanocomposites. <i>Journal of Polymer Research</i> , 2008, 15, 205-212.	1.2	140
8	Reinforcing and Flame-Retardant Effects of Halloysite Nanotubes on LLDPE. <i>Polymer-Plastics Technology and Engineering</i> , 2009, 48, 607-613.	1.9	123
9	Styrene-butadiene rubber/halloysite nanotubes nanocomposites modified by methacrylic acid. <i>Applied Surface Science</i> , 2008, 255, 2715-2722.	3.1	108
10	Structure and Performance of Polyamide 6/Halloysite Nanotubes Nanocomposites. <i>Polymer Journal</i> , 2009, 41, 835-842.	1.3	87
11	Constructing conductive titanium carbide nanosheet (MXene) network on polyurethane/polyacrylonitrile fibre framework for flexible strain sensor. <i>Journal of Colloid and Interface Science</i> , 2021, 584, 1-10.	5.0	86
12	A method to improve the mechanical performance of styrene-butadiene rubber via vulcanization accelerator modified silica. <i>Composites Science and Technology</i> , 2015, 117, 46-53.	3.8	78
13	Effects of halloysite nanotubes on kinetics and activation energy of non-isothermal crystallization of polypropylene. <i>Journal of Polymer Research</i> , 2010, 17, 109-118.	1.2	73
14	Preparation of halloysite nanotubes supported 2-mercaptobenzimidazole and its application in natural rubber. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 73, 63-71.	3.8	62
15	Preparation and properties of natural rubber nanocomposites with solid-state organomodified montmorillonite. <i>Journal of Applied Polymer Science</i> , 2008, 107, 2786-2792.	1.3	61
16	Preparation and Characterization of Polypropylene Grafted Halloysite and Their Compatibility Effect to Polypropylene/Halloysite Composite. <i>Polymer Journal</i> , 2006, 38, 1198-1204.	1.3	59
17	Preparation, structure and properties of nitrile-butadiene rubber-organoclay nanocomposites by reactive mixing intercalation method. <i>Journal of Applied Polymer Science</i> , 2006, 100, 1905-1913.	1.3	58
18	Reinforcement of Natural Rubber: The Use of <i>in Situ</i> Regenerated Cellulose from Alkaline-Urea-Aqueous System. <i>Macromolecules</i> , 2017, 50, 7211-7221.	2.2	55

#	ARTICLE	IF	CITATIONS
19	The use of a hybrid consisting of tubular clay and graphene as a reinforcement for elastomers. RSC Advances, 2013, 3, 17057.	1.7	54
20	Ti ₃ C ₂ MXene as a new nanofiller for robust and conductive elastomer composites. Nanoscale, 2019, 11, 14712-14719.	2.8	52
21	One-step synthesis of metal nanoparticle decorated graphene by liquid phase exfoliation. Journal of Materials Chemistry, 2012, 22, 20342.	6.7	51
22	Toughness and reinforcement of diglycidyl ether of bisphenol-A by hyperbranched poly(trimellitic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.3	48
23	Adsorption of Ionic Liquid onto Halloysite Nanotubes: Mechanism and Reinforcement of the Modified Clay to Rubber. Journal of Macromolecular Science - Physics, 2010, 49, 1029-1043.	0.4	48
24	Effects of interfacial interaction on chain dynamics of rubber/graphene oxide hybrids: a dielectric relaxation spectroscopy study. RSC Advances, 2013, 3, 14549.	1.7	48
25	<i>In situ</i> dispersion and compatibilization of lignin/epoxidized natural rubber composites: reactivity, morphology and property. Journal of Applied Polymer Science, 2015, 132, .	1.3	44
26	Synthesis and characterization of solid-phase graft copolymer of polypropylene with styrene and maleic anhydride. Journal of Applied Polymer Science, 2000, 78, 2482-2487.	1.3	43
27	Formation of Reinforcing Inorganic Network in Polymer via Hydrogen Bonding Self-Assembly Process. Polymer Journal, 2007, 39, 208-212.	1.3	41
28	Thiol-containing ionic liquid for the modification of styrene-butadiene rubber/silica composites. Journal of Applied Polymer Science, 2012, 123, 1252-1260.	1.3	41
29	Preparation of hyperbranched epoxy resin containing nitrogen heterocycle and its toughened and reinforced composites. Journal of Applied Polymer Science, 2012, 123, 3261-3269.	1.3	37
30	The aggregation structure regulation of lignin by chemical modification and its effect on the property of lignin/styrene-butadiene rubber composites. Journal of Applied Polymer Science, 2018, 135, 45759.	1.3	36
31	Fluorescent whitening agent stabilized graphene and its composites with chitosan. Journal of Materials Chemistry, 2011, 21, 17111.	6.7	33
32	Elastomer Reinforced with Regenerated Chitin from Alkaline/Urea Aqueous System. ACS Applied Materials & Interfaces, 2017, 9, 26460-26467.	4.0	33
33	Compatibilization of polypropylene/nylon 6 blends with a polypropylene solid-phase graft. Journal of Applied Polymer Science, 2004, 93, 420-427.	1.3	30
34	Mechanism of adhesion of polyurethane/polymethacrylate simultaneous interpenetrating networks adhesives to polymer substrates. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 817-823.	2.4	29
35	Thermoplastic Elastomers Derived from Scrap Rubber Powder/LLDPE Blend with LLDPE-graft-(Epoxidized Natural Rubber) Dual Compatibilizer. Macromolecular Materials and Engineering, 2004, 289, 360-367.	1.7	28
36	A high-performance, thermal and electrical conductive elastomer composite based on Ti ₃ C ₂ MXene. Composites Part A: Applied Science and Manufacturing, 2021, 145, 106292.	3.8	28

#	ARTICLE	IF	CITATIONS
37	Cure behavior of unsaturated polyester/modified montmorillonite nanocomposites. <i>Polymer International</i> , 2007, 56, 267-274.	1.6	27
38	Effect of Alkali Treatment on Structure and Mechanical Properties of Acrylonitrile-Butadiene-Styrene/Bamboo Fiber Composites. <i>Journal of Macromolecular Science - Physics</i> , 2012, 51, 2232-2244.	0.4	27
39	Self-crosslinkable lignin/epoxidized natural rubber composites. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	1.3	27
40	Study on the Performance of Diglycidyl Ether of Bisphenol-A/Hyperbranched Aromatic Polyester Epoxy Resin (HTME) System and Their Toughness Mechanism. <i>Polymer-Plastics Technology and Engineering</i> , 2006, 45, 1005-1011.	1.9	26
41	Synthesis and Characterization of Low Viscosity Aromatic Hyperbranched Poly(trimellitic anhydride) Tj ETQq1 1 0.784314 rgBT /Overl	1.1	25
42	Synthesis and characterization of low viscosity aromatic hyperbranched polyester epoxy resin. <i>Macromolecular Research</i> , 2009, 17, 289-295.	1.0	25
43	Structure and Flame-Retardant Actions of Rigid Polyurethane Foams with Expandable Graphite. <i>Polymers</i> , 2019, 11, 686.	2.0	25
44	Immobilization of rubber additive on graphene for high-performance rubber composites. <i>Journal of Colloid and Interface Science</i> , 2019, 550, 190-198.	5.0	24
45	Effect of 3-mercaptopropyltrimethoxysilane on structure, mechanical, and dynamic mechanical properties of NR/silica composites. <i>Polymer Composites</i> , 2009, 30, 955-961.	2.3	23
46	SBR/silica composites modified by a polymerizable protic ionic liquid. <i>Polymer Journal</i> , 2010, 42, 555-561.	1.3	23
47	The Synergistic Effect of Ionic Liquid-Modified Expandable Graphite and Intumescent Flame-Retardant on Flame-Retardant Rigid Polyurethane Foams. <i>Materials</i> , 2020, 13, 3095.	1.3	22
48	Influence of nanocrystalline cellulose on structure and properties of natural rubber/silica composites. <i>Polymer Composites</i> , 2015, 36, 861-868.	2.3	20
49	Synthesis and characterization of a dimethacrylates monomer with low shrinkage and water sorption for dental application. <i>Journal of Applied Polymer Science</i> , 2012, 125, 114-120.	1.3	19
50	Effect of acetone extract from natural rubber on the structure and interface interaction in NR/CB composites. <i>RSC Advances</i> , 2017, 7, 26458-26467.	1.7	19
51	A Robust and Versatile Continuous Super-Repellent Polymeric Film for Easy Repair and Underwater Display. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6677-6687.	4.0	19
52	Exploitation of introducing of catalytic centers into layer galleries of layered silicates and related epoxy nanocomposites. I. Epoxy nanocomposites derived from montmorillonite modified with catalytic surfactant-bearing carboxyl groups. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2004, 42, 1192-1198.	2.4	18
53	Structure and properties of polypropylene/clay nanocomposites compatibilized by solid-phase grafted polypropylene. <i>Polymer Composites</i> , 2008, 29, 698-701.	2.3	18
54	Synthesis and characterization of 3-benzothiazolthio-1-propyltriethoxysilane and its reinforcement for styrene-butadiene rubber/silica composites. <i>Journal of Applied Polymer Science</i> , 2009, 112, 1967-1973.	1.3	18

#	ARTICLE	IF	CITATIONS
55	Properties of 2,2-bis[4-(2-hydroxy-3-methacryloxy propoxy)phenyl]propane/Isobornyl (Meth)acrylate copolymers. Journal of Applied Polymer Science, 2012, 126, 1527-1531.	1.3	18
56	Kinetics of curing and thermal degradation of hyperbranched epoxy (HTDE)/diglycidyl ether of bisphenol-A epoxy hybrid resin. Journal of Thermal Analysis and Calorimetry, 2009, 98, 819-824.	2.0	16
57	Preparation of highly conductive adhesives by in situ generated and sintered silver nanoparticles during curing process. Journal of Materials Science: Materials in Electronics, 2012, 23, 22-30.	1.1	16
58	Enhanced oil resistance and mechanical properties of nitrile butadiene rubber/lignin composites modified by epoxy resin. Journal of Applied Polymer Science, 2016, 133, .	1.3	14
59	Morphology and performance of styrene butadiene rubber filled with modified graphite nanoplatelet and carbon black. Polymers for Advanced Technologies, 2016, 27, 830-840.	1.6	13
60	Polydimethylsiloxane-based superhydrophobic membranes: fabrication, durability, repairability, and applications. Polymer Chemistry, 2020, 11, 2370-2380.	1.9	13
61	Thermal degradation of the polyimide synthesized from 4,4'-(hexafluoroisopropylidene) diphtalic dianhydride and 4,4'-diaminodiphenylmethane. Journal of Applied Polymer Science, 2004, 91, 2295-2301.	1.3	12
62	Structure and flammability properties of NR-organoclay nanocomposites. Polymer Composites, 2009, 30, 107-110.	2.3	11
63	Inorganic and Organic Hybrid Nanoparticles as Multifunctional Crosslinkers for Rubber Vulcanization with High-Filler Rubber Interaction. Polymers, 2018, 10, 1138.	2.0	11
64	Morphology and properties of halloysite nanotubes reinforced polypropylene nanocomposites. E-Polymers, 2008, 8, .	1.3	10
65	Tubular Clay Composites with High Strength and Transparency. Journal of Macromolecular Science - Physics, 2010, 49, 111-121.	0.4	10
66	Synthesis and Characterization of Low Viscosity Aromatic Hyperbranched Poly(trimellitic anhydride) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 2010, 47, 957-964.	1.2	10
67	Effect of Wood Flour on the Curing Behavior, Mechanical Properties, and Water Absorption of Natural Rubber/Wood Flour Composites. Journal of Macromolecular Science - Physics, 2011, 50, 1625-1636.	0.4	9
68	Quantitative analysis of the higher fatty acids in acetone solutes (AS) from raw natural rubber and their impacts on the structure and properties of NR/silica composites. Industrial Crops and Products, 2018, 121, 80-89.	2.5	9
69	In situ fabrication of graphene oxide supported nano silica for the preparation of rubber composites with high mechanical strength and thermal conductivity. Polymer Composites, 2019, 40, E1633.	2.3	9
70	Photopolymerization and properties of fluorene-based dimethacrylate monomer used as a root canal sealer. Advances in Polymer Technology, 2008, 27, 108-116.	0.8	8
71	Flame retarded polyethylene/wood flour composites with high performances: Satisfying both sides with intumescent flame retardants and synergistic compatibilizers, respectively. Polymer Composites, 2018, 39, 569-579.	2.3	8
72	Effects of epoxy content on dynamic mechanical behaviour of PEI-toughened dicyanate-novolac epoxy blends. Polymer International, 2004, 53, 1378-1381.	1.6	7

#	ARTICLE	IF	CITATIONS
73	Improving the performances of polyethylene/sisal fiber composites by infiltratively compatibilizing the multi-scale interfaces. <i>Composite Interfaces</i> , 2015, 22, 489-502.	1.3	7
74	Thermal stability of poly(3-hydroxybutyrate-co-4-hydroxybutyrate)/modified montmorillonite bio-nanocomposites. <i>Polymer Composites</i> , 2017, 38, 673-681.	2.3	7
75	Novel Hybrid Biomass Anti-Aging Filler for Styrene-Butadiene Rubber Composites with Antioxidative and Reinforcing Properties. <i>Materials</i> , 2020, 13, 4045.	1.3	7
76	Effects of monomer addition sequences on the properties of silicon-containing copolyimides. <i>Polymer International</i> , 2005, 54, 1097-1101.	1.6	6
77	Three-dimensional self-similar super-repellent films for underwater display and wettability switching. <i>Journal of Materials Chemistry C</i> , 2019, 7, 13548-13558.	2.7	6
78	Modification In Situ of EPDM Filled with Carbon Black by Glycidyl Methacrylate. <i>Polymer-Plastics Technology and Engineering</i> , 2007, 46, 1167-1171.	1.9	5
79	Study on Curing Kinetics and Thermal Degradation Kinetics of Hyperbranched Poly(Trimellitic) Tj ETQq1 1 0.784314 rgBT /Overlock 10T <i>Polymer-Plastics Technology and Engineering</i> , 2008, 47, 1220-1226.	1.9	5
80	Transform Rice Husk and Recycled Polyethylene into High Performance Composites: Using a Novel Compatibilizer to Infiltratively Enhance the Interfacial Interactions. <i>Progress in Rubber, Plastics and Recycling Technology</i> , 2016, 32, 253-268.	0.8	5
81	Styrene butadiene rubber/carbon black composites modified by imidazole derivatives. <i>International Journal of Polymer Analysis and Characterization</i> , 2016, 21, 447-457.	0.9	5
82	Synthesis and anti-aging property in acrylonitrile-butadiene rubber of non-aromatic dendritic antioxidant with amine groups. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2017, 54, 612-621.	1.2	5
83	Reutilization of waste printed circuit boards nonmetallic powders in elastomer composites: Significant improvements of curing and mechanical properties. <i>Polymer Composites</i> , 2020, 41, 2224-2232.	2.3	5
84	Properties and morphology of bioceramics/poly(D,L-lactide) composites modified by in situ compatibilizing extrusion. <i>Journal of Applied Polymer Science</i> , 2006, 102, 4085-4091.	1.3	4
85	Bisphenol-A epoxy resin reinforced and toughened by hyperbranched epoxy resin. <i>Frontiers of Chemical Engineering in China</i> , 2007, 1, 349-354.	0.6	4
86	Effects of decoppering pretreatment on accelerated weathering behaviors of waste printed circuit boards powders reinforced polypropylene composites. <i>Journal of Applied Polymer Science</i> , 2019, 136, 48224.	1.3	4
87	Thermal and thermo-oxidative degradation of flame retardant high impact polystyrene with triphenyl phosphate and novolac epoxy resin. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2007, 22, 486-489.	0.4	3
88	Study on Crystallization Behavior of Solid-Phase Graft Copolymers of Polypropylene with Maleic Anhydride and Methyl Methacrylate. <i>Polymer-Plastics Technology and Engineering</i> , 2008, 47, 996-1001.	1.9	3
89	Reinforced Rubber with Ionic Liquid Modified Carbon Black. <i>Polymers and Polymer Composites</i> , 2011, 19, 593-602.	1.0	3
90	Novel blocked mercaptosilane (3-propionylthio-1-propyltrimethoxysilane) for natural rubber/silica composite reinforcement in various curing systems. <i>E-Polymers</i> , 2008, 8, .	1.3	2

#	ARTICLE	IF	CITATIONS
91	Determination of Molecular Structures of Acetone Solutes from Natural Rubber by Pyrolysis Gas Chromatography Coupled to Mass Spectrometry. <i>Chromatographia</i> , 2018, 81, 1085-1096.	0.7	2
92	Effect of compound organification of montmorillonite on the structure and properties of polypropylene/montmorillonite nanocomposites. <i>Frontiers of Materials Science in China</i> , 2007, 1, 65-71.	0.5	1
93	Microwave-Irradiated Ring-Opening Polymerization of Octamethylcyclotetrasiloxane in the Presence of Water. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2008, 57, 717-729.	1.8	1
94	Structure and properties of epoxidized nature rubber/organoclay nanocomposites. , 2008, , .		1
95	Effect of unsaturated hydroxyl-fatty acid modified nano-CaCO ₃ on the morphological and rheological behavior of PP. <i>Frontiers of Chemistry in China: Selected Publications From Chinese Universities</i> , 2009, 4, 75-82.	0.4	0
96	Effects of polypropylene-g-dibutyl maleate on mechanical and rheological properties of PP/PA6 blends. <i>E-Polymers</i> , 2009, 9, .	1.3	0