Chuanhui Xu

List of Publications by Year in descending order

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		108046	145109
84	3,947	37	60
papers	citations	h-index	g-index

84	84	84	2686
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Highâ€Performance, Sensitive, Wearable Multifunctional Sensor Based on Rubber/CNT for Human Motion and Skin Temperature Detection. Advanced Materials, 2022, 34, e2107309.	11.1	244
2	Nanocellulose-A Sustainable and Efficient Nanofiller for Rubber Nanocomposites: From Reinforcement to Smart Soft Materials. Polymer Reviews, 2022, 62, 549-584.	5.3	16
3	Enhanced, hydrophobic, initial-shape programmable shape-memory composites with a bio-based nano-framework via gradient metal-ligand cross-linking. Composites Science and Technology, 2022, 220, 109255.	3.8	8
4	Healable, recyclable, and adhesive rubber composites equipped with ester linkages, zinc ionic bonds, and hydrogen bonds. Composites Part A: Applied Science and Manufacturing, 2022, 155, 106816.	3.8	22
5	Self-healing epoxidized natural rubber with ionic/coordination crosslinks. Materials Chemistry and Physics, 2022, 285, 126063.	2.0	19
6	Curcumin-loaded HKUST-1@ carboxymethyl starch-based composites with moisture-responsive release properties and synergistic antibacterial effect for perishable fruits. International Journal of Biological Macromolecules, 2022, 214, 181-191.	3.6	16
7	Multifunctional flexible Ag-MOFs@CMFP composite paper for fruit preservation and real-time wireless monitoring of fruit quality during storage and transportation. Food Chemistry, 2022, 395, 133614.	4.2	25
8	Silicaâ€reinforced ethylene propylene diene monomer/polypropylene thermoplastic vulcanizates with interfacial compatibilized by methylacrylate. Polymer Composites, 2021, 42, 701-713.	2.3	7
9	Study on long-term pest control and stability of double-layer pesticide carrier in indoor and outdoor environment. Chemical Engineering Journal, 2021, 403, 126342.	6.6	60
10	Curcumin-loaded nanoMOFs@CMFP: A biological preserving paste with antibacterial properties and long-acting, controllable release. Food Chemistry, 2021, 337, 127987.	4.2	35
11	Strengthened, conductivity-tunable, and low solvent-sensitive flexible conductive rubber films with a Zn2+-crosslinked one-body segregated network. Composites Science and Technology, 2021, 203, 108606.	3.8	12
12	Fabrication of high-performance magnetic elastomers by using natural polymer as auxiliary dispersant of Fe3O4 nanoparticles. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106158.	3.8	24
13	Conductivity controllable rubber films: response to humidity based on a bio-based continuous segregated cell network. Journal of Materials Chemistry A, 2021, 9, 8749-8760.	5.2	10
14	A dual stimuli-responsive and safer controlled release platform of pesticide through constructing UiO-66-based alginate hydrogel. Polymer Testing, 2021, 97, 107152.	2.3	15
15	Mechanical Strong and Recyclable Rubber Nanocomposites with Sustainable Cellulose Nanocrystals and Interfacial Exchangeable Bonds. ACS Sustainable Chemistry and Engineering, 2021, 9, 9409-9417.	3.2	34
16	Frame-structured and self-healing ENR-based nanocomposites for strain sensors. European Polymer Journal, 2021, 154, 110569.	2.6	9
17	Sodium alginate crosslinked oxidized natural rubber supramolecular network with rapid self-healing at room temperature and improved mechanical properties. Composites Part A: Applied Science and Manufacturing, 2021, 150, 106601.	3.8	27
18	Endeavour to balance mechanical properties and self-healing of nature rubber by increasing covalent crosslinks via a controlled vulcanization. European Polymer Journal, 2021, 161, 110823.	2.6	17

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19	A super long-acting and anti-photolysis pesticide release platform through self-assembled natural polymer-based polyelectrolyte. Reactive and Functional Polymers, 2020, 146, 104429.	2.0	16
20	Hybridization of carboxymethyl chitosan with MOFs to construct recyclable, long-acting and intelligent antibacterial agent carrier. Carbohydrate Polymers, 2020, 233, 115848.	5.1	53
21	A novel strategy to construct co-continuous PLA/NBR thermoplastic vulcanizates: Metal-ligand coordination-induced dynamic vulcanization, balanced stiffness-toughness and shape memory effect. Chemical Engineering Journal, 2020, 385, 123828.	6.6	91
22	Strengthened, Recyclable, Weldable, and Conducting-Controllable Biobased Rubber Film with a Continuous Water-Soluble Framework Network. ACS Sustainable Chemistry and Engineering, 2020, 8, 1285-1294.	3.2	33
23	High-efficiency removal of dyes from wastewater by fully recycling litchi peel biochar. Chemosphere, 2020, 246, 125734.	4.2	136
24	Strengthened, Antibacterial, and Conductive Flexible Film for Humidity and Strain Sensors. ACS Applied Materials & Interfaces, 2020, 12, 35482-35492.	4.0	41
25	Strengthened, Self-Healing, and Conductive ENR-Based Composites Based on Multiple Hydrogen Bonding Interactions. ACS Sustainable Chemistry and Engineering, 2020, 8, 13724-13733.	3.2	60
26	Antioxidant effects on curing/processing and thermo-oxidative aging of filled nitrile rubber. Materials Chemistry and Physics, 2020, 253, 123403.	2.0	12
27	Structure and Performance of Carboxylic Styrene Butadiene Rubber/Citric Acid Composite Films. Industrial & Engineering Chemistry Research, 2020, 59, 13613-13622.	1.8	5
28	Universal, controllable, large-scale and facile fabrication of nano-MOFs tightly-bonded on flexible substrate. Chemical Engineering Journal, 2020, 395, 125181.	6.6	14
29	Self-Healable, Recyclable, and Strengthened Epoxidized Natural Rubber/Carboxymethyl Chitosan Biobased Composites with Hydrogen Bonding Supramolecular Hybrid Networks. ACS Sustainable Chemistry and Engineering, 2019, 7, 15778-15789.	3.2	79
30	Shape memory effect of dynamically vulcanized ethylene-propylene-diene rubber/polypropylene blends realized by in-situ compatibilization of sodium methacrylate. Composites Part B: Engineering, 2019, 179, 107532.	5.9	20
31	Design of healable epoxy composite based on Î²-hydroxyl esters crosslinked networks by using carboxylated cellulose nanocrystals as crosslinker. Composites Science and Technology, 2019, 181, 107677.	3.8	43
32	Fabrication of â€œZn²⁺ Salt-Bondingsâ€•Cross-Linked SBS-g-COOH/ZnO Composites: Thiolâ€“Ene Reaction Modification of SBS, Structure, High Modulus, and Shape Memory Properties. Macromolecules, 2019, 52, 4329-4340.	2.2	73
33	Strengthened, recyclable shape memory rubber films with a rigid filler nano-capillary network. Journal of Materials Chemistry A, 2019, 7, 6901-6910.	5.2	60
34	Preparation of carboxylic styrene butadiene rubber/chitosan composites with dense supramolecular network via solution mixing process. Composites Part A: Applied Science and Manufacturing, 2019, 117, 116-124.	3.8	49
35	Design of self-healable supramolecular hybrid network based on carboxylated styrene butadiene rubber and nano-chitosan. Carbohydrate Polymers, 2019, 205, 410-419.	5.1	74
36	Dynamically vulcanized PP/EPDM blends with balanced stiffness and toughness via in-situ compatibilization of MAA and excess ZnO nanoparticles: Preparation, structure and properties. Composites Part B: Engineering, 2019, 160, 147-157.	5.9	74

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37	Anisotropic Shape Memory Behaviors of Polylactic Acid/Citric Acidâ€“Bentonite Composite with a Gradient Filler Concentration in Thickness Direction. Industrial & Engineering Chemistry Research, 2018, 57, 6265-6274.	1.8	39
38	Novel fluorosilicone thermoplastic vulcanizates prepared via coreâ€shell dynamic vulcanization: Effect of fluororubber/silicone rubber ratio on morphology, crystallization behavior, and mechanical properties. Polymers for Advanced Technologies, 2018, 29, 1456-1468.	1.6	10
39	Self-healing chitosan/vanillin hydrogels based on Schiff-base bond/hydrogen bond hybrid linkages. Polymer Testing, 2018, 66, 155-163.	2.3	147
40	Preparation and characterization of individual chitin nanofibers with high stability from chitin gels by low-intensity ultrasonication for antibacterial finishing. Cellulose, 2018, 25, 999-1010.	2.4	16
41	Bio-Based PLA/NR-PMMA/NR Ternary Thermoplastic Vulcanizates with Balanced Stiffness and Toughness: â€œSoftâ€“Hardâ€•Coreâ€“Shell Continuous Rubber Phase, In Situ Compatibilization, and Properties. ACS Sustainable Chemistry and Engineering, 2018, 6, 6488-6496.	3.2	105
42	Design of shape-memory materials based on sea-island structured EPDM/PP TPVs via in-situ compatibilization of methacrylic acid and excess zinc oxide nanoparticles. Composites Science and Technology, 2018, 167, 431-439.	3.8	52
43	Adsorption of Cu(<scp>ii</scp>), Zn(<scp>ii</scp>), and Pb(<scp>ii</scp>) from aqueous single and binary metal solutions by regenerated cellulose and sodium alginate chemically modified with polyethyleneimine. RSC Advances, 2018, 8, 18723-18733.	1.7	84
44	Recyclable and heat-healable epoxidized natural rubber/bentonite composites. Composites Science and Technology, 2018, 167, 421-430.	3.8	98
45	Novel Composite Microparticles of Alginate Coated with Chitosan for Controlled Release and Protection of Ascorbic Acid. Advances in Polymer Technology, 2017, 36, 58-67.	0.8	9
46	Poly (vinylidene fluoride)/fluororubber/silicone rubber thermoplastic vulcanizates prepared through core-shell dynamic vulcanization: Formation of different rubber/plastic interfaces via controlling the core from â€œsoftâ€•to â€œhardâ€• Materials Chemistry and Physics, 2017, 195, 123-131.	2.0	26
47	High-performance natural rubber nanocomposites with marine biomass (tunicate cellulose). Cellulose, 2017, 24, 2849-2860.	2.4	49
48	Fabrication of High Performance Magnetic Rubber from NBR and Fe₃O₄via in Situ Compatibilization with Zinc Dimethacrylate. Industrial & Engineering Chemistry Research, 2017, 56, 183-190.	1.8	39
49	Biobased, self-healable, high strength rubber with tunicate cellulose nanocrystals. Nanoscale, 2017, 9, 15696-15706.	2.8	115
50	Self-Healing Natural Rubber with Tailorable Mechanical Properties Based on Ionic Supramolecular Hybrid Network. ACS Applied Materials & Interfaces, 2017, 9, 29363-29373.	4.0	89
51	A Green Modified Microsphere of Chitosan Encapsulating Dimethyl Fumarate and Cross-Linked by Vanillin and Its Application for Litchi Preservation. Industrial & Engineering Chemistry Research, 2016, 55, 4490-4498.	1.8	25
52	Zinc Dimethacrylate Induced in Situ Interfacial Compatibilization Turns EPDM/PP TPVs into a Shape Memory Material. Industrial & Engineering Chemistry Research, 2016, 55, 4539-4548.	1.8	64
53	Design of â€œZn²⁺ Salt-Bondingsâ€•Cross-Linked Carboxylated Styrene Butadiene Rubber with Reprocessing and Recycling Ability via Rearrangements of Ionic Cross-Linkings. ACS Sustainable Chemistry and Engineering, 2016, 4, 6981-6990.	3.2	85
54	Design of Self-Healing Supramolecular Rubbers by Introducing Ionic Cross-Links into Natural Rubber via a Controlled Vulcanization. ACS Applied Materials & Interfaces, 2016, 8, 17728-17737.	4.0	211

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55	In situ reactive compatibilization of natural rubber/acrylic-bentonite composites via peroxide-induced vulcanization. Materials Chemistry and Physics, 2016, 170, 193-200.	2.0	6
56	New Approach to Fabricate Novel Fluorosilicone Thermoplastic Vulcanizate with Bicrosslinked Silicone Rubber-Core/Fluororubber-Shell Particles Dispersed in Poly(vinylidene Fluoride): Structure and Property. Industrial & Engineering Chemistry Research, 2016, 55, 1701-1709.	1.8	39
57	Polyvinylidene Fluoride/Acrylonitrile Butadiene Rubber Blends Prepared Via Dynamic Vulcanization. Journal of Macromolecular Science - Physics, 2015, 54, 58-70.	0.4	7
58	Cellulose nanocrystals reinforced foamed nitrile rubber nanocomposites. Carbohydrate Polymers, 2015, 130, 149-154.	5.1	42
59	Fully Biobased Shape Memory Material Based on Novel Cocontinuous Structure in Poly(Lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T Interfacial Compatibilization. ACS Sustainable Chemistry and Engineering, 2015, 3, 2856-2865.	3.2	119
60	Biobased Heat-Triggered Shape-Memory Polymers Based on Polylactide/Epoxidized Natural Rubber Blend System Fabricated via Peroxide-Induced Dynamic Vulcanization: Co-continuous Phase Structure, Shape Memory Behavior, and Interfacial Compatibilization. Industrial & Engineering Chemistry Research, 2015, 54, 8723-8731.	1.8	74
61	Supertoughened Biobased Poly(lactic acid)â€“Epoxidized Natural Rubber Thermoplastic Vulcanizates: Fabrication, Co-continuous Phase Structure, Interfacial in Situ Compatibilization, and Toughening Mechanism. Journal of Physical Chemistry B, 2015, 119, 12138-12146.	1.2	115
62	Dynamic rheology studies of carboxylated butadiene-styrene rubber/cellulose nanocrystals nanocomposites: Vulcanization process and network structures. Polymer Composites, 2015, 36, 623-629.	2.3	6
63	In situ reactive compatibilized polypropylene/nitrile butadiene rubber blends by zinc dimethacrylate: Preparation, structure, and properties. Polymer Engineering and Science, 2014, 54, 2321-2331.	1.5	16
64	Morphology and properties of poly(vinylidene fluoride)/silicone rubber blends. Journal of Applied Polymer Science, 2014, 131, .	1.3	3
65	Glass fibers reinforced poly(ethylene 2,6â€naphthalate)/ethylene propylene diene monomer composites: Structure, mechanical, and thermal properties. Polymer Composites, 2014, 35, 939-947.	2.3	7
66	Crosslinked bicontinuous biobased polylactide/natural rubber materials: Super toughness, â€œnet-likeâ€•structure of NR phase and excellent interfacial adhesion. Polymer Testing, 2014, 38, 73-80.	2.3	78
67	Crosslinked bicontinuous biobased PLA/NR blends via dynamic vulcanization using different curing systems. Carbohydrate Polymers, 2014, 113, 438-445.	5.1	63
68	Dynamically Vulcanized Biobased Polylactide/Natural Rubber Blend Material with Continuous Cross-Linked Rubber Phase. ACS Applied Materials & Interfaces, 2014, 6, 3811-3816.	4.0	198
69	Temperature dependence of the mechanical properties and the inner structures of natural rubber reinforced by in situ polymerization of zinc dimethacrylate. Journal of Applied Polymer Science, 2013, 128, 2350-2357.	1.3	24
70	In situ reactive compatibilization and reinforcement of peroxide dynamically vulcanized polypropylene/ethyleneâ€propyleneâ€diene monomer tpv by zinc dimethacrylate. Polymer Composites, 2013, 34, 1357-1366.	2.3	22
71	Study of the Crosslinking Evolution of Styrene-Butadiene Rubber/Zinc Dimethacrylate Based on Dissolution/Swelling Experiments. Journal of Macromolecular Science - Physics, 2013, 52, 319-333.	0.4	9
72	Stress-Strain Behaviors and Crosslinked Networks Studies of Natural Rubber-Zinc Dimethacrylate Composites. Journal of Macromolecular Science - Physics, 2012, 51, 1384-1400.	0.4	18

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73	Study of Viscoelastic Properties of EPDM Filled with Zinc Dimethacrylate Prepared In Situ by Using a Rubber Process Analyzer. Journal of Macromolecular Science - Physics, 2012, 51, 1921-1933.	0.4	10
74	A study on stress-softening of nitrile butadiene rubber reinforced by in situ zinc dimethacrylate. Journal of Reinforced Plastics and Composites, 2012, 31, 705-716.	1.6	8
75	Viscoelasticity behaviors of lightly cured natural rubber/zinc dimethacrylate composites. Polymer Composites, 2012, 33, 967-975.	2.3	10
76	Dynamic viscoelasticity behaviors of magnesium dimethacrylate/natural rubber composites with different cure extent. Polymer Composites, 2012, 33, 1244-1253.	2.3	10
77	Structure and properties of peroxide dynamically vulcanized polypropylene/ethyleneâ€“propyleneâ€“diene/zinc dimethacrylate composites. Polymer Composites, 2012, 33, 1206-1214.	2.3	24
78	A study on the crosslink network evolution of magnesium dimethacrylate/natural rubber composite. Journal of Applied Polymer Science, 2012, 125, 2449-2459.	1.3	18
79	PP/EPDM-based dynamically vulcanized thermoplastic olefin with zinc dimethacrylate: Preparation, rheology, morphology, crystallization and mechanical properties. Polymer Testing, 2012, 31, 728-736.	2.3	68
80	Stress softening of NR reinforced by in situ prepared zinc dimethacrylate. Journal of Applied Polymer Science, 2012, 123, 833-841.	1.3	26
81	Thermal aging on mechanical properties and crosslinked network of natural rubber/zinc Dimethacrylate composites. Journal of Applied Polymer Science, 2012, 124, 2240-2249.	1.3	17
82	Crosslink network evolution of nature rubber/zinc dimethacrylate composite during peroxide vulcanization. Polymer Composites, 2011, 32, 1505-1514.	2.3	67
83	Specific nonlinear viscoelasticity behaviors of natural rubber and zinc dimethacrylate composites due to multiâ€crosslinking bond interaction by using rubber process analyzer 2000. Polymer Composites, 2011, 32, 1593-1600.	2.3	33
84	A study on the crosslink network evolution of nitrile butadiene rubber reinforced by in situ zinc dimethacrylate. Polymer Composites, 2011, 32, 2084-2092.	2.3	14