## Baochun Guo

## List of Publications by Year in descending order

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23567 36028 10,865 172 58 97 citations h-index g-index papers 175 175 175 7449 docs citations times ranked citing authors all docs

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Newly emerging applications of halloysite nanotubes: a review. Polymer International, 2010, 59, 574-582.   | 3.1  | 605       |
| 2  | Thermal stability and flame retardant effects of halloysite nanotubes on poly(propylene). European Polymer Journal, 2006, 42, 1362-1369.   | 5.4  | 429       |
| 3  | Covalently Cross-Linked Elastomers with Self-Healing and Malleable Abilities Enabled by Boronic Ester Bonds. ACS Applied Materials & Samp; Interfaces, 2018, 10, 24224-24231.                    | 8.0  | 274       |
| 4  | Properties of halloysite nanotube–epoxy resin hybrids and the interfacial reactions in the systems. Nanotechnology, 2007, 18, 455703.  | 2.6  | 253       |
| 5  | Bioinspired Engineering of Sacrificial Metal–Ligand Bonds into Elastomers with Supramechanical Performance and Adaptive Recovery. Macromolecules, 2016, 49, 1781-1789.                           | 4.8  | 238       |
| 6  | Hydrolysable tannin as environmentally friendly reducer and stabilizer for graphene oxide. Green Chemistry, 2011, 13, 1655.  | 9.0  | 235       |
| 7  | Mechanically Robust, Self-Healable, and Reprocessable Elastomers Enabled by Dynamic Dual Cross-Links. Macromolecules, 2019, 52, 3805-3812.   | 4.8  | 224       |
| 8  | Carboxylated butadiene–styrene rubber/halloysite nanotube nanocomposites: Interfacial interaction and performance. Polymer, 2008, 49, 4871-4876.   | 3.8  | 221       |
| 9  | Halloysite nanotubes as a novel $\hat{I}^2$ -nucleating agent for isotactic polypropylene. Polymer, 2009, 50, 3022-3030.   | 3.8  | 206       |
| 10 | Grafting of Polyester onto Graphene for Electrically and Thermally Conductive Composites. Macromolecules, 2012, 45, 3444-3451.   | 4.8  | 188       |
| 11 | Using a green method to develop graphene oxide/elastomers nanocomposites with combination of high barrier and mechanical performance. Composites Science and Technology, 2014, 92, 1-8.          | 7.8  | 179       |
| 12 | Biobased Poly(propylene sebacate) as Shape Memory Polymer with Tunable Switching Temperature for Potential Biomedical Applications. Biomacromolecules, 2011, 12, 1312-1321.                      | 5.4  | 170       |
| 13 | Preparation of butadiene–styrene–vinyl pyridine rubber–graphene oxide hybrids through co-coagulation process and in situ interface tailoring. Journal of Materials Chemistry, 2012, 22, 7492.    | 6.7  | 167       |
| 14 | Integrating Sacrificial Bonds into Dynamic Covalent Networks toward Mechanically Robust and Malleable Elastomers. ACS Macro Letters, 2019, 8, 193-199.   | 4.8  | 165       |
| 15 | Rational Design of Graphene Surface Chemistry for High-Performance Rubber/Graphene Composites.<br>Macromolecules, 2014, 47, 8663-8673.   | 4.8  | 164       |
| 16 | Malleable, Mechanically Strong, and Adaptive Elastomers Enabled by Interfacial Exchangeable Bonds.<br>Macromolecules, 2017, 50, 7584-7592.   | 4.8  | 160       |
| 17 | Progress in bio-inspired sacrificial bonds in artificial polymeric materials. Chemical Society Reviews, 2017, 46, 6301-6329.   | 38.1 | 157       |
| 18 | Engineering of β-Hydroxyl Esters into Elastomer–Nanoparticle Interface toward Malleable, Robust, and Reprocessable Vitrimer Composites. ACS Applied Materials & Diterfaces, 2018, 10, 2992-3001. | 8.0  | 150       |

| #  | Article   | IF   | Citations |
|----|---|------|-----------|
| 19 | Bioinspired Engineering of Two Different Types of Sacrificial Bonds into Chemically Cross-Linked <i>cis</i> -1,4-Polyisoprene toward a High-Performance Elastomer. Macromolecules, 2016, 49, 8593-8604. | 4.8  | 142       |
| 20 | Natural inorganic nanotubes reinforced epoxy resin nanocomposites. Journal of Polymer Research, 2008, 15, 205-212.  | 2.4  | 140       |
| 21 | Styrene-butadiene rubber/halloysite nanotubes nanocomposites modified by sorbic acid. Applied Surface Science, 2009, 255, 7329-7336.  | 6.1  | 132       |
| 22 | How organo-montmorillonite truly affects the structure and properties of polypropylene. Polymer Testing, 2005, 24, 94-100.  | 4.8  | 129       |
| 23 | Transport performance in novel elastomer nanocomposites: Mechanism, design and control. Progress in Polymer Science, 2016, 61, 29-66.   | 24.7 | 128       |
| 24 | An advanced elastomer with an unprecedented combination of excellent mechanical properties and high self-healing capability. Journal of Materials Chemistry A, 2017, 5, 25660-25671.                    | 10.3 | 128       |
| 25 | Crystallization behavior of polyamide 6/halloysite nanotubes nanocomposites. Thermochimica Acta, 2009, 484, 48-56.  | 2.7  | 125       |
| 26 | Preparation of rubber/graphene oxide composites with in-situ interfacial design. Polymer, 2015, 56, 553-562.  | 3.8  | 124       |
| 27 | Reinforcing and Flame-Retardant Effects of Halloysite Nanotubes on LLDPE. Polymer-Plastics<br>Technology and Engineering, 2009, 48, 607-613.  | 1.9  | 123       |
| 28 | Effects of organo-montmorillonite dispersion on thermal stability of epoxy resin nanocomposites. European Polymer Journal, 2004, 40, 1743-1748.   | 5.4  | 121       |
| 29 | Functional thiol ionic liquids as novel interfacial modifiers in SBR/HNTs composites. Polymer, 2011, 52, 1337-1344.   | 3.8  | 120       |
| 30 | Interactions between halloysite nanotubes and 2,5-bis(2-benzoxazolyl) thiophene and their effects on reinforcement of polypropylene/halloysite nanocomposites. Nanotechnology, 2008, 19, 205709.        | 2.6  | 114       |
| 31 | Styrene–butadiene rubber/halloysite nanotubes nanocomposites modified by methacrylic acid. Applied Surface Science, 2008, 255, 2715-2722.   | 6.1  | 108       |
| 32 | Polyphenol-Reduced Graphene Oxide: Mechanism and Derivatization. Journal of Physical Chemistry C, 2011, 115, 20740-20746.   | 3.1  | 104       |
| 33 | Tuning the mechanical and dynamic properties of imine bond crosslinked elastomeric vitrimers by manipulating the crosslinking degree. Polymer Chemistry, 2020, 11, 1348-1355.                           | 3.9  | 100       |
| 34 | Interface Engineering toward Promoting Silanization by Ionic Liquid for High-Performance Rubber/Silica Composites. Industrial & Engineering Chemistry Research, 2015, 54, 10747-10756.                  | 3.7  | 99        |
| 35 | Significantly improved rubber-silica interface via subtly controlling surface chemistry of silica. Composites Science and Technology, 2018, 156, 70-77.   | 7.8  | 99        |
| 36 | General route to graphene with liquid-like behavior by non-covalent modification. Soft Matter, 2012, 8, 9214.   | 2.7  | 88        |

| #  | Article   | IF   | Citations |
|----|---|------|-----------|
| 37 | Structure and Performance of Polyamide 6/Halloysite Nanotubes Nanocomposites. Polymer Journal, 2009, 41, 835-842.   | 2.7  | 87        |
| 38 | Enabling Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal—Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination. ACS Applied Materials & Design of Advanced Elastomer with Bioinspired Metal—Oxygen Coordination (Basel Materials & Design of Advanced Elastomer with Bioinspired Metal–Oxygen Coordination (Basel Materials & Design of Advanced Elastomer with Bioinspired Metal—Oxygen Coordination (Basel Materials & Design of Advanced Elastomer with Bioinspired Metal†(Basel Materials & Design of Advanced Elastomer with Bioinspired Metal†(Basel Materials & Design of Advanced Elastomer with Bioinspired Metal†(Basel Materials & Basel Materials & Design of Advanced Elastomer with Bioinspired Metal†(Basel Materials & Basel M | 8.0  | 87        |
| 39 | Rational design of covalent interfaces for graphene/elastomer nanocomposites. Composites Science and Technology, 2016, 132, 68-75.  | 7.8  | 86        |
| 40 | Vapor grown carbon nanofiber reinforced bio-based polyester for electroactive shape memory performance. Composites Science and Technology, 2013, 75, 15-21.   | 7.8  | 84        |
| 41 | Mechanically Robust and Recyclable EPDM Rubber Composites by a Green Cross-Linking Strategy. ACS Sustainable Chemistry and Engineering, 2019, 7, 11712-11720.   | 6.7  | 84        |
| 42 | Scalable fabrication of thermally conductive elastomer/boron nitride nanosheets composites by slurry compounding. Composites Science and Technology, 2016, 123, 179-186.  | 7.8  | 83        |
| 43 | Sustainable, recyclable and robust elastomers enabled by exchangeable interfacial cross-linking. Journal of Materials Chemistry A, 2018, 6, 13607-13612.  | 10.3 | 83        |
| 44 | Biomimetic design of elastomeric vitrimers with unparalleled mechanical properties, improved creep resistance and retained malleability by metal–ligand coordination. Journal of Materials Chemistry A, 2019, 7, 26867-26876.   | 10.3 | 83        |
| 45 | Tailoring the wettability of polypropylene surfaces with halloysite nanotubes. Journal of Colloid and Interface Science, 2010, 350, 186-193.  | 9.4  | 78        |
| 46 | The use of rhodamine B-decorated graphene as a reinforcement in polyvinyl alcohol composites. Polymer, 2012, 53, 673-680.   | 3.8  | 76        |
| 47 | Programming dynamic imine bond into elastomer/graphene composite toward mechanically strong, malleable, and multi-stimuli responsive vitrimer. Composites Science and Technology, 2018, 168, 214-223.   | 7.8  | 74        |
| 48 | Effects of halloysite nanotubes on kinetics and activation energy of non-isothermal crystallization of polypropylene. Journal of Polymer Research, 2010, 17, 109-118.   | 2.4  | 73        |
| 49 | Exchangeable interfacial crosslinks towards mechanically robust elastomer/carbon nanotubes vitrimers. Composites Science and Technology, 2018, 165, 24-30.  | 7.8  | 73        |
| 50 | Remarkably improving performance of carbon black-filled rubber composites by incorporating MoS2 nanoplatelets. Composites Science and Technology, 2016, 132, 93-100.  | 7.8  | 72        |
| 51 | Poly(vinyl alcohol)/halloysite nanotubes bionanocomposite films: Properties and <i>in vitro</i> osteoblasts and fibroblasts response. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1574-1587.  | 4.0  | 71        |
| 52 | Bioinspired Interface Engineering in Elastomer/Graphene Composites by Constructing Sacrificial Metal–Ligand Bonds. Macromolecular Rapid Communications, 2016, 37, 1040-1045.  | 3.9  | 71        |
| 53 | Malleable organic/inorganic thermosetting hybrids enabled by exchangeable silyl ether interfaces.<br>Journal of Materials Chemistry A, 2019, 7, 1459-1467.  | 10.3 | 71        |
| 54 | Polymerâ€modified halloysite composite nanotubes. Journal of Applied Polymer Science, 2008, 110, 3638-3646.   | 2.6  | 69        |

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|----|--|------|-----------|
| 55 | A generic solvent exchange method to disperse MoS2 in organic solvents to ease the solution process. Chemical Communications, 2014, 50, 3934.  | 4.1  | 68        |
| 56 | Carbon Nanodots as High-Functionality Cross-Linkers for Bioinspired Engineering of Multiple Sacrificial Units toward Strong yet Tough Elastomers. Macromolecules, 2017, 50, 3244-3253.           | 4.8  | 66        |
| 57 | Incorporation of graphene into polyester/carbon nanofibers composites for better multi-stimuli responsive shape memory performances. Carbon, 2013, 64, 487-498.                                  | 10.3 | 63        |
| 58 | Preparation of halloysite nanotubes supported 2-mercaptobenzimidazole and its application in natural rubber. Composites Part A: Applied Science and Manufacturing, 2015, 73, 63-71.              | 7.6  | 62        |
| 59 | Synthesis and characterization of biobased isosorbide-containing copolyesters as shape memory polymers for biomedical applications. Journal of Materials Chemistry B, 2014, 2, 7877-7886.        | 5.8  | 60        |
| 60 | Preparation and Characterization of Polypropylene Grafted Halloysite and Their Compatibility Effect to Polypropylene/Halloysite Composite. Polymer Journal, 2006, 38, 1198-1204.                 | 2.7  | 59        |
| 61 | Preparation, structure and properties of nitrile–butadiene rubber–organoclay nanocomposites by reactive mixing intercalation method. Journal of Applied Polymer Science, 2006, 100, 1905-1913.   | 2.6  | 58        |
| 62 | Concurrently improved dispersion and interfacial interaction in rubber/nanosilica composites via efficient hydrosilane functionalization. Composites Science and Technology, 2019, 169, 217-223. | 7.8  | 58        |
| 63 | Design of next-generation cross-linking structure for elastomers toward green process and a real recycling loop. Science Bulletin, 2020, 65, 889-898.  | 9.0  | 58        |
| 64 | Toughening Elastomers Using a Mussel-Inspired Multiphase Design. ACS Applied Materials & Samp; Interfaces, 2018, 10, 23485-23489.  | 8.0  | 57        |
| 65 | The use of a hybrid consisting of tubular clay and graphene as a reinforcement for elastomers. RSC Advances, 2013, 3, 17057.   | 3.6  | 54        |
| 66 | Reprocessable and robust crosslinked elastomers via interfacial C N transalkylation of pyridinium. Composites Science and Technology, 2018, 168, 320-326.  | 7.8  | 51        |
| 67 | Interfacial structure and performance of rubber/boehmite nanocomposites modified by methacrylic acid. Polymer, 2011, 52, 4387-4395.  | 3.8  | 49        |
| 68 | Nanodot-Loaded Clay Nanotubes as Green and Sustained Radical Scavengers for Elastomer. ACS Sustainable Chemistry and Engineering, 2017, 5, 1775-1783.  | 6.7  | 49        |
| 69 | 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.              | 1.0  | 48        |
| 70 | Effects of interfacial interaction on chain dynamics of rubber/graphene oxide hybrids: a dielectric relaxation spectroscopy study. RSC Advances, 2013, 3, 14549.                                 | 3.6  | 48        |
| 71 | New evidence disclosed for networking in natural rubber by dielectric relaxation spectroscopy. Soft Matter, 2015, 11, 2290-2299.   | 2.7  | 48        |
| 72 | Coating polyrhodanine onto boron nitride nanosheets for thermally conductive elastomer composites. Composites Part A: Applied Science and Manufacturing, 2017, 94, 77-85.                        | 7.6  | 48        |

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|----|--|------|-----------|
| 73 | Benzothiazole sulfide compatibilized polypropylene/halloysite nanotubes composites. Applied Surface Science, 2009, 255, 4961-4969.   | 6.1  | 45        |
| 74 | A green method for preparing conductive elastomer composites with interconnected graphene network via Pickering emulsion templating. Chemical Engineering Journal, 2018, 342, 112-119.                               | 12.7 | 44        |
| 75 | Uniaxial Stretching-Induced Alignment of Carbon Nanotubes in Cross-Linked Elastomer Enabled by Dynamic Cross-Link Reshuffling. ACS Macro Letters, 2019, 8, 1575-1581.  | 4.8  | 43        |
| 76 | A scalable strategy for constructing three-dimensional segregated graphene network in polymer via hydrothermal self-assembly. Chemical Engineering Journal, 2019, 363, 300-308.                                      | 12.7 | 42        |
| 77 | Bioinspired design of elastomeric vitrimers with sacrificial metal-ligand interactions leading to supramechanical robustness and retentive malleability. Materials and Design, 2020, 192, 108756.                    | 7.0  | 42        |
| 78 | Formation of Reinforcing Inorganic Network in Polymer via Hydrogen Bonding Self-Assembly Process. Polymer Journal, 2007, 39, 208-212.  | 2.7  | 41        |
| 79 | Stronger and Faster Degradable Biobased Poly(propylene sebacate) as Shape Memory Polymer by Incorporating Boehmite Nanoplatelets. ACS Applied Materials & Samp; Interfaces, 2012, 4, 4006-4014.                      | 8.0  | 41        |
| 80 | Thiolâ€containing ionic liquid for the modification of styrene–butadiene rubber/silica composites. Journal of Applied Polymer Science, 2012, 123, 1252-1260.   | 2.6  | 41        |
| 81 | Sodium Humate Functionalized Graphene and Its Unique Reinforcement Effects for Rubber. Industrial & Lamp; Engineering Chemistry Research, 2013, 52, 14592-14600.   | 3.7  | 40        |
| 82 | Surface modification of halloysite nanotubes by vulcanization accelerator and properties of styrene-butadiene rubber nanocomposites with modified halloysite nanotubes. Applied Surface Science, 2016, 366, 193-201. | 6.1  | 40        |
| 83 | Bioinspired engineering of sacrificial bonds into rubber networks towards high-performance and functional elastomers. Composites Communications, 2018, 8, 65-73.   | 6.3  | 40        |
| 84 | A real recycling loop of sulfur-cured rubber through transalkylation exchange of C–S bonds. Green Chemistry, 2018, 20, 5454-5458.  | 9.0  | 40        |
| 85 | Sustainable Carbon Nanodots with Tunable Radical Scavenging Activity for Elastomers. ACS Sustainable Chemistry and Engineering, 2016, 4, 247-254.  | 6.7  | 39        |
| 86 | Preparation and structure of highly confined intercalated polystyrene/montmorillonite nanocomposite via a two-step method. European Polymer Journal, 2005, 41, 1781-1786.  | 5.4  | 38        |
| 87 | Reinforcing thermoplastics with hydrogen bonding bridged inorganics. Physica B: Condensed Matter, 2010, 405, 655-662.  | 2.7  | 37        |
| 88 | Bioinspired Design of a Robust Elastomer with Adaptive Recovery via Triazolinedione Click Chemistry. Macromolecular Rapid Communications, 2017, 38, 1600678.   | 3.9  | 37        |
| 89 | Effects of dynamic covalent bond multiplicity on the performance of vitrimeric elastomers. Journal of Materials Chemistry A, 2020, 8, 20503-20512.   | 10.3 | 36        |
| 90 | Enhanced comprehensive performance of SSBR/BR with self-assembly reduced graphene oxide/silica nanocomposites. Composites Part B: Engineering, 2019, 175, 107027.  | 12.0 | 34        |

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|-----|--|------|-----------|
| 91  | Fluorescent whitening agent stabilized graphene and its composites with chitosan. Journal of Materials Chemistry, 2011, 21, 17111.   | 6.7  | 33        |
| 92  | CORRELATION OF FILLER NETWORKING WITH REINFORCEMENT AND DYNAMIC PROPERTIES OF SSBR/CARBON BLACK/SILICA COMPOSITES. Rubber Chemistry and Technology, 2015, 88, 676-689.   | 1.2  | 33        |
| 93  | Engineering Segregated Structures in a Cross-Linked Elastomeric Network Enabled by Dynamic Cross-Link Reshuffling. ACS Macro Letters, 2021, 10, 231-236.   | 4.8  | 33        |
| 94  | Curing of Rubber via Oxa-Michael Reaction toward Significantly Increased Aging Resistance. Industrial & Lamp; Engineering Chemistry Research, 2013, 52, 18123-18130.   | 3.7  | 32        |
| 95  | Catalyst-Free Metathesis of Cyclic Acetals and Spirocyclic Acetal Covalent Adaptable Networks. ACS<br>Macro Letters, 2020, 9, 1143-1148.   | 4.8  | 32        |
| 96  | Hygrothermal stability of dicyanate-novolac epoxy resin blends. Polymer Degradation and Stability, 2003, 79, 521-528.  | 5.8  | 30        |
| 97  | Thermal Decomposition and Oxidation Ageing Behaviour of Polypropylene/Halloysite Nanotube Nanocomposites. Polymers and Polymer Composites, 2007, 15, 321-328.  | 1.9  | 30        |
| 98  | The Role of Interactions between Halloysite Nanotubes and 2,2′-(1,2-Ethenediyldi-4,1-phenylene) Bisbenzoxazole in Halloysite Reinforced Polypropylene Composites. Polymer Journal, 2008, 40, 1087-1093.                              | 2.7  | 30        |
| 99  | Renewable conjugated acids as curatives for high-performance rubber/silica composites. Green Chemistry, 2015, 17, 3301-3305.   | 9.0  | 30        |
| 100 | Strikingly improved toughness of nonpolar rubber by incorporating sacrificial network at small fraction. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 781-786.   | 2.1  | 29        |
| 101 | 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.                                | 3.6  | 28        |
| 102 | Scalable and Versatile Graphene Functionalized with the Mannich Condensate. ACS Applied Materials & Samp; Interfaces, 2013, 5, 2174-2181.  | 8.0  | 28        |
| 103 | Probing the unexpected behavior of AuNPs migrating through nanofibers: a new strategy for the fabrication of carbon nanofiber–noble metal nanocrystal hybrid nanostructures. Journal of Materials Chemistry A, 2014, 2, 11728-11741. | 10.3 | 28        |
| 104 | Correlating synergistic reinforcement with chain motion in elastomer/nanocarbon hybrids composites. Soft Matter, 2016, 12, 6893-6901.  | 2.7  | 27        |
| 105 | High-performance rubber/boehmite nanoplatelets composites by judicious in situ interfacial design. Composites Science and Technology, 2017, 146, 191-197.  | 7.8  | 27        |
| 106 | Solving "magic triangle―of tread rubber composites with phosphonium-modified petroleum resin. Polymer, 2020, 190, 122244.  | 3.8  | 27        |
| 107 | Significantly improved performance of rubber/silica composites by addition of sorbic acid. Polymer Journal, 2010, 42, 319-326.   | 2.7  | 25        |
| 108 | Synthesis of bio-based copolyester and its reinforcement with zinc diacrylate for shape memory application. Polymer, 2014, 55, 4324-4331.  | 3.8  | 25        |

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|-----|--|------|-----------|
| 109 | Wrapping of polyrhodanine onto tubular clay and its prominent effects on the reinforcement of the clay for rubber. Composites Part A: Applied Science and Manufacturing, 2016, 84, 344-353.          | 7.6  | 25        |
| 110 | Crosslinking diene rubbers by using an inverse vulcanised co-polymer. Green Chemistry, 2020, 22, 7337-7342.  | 9.0  | 25        |
| 111 | Low permeability styrene butadiene rubber/boehmite nanocomposites modified with tannic acid.<br>Materials and Design, 2016, 103, 25-31.  | 7.0  | 24        |
| 112 | Rubber-reinforced rubbers toward the combination of high reinforcement and low energy loss. Nano Energy, 2021, 83, 105822.   | 16.0 | 24        |
| 113 | Effects of Thermal and UV-induced Grafting of Bismaleimide on Mechanical Performance of Reclaimed Rubber/Natural Rubber Blends. Journal of Polymer Research, 2005, 12, 473-482.                      | 2.4  | 23        |
| 114 | SBR/silica composites modified by a polymerizable protic ionic liquid. Polymer Journal, 2010, 42, 555-561.   | 2.7  | 23        |
| 115 | Effects of substitution for carbon black with graphene oxide or graphene on the morphology and performance of natural rubber/carbon black composites. Journal of Applied Polymer Science, 2015, 132, | 2.6  | 23        |
| 116 | Effects of Alkalinity of Ionic Liquid on Catalyzed Silanization in Rubber/Silica Composites. Industrial & Engineering Chemistry Research, 2019, 58, 18654-18662.                                     | 3.7  | 23        |
| 117 | Iron ion cluster-OH coordination as high-efficiency sacrificial bond for reinforcement of elastomer.<br>Polymer, 2020, 186, 122059.  | 3.8  | 23        |
| 118 | Notably Improved Dispersion of Carbon Black for High-Performance Natural Rubber Composites via Triazolinedione Click Chemistry. Industrial & Engineering Chemistry Research, 2020, 59, 21047-21057.  | 3.7  | 23        |
| 119 | The use of inverse vulcanised polysulfide as an intelligent interfacial modifier in rubber/carbon black composites. Carbon, 2021, 184, 409-417.  | 10.3 | 23        |
| 120 | Regulation of mechanical properties of diene rubber cured by oxa-Michael Reaction via manipulating network structure. Polymer, 2018, 144, 57-64.   | 3.8  | 22        |
| 121 | Dispersion of graphene in chlorosulfonated polyethylene by slurry compounding. Composites Science and Technology, 2018, 162, 156-162.  | 7.8  | 22        |
| 122 | Extrudable Vitrimeric Rubbers Enabled via Heterogeneous Network Design. Macromolecules, 2022, 55, 3236-3248.   | 4.8  | 22        |
| 123 | Graphene oxide/rhodanine redox chemistry and its application in designing high-performance elastomer/graphene composites. RSC Advances, 2015, 5, 84398-84405.  | 3.6  | 21        |
| 124 | A Novel and Non-Cytotoxic Self-Healing Supramolecular Elastomer Synthesized with Small Molecular Biological Acids. Macromolecular Rapid Communications, 2016, 37, 1603-1610.                         | 3.9  | 21        |
| 125 | Preparation and Application of a New Curing Agent for Epoxy Resin. International Journal of Polymeric Materials and Polymeric Biomaterials, 2012, 61, 520-531.                                       | 3.4  | 20        |
| 126 | Integrating transient and sacrificial bonds into biobased elastomers toward mechanical property enhancement and macroscopically responsive property. Polymer, 2019, 184, 121914.                     | 3.8  | 20        |

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|-----|---|-----|-----------|
| 127 | Facile Strategy for the Biomimetic Heterogeneous Design of Elastomers with Mechanical Robustness, Malleability, and Functionality. ACS Macro Letters, 2020, 9, 49-55.   | 4.8 | 20        |
| 128 | Preparation and characterization of high strength and noncytotoxic bioelastomers containing isosorbide. RSC Advances, 2014, 4, 19462.   | 3.6 | 19        |
| 129 | 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. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 1192-1198. | 2.1 | 18        |
| 130 | Structure and properties of polypropylene/clay nanocomposites compatibilized by solidâ€phase grafted polypropylene. Polymer Composites, 2008, 29, 698-701.  | 4.6 | 18        |
| 131 | Reversible plasticity shape memory polymers: Key factors and applications. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1295-1299.  | 2.1 | 18        |
| 132 | Significantly Improving Strength and Damping Performance of Nitrile Rubber via Incorporating Sliding Graft Copolymer. Industrial & Engineering Chemistry Research, 2018, 57, 16692-16700.   | 3.7 | 18        |
| 133 | Polyrhodanine mediated interface in natural rubber/carbon black composites toward ultralow energy loss. Composites Part A: Applied Science and Manufacturing, 2021, 149, 106589.  | 7.6 | 18        |
| 134 | Structure and Properties of Poly(vinyl chloride)/Halloysite Nanotubes Nanocomposites. Journal of Macromolecular Science - Physics, 2012, 51, 968-981.   | 1.0 | 17        |
| 135 | Preparation and performance of bio-based carboxylic elastomer/halloysite nanotubes nanocomposites with strong interfacial interaction. Composites Part A: Applied Science and Manufacturing, 2017, 102, 253-262.  | 7.6 | 17        |
| 136 | Generic Method to Create Segregated Structures toward Robust, Flexible, Highly Conductive Elastomer Composites. ACS Applied Materials & Elastomer Composites. ACS Applied Materials & Elastomer Composites.   | 8.0 | 17        |
| 137 | Recyclable crosslinked elastomer based on dynamic dithioacetals. Polymer, 2021, 229, 124007.  | 3.8 | 17        |
| 138 | Dispersing Graphene in Hydroxypropyl Cellulose by Utilizing its LCST Behavior. Macromolecular Chemistry and Physics, 2012, 213, 1370-1377.  | 2.2 | 16        |
| 139 | Optimization of mechanical performance of compatibilized polypropylene/poly(ethylene terephthalate) blends via selective dispersion of halloysite nanotubes in the blend. Journal of Applied Polymer Science, 2013, 129, 47-56.   | 2.6 | 16        |
| 140 | CHALLENGE OF RUBBER/GRAPHENE COMPOSITES AIMING AT REAL APPLICATIONS. Rubber Chemistry and Technology, 2017, 90, 225-237.  | 1.2 | 16        |
| 141 | Promoted dispersion of silica and interfacial strength in rubber/silica composites by grafting with oniums. Journal of Applied Polymer Science, 2019, 136, 48243.   | 2.6 | 16        |
| 142 | A slurry compounding route to disperse graphene oxide in rubber. Materials Letters, 2017, 191, 93-96.   | 2.6 | 15        |
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