

Weiwei Lei

List of Publications by Year in descending order

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179
papers

9,906
citations

36203

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docs citations

179
times ranked

8863
citing authors

#	ARTICLE	IF	CITATIONS
1	Combined effect of volume fractions of nanofillers and filler-polymer interactions on 3D multiscale dispersion of nanofiller and Payne effect. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 152, 106722.	3.8	11
2	Recyclable silicone elastic light-triggered actuator with a reconfigurable Janus structure and self-healable performance. <i>Polymer Chemistry</i> , 2022, 13, 829-837.	1.9	7
3	Designing high performance polymer nanocomposites by incorporating robustness-controlled polymeric nanoparticles: insights from molecular dynamics. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 2813-2825.	1.3	4
4	Controllable Design and Preparation of Hydroxyl-Terminated Solution-Polymerized Styrene Butadiene for Polyurethane Elastomers with High Damping Properties. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2100692.	2.0	8
5	Enhanced thermal conductivity of silicone rubber via synergistic effects of polydopamine modification and silver deposition on boron nitride. <i>Composites Communications</i> , 2022, 30, 101082.	3.3	22
6	Molecular Dynamics Simulation of the Structural, Mechanical, and Reprocessing Properties of Vitrimers Based on a Dynamic Covalent Polymer Network. <i>Macromolecules</i> , 2022, 55, 1091-1103.	2.2	24
7	Current trends in bio-based elastomer materials. <i>SusMat</i> , 2022, 2, 2-33.	7.8	40
8	Thermal Reprocessing and Closed-Loop Chemical Recycling of Styrene-Butadiene Rubber Enabled by Exchangeable and Cleavable Acetal Linkages. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2100887.	2.0	9
9	Recyclable, self-healable and reshape vitrified poly-dimethylsiloxane composite filled with renewable cellulose nanocrystal. <i>Polymer</i> , 2022, 245, 124648.	1.8	13
10	Extrudable Vitrimeric Rubbers Enabled via Heterogeneous Network Design. <i>Macromolecules</i> , 2022, 55, 3236-3248.	2.2	22
11	Comfort fitting shape memory elastomer with constructed strong interface based on amphiphilic hybrid Janus particles. <i>Composites Part B: Engineering</i> , 2022, 236, 109828.	5.9	9
12	Structure-Mechanics Relation of Natural Rubber: Insights from Molecular Dynamics Simulations. <i>ACS Applied Polymer Materials</i> , 2022, 4, 3575-3586.	2.0	27
13	Designing the cross-linked network to tailor the mechanical fracture of elastomeric polymer materials. <i>Polymer</i> , 2022, , 124931.	1.8	2
14	Design and fabrication of recyclable and reshape vitrified elastomer reinforced with renewable cellulose nanocrystal. <i>Composites Communications</i> , 2022, 32, 101165.	3.3	9
15	Preparation of Porous Yolk-Shell S@Poly(vinyl alcohol) (PVA) Particles for a Lithium-Sulfur Battery Cathode with High Cycling and Rate Performances via a Self-Emulsification Process. <i>ACS Applied Energy Materials</i> , 2022, 5, 7432-7442.	2.5	2
16	Integrating Inflammation-Responsive Prodrug with Electrospun Nanofibers for Anti-Inflammation Application. <i>Pharmaceutics</i> , 2022, 14, 1273.	2.0	9
17	Bio-based polyurethane/hindered phenol AO-80 composites for room temperature high damping properties. <i>Composites Part B: Engineering</i> , 2022, 243, 110118.	5.9	13
18	A high toughness elastomer based on natural <i>Eucommia ulmoides</i> gum. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50007.	1.3	14

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19	Rheological and structural properties of associated polymer networks studied via non-equilibrium molecular dynamics simulation. <i>Molecular Systems Design and Engineering</i> , 2021, 6, 461-475.	1.7	7
20	Molecular Dynamics Simulations of Self-Healing Topological Copolymers with a Comblike Structure. <i>Macromolecules</i> , 2021, 54, 1095-1105.	2.2	24
21	Bimodal Polymer End-Linked Nanoparticle Network Design Strategy to Manipulate the Structure-Mechanics Relation. <i>Journal of Physical Chemistry B</i> , 2021, 125, 1680-1691.	1.2	6
22	Rubber-reinforced rubbers toward the combination of high reinforcement and low energy loss. <i>Nano Energy</i> , 2021, 83, 105822.	8.2	24
23	Quantifying the 3D multiscale dispersion structure of nanofillers in polymer nanocomposites by combining 3D-STEM and Synchrotron Radiation X-ray CT. <i>Composites Part B: Engineering</i> , 2021, 212, 108687.	5.9	11
24	Green processing strategy to fabricate silica-filled biobased elastomers with excellent heat oil resistance. <i>Polymer</i> , 2021, 228, 123910.	1.8	7
25	Creep behavior of polymer nanocomposites: Insights from molecular dynamics simulation. <i>Polymer</i> , 2021, 228, 123895.	1.8	7
26	New designed coupling agents for silica used in green tires with low VOCs and low rolling resistance. <i>Applied Surface Science</i> , 2021, 558, 149819.	3.1	35
27	Bio-Based, Self-Crosslinkable <i>Eucommia ulmoides</i> Gum/Silica Hybrids with Body Temperature Triggering Shape Memory Capability. <i>Macromolecular Materials and Engineering</i> , 2021, 306, 2100370.	1.7	11
28	Heterogeneous Dynamics of Polymer Melts Exerted by Chain Loops Anchored on the Substrate: Insights from Molecular Dynamics Simulation. <i>Langmuir</i> , 2021, 37, 12290-12303.	1.6	5
29	Catalyst-free curing and closed-loop recycling of carboxylated functionalized rubber by a green crosslinking strategy. <i>Polymer</i> , 2021, 234, 124237.	1.8	8
30	Biobased and Recyclable Polyurethane for Room-Temperature Damping and Three-Dimensional Printing. <i>ACS Omega</i> , 2021, 6, 30003-30011.	1.6	12
31	Green Fabrication of High-Performance, Lignosulfonate-Functionalized, and Reduced-Graphene Oxide Styrene-Butadiene Rubber Composites. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 17989-17998.	1.8	5
32	Creation of Tortuosity in Unfilled Rubber via Heterogeneous Cross-Linking toward Improved Barrier Property. <i>Macromolecules</i> , 2021, 54, 11522-11532.	2.2	8
33	Enhanced gas barrier properties of graphene oxide/rubber composites with strong interfaces constructed by graphene oxide and sulfur. <i>Chemical Engineering Journal</i> , 2020, 383, 123100.	6.6	65
34	Starch: An Undisputed Potential Candidate and Sustainable Resource for the Development of Wood Adhesive. <i>Starch/Staerke</i> , 2020, 72, 1900276.	1.1	36
35	Mussel-Inspired Highly Stretchable, Tough Nanocomposite Hydrogel with Self-Healable and Near-Infrared Actuated Performance. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 166-174.	1.8	18
36	Facile Strategy for the Biomimetic Heterogeneous Design of Elastomers with Mechanical Robustness, Malleability, and Functionality. <i>ACS Macro Letters</i> , 2020, 9, 49-55.	2.3	20

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37	Unveiling the Mechanism of the Location of the Grafted Nanoparticles in a Lamellar-Forming Block Copolymer. <i>Langmuir</i> , 2020, 36, 194-203.	1.6	5
38	Design and synthesis of phenyl silicone rubber with functional epoxy groups through anionic copolymerization and subsequent epoxidation. <i>Polymer</i> , 2020, 186, 122077.	1.8	30
39	Enhancing the Performance of Rubber with Nano ZnO as Activators. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 48007-48015.	4.0	45
40	Performance enhancement of rubber composites using VOC-Free interfacial silica coupling agent. <i>Composites Part B: Engineering</i> , 2020, 202, 108301.	5.9	53
41	Enhanced Electromechanical Performance of Natural Rubber Composites via Constructing Strawberry-like Dielectric Nanoparticles. <i>ACS Applied Polymer Materials</i> , 2020, 2, 5621-5629.	2.0	15
42	Mitigating the Shielding Effect of Ether Oxygen in Poly(ethylene glycol) on Boron Atoms in Boron-Doped Poly(ethylene glycol) Hybrid Polymer Electrolyte by Introducing Siloxane Spacers. <i>ChemElectroChem</i> , 2020, 7, 3353-3360.	1.7	1
43	Itaconate Based Elastomer as a Green Alternative to Styrene-Butadiene Rubber for Engineering Applications: Performance Comparison. <i>Processes</i> , 2020, 8, 1527.	1.3	10
44	Design of Epoxy-Functionalized Styrene-Butadiene Rubber with Bio-Based Dicarboxylic Acid as a Cross-Linker toward the Green-Curing Process and Recyclability. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 10447-10456.	1.8	18
45	A silicone elastomer with optimized and tunable mechanical strength and self-healing ability based on strong and weak coordination bonds. <i>Polymer Chemistry</i> , 2020, 11, 4047-4057.	1.9	31
46	Mechanical and Self-Healing Behavior of Matrix-Free Polymer Nanocomposites Constructed via Grafted Graphene Nanosheets. <i>Langmuir</i> , 2020, 36, 7427-7438.	1.6	16
47	Bio-based thermoplastic polyurethane derived from polylactic acid with high-damping performance. <i>Industrial Crops and Products</i> , 2020, 154, 112619.	2.5	47
48	Plasticization Effect of Bio-Based Plasticizers from Soybean Oil for Tire Tread Rubber. <i>Polymers</i> , 2020, 12, 623.	2.0	34
49	Design of next-generation cross-linking structure for elastomers toward green process and a real recycling loop. <i>Science Bulletin</i> , 2020, 65, 889-898.	4.3	58
50	Mechanical, dielectric and actuated properties of carboxyl grafted silicone elastomer composites containing epoxy-functionalized TiO ₂ filler. <i>Chemical Engineering Journal</i> , 2020, 393, 124791.	6.6	55
51	Self-Assembly Strategy for Double Network Elastomer Nanocomposites with Ultralow Energy Consumption and Ultrahigh Wear Resistance. <i>Advanced Functional Materials</i> , 2020, 30, 2003429.	7.8	22
52	Advanced flexible rGO-BN natural rubber films with high thermal conductivity for improved thermal management capability. <i>Carbon</i> , 2020, 162, 46-55.	5.4	78
53	Optimizing energy harvesting performance of cone dielectric elastomer generator based on VHB elastomer. <i>Nano Energy</i> , 2020, 71, 104606.	8.2	54
54	Multidirectional Triple-Shape-Memory Polymer by Tunable Cross-linking and Crystallization. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6426-6435.	4.0	31

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55	Preparation of porous antibacterial polyamide 6 (PA6) membrane with zinc oxide (ZnO) nanoparticles selectively localized at the pore walls via reactive extrusion. <i>Science of the Total Environment</i> , 2020, 715, 137018.	3.9	21
56	Functional rubber-clay nanotube composites with sustained release of protective agents. , 2020, , 911-941.		2
57	Tailoring the mechanical properties of polymer nanocomposites via interfacial engineering. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18714-18726.	1.3	16
58	In Situ Exfoliation of Graphite into Graphene Nanosheets in Elastomer Composites Based on Diels-Alder Reaction during Melt Blending. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 13182-13189.	1.8	9
59	Wearable, Antifreezing, and Healable Epidermal Sensor Assembled from Long-Lasting Moist Conductive Nanocomposite Organohydrogel. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 41701-41709.	4.0	94
60	Designing novel epoxy-terminated polybutadiene to construct chemical interface between nanosilica and rubbers with green nature. <i>Composites Part B: Engineering</i> , 2019, 178, 107451.	5.9	24
61	Highly stretchable liquid metal/polyurethane sponge conductors with excellent electrical conductivity stability and good mechanical properties. <i>Composites Part B: Engineering</i> , 2019, 179, 107492.	5.9	25
62	Enhanced Actuation Strains of Rubber Composites by Combined Covalent and Noncovalent Modification of TiO ₂ Nanoparticles. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 19890-19898.	1.8	15
63	Multifunctional Vitrimer-Like Polydimethylsiloxane (PDMS): Recyclable, Self-Healable, and Water-Driven Malleable Covalent Networks Based on Dynamic Imine Bond. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 1212-1221.	1.8	108
64	Bromination Modification of Butyl Rubber and Its Structure, Properties, and Application. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 16645-16653.	1.8	21
65	Shear-Induced Microscopic Structure Damage in Polymer Nanocomposites: A Dynamic Density Functional Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22529-22538.	1.5	4
66	A scalable strategy for constructing three-dimensional segregated graphene network in polymer via hydrothermal self-assembly. <i>Chemical Engineering Journal</i> , 2019, 363, 300-308.	6.6	42
67	Environmentally Friendly Method To Prepare Thermo-Reversible, Self-Healable Biobased Elastomers by One-Step Melt Processing. <i>ACS Applied Polymer Materials</i> , 2019, 1, 169-177.	2.0	23
68	Selectively localized nanosilica particles at the phase interface of PS/PA6/nanosilica composites with co-continuous structure via reactive extrusion. <i>Composites Science and Technology</i> , 2019, 172, 125-133.	3.8	21
69	Improved thermal conductivity and electromechanical properties of natural rubber by constructing Al ₂ O ₃ -PDA-Ag hybrid nanoparticles. <i>Composites Science and Technology</i> , 2019, 180, 86-93.	3.8	63
70	Chemical Bond Scission and Physical Slippage in the Mullins Effect and Fatigue Behavior of Elastomers. <i>Macromolecules</i> , 2019, 52, 4209-4221.	2.2	50
71	Application of Displacement-Current-Governed Triboelectric Nanogenerator in an Electrostatic Discharge Protection System for the Next-Generation Green Tire. <i>ACS Nano</i> , 2019, 13, 8202-8212.	7.3	18
72	Mechanically Robust and Recyclable EPDM Rubber Composites by a Green Cross-Linking Strategy. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 11712-11720.	3.2	84

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73	Tailoring the thermal conductivity of Poly(dimethylsiloxane)/Hexagonal boron nitride composite. <i>Polymer</i> , 2019, 177, 262-273.	1.8	27
74	Self-assembly and structural manipulation of diblock-copolymer grafted nanoparticles in a homopolymer matrix. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 11785-11796.	1.3	12
75	Constructing Sacrificial Multiple Networks To Toughen Elastomer. <i>Macromolecules</i> , 2019, 52, 4154-4168.	2.2	43
76	Fabricated Biobased Eucommia Ulmoides Gum/Polyolefin Elastomer Thermoplastic Vulcanizates into a Shape Memory Material. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 6375-6384.	1.8	39
77	Designing Superlattice Structure via Self-Assembly of One-Component Polymer-Grafted Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2019, 123, 2157-2168.	1.2	16
78	Design, Preparation, and Evaluation of a Novel Elastomer with Bio-Based Diethyl Itaconate Aiming at High-Temperature Oil Resistance. <i>Polymers</i> , 2019, 11, 1897.	2.0	8
79	Highly Stretchable Conductor by Self-Assembling and Mechanical Sintering of a 2D Liquid Metal on a 3D Polydopamine-Modified Polyurethane Sponge. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 48321-48330.	4.0	35
80	Polyvinyl Alcohol-Stabilized Liquid Metal Hydrogel for Wearable Transient Epidermal Sensors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 47358-47364.	4.0	148
81	Uniaxial Stretching-Induced Alignment of Carbon Nanotubes in Cross-Linked Elastomer Enabled by Dynamic Cross-Link Reshuffling. <i>ACS Macro Letters</i> , 2019, 8, 1575-1581.	2.3	43
82	Phase manipulation of topologically engineered AB-type multi-block copolymers. <i>RSC Advances</i> , 2019, 9, 42029-42042.	1.7	0
83	Photothermal-Induced Self-Healable and Reconfigurable Shape Memory Bio-Based Elastomer with Recyclable Ability. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 1469-1479.	4.0	142
84	Concurrently improved dispersion and interfacial interaction in rubber/nanosilica composites via efficient hydrosilane functionalization. <i>Composites Science and Technology</i> , 2019, 169, 217-223.	3.8	58
85	Triboelectric Nanogenerator Boosts Smart Green Tires. <i>Advanced Functional Materials</i> , 2019, 29, 1806331.	7.8	52
86	Mussel Inspired Modification for Aluminum Oxide/Silicone Elastomer Composites with Largely Improved Thermal Conductivity and Low Dielectric Constant. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 3255-3262.	1.8	83
87	Tailoring the mechanical properties by molecular integration of flexible and stiff polymer networks. <i>Soft Matter</i> , 2018, 14, 2379-2390.	1.2	22
88	Thermodynamic and dynamical heterogeneities during glass transition of water. <i>Journal of Molecular Liquids</i> , 2018, 253, 91-95.	2.3	2
89	A Robust, Self-Healable, and Shape Memory Supramolecular Hydrogel by Multiple Hydrogen Bonding Interactions. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1800138.	2.0	78
90	Mechanical and Viscoelastic Properties of Polymer-Grafted Nanorod Composites from Molecular Dynamics Simulation. <i>Macromolecules</i> , 2018, 51, 2641-2652.	2.2	33

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91	Rational design of advanced elastomer nanocomposites towards extremely energy-saving tires based on macromolecular assembly strategy. <i>Nano Energy</i> , 2018, 48, 180-188.	8.2	65
92	Highly toughened polylactide by renewable <i>Eucommia ulmoides</i> gum. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46017.	1.3	19
93	Preparation, microstructure, and microstructure-properties relationship of thermoplastic vulcanizates (TPVs): A review. <i>Progress in Polymer Science</i> , 2018, 79, 61-97.	11.8	158
94	A real recycling loop of sulfur-cured rubber through transalkylation exchange of C-S bonds. <i>Green Chemistry</i> , 2018, 20, 5454-5458.	4.6	40
95	Significantly Improving Strength and Damping Performance of Nitrile Rubber via Incorporating Sliding Graft Copolymer. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 16692-16700.	1.8	18
96	Enhancement of Dielectric Performance of Polymer Composites via Constructing BaTiO ₃ -Poly(dopamine)-Ag Nanoparticles through Mussel-Inspired Surface Functionalization. <i>ACS Omega</i> , 2018, 3, 14087-14096.	1.6	31
97	Controllable Synthesis and Characterization of Soybean-Oil-Based Hyperbranched Polymers via One-Pot Method. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12865-12871.	3.2	16
98	Designing the Slide-Ring Polymer Network with both Good Mechanical and Damping Properties via Molecular Dynamics Simulation. <i>Polymers</i> , 2018, 10, 964.	2.0	26
99	Surface Modification of As-Prepared Silver-Coated Silica Microspheres through Mussel-Inspired Functionalization and Its Application Properties in Silicone Rubber. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 7486-7494.	1.8	27
100	Constructing a Multiple Covalent Interface and Isolating a Dispersed Structure in Silica/Rubber Nanocomposites with Excellent Dynamic Performance. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 19922-19931.	4.0	74
101	Theoretical Model of Time-Temperature Superposition Principle of the Self-Healing Kinetics of Supramolecular Polymer Nanocomposites. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1800382.	2.0	20
102	Toughening Elastomers Using a Mussel-Inspired Multiphase Design. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 23485-23489.	4.0	57
103	Tuning the structure and mechanical properties of double-network elastomer: Molecular dynamics simulation. <i>Chinese Science Bulletin</i> , 2018, 63, 3631-3641.	0.4	3
104	A Combined Experimental and Molecular Simulation Study of Factors Influencing the Selection of Antioxidants in Butadiene Rubber. <i>Journal of Physical Chemistry B</i> , 2017, 121, 1413-1425.	1.2	39
105	Pendant Chain Effect on the Synthesis, Characterization, and Structure-Property Relations of Poly(di-n-alkyl itaconate-co-isoprene) Biobased Elastomers. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 5214-5223.	3.2	25
106	Designing polymer nanocomposites with a semi-interpenetrating or interpenetrating network structure: toward enhanced mechanical properties. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 15808-15820.	1.3	27
107	Molecular Dynamics Simulation Study of Polymer Nanocomposites with Controllable Dispersion of Spherical Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2017, 121, 10146-10156.	1.2	11
108	Malleable, Mechanically Strong, and Adaptive Elastomers Enabled by Interfacial Exchangeable Bonds. <i>Macromolecules</i> , 2017, 50, 7584-7592.	2.2	160

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109	Progress in bio-inspired sacrificial bonds in artificial polymeric materials. <i>Chemical Society Reviews</i> , 2017, 46, 6301-6329.	18.7	157
110	Theoretical and Experimental Insights into the Phase Transition of Rubber/Plastic Blends during Dynamic Vulcanization. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 13911-13918.	1.8	5
111	Self-Assembly of Block Copolymer Chains To Promote the Dispersion of Nanoparticles in Polymer Nanocomposites. <i>Journal of Physical Chemistry B</i> , 2017, 121, 9311-9318.	1.2	16
112	Antifouling Thermoplastic Composites with Maleimide Encapsulated in Clay Nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30083-30091.	4.0	20
113	An advanced elastomer with an unprecedented combination of excellent mechanical properties and high self-healing capability. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25660-25671.	5.2	128
114	Wearable, Healable, and Adhesive Epidermal Sensors Assembled from Mussel-Inspired Conductive Hybrid Hydrogel Framework. <i>Advanced Functional Materials</i> , 2017, 27, 1703852.	7.8	617
115	Tailoring the dispersion of nanoparticles and the mechanical behavior of polymer nanocomposites by designing the chain architecture. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 32024-32037.	1.3	19
116	Tuning the Mechanical Properties of Polymer Nanocomposites Filled with Grafted Nanoparticles by Varying the Grafted Chain Length and Flexibility. <i>Polymers</i> , 2016, 8, 270.	2.0	13
117	Tailoring the Static and Dynamic Mechanical Properties of Tri-Block Copolymers through Molecular Dynamics Simulation. <i>Polymers</i> , 2016, 8, 335.	2.0	15
118	Dispersion and shear-induced orientation of anisotropic nanoparticle filled polymer nanocomposites: insights from molecular dynamics simulation. <i>Nanotechnology</i> , 2016, 27, 265704.	1.3	16
119	Tuning the visco-elasticity of elastomeric polymer materials via flexible nanoparticles: insights from molecular dynamics simulation. <i>RSC Advances</i> , 2016, 6, 28666-28678.	1.7	18
120	Morphology and performance of NR/NBR/ENR ternary rubber composites. <i>Composites Part B: Engineering</i> , 2016, 107, 106-112.	5.9	50
121	Stress-strain behavior of block-copolymers and their nanocomposites filled with uniform or Janus nanoparticles under shear: a molecular dynamics simulation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 27232-27244.	1.3	16
122	Highly Sensitive, Wearable, Durable Strain Sensors and Stretchable Conductors Using Graphene/Silicon Rubber Composites. <i>Advanced Functional Materials</i> , 2016, 26, 7614-7625.	7.8	339
123	Numerical simulation and experimental verification of heat build-up for rubber compounds. <i>Polymer</i> , 2016, 101, 199-207.	1.8	54
124	Novel Slide-Ring Material/Natural Rubber Composites with High Damping Property. <i>Scientific Reports</i> , 2016, 6, 22810.	1.6	39
125	Enabling Design of Advanced Elastomer with Bioinspired Metal-Oxygen Coordination. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32520-32527.	4.0	87
126	One-Piece Triboelectric Nanosensor for Self-Triggered Alarm System and Latent Fingerprint Detection. <i>ACS Nano</i> , 2016, 10, 10366-10372.	7.3	108

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127	Transport performance in novel elastomer nanocomposites: Mechanism, design and control. Progress in Polymer Science, 2016, 61, 29-66.	11.8	128
128	Nanomechanical Mapping of a Deformed Elastomer: Visualizing a Self-Reinforcement Mechanism. ACS Macro Letters, 2016, 5, 839-843.	2.3	29
129	Bioinspired Engineering of Sacrificial Metal-Ligand Bonds into Elastomers with Supramechanical Performance and Adaptive Recovery. Macromolecules, 2016, 49, 1781-1789.	2.2	238
130	In-chain functionalized polymer induced assembly of nanoparticles: toward materials with tailored properties. Soft Matter, 2016, 12, 1964-1968.	1.2	17
131	Enhanced electrical and mechanical properties of rubber/graphene film through layer-by-layer electrostatic assembly. Composites Part B: Engineering, 2016, 90, 457-464.	5.9	48
132	Preparation and performance of silica/SBR masterbatches with high silica loading by latex compounding method. Composites Part B: Engineering, 2016, 85, 130-139.	5.9	70
133	Molecular dynamics simulations of the structural, mechanical and visco-elastic properties of polymer nanocomposites filled with grafted nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 7196-7207.	1.3	70
134	Separated-structured all-organic dielectric elastomer with large actuation strain under ultra-low voltage and high mechanical strength. Journal of Materials Chemistry A, 2015, 3, 1483-1491.	5.2	39
135	Tailoring Dielectric and Actuated Properties of Elastomer Composites by Bioinspired Poly(dopamine) Encapsulated Graphene Oxide. ACS Applied Materials & Interfaces, 2015, 7, 10755-10762.	4.0	105
136	Natural rubber/nitrile butadiene rubber/hindered phenol composites with high-damping properties. International Journal of Smart and Nano Materials, 2015, 6, 239-250.	2.0	22
137	Electrospun Microfiber Membranes Embedded with Drug-Loaded Clay Nanotubes for Sustained Antimicrobial Protection. ACS Nano, 2015, 9, 1600-1612.	7.3	271
138	Novel biobased thermoplastic elastomer consisting of synthetic polyester elastomer and polylactide by in situ dynamical crosslinking method. RSC Advances, 2015, 5, 23498-23507.	1.7	41
139	Revealing the toughening mechanism of graphene-polymer nanocomposite through molecular dynamics simulation. Nanotechnology, 2015, 26, 291003.	1.3	35
140	One-step fabrication of RGO/HNBR composites via selective hydrogenation of NBR with graphene-based catalyst. RSC Advances, 2015, 5, 41098-41102.	1.7	26
141	Highly Aging-Resistant Elastomers Doped with Antioxidant-Loaded Clay Nanotubes. ACS Applied Materials & Interfaces, 2015, 7, 8156-8165.	4.0	85
142	Interface Engineering toward Promoting Silanization by Ionic Liquid for High-Performance Rubber/Silica Composites. Industrial & Engineering Chemistry Research, 2015, 54, 10747-10756.	1.8	99
143	Design and synthesis of non-crystallizable, low-T _g polysiloxane elastomers with functional epoxy groups through anionic copolymerization and subsequent epoxidation. RSC Advances, 2014, 4, 31249-31260.	1.7	29
144	Effect of the temperature on surface modification of silica and properties of modified silica filled rubber composites. Composites Part A: Applied Science and Manufacturing, 2014, 62, 52-59.	3.8	172

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