

Liqun Zhang

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478
papers

19,445
citations

72
h-index

113
g-index

496
ext. papers

22,239
ext. citations

5.3
avg, IF

7.08
L-index

#	Paper	IF	Citations
478	Halloysite Clay Nanotubes for Loading and Sustained Release of Functional Compounds. <i>Advanced Materials</i> , 2016 , 28, 1227-50	24	592
477	Wearable, Healable, and Adhesive Epidermal Sensors Assembled from Mussel-Inspired Conductive Hybrid Hydrogel Framework. <i>Advanced Functional Materials</i> , 2017 , 27, 1703852	15.6	460
476	Respiratory syncytial virus infection of human airway epithelial cells is polarized, specific to ciliated cells, and without obvious cytopathology. <i>Journal of Virology</i> , 2002 , 76, 5654-66	6.6	408
475	Silica Modified by Alcohol Polyoxyethylene Ether and Silane Coupling Agent Together to Achieve High Performance Rubber Composites Using the Latex Compounding Method. <i>Polymers</i> , 2017 , 10,	4.5	290
474	Highly Sensitive, Wearable, Durable Strain Sensors and Stretchable Conductors Using Graphene/Silicon Rubber Composites. <i>Advanced Functional Materials</i> , 2016 , 26, 7614-7625	15.6	272
473	Normal and cystic fibrosis airway surface liquid homeostasis. The effects of phasic shear stress and viral infections. <i>Journal of Biological Chemistry</i> , 2005 , 280, 35751-9	5.4	261
472	Morphology and mechanical properties of clay/styrene-butadiene rubber nanocomposites. <i>Journal of Applied Polymer Science</i> , 2000 , 78, 1873-1878	2.9	254
471	Nanoparticle dispersion and aggregation in polymer nanocomposites: insights from molecular dynamics simulation. <i>Langmuir</i> , 2011 , 27, 7926-33	4	248
470	The effect of citric acid on the structural properties and cytotoxicity of the polyvinyl alcohol/starch films when molding at high temperature. <i>Carbohydrate Polymers</i> , 2008 , 74, 763-770	10.3	238
469	Characterization of citric acid/glycerol co-plasticized thermoplastic starch prepared by melt blending. <i>Carbohydrate Polymers</i> , 2007 , 69, 748-755	10.3	231
468	Infection of ciliated cells by human parainfluenza virus type 3 in an in vitro model of human airway epithelium. <i>Journal of Virology</i> , 2005 , 79, 1113-24	6.6	218
467	A Facile Approach to Chemically Modified Graphene and its Polymer Nanocomposites. <i>Advanced Functional Materials</i> , 2012 , 22, 2735-2743	15.6	211
466	Preparation and characterization of rubber/clay nanocomposites. <i>Journal of Applied Polymer Science</i> , 2000 , 78, 1879-1883	2.9	204
465	Large-scale synthesis of N-doped carbon quantum dots and their phosphorescence properties in a polyurethane matrix. <i>Nanoscale</i> , 2016 , 8, 4742-7	7.7	189
464	Electrically and thermally conductive elastomer/graphene nanocomposites by solution mixing. <i>Polymer</i> , 2014 , 55, 201-210	3.9	187
463	Novel percolation phenomena and mechanism of strengthening elastomers by nanofillers. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 3014-30	3.6	179
462	Molecular Dynamics Study on Nanoparticle Diffusion in Polymer Melts: A Test of the Stokes-Einstein Law. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 6653-6661	3.8	177

461	Bioinspired Engineering of Sacrificial Metal-Ligand Bonds into Elastomers with Supramechanical Performance and Adaptive Recovery. <i>Macromolecules</i> , 2016 , 49, 1781-1789	5.5	172
460	Grafting of Polyester onto Graphene for Electrically and Thermally Conductive Composites. <i>Macromolecules</i> , 2012 , 45, 3444-3451	5.5	168
459	Analyzing Properties of Model Asphalts Using Molecular Simulation. <i>Energy & Fuels</i> , 2007 , 21, 1712-1716	4.7	153
458	Using a green method to develop graphene oxide/elastomers nanocomposites with combination of high barrier and mechanical performance. <i>Composites Science and Technology</i> , 2014 , 92, 1-8	8.6	150
457	Synthesis, preparation, in vitro degradation, and application of novel degradable bioelastomers: A review. <i>Progress in Polymer Science</i> , 2012 , 37, 715-765	29.6	149
456	Biobased poly(propylene sebacate) as shape memory polymer with tunable switching temperature for potential biomedical applications. <i>Biomacromolecules</i> , 2011 , 12, 1312-21	6.9	143
455	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		142
454	Surface silverized meta-aramid fibers prepared by bio-inspired poly(dopamine) functionalization. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 2062-9	9.5	140
453	Overview of polymer nanocomposites: Computer simulation understanding of physical properties. <i>Polymer</i> , 2017 , 133, 272-287	3.9	137
452	Surface modification of silica by two-step method and properties of solution styrene butadiene rubber (SSBR) nanocomposites filled with modified silica. <i>Composites Science and Technology</i> , 2013 , 88, 69-75	8.6	132
451	Antibacterial surfaces through dopamine functionalization and silver nanoparticle immobilization. <i>Materials Chemistry and Physics</i> , 2010 , 121, 534-540	4.4	132
450	Crystallization and morphology study of polyhedral oligomeric silsesquioxane (POSS)/polysiloxane elastomer composites prepared by melt blending. <i>Polymer</i> , 2007 , 48, 3201-3212	3.9	123
449	Relaxation time, diffusion, and viscosity analysis of model asphalt systems using molecular simulation. <i>Journal of Chemical Physics</i> , 2007 , 127, 194502	3.9	122
448	Malleable, Mechanically Strong, and Adaptive Elastomers Enabled by Interfacial Exchangeable Bonds. <i>Macromolecules</i> , 2017 , 50, 7584-7592	5.5	121
447	High performance graphene oxide based rubber composites. <i>Scientific Reports</i> , 2013 , 3, 2508	4.9	116
446	Preparation and characterization of dopamine-decorated hydrophilic carbon black. <i>Applied Surface Science</i> , 2012 , 258, 5387-5393	6.7	115
445	A novel approach to electrically and thermally conductive elastomers using graphene. <i>Polymer</i> , 2013 , 54, 3663-3670	3.9	112
444	Study on mechanical properties of elastomers reinforced by zinc dimethacrylate. <i>European Polymer Journal</i> , 2005 , 41, 589-598	5.2	110

- 443 A combined experiment and molecular dynamics simulation study of hydrogen bonds and free volume in nitrile-butadiene rubber/hindered phenol damping mixtures. *Journal of Materials Chemistry*, **2012**, 22, 12339 107
- 442 Molecular engineering of a two-step transcription amplification (TSTA) system for transgene delivery in prostate cancer. *Molecular Therapy*, **2002**, 5, 223-32 11.7 107
- 441 Melt compounding with graphene to develop functional, high-performance elastomers. *Nanotechnology*, **2013**, 24, 165601 3.4 106
- 440 On the global existence of solutions to the Prandtl system. *Advances in Mathematics*, **2004**, 181, 88-133 1.3 106
- 439 Synthesis and Characterization of Novel Soybean-Oil-Based Elastomers with Favorable Processability and Tunable Properties. *Macromolecules*, **2012**, 45, 9010-9019 5.5 104
- 438 Preparation and properties of natural rubber/ectorite nanocomposites. *European Polymer Journal*, **2005**, 41, 2776-2783 5.2 103
- 437 Hydroxide ions transportation in polynorbornene anion exchange membrane. *Polymer*, **2018**, 138, 363-368 99
- 436 Molecular Orientation in Model Asphalts Using Molecular Simulation. *Energy & Fuels*, **2007**, 21, 11024-1111 99
- 435 Effect of particle size on the properties of Mg(OH)₂-filled rubber composites. *Journal of Applied Polymer Science*, **2004**, 94, 2341-2346 2.9 98
- 434 Recent advances in synthetic bioelastomers. *International Journal of Molecular Sciences*, **2009**, 10, 4223-563 96
- 433 Dramatic influence of compatibility on crystallization behavior and morphology of polypropylene in NBR/PP thermoplastic vulcanizates. *Journal of Polymer Research*, **2012**, 19, 1 2.7 93
- 432 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 13 93
- 431 Preparation, microstructure, and microstructure-properties relationship of thermoplastic vulcanizates (TPVs): A review. *Progress in Polymer Science*, **2018**, 79, 61-97 29.6 92
- 430 Transport performance in novel elastomer nanocomposites: Mechanism, design and control. *Progress in Polymer Science*, **2016**, 61, 29-66 29.6 91
- 429 Structure and properties of fibrillar silicate/SBR composites by direct blend process. *Journal of Materials Science*, **2003**, 38, 4917-4924 4.3 91
- 428 Synthesis of amphiphilic carbon quantum dots with phosphorescence properties and their multifunctional applications. *Journal of Materials Chemistry C*, **2016**, 4, 10146-10153 7.1 90
- 427 Photothermal-Induced Self-Healable and Reconfigurable Shape Memory Bio-Based Elastomer with Recyclable Ability. *ACS Applied Materials & Interfaces*, **2019**, 11, 1469-1479 9.5 90
- 426 Progress in bio-inspired sacrificial bonds in artificial polymeric materials. *Chemical Society Reviews*, **2017**, 46, 6301-6329 58.5 89

4 ²⁵	Polymer-nanoparticle interfacial behavior revisited: a molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 13058-69	3.6	86
4 ²⁴	One-Piece Triboelectric Nanosensor for Self-Triggered Alarm System and Latent Fingerprint Detection. <i>ACS Nano</i> , 2016 , 10, 10366-10372	16.7	84
4 ²³	Macroscopic supramolecular assembly of rigid building blocks through a flexible spacing coating. <i>Advanced Materials</i> , 2014 , 26, 3009-13	24	84
4 ²²	Preparation and properties of isobutylene- β -oprene rubber (IIR)/clay nanocomposites. <i>Polymer Testing</i> , 2005 , 24, 12-17	4.5	83
4 ²¹	Enhanced dielectric properties and actuated strain of elastomer composites with dopamine-induced surface functionalization. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 12276	13	82
4 ²⁰	Proton conductivity improvement of sulfonated poly(ether ether ketone) nanocomposite membranes with sulfonated halloysite nanotubes prepared via dopamine-initiated atom transfer radical polymerization. <i>Journal of Membrane Science</i> , 2016 , 504, 206-219	9.6	81
4 ¹⁹	General route to graphene with liquid-like behavior by non-covalent modification. <i>Soft Matter</i> , 2012 , 8, 9214	3.6	81
4 ¹⁸	Structure and properties of strain-induced crystallization rubber/clay nanocomposites by co-coagulating the rubber latex and clay aqueous suspension. <i>Journal of Applied Polymer Science</i> , 2005 , 96, 318-323	2.9	81
4 ¹⁷	A Flexible Wearable Pressure Sensor with Bioinspired Microcrack and Interlocking for Full-Range Human-Machine Interfacing. <i>Small</i> , 2018 , 14, e1803018	11	81
4 ¹⁶	Long-acting and broad-spectrum antimicrobial electrospun poly (ϵ -caprolactone)/gelatin micro/nanofibers for wound dressing. <i>Journal of Colloid and Interface Science</i> , 2018 , 509, 275-284	9.3	79
4 ¹⁵	Fabrication of silver-coated silica microspheres through mussel-inspired surface functionalization. <i>Journal of Colloid and Interface Science</i> , 2011 , 358, 567-74	9.3	79
4 ¹⁴	Molecular dynamics simulation for insight into microscopic mechanism of polymer reinforcement. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 518-29	3.6	78
4 ¹³	Ageing of soft thermoplastic starch with high glycerol content. <i>Journal of Applied Polymer Science</i> , 2007 , 103, 574-586	2.9	77
4 ¹²	Effect of particle size on flame retardancy of Mg(OH) ₂ -filled ethylene vinyl acetate copolymer composites. <i>Journal of Applied Polymer Science</i> , 2006 , 100, 4461-4469	2.9	77
4 ¹¹	Study on flammability of montmorillonite/styrene-butadiene rubber (SBR) nanocomposites. <i>Journal of Applied Polymer Science</i> , 2005 , 97, 844-849	2.9	77
4 ¹⁰	Employing a novel bioelastomer to toughen polylactide. <i>Polymer</i> , 2013 , 54, 2450-2458	3.9	76
4 ⁰⁹	Vapor grown carbon nanofiber reinforced bio-based polyester for electroactive shape memory performance. <i>Composites Science and Technology</i> , 2013 , 75, 15-21	8.6	75
4 ⁰⁸	Tough Bio-Based Elastomer Nanocomposites with High Performance for Engineering Applications. <i>Advanced Engineering Materials</i> , 2012 , 14, 112-118	3.5	74

407	Highly conductive one-dimensional nanofibers: silvered electrospun silica nanofibers via poly(dopamine) functionalization. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 5105-12	9.5	72
406	Preparation of nano-zinc oxide/EPDM composites with both good thermal conductivity and mechanical properties. <i>Journal of Applied Polymer Science</i> , 2011 , 119, 1144-1155	2.9	72
405	Design and Preparation of a Novel Cross-Linkable, High Molecular Weight, and Bio-Based Elastomer by Emulsion Polymerization. <i>Macromolecules</i> , 2012 , 45, 6830-6839	5.5	70
404	Rational design of covalent interfaces for graphene/elastomer nanocomposites. <i>Composites Science and Technology</i> , 2016 , 132, 68-75	8.6	70
403	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	3.9	69
402	The use of rhodamine B-decorated graphene as a reinforcement in polyvinyl alcohol composites. <i>Polymer</i> , 2012 , 53, 673-680	3.9	69
401	The surface modification of nanosilica, preparation of nanosilica/acrylic core-shell composite latex, and its application in toughening PVC matrix. <i>Journal of Applied Polymer Science</i> , 2008 , 107, 2671-2680	2.9	68
400	Enhanced interfacial interaction and excellent performance of silica/epoxy group-functionalized styrene-butadiene rubber (SBR) nanocomposites without any coupling agent. <i>Composites Part B: Engineering</i> , 2017 , 114, 356-364	10	67
399	Hierarchical electrospun SiO ₂ nanofibers containing SiO ₂ nanoparticles with controllable surface-roughness and/or porosity. <i>Materials Letters</i> , 2010 , 64, 1517-1520	3.3	67
398	The morphology of zinc dimethacrylate reinforced elastomers investigated by SEM and TEM. <i>European Polymer Journal</i> , 2005 , 41, 577-588	5.2	67
397	New understanding of microstructure formation of the rubber phase in thermoplastic vulcanizates (TPV). <i>Soft Matter</i> , 2014 , 10, 1816-22	3.6	66
396	Swelling process of rubber in asphalt and its effect on the structure and properties of rubber and asphalt. <i>Construction and Building Materials</i> , 2012 , 29, 316-322	6.7	64
395	Significantly improved rubber-silica interface via subtly controlling surface chemistry of silica. <i>Composites Science and Technology</i> , 2018 , 156, 70-77	8.6	63
394	Enabling Design of Advanced Elastomer with Bioinspired Metal-Oxygen Coordination. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 32520-32527	9.5	63
393	The Interesting Influence of Nanosprings on the Viscoelasticity of Elastomeric Polymer Materials: Simulation and Experiment. <i>Advanced Functional Materials</i> , 2013 , 23, 1156-1163	15.6	63
392	A facile method for preparing highly conductive and reflective surface-silvered polyimide films. <i>Applied Surface Science</i> , 2009 , 255, 8207-8212	6.7	63
391	Preparation and characterization of polystyrene/Ag core-shell microspheres--a bio-inspired poly(dopamine) approach. <i>Journal of Colloid and Interface Science</i> , 2012 , 368, 241-9	9.3	62
390	Effect of expanded graphite (EG) dispersion on the mechanical and tribological properties of nitrile rubber/EG composites. <i>Wear</i> , 2012 , 276-277, 85-93	3.5	62

389	High performance dielectric composites by latex compounding of graphene oxide-encapsulated carbon nanosphere hybrids with XNBR. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 11144-11154	13	61
388	Preparation of PET/Ag hybrid fibers via a biomimetic surface functionalization method. <i>Electrochimica Acta</i> , 2012 , 79, 37-45	6.7	61
387	Fabrication and evaluation of electrospun PCL-gelatin micro-/nanofiber membranes for anti-infective GTR implants. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 6867-6877	7.3	60
386	Mechanical, Dielectric, and Actuated Strain of Silicone Elastomer Filled with Various Types of TiO ₂ . <i>Soft Materials</i> , 2013 , 11, 363-370	1.7	60
385	A Robust, Self-Healable, and Shape Memory Supramolecular Hydrogel by Multiple Hydrogen Bonding Interactions. <i>Macromolecular Rapid Communications</i> , 2018 , 39, e1800138	4.8	59
384	Largely improved actuation strain at low electric field of dielectric elastomer by combining disrupting hydrogen bonds with ionic conductivity. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 8388-8397	7.1	59
383	Molecular dynamics simulations of the structural, mechanical and visco-elastic properties of polymer nanocomposites filled with grafted nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 7196-207	3.6	59
382	A new strategy to improve the gas barrier property of isobutylene/eprene rubber/clay nanocomposites. <i>Polymer Testing</i> , 2008 , 27, 270-276	4.5	59
381	Modification of starch for high performance elastomer. <i>Polymer</i> , 2006 , 47, 3896-3903	3.9	59
380	Noninvasive imaging of enhanced prostate-specific gene expression using a two-step transcriptional amplification-based lentivirus vector. <i>Molecular Therapy</i> , 2004 , 10, 545-52	11.7	58
379	Flexible Breathable Nanomesh Electronic Devices for On-Demand Therapy. <i>Advanced Functional Materials</i> , 2019 , 29, 1902127	15.6	57
378	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	3.9	57
377	Chemical and physical interaction between silane coupling agent with long arms and silica and its effect on silica/natural rubber composites. <i>Polymer</i> , 2018 , 135, 200-210	3.9	56
376	Dramatically improved dielectric properties of polymer composites by controlling the alignment of carbon nanotubes in matrix. <i>RSC Advances</i> , 2014 , 4, 4543-4551	3.7	56
375	Incorporation of graphene into polyester/carbon nanofibers composites for better multi-stimuli responsive shape memory performances. <i>Carbon</i> , 2013 , 64, 487-498	10.4	56
374	Enhancing Crystallinity and Orientation by Hot-Stretching to Improve the Mechanical Properties of Electrospun Partially Aligned Polyacrylonitrile (PAN) Nanocomposites. <i>Materials</i> , 2011 , 4, 621-632	3.5	56
373	Stearic acid surface modifying Mg(OH) ₂ : Mechanism and its effect on properties of ethylene vinyl acetate/Mg(OH) ₂ composites. <i>Journal of Applied Polymer Science</i> , 2008 , 107, 3325-3331	2.9	56
372	Study on preparation and properties of carbon nanotubes/rubber composites. <i>Journal of Materials Science</i> , 2006 , 41, 2541-2544	4.3	56

- 371 Highly efficient mussel-like inspired modification of aramid fibers by UV-accelerated catechol/polyamine deposition followed chemical grafting for high-performance polymer composites. *Chemical Engineering Journal*, **2017**, 314, 583-593 14.7 55
- 370 Time-Temperature and Time-Concentration Superposition of Nanofilled Elastomers: A Molecular Dynamics Study. *Macromolecules*, **2009**, 42, 2831-2842 5.5 55
- 369 Lead magnesium niobate-filled silicone dielectric elastomer with large actuated strain. *Journal of Applied Polymer Science*, **2012**, 125, 2196-2201 2.9 54
- 368 The effect of respiratory syncytial virus on chemokine release by differentiated airway epithelium. *Experimental Lung Research*, **2004**, 30, 43-57 2.3 54
- 367 Preparation, fracture, and fatigue of exfoliated graphene oxide/natural rubber composites. *RSC Advances*, **2015**, 5, 17140-17148 3.7 53
- 366 Static, rheological and mechanical properties of polymer nanocomposites studied by computer modeling and simulation. *Physical Chemistry Chemical Physics*, **2009**, 11, 11365-84 3.6 53
- 365 Infrared study on in situ polymerization of zinc dimethacrylate in poly(Octylene-co-ethylene) elastomer. *Polymer International*, **2004**, 53, 802-808 3.3 53
- 364 Interfacial polarization and dielectric properties of aligned carbon nanotubes/polymer composites: The role of molecular polarity. *Composites Science and Technology*, **2018**, 154, 145-153 8.6 52
- 363 Preparation and performance of silica/SBR masterbatches with high silica loading by latex compounding method. *Composites Part B: Engineering*, **2016**, 85, 130-139 10 50
- 362 Largely improved electromechanical properties of thermoplastic polyurethane dielectric elastomers by the synergistic effect of polyethylene glycol and partially reduced graphene oxide. *Composites Science and Technology*, **2017**, 142, 311-320 8.6 49
- 361 Revisiting the dispersion mechanism of grafted nanoparticles in polymer matrix: a detailed molecular dynamics simulation. *Langmuir*, **2011**, 27, 15213-22 4 49
- 360 Preparation, properties and cytotoxicity evaluation of a biodegradable polyester elastomer composite. *Polymer Degradation and Stability*, **2009**, 94, 1427-1435 4.7 49
- 359 Coupled nucleotide and mucin hypersecretion from goblet-cell metaplastic human airway epithelium. *American Journal of Respiratory Cell and Molecular Biology*, **2011**, 45, 253-60 5.7 49
- 358 Optimization of adenoviral vectors to direct highly amplified prostate-specific expression for imaging and gene therapy. *Molecular Therapy*, **2003**, 8, 726-37 11.7 48
- 357 Surface modification of fibrillar silicate and its reinforcing mechanism on FS/rubber composites. *Composites Science and Technology*, **2005**, 65, 1129-1138 8.6 48
- 356 Synthesis and characterization of biobased isosorbide-containing copolyesters as shape memory polymers for biomedical applications. *Journal of Materials Chemistry B*, **2014**, 2, 7877-7886 7.3 47
- 355 NMR structure of a heterodimeric SAM:SAM complex: characterization and manipulation of EphA2 binding reveal new cellular functions of SHIP2. *Structure*, **2012**, 20, 41-55 5.2 47
- 354 Preparation, structure, and properties of a novel rectorite/styrene-Butadiene copolymer nanocomposite. *Journal of Applied Polymer Science*, **2005**, 96, 324-328 2.9 47

353	Supramolecular ionic liquid based on graphene oxide. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 9838-9845	4.5	46
352	Molecular dynamics simulations and microscopic analysis of the damping performance of hindered phenol AO-60/nitrile-butadiene rubber composites. <i>RSC Advances</i> , 2014 , 4, 6719	3.7	45
351	New polyester dielectric elastomer with large actuated strain at low electric field. <i>Materials Letters</i> , 2012 , 76, 229-232	3.3	45
350	Effects of interfacial interaction on chain dynamics of rubber/graphene oxide hybrids: a dielectric relaxation spectroscopy study. <i>RSC Advances</i> , 2013 , 3, 14549	3.7	45
349	Structure and performance of reclaimed rubber obtained by different methods. <i>Journal of Applied Polymer Science</i> , 2013 , 129, 999-1007	2.9	45
348	Synthesis, characterization and in vitro degradation of a novel degradable poly((1,2-propanediol-sebacate)-citrate) bioelastomer. <i>Polymer Degradation and Stability</i> , 2007 , 92, 389-396	4.7	45
347	A new kind of electro-active polymer composite composed of silicone elastomer and polyethylene glycol. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 485303	3	44
346	Relations between carbon nanotubes length and their composites mechanical and functional performance. <i>Polymer</i> , 2013 , 54, 2158-2165	3.9	44
345	Luminescence Properties of Eu(III) Complex/Polyvinylpyrrolidone Electrospun Composite Nanofibers. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3898-3903	3.8	44
344	Study on the structure and properties of conductive silicone rubber filled with nickel-coated graphite. <i>Journal of Applied Polymer Science</i> , 2010 , 115, 2710-2717	2.9	44
343	Stretching-induced crystallinity and orientation to improve the mechanical properties of electrospun PAN nanocomposites. <i>Materials & Design</i> , 2010 , 31, 1726-1730		44
342	Improved electromechanical properties of silicone dielectric elastomer composites by tuning molecular flexibility. <i>Composites Science and Technology</i> , 2018 , 155, 160-168	8.6	44
341	Reinforcement of Elastomer by Starch. <i>Macromolecular Materials and Engineering</i> , 2006 , 291, 629-637	3.9	43
340	Antimicrobial gelatin-based elastomer nanocomposite membrane loaded with ciprofloxacin and polymyxin B sulfate in halloysite nanotubes for wound dressing. <i>Materials Science and Engineering C</i> , 2018 , 87, 128-138	8.3	42
339	Preparation, morphology and superior performances of biobased thermoplastic elastomer by in situ dynamical vulcanization for 3D-printed materials. <i>Polymer</i> , 2017 , 108, 11-20	3.9	42
338	Synthesis, characterization and in vitro degradation study of a novel and rapidly degradable elastomer. <i>Polymer Degradation and Stability</i> , 2006 , 91, 733-739	4.7	42
337	Toughening Elastomers Using a Mussel-Inspired Multiphase Design. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 23485-23489	9.5	41
336	Complete devulcanization of sulfur-cured butyl rubber by using supercritical carbon dioxide. <i>Journal of Applied Polymer Science</i> , 2013 , 127, 2397-2406	2.9	41

335	In vitro degradation of starch/PVA films and biocompatibility evaluation. <i>Journal of Applied Polymer Science</i> , 2010 , 115, 346-357	2.9	41
334	Preparation and characterization of a thermoplastic poly(glycerol sebacate) elastomer by two-step method. <i>Journal of Applied Polymer Science</i> , 2007 , 103, 1412-1419	2.9	41
333	Functionality of androgen receptor-based gene expression imaging in hormone refractory prostate cancer. <i>Clinical Cancer Research</i> , 2005 , 11, 3743-9	12.9	41
332	Aligned carbon nanotubes stabilized liquid phase exfoliated graphene hybrid and their polyurethane dielectric elastomers. <i>Composites Science and Technology</i> , 2016 , 125, 30-37	8.6	40
331	Continuous production of liquid reclaimed rubber from ground tire rubber and its application as reactive polymeric plasticizer. <i>Polymer Degradation and Stability</i> , 2014 , 99, 166-175	4.7	40
330	Electrospinning preparation and luminescence properties of Eu(TTA) ₃ phen/polystyrene composite nanofibers. <i>Journal of Rare Earths</i> , 2010 , 28, 333-339	3.7	40
329	Nanodot-Loaded Clay Nanotubes as Green and Sustained Radical Scavengers for Elastomer. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 1775-1783	8.3	39
328	Enhanced thermo-oxidative aging resistance of EPDM at high temperature by using synergistic antioxidants. <i>Polymer Degradation and Stability</i> , 2014 , 102, 1-8	4.7	39
327	Fabrication and Properties of Silverized Glass Fiber by Dopamine Functionalization and Electroless Plating. <i>Journal of the Electrochemical Society</i> , 2012 , 159, D217-D224	3.9	39
326	Structure and properties of thermoplastic poly(glycerol sebacate) elastomers originating from prepolymers with different molecular weights. <i>Journal of Applied Polymer Science</i> , 2007 , 104, 1131-1137 ^{2.9}		39
325	Design, preparation and properties of bio-based elastomer composites aiming at engineering applications. <i>Composites Science and Technology</i> , 2016 , 133, 136-156	8.6	39
324	High performance bio-based elastomers: energy efficient and sustainable materials for tires. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 13058-13062	13	39
323	Mechanically Robust and Recyclable EPDM Rubber Composites by a Green Cross-Linking Strategy. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 11712-11720	8.3	38
322	From nano to giant? Designing carbon nanotubes for rubber reinforcement and their applications for high performance tires. <i>Composites Science and Technology</i> , 2016 , 137, 94-101	8.6	38
321	Concurrently improved dispersion and interfacial interaction in rubber/nanosilica composites via efficient hydrosilane functionalization. <i>Composites Science and Technology</i> , 2019 , 169, 217-223	8.6	38
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