

Anil Kumar Bhowmick

List of Publications by Year in descending order

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342
papers

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28274

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357
docs citations

357
times ranked

8780
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on the mechanical and electrical properties of graphite and modified graphite reinforced polymer composites. <i>Progress in Polymer Science</i> , 2011, 36, 638-670.	24.7	1,055
2	Polymer nanocomposites from modified clays: Recent advances and challenges. <i>Progress in Polymer Science</i> , 2015, 51, 127-187.	24.7	475
3	Modifications of carbon for polymer composites and nanocomposites. <i>Progress in Polymer Science</i> , 2012, 37, 781-819.	24.7	256
4	Preparation and properties of natural nanocomposites based on natural rubber and naturally occurring halloysite nanotubes. <i>Materials & Design</i> , 2010, 31, 2151-2156.	5.1	238
5	Preparation and properties of nanocomposites based on acrylonitrile-butadiene rubber, styrene-butadiene rubber, and polybutadiene rubber. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2004, 42, 1573-1585.	2.1	179
6	Elastomer Nanocomposites. <i>Rubber Chemistry and Technology</i> , 2008, 81, 384-469.	1.2	172
7	Effect of zinc oxide nanoparticles as cure activator on the properties of natural rubber and nitrile rubber. <i>Journal of Applied Polymer Science</i> , 2007, 105, 2407-2415.	2.6	145
8	Preparation and properties of styrene-butadiene rubber based nanocomposites: The influence of the structural and processing parameters. <i>Journal of Applied Polymer Science</i> , 2004, 92, 698-709.	2.6	136
9	Synthesis of partially exfoliated EPDM/LDH nanocomposites by solution intercalation: Structural characterization and properties. <i>Composites Science and Technology</i> , 2007, 67, 2807-2816.	7.8	136
10	Rubber-clay nanocomposite by solution blending. <i>Journal of Applied Polymer Science</i> , 2003, 87, 2216-2220.	2.6	124
11	Polyamide-6,6/in situ silica hybrid nanocomposites by sol-gel technique: synthesis, characterization and properties. <i>Polymer</i> , 2005, 46, 3343-3354.	3.8	122
12	Metal/metal oxide decorated graphene synthesis and application as supercapacitor: a review. <i>Journal of Materials Science</i> , 2020, 55, 6375-6400.	3.7	111
13	Thermal ageing, degradation and swelling of acrylate rubber, fluororubber and their blends containing polyfunctional acrylates. <i>Polymer Degradation and Stability</i> , 2003, 79, 283-295.	5.8	110
14	Thermoplastic elastomeric composition based on ground rubber tire. <i>Polymer Engineering and Science</i> , 2001, 41, 1087-1098.	3.1	104
15	Synthesis and characterization of acrylic rubber/silica hybrid composites prepared by sol-gel technique. <i>Journal of Applied Polymer Science</i> , 2004, 93, 2579-2589.	2.6	101
16	Synthesis, characterization and properties of a bio-based elastomer: polymyrcene. <i>RSC Advances</i> , 2014, 4, 61343-61354.	3.6	98
17	Effect of Chain Length of Amine and Nature and Loading of Clay on Styrene-Butadiene Rubber-Clay Nanocomposites. <i>Rubber Chemistry and Technology</i> , 2003, 76, 860-875.	1.2	93
18	Ethylene vinyl acetate/expanded graphite nanocomposites by solution intercalation: preparation, characterization and properties. <i>Journal of Materials Science</i> , 2008, 43, 702-708.	3.7	90

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19	Thermoplastic polyurethane and nitrile butadiene rubber blends with layered double hydroxide nanocomposites by solution blending. <i>Polymer International</i> , 2010, 59, 2-10.	3.1	90
20	Preparation and properties of polyurethane nanocomposites of novel architecture as advanced barrier materials. <i>Polymer</i> , 2010, 51, 1100-1110.	3.8	89
21	New Route for Devulcanization of Natural Rubber and the Properties of Devulcanized Rubber. <i>Journal of Polymers and the Environment</i> , 2011, 19, 382-390.	5.0	89
22	Polymer-filler interaction in nanocomposites: New interface area function to investigate swelling behavior and Young's modulus. <i>Polymer</i> , 2008, 49, 4808-4818.	3.8	83
23	Structure and properties of some novel fluoroelastomer/clay nanocomposites with special reference to their interaction. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 162-176.	2.1	82
24	New insights into rubber-clay nanocomposites by AFM imaging. <i>Polymer</i> , 2006, 47, 6156-6166.	3.8	80
25	Effect of the Microstructure of a Hyperbranched Polymer and Nanoclay Loading on the Morphology and Properties of Novel Polyurethane Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 289-300.	8.0	79
26	Thermoplastic Elastomeric Blends of Nylon-6/Acrylate Rubber: Influence of Interaction on Mechanical and Dynamic Mechanical Thermal Properties. <i>Rubber Chemistry and Technology</i> , 1997, 70, 798-814.	1.2	78
27	Novel in situ polydimethylsiloxane-sepiolite nanocomposites: Structure-property relationship. <i>Polymer</i> , 2010, 51, 5172-5185.	3.8	77
28	Permeation characteristics and modeling of barrier properties of multifunctional rubber nanocomposites. <i>Polymer</i> , 2011, 52, 1562-1576.	3.8	76
29	Multifunctional Hybrid Materials Based on Carbon Nanotube Chemically Bonded to Reduced Graphene Oxide. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25865-25875.	3.1	75
30	Terpene Based Sustainable Elastomer for Low Rolling Resistance and Improved Wet Grip Application: Synthesis, Characterization and Properties of Poly(styrene-co-myrcene). <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5462-5474.	6.7	75
31	Degradation of hydrogenated nitrile rubber. <i>Polymer Degradation and Stability</i> , 1991, 31, 71-87.	5.8	74
32	Quantitative Estimation of Filler Distribution in Immiscible Rubber Blends by Mechanical Damping Studies. <i>Rubber Chemistry and Technology</i> , 1992, 65, 293-302.	1.2	74
33	Thermoplastic elastomeric composition based on maleic anhydride-grafted ground rubber tire. <i>Journal of Applied Polymer Science</i> , 2002, 84, 370-378.	2.6	74
34	Tailoring properties of styrene butadiene rubber nanocomposite by various nanofillers and their dispersion. <i>Polymer Engineering and Science</i> , 2009, 49, 81-98.	3.1	73
35	Polymer-filler interactions in sol-gel derived polymer/silica hybrid nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 2399-2412.	2.1	72
36	Compatibilization of natural rubber-polyolefin thermoplastic elastomeric blends by phase modification. <i>Journal of Applied Polymer Science</i> , 1989, 38, 1091-1109.	2.6	71

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37	Thermoplastic elastomers from reclaimed rubber and waste plastics. <i>Journal of Applied Polymer Science</i> , 2002, 83, 2035-2042.	2.6	70
38	Sustainable rubbers and rubber additives. <i>Journal of Applied Polymer Science</i> , 2018, 135, 45701.	2.6	70
39	Synergy in carbon black-filled natural rubber nanocomposites. Part I: Mechanical, dynamic mechanical properties, and morphology. <i>Journal of Materials Science</i> , 2010, 45, 6126-6138.	3.7	69
40	Influence of electron beam irradiation on the mechanical properties and crosslinking of fluorocarbon elastomer. <i>Radiation Physics and Chemistry</i> , 1999, 54, 135-142.	2.8	68
41	Effect of carbon black on properties of rubber nanocomposites. <i>Journal of Applied Polymer Science</i> , 2005, 96, 443-451.	2.6	66
42	Novel nanostructured polyamide 6/fluoroelastomer thermoplastic elastomeric blends: Influence of interaction and morphology on physical properties. <i>Polymer</i> , 2013, 54, 6561-6571.	3.8	66
43	Surface and bulk properties of EPDM rubber modified by electron beam irradiation. <i>Radiation Physics and Chemistry</i> , 1998, 53, 63-78.	2.8	65
44	Effect of organo-modified clay on accelerated aging resistance of hydrogenated nitrile rubber nanocomposites and their life time prediction. <i>Polymer Degradation and Stability</i> , 2010, 95, 2555-2562.	5.8	65
45	Effect of nanoclays on physico-mechanical properties and adhesion of polyester-based polyurethane nanocomposites: structure-property correlations. <i>Journal of Materials Science</i> , 2009, 44, 5861-5871.	3.7	64
46	Studies on thermal degradation of short melamine fibre reinforced EPDM, maleated EPDM and nitrile rubber composites. <i>Polymer Degradation and Stability</i> , 2003, 79, 449-463.	5.8	62
47	Thermal and ablative properties of rocket insulator compound based on EPDM. <i>Polymer Degradation and Stability</i> , 1988, 21, 21-28.	5.8	61
48	Novel role of polymer-solvent and clay-solvent interaction parameters on the thermal, mechanical and optical properties of polymer nanocomposites. <i>Polymer</i> , 2009, 50, 201-210.	3.8	60
49	Development of new thermoplastic elastomers from blends of polyethylene and ethylene-vinyl acetate copolymer by electron-beam technology. <i>Journal of Applied Polymer Science</i> , 2001, 79, 1877-1889.	2.6	59
50	Thermal degradation studies of electron beam cured terpolymeric fluorocarbon rubber. <i>Polymer Degradation and Stability</i> , 1999, 63, 413-421.	5.8	58
51	Synthesis and characterization of novel dendritic (arborescent, hyperbranched) polyisobutylene-polystyrene block copolymers. <i>Journal of Polymer Science Part A</i> , 2005, 43, 1811-1826.	2.3	58
52	Influence of number of functional groups of hyperbranched polyol on cure kinetics and physical properties of polyurethanes. <i>Journal of Polymer Science Part A</i> , 2009, 47, 731-745.	2.3	58
53	Unique rheological behavior of rubber based nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 1854-1864.	2.1	57
54	Effect of nanoclays on high and low temperature degradation of fluoroelastomers. <i>Polymer Degradation and Stability</i> , 2008, 93, 188-200.	5.8	57

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55	Electron beam irradiated polyamide-6,6 films: characterization by wide angle X-ray scattering and infrared spectroscopy. <i>Radiation Physics and Chemistry</i> , 2005, 72, 625-633.	2.8	56
56	Functionalized graphene with polymer as unique strategy in tailoring the properties of bromobutyl rubber nanocomposites. <i>Polymer</i> , 2016, 82, 121-132.	3.8	55
57	Green Approach toward Sustainable Polymer: Synthesis and Characterization of Poly(myrcene-co-dibutyl itaconate). <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 2129-2141.	6.7	55
58	Terpene Based Elastomers: Synthesis, Properties, and Applications. <i>Processes</i> , 2020, 8, 553.	2.8	55
59	Thermogravimetric studies on Polyamide-6,6 modified by electron beam irradiation and by nanofillers. <i>Polymer Degradation and Stability</i> , 2006, 91, 1311-1318.	5.8	54
60	Beneficial Effect of Nanoclay in Atom Transfer Radical Polymerization of Ethyl Acrylate: A One Pot Preparation of Tailor-Made Polymer Nanocomposite. <i>Macromolecules</i> , 2008, 41, 50-57.	4.8	54
61	Thermoplastic elastomeric nanocomposites from poly[styrene-(ethylene-co-butylene)-styrene] triblock copolymer and clay: Preparation and characterization. <i>Journal of Applied Polymer Science</i> , 2006, 100, 2040-2052.	2.6	53
62	MWCNT reinforced Polyamide-6,6 films: preparation, characterization and properties. <i>Journal of Materials Science</i> , 2007, 42, 923-934.	3.7	53
63	Influence of Different Nanofillers and their Dispersion Methods on the Properties of Natural Rubber Nanocomposites. <i>Rubber Chemistry and Technology</i> , 2008, 81, 782-808.	1.2	53
64	Dynamic vulcanization of novel nanostructured polyamide 6/ fluoroelastomer thermoplastic elastomeric blends with special reference to morphology, physical properties and degree of vulcanization. <i>Polymer</i> , 2015, 57, 105-116.	3.8	53
65	Effect of polymer-clay interaction on solvent transport behavior of fluoroelastomer-clay nanocomposites and prediction of aspect ratio of nanoclay. <i>Journal of Applied Polymer Science</i> , 2007, 105, 435-445.	2.6	52
66	Unique Tackification Behavior of Needle-like Sepiolite Nanoclay in Brominated Isobutylene-co-p-methylstyrene (BIMS) Rubber. <i>Macromolecules</i> , 2010, 43, 4184-4193.	4.8	52
67	Surface properties of EPDM, silicone rubber, and their blend during aging. <i>Journal of Applied Polymer Science</i> , 1995, 57, 631-637.	2.6	51
68	Tailored Nanostructured Thermoplastic Elastomers from Polypropylene and Fluoroelastomer: Morphology and Functional Properties. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 8137-8146.	3.7	51
69	Structural characterization of electron-beam crosslinked thermoplastic elastomeric films from blends of polyethylene and ethylene-vinyl acetate copolymers. <i>Journal of Applied Polymer Science</i> , 2001, 81, 1936-1950.	2.6	50
70	Chlorophenyl pendant decorated graphene sheet as a potential antimicrobial agent: synthesis and characterization. <i>Journal of Materials Chemistry</i> , 2012, 22, 22481.	6.7	50
71	Bionanowhiskers from jute: Preparation and characterization. <i>Carbohydrate Polymers</i> , 2013, 92, 1116-1123.	10.2	50
72	Electron beam induced structural modification of a fluorocarbon elastomer in the presence of polyfunctional monomers. <i>Polymer</i> , 1999, 40, 447-458.	3.8	49

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73	An effective strategy to develop nanostructured morphology and enhanced physico-mechanical properties of PP/EPDM thermoplastic elastomers. <i>Journal of Materials Science</i> , 2016, 51, 6722-6734.	3.7	49
74	Sulfonated Styrene-(ethylene-co-butylene)-styrene/Montmorillonite Clay Nanocomposites: Synthesis, Morphology, and Properties. <i>Nanoscale Research Letters</i> , 2008, 3, 36-44.	5.7	48
75	New generation layered nanocomposites derived from ethylene-co-vinyl acetate and naturally occurring graphite. <i>Journal of Applied Polymer Science</i> , 2008, 108, 1603-1616.	2.6	48
76	Ageing of rocket insulator compound based on EPDM. <i>Polymer Degradation and Stability</i> , 1986, 16, 221-239.	5.8	47
77	Brominated poly(isobutylene-co-para-methylstyrene) (BIMS)-clay nanocomposites: Synthesis and characterization. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2004, 42, 4489-4502.	2.1	46
78	Preparation and characterization of nanocomposites based on thermoplastic elastomers from rubber-plastic blends. <i>Journal of Applied Polymer Science</i> , 2006, 99, 1645-1656.	2.6	46
79	Insights into Montmorillonite Nanoclay Based ex Situ Nanocomposites from SEBS and Modified SEBS by Small-Angle X-ray Scattering and Modulated DSC Studies. <i>Macromolecules</i> , 2008, 41, 6246-6253.	4.8	46
80	Analysis of wear characteristics of natural rubber nanocomposites. <i>Wear</i> , 2010, 269, 152-166.	3.1	46
81	HIGH-TEMPERATURE THERMOPLASTIC ELASTOMERS FROM RUBBER-PLASTIC BLENDS: A STATE-OF-THE-ART REVIEW. <i>Rubber Chemistry and Technology</i> , 2017, 90, 1-36.	1.2	46
82	Aging of EPDM rubber. <i>Journal of Applied Polymer Science</i> , 1987, 34, 2205-2222.	2.6	45
83	Influence of Matrix Polarity on the Properties of Ethylene Vinyl Acetate-Carbon Nanofiller Nanocomposites. <i>Nanoscale Research Letters</i> , 2009, 4, 655-664.	5.7	45
84	Heat shrinkability of electron-beam-modified thermoplastic elastomeric films from blends of ethylene-vinylacetate copolymer and polyethylene. <i>Radiation Physics and Chemistry</i> , 2000, 59, 501-510.	2.8	44
85	Dynamic mechanical properties of styrene-butadiene rubber vulcanizate filled with electron beam modified surface-treated dual-phase filler. <i>Journal of Applied Polymer Science</i> , 2003, 88, 2992-3004.	2.6	44
86	Reactive processing of rubber-plastic blends: Role of chemical compatibilizer. <i>Journal of Applied Polymer Science</i> , 1993, 50, 2055-2064.	2.6	43
87	Effect of Nanoclay on the Dynamic Mechanical Properties of Styrene Butadiene and Acrylonitrile Butadiene Rubber Vulcanizates. <i>Rubber Chemistry and Technology</i> , 2005, 78, 321-335.	1.2	43
88	Synthesis, Characterization and Properties of Montmorillonite Clay-Polyacrylate Hybrid Material and its Effect on the Properties of Engage-Clay Hybrid Composite. <i>Rubber Chemistry and Technology</i> , 2001, 74, 835-845.	1.2	42
89	Surface modification of argon/oxygen plasma treated vulcanized ethylene propylene diene polymethylene surfaces for improved adhesion with natural rubber. <i>Applied Surface Science</i> , 2011, 257, 2891-2904.	6.1	42
90	Nanomechanics and Origin of Rubber Elasticity of Novel Nanostructured Thermoplastic Elastomeric Blends Using Atomic Force Microscopy. <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 1666-1674.	2.2	42

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91	Electron beam initiated grafting of trimethylol propane trimethacrylate onto polyethylene structure and properties. <i>Radiation Physics and Chemistry</i> , 1995, 45, 829-833.	2.8	41
92	Design of a Molecular Architecture via a Green Route for an Improved Silica Reinforced Nanocomposite using Bioresources. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6599-6611.	6.7	41
93	Effect of fillers and plasticizers on the performance of novel heat and oil-resistant thermoplastic elastomers from nylon-6 and acrylate rubber blends. <i>Journal of Applied Polymer Science</i> , 1999, 74, 1490-1501.	2.6	40
94	New fluoroelastomer nanocomposites from synthetic montmorillonite. <i>Composites Science and Technology</i> , 2008, 68, 1-9.	7.8	40
95	Effect of microstructure of acrylic copolymer/terpolymer on the properties of silica based nanocomposites prepared by sol-gel technique. <i>Polymer</i> , 2005, 46, 8079-8090.	3.8	39
96	Influence of ZnO nanoparticles on the cure characteristics and mechanical properties of carboxylated nitrile rubber. <i>Journal of Applied Polymer Science</i> , 2007, 106, 3077-3083.	2.6	39
97	Effect of polar modification on morphology and properties of styrene-(ethylene-co-butylene)-styrene triblock copolymer and its montmorillonite clay-based nanocomposites. <i>Journal of Materials Science</i> , 2009, 44, 903-918.	3.7	39
98	Effect of ambient-temperature and high-temperature electron-beam radiation on the structural, thermal, mechanical, and dynamic mechanical properties of injection-molded polyamide-6,6. <i>Journal of Applied Polymer Science</i> , 2006, 99, 1633-1644.	2.6	38
99	Synthesis and characterization of bi-functionalized graphene and expanded graphite using n-butyl lithium and their use for efficient water soluble dye adsorption. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8144.	10.3	38
100	Synthesis and properties of nanocomposite adhesives. <i>Journal of Adhesion Science and Technology</i> , 2006, 20, 371-385.	2.6	37
101	Ethylene-octene copolymer (engage) clay nanocomposites: Preparation and characterization. <i>Journal of Applied Polymer Science</i> , 2006, 101, 603-610.	2.6	37
102	Tailor-made hybrid nanostructure of poly(ethyl acrylate)/clay by surface-initiated atom transfer radical polymerization. <i>Journal of Polymer Science Part A</i> , 2008, 46, 5014-5027.	2.3	37
103	Dynamic viscoelastic properties of fluoroelastomer/clay nanocomposites. <i>Polymer Engineering and Science</i> , 2007, 47, 1777-1787.	3.1	36
104	Effect of Various Nanofillers on Thermal Stability and Degradation Kinetics of Polymer Nanocomposites. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 5056-5071.	0.9	36
105	Graphene Nanocomposites with High Molecular Weight Poly(μ -caprolactone) Grafts: Controlled Synthesis and Accelerated Crystallization. <i>ACS Macro Letters</i> , 2016, 5, 278-282.	4.8	36
106	Structure development during dynamic vulcanization of hydrogenated nitrile rubber/nylon blends. <i>Journal of Applied Polymer Science</i> , 1993, 49, 1893-1900.	2.6	35
107	Electron-beam-initiated grafting of triallyl cyanurate onto polyethylene: Structure and properties. <i>Journal of Applied Polymer Science</i> , 1994, 53, 141-150.	2.6	35
108	Fabrication and Properties of Ethylene Vinyl Acetate-Carbon Nanofiber Nanocomposites. <i>Nanoscale Research Letters</i> , 2008, 3, 508-15.	5.7	35

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109	Redox Emulsion Polymerization of Terpenes: Mapping the Effect of the System, Structure, and Reactivity. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 20946-20960.	3.7	35
110	Degradation of Hydrogenated Styrene-Butadiene Rubber at High Temperature. <i>Rubber Chemistry and Technology</i> , 1997, 70, 855-870.	1.2	34
111	Hysteresis loss in filled rubber vulcanizates and its relationship with heat generation. <i>Journal of Applied Polymer Science</i> , 1997, 64, 1541-1555.	2.6	34
112	Influence of dynamic vulcanization and phase interaction on the swelling behavior of the thermoplastic elastomeric blends of nylon-6 and acrylate rubber in various solvents and oil. <i>Journal of Applied Polymer Science</i> , 1998, 69, 2331-2340.	2.6	34
113	Electron beam initiated modification of acrylic elastomer in presence of polyfunctional monomers. <i>Radiation Physics and Chemistry</i> , 2004, 71, 1045-1058.	2.8	34
114	Highly transparent thermoplastic elastomer from isotactic polypropylene and styrene/ethylene-butylene/styrene triblock copolymer: Structure-property correlations. <i>Polymer Engineering and Science</i> , 2010, 50, 331-341.	3.1	34
115	Improved dispersion and physico-mechanical properties of rubber/silica composites through new silane grafting. <i>Polymer Engineering and Science</i> , 2020, 60, 3115-3134.	3.1	34
116	Preparation of hydrogenated nitrile rubber using palladium acetate catalyst: Its characterization and kinetics. <i>Journal of Polymer Science Part A</i> , 1992, 30, 471-484.	2.3	33
117	Controlled Synthesis of Nitrogen-Doped Graphene from a Heteroatom Polymer and Its Mechanism of Formation. <i>Chemistry of Materials</i> , 2015, 27, 716-725.	6.7	33
118	Thermoplastic elastomeric blends of poly(ethylene terephthalate) and acrylate rubber: 1. Influence of interaction on thermal, dynamic mechanical and tensile properties. <i>Polymer</i> , 1997, 38, 4337-4344.	3.8	32
119	Thermoplastic elastomeric hydrogenated styrene-butadiene elastomer: Optimization of reaction conditions, thermodynamics, and kinetics. <i>Journal of Applied Polymer Science</i> , 1997, 66, 1151-1162.	2.6	32
120	Phase modification of SEBS block copolymer by different additives and its effect on morphology, mechanical and dynamic mechanical properties. <i>Journal of Applied Polymer Science</i> , 1998, 67, 2015-2025.	2.6	32
121	Novel electron beam-modified surface-coated silica fillers: Physical and chemical characteristics. <i>Journal of Applied Polymer Science</i> , 2002, 83, 2255-2268.	2.6	32
122	Acrylic rubber-fluorocarbon rubber miscible blends: Effect of curatives and fillers on cure, mechanical, aging, and swelling properties. <i>Journal of Applied Polymer Science</i> , 2003, 89, 1442-1452.	2.6	32
123	Thermal Degradation of Elastomer Based Nanocomposites. <i>Polymers and Polymer Composites</i> , 2008, 16, 283-293.	1.9	32
124	Morphology and properties of stearate-intercalated layered double hydroxide nanoplatelet-reinforced thermoplastic polyurethane. <i>Polymer International</i> , 2011, 60, 772-780.	3.1	32
125	An Insight into molecular structure and properties of flexible amorphous polymers: A molecular dynamics simulation approach. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47457.	2.6	32
126	Influence of curative, filler, compatibilizer, domain size, and blend ratio on the dynamic mechanical properties of silicone-EPDM blends. <i>Journal of Applied Polymer Science</i> , 1993, 48, 529-545.	2.6	31

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127	Effect of layered silicate on EPDM/EVA blend nanocomposite: Dynamic mechanical, thermal, and swelling properties. <i>Polymer Composites</i> , 2008, 29, 443-450.	4.6	31
128	Distinct Melt Viscoelastic Properties of Novel Nanostructured and Microstructured Thermoplastic Elastomeric Blends from Polyamide 6 and Fluoroelastomer. <i>Macromolecular Materials and Engineering</i> , 2015, 300, 283-290.	3.6	31
129	Preferentially fixing nanoclays in the phases of incompatible carboxylated nitrile rubber (XNBR)-natural rubber (NR) blend using thermodynamic approach and its effect on physico mechanical properties. <i>Polymer</i> , 2016, 99, 21-43.	3.8	31
130	Terpene based sustainable methacrylate copolymer series by emulsion polymerization: Synthesis and structure-property relationship. <i>Journal of Polymer Science Part A</i> , 2017, 55, 2639-2649.	2.3	31
131	Electron beam modification and crosslinking: Influence of nitrile and carboxyl contents and level of unsaturation on structure and properties of nitrile rubber. <i>Radiation Physics and Chemistry</i> , 2006, 75, 779-792.	2.8	30
132	Structure-property relationship in sol-gel derived polymer/silica hybrid nanocomposites prepared at various pH. <i>Journal of Materials Science</i> , 2006, 41, 5981-5993.	3.7	30
133	Adhesive tack and green strength of EPDM rubber. <i>Polymer Engineering and Science</i> , 1987, 27, 1195-1202.	3.1	29
134	Nanolamellar triblock of poly-D,L-lactide- ϵ -valerolactone- <i>l</i> -lactide with tuneable glass transition temperature and crystallinity for use as a drug-delivery vesicle. <i>RSC Advances</i> , 2014, 4, 27439-27451.	3.6	29
135	Effect of filler on the mechanical, dynamic mechanical, and aging properties of binary and ternary blends of acrylic rubber, fluorocarbon rubber, and polyacrylate. <i>Journal of Applied Polymer Science</i> , 2003, 90, 278-286.	2.6	28
136	Novel Thermoplastic Elastomers Based on Acrylonitrile-Butadiene-Styrene Terpolymer (ABS) from Waste Computer Equipment and Nitrile Rubber. <i>Rubber Chemistry and Technology</i> , 2003, 76, 1145-1163.	1.2	28
137	Epoxidized Natural Rubber / Silica Nanoscale Organic-Inorganic Hybrid Composites Prepared by Sol-Gel Technique. <i>Rubber Chemistry and Technology</i> , 2004, 77, 830-846.	1.2	28
138	Morphological mapping and analysis of poly[styrene- <i>b</i> -(ethylene-co-butylene)- <i>b</i> -styrene] and its clay nanocomposites by atomic force microscopy. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2007, 45, 52-66.	2.1	28
139	Chlorinated polyethylene nanocomposites: thermal and mechanical behavior. <i>Journal of Materials Science</i> , 2010, 45, 64-73.	3.7	28
140	Structure and properties of tailor-made poly(ethyl acrylate)/clay nanocomposites prepared by <i>in situ</i> atom transfer radical polymerization. <i>Journal of Applied Polymer Science</i> , 2008, 108, 2398-2407.	2.6	27
141	Influence of gel and molecular weight on the properties of natural rubber. <i>Polymer</i> , 1986, 27, 1889-1894.	3.8	26
142	Novel Thermoplastic Elastomers from Fluorocarbon Elastomer, Acrylate Rubber and Acrylate Plastics. <i>Rubber Chemistry and Technology</i> , 2001, 74, 662-676.	1.2	26
143	Wear Behavior of Silica Filled Tire Tread Compounds by Various Rock Surfaces. <i>Rubber Chemistry and Technology</i> , 2005, 78, 705-723.	1.2	26
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