Anil Kumar Bhowmick

List of Publications by Year
in descending order

342	12,259	29994 54	46693 89
papers	citations	h-index	g-index

357	357	357	8780
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review on the mechanical and electrical properties of graphite and modified graphite reinforced polymer composites. Progress in Polymer Science, 2011, 36, 638-670.	11.8	1,055
2	Polymer nanocomposites from modified clays: Recent advances and challenges. Progress in Polymer Science, 2015, 51, 127-187.	11.8	475
3	Modifications of carbon for polymer composites and nanocomposites. Progress in Polymer Science, 2012, 37, 781-819.	11.8	256
4	Preparation and properties of natural nanocomposites based on natural rubber and naturally occurring halloysite nanotubes. Materials & Design, 2010, 31, 2151-2156.	5.1	238
5	Preparation and properties of nanocomposites based on acrylonitrile-butadiene rubber, styrene-butadiene rubber, and polybutadiene rubber. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 1573-1585.	2.4	179
6	Elastomer Nanocomposites. Rubber Chemistry and Technology, 2008, 81, 384-469.	0.6	172
7	Effect of zinc oxide nanoparticles as cure activator on the properties of natural rubber and nitrile rubber. Journal of Applied Polymer Science, 2007, 105, 2407-2415.	1.3	145
8	Preparation and properties of styrene-butadiene rubber based nanocomposites: The influence of the structural and processing parameters. Journal of Applied Polymer Science, 2004, 92, 698-709.	1.3	136
9	Synthesis of partially exfoliated EPDM/LDH nanocomposites by solution intercalation: Structural characterization and properties. Composites Science and Technology, 2007, 67, 2807-2816.	3.8	136
10	Rubber-clay nanocomposite by solution blending. Journal of Applied Polymer Science, 2003, 87, 2216-2220.	1.3	124
11	Polyamide-6,6/in situ silica hybrid nanocomposites by solâ€“gel technique: synthesis, characterization and properties. Polymer, 2005, 46, 3343-3354.	1.8	122
12	Metal/metal oxide decorated graphene synthesis and application as supercapacitor: a review. Journal of Materials Science, 2020, 55, 6375-6400.	1.7	111
13	Thermal ageing, degradation and swelling of acrylate rubber, fluororubber and their blends containing polyfunctional acrylates. Polymer Degradation and Stability, 2003, 79, 283-295.	2.7	110
14	Thermoplastic elastomeric composition based on ground rubber tire. Polymer Engineering and Science, 2001, 41, 1087-1098.	1.5	104
15	Synthesis and characterization of acrylic rubber/silica hybrid composites prepared by sol-gel technique. Journal of Applied Polymer Science, 2004, 93, 2579-2589.	1.3	101
16	Synthesis, characterization and properties of a bio-based elastomer: polymyrcene. RSC Advances, 2014, 4, 61343-61354.	1.7	98
17	Effect of Chain Length of Amine and Nature and Loading of Clay on Styrene-Butadiene Rubber-Clay Nanocomposites. Rubber Chemistry and Technology, 2003, 76, 860-875.	0.6	93
18	Ethylene vinyl acetate/expanded graphite nanocomposites by solution intercalation: preparation, characterization and properties. Journal of Materials Science, 2008, 43, 702-708.	1.7	90

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19	Thermoplastic polyurethane and nitrile butadiene rubber blends with layered double hydroxide nanocomposites by solution blending. Polymer International, 2010, 59, 2-10.	1.6	90
20	Preparation and properties of polyurethane nanocomposites of novel architecture as advanced barrier materials. Polymer, 2010, 51, 1100-1110.	1.8	89
21	New Route for Devulcanization of Natural Rubber and the Properties of Devulcanized Rubber. Journal of Polymers and the Environment, 2011, 19, 382-390.	2.4	89
22	Polymerâ€“filler interaction in nanocomposites: New interface area function to investigate swelling behavior and Young's modulus. Polymer, 2008, 49, 4808-4818.	1.8	83
23	Structure and properties of some novel fluoroelastomer/clay nanocomposites with special reference to their interaction. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 162-176.	2.4	82
24	New insights into rubberâ€“clay nanocomposites by AFM imaging. Polymer, 2006, 47, 6156-6166.	1.8	80
25	Effect of the Microstructure of a Hyperbranched Polymer and Nanoclay Loading on the Morphology and Properties of Novel Polyurethane Nanocomposites. ACS Applied Materials & Interfaces, 2009, 1, 289-300.	4.0	79
26	Thermoplastic Elastomeric Blends of Nylon-6/Acrylate Rubber: Influence of Interaction on Mechanical and Dynamic Mechanical Thermal Properties. Rubber Chemistry and Technology, 1997, 70, 798-814.	0.6	78
27	Novel in situ polydimethylsiloxane-sepiolite nanocomposites: Structure-property relationship. Polymer, 2010, 51, 5172-5185.	1.8	77
28	Permeation characteristics and modeling of barrier properties of multifunctional rubber nanocomposites. Polymer, 2011, 52, 1562-1576.	1.8	76
29	Multifunctional Hybrid Materials Based on Carbon Nanotube Chemically Bonded to Reduced Graphene Oxide. Journal of Physical Chemistry C, 2013, 117, 25865-25875.	1.5	75
30	Terpene Based Sustainable Elastomer for Low Rolling Resistance and Improved Wet Grip Application: Synthesis, Characterization and Properties of Poly(styrene-co-myrcene). ACS Sustainable Chemistry and Engineering, 2016, 4, 5462-5474.	3.2	75
31	Degradation of hydrogenated nitrile rubber. Polymer Degradation and Stability, 1991, 31, 71-87.	2.7	74
32	Quantitative Estimation of Filler Distribution in Immiscible Rubber Blends by Mechanical Damping Studies. Rubber Chemistry and Technology, 1992, 65, 293-302.	0.6	74
33	Thermoplastic elastomeric composition based on maleic anhydride-grafted ground rubber tire. Journal of Applied Polymer Science, 2002, 84, 370-378.	1.3	74
34	Tailoring properties of styrene butadiene rubber nanocomposite by various nanofillers and their dispersion. Polymer Engineering and Science, 2009, 49, 81-98.	1.5	73
35	Polymer-filler interactions in sol-gel derived polymer/silica hybrid nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2399-2412.	2.4	72
36	Compatibilization of natural rubberâ€“polyolefin thermoplastic elastomeric blends by phase modification. Journal of Applied Polymer Science, 1989, 38, 1091-1109.	1.3	71

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37	Thermoplastic elastomers from reclaimed rubber and waste plastics. Journal of Applied Polymer Science, 2002, 83, 2035-2042.	1.3	70
38	Sustainable rubbers and rubber additives. Journal of Applied Polymer Science, 2018, 135, 45701.	1.3	70
39	Synergy in carbon black-filled natural rubber nanocomposites. Part I: Mechanical, dynamic mechanical properties, and morphology. Journal of Materials Science, 2010, 45, 6126-6138.	1.7	69
40	Influence of electron beam irradiation on the mechanical properties and crosslinking of fluorocarbon elastomer. Radiation Physics and Chemistry, 1999, 54, 135-142.	1.4	68
41	Effect of carbon black on properties of rubber nanocomposites. Journal of Applied Polymer Science, 2005, 96, 443-451.	1.3	66
42	Novel nanostructured polyamide 6/fluoroelastomer thermoplastic elastomeric blends: Influence of interaction and morphology on physical properties. Polymer, 2013, 54, 6561-6571.	1.8	66
43	Surface-and bulk-properties of EPDM rubber modified by electron beam irradiation. Radiation Physics and Chemistry, 1998, 53, 63-78.	1.4	65
44	Effect of organo-modified clay on accelerated aging resistance of hydrogenated nitrile rubber nanocomposites and their life time prediction. Polymer Degradation and Stability, 2010, 95, 2555-2562.	2.7	65
45	Effect of nanoclays on physico-mechanical properties and adhesion of polyester-based polyurethane nanocomposites: structureâ€“property correlations. Journal of Materials Science, 2009, 44, 5861-5871.	1.7	64
46	Studies on thermal degradation of short melamine fibre reinforced EPDM, maleated EPDM and nitrile rubber composites. Polymer Degradation and Stability, 2003, 79, 449-463.	2.7	62
47	Thermal and ablative properties of rocket insulator compound based on EPDM. Polymer Degradation and Stability, 1988, 21, 21-28.	2.7	61
48	Novel role of polymerâ€“solvent and clayâ€“solvent interaction parameters on the thermal, mechanical and optical properties of polymer nanocomposites. Polymer, 2009, 50, 201-210.	1.8	60
49	Development of new thermoplastic elastomers from blends of polyethylene and ethylene-vinyl acetate copolymer by electron-beam technology. Journal of Applied Polymer Science, 2001, 79, 1877-1889.	1.3	59
50	Thermal degradation studies of electron beam cured terpolymeric fluorocarbon rubber. Polymer Degradation and Stability, 1999, 63, 413-421.	2.7	58
51	Synthesis and characterization of novel dendritic (arborescent, hyperbranched) polyisobutylene-polystyrene block copolymers. Journal of Polymer Science Part A, 2005, 43, 1811-1826.	2.5	58
52	Influence of number of functional groups of hyperbranched polyol on cure kinetics and physical properties of polyurethanes. Journal of Polymer Science Part A, 2009, 47, 731-745.	2.5	58
53	Unique rheological behavior of rubber based nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 1854-1864.	2.4	57
54	Effect of nanoclays on high and low temperature degradation of fluoroelastomers. Polymer Degradation and Stability, 2008, 93, 188-200.	2.7	57

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55	Electron beam irradiated polyamide-6,6 filmsâ€"I: characterization by wide angle X-ray scattering and infrared spectroscopy. Radiation Physics and Chemistry, 2005, 72, 625-633.	1.4	56
56	Functionalized graphene with polymer as unique strategy in tailoring the properties of bromobutyl rubber nanocomposites. Polymer, 2016, 82, 121-132.	1.8	55
57	Green Approach toward Sustainable Polymer: Synthesis and Characterization of Poly(myrcene-co-dibutyl itaconate). ACS Sustainable Chemistry and Engineering, 2016, 4, 2129-2141.	3.2	55
58	Terpene Based Elastomers: Synthesis, Properties, and Applications. Processes, 2020, 8, 553.	1.3	55
59	Thermogravimetric studies on Polyamide-6,6 modified by electron beam irradiation and by nanofillers. Polymer Degradation and Stability, 2006, 91, 1311-1318.	2.7	54
60	Beneficial Effect of Nanoclay in Atom Transfer Radical Polymerization of Ethyl Acrylate:â€‰ A One Pot Preparation of Tailor-Made Polymer Nanocomposite. Macromolecules, 2008, 41, 50-57.	2.2	54
61	Thermoplastic elastomeric nanocomposites from poly[styreneâ€"(ethylene-co-butylene)â€"styrene] triblock copolymer and clay: Preparation and characterization. Journal of Applied Polymer Science, 2006, 100, 2040-2052.	1.3	53
62	MWCNT reinforced Polyamide-6,6 films: preparation, characterization and properties. Journal of Materials Science, 2007, 42, 923-934.	1.7	53
63	Influence of Different Nanofillers and their Dispersion Methods on the Properties of Natural Rubber Nanocomposites. Rubber Chemistry and Technology, 2008, 81, 782-808.	0.6	53
64	Dynamic vulcanization of novel nanostructured polyamide 6/ fluoroelastomer thermoplastic elastomeric blends with special reference to morphology, physical properties and degree of vulcanization. Polymer, 2015, 57, 105-116.	1.8	53
65	Effect of polymerâ€"clay interaction on solvent transport behavior of fluoroelastomerâ€"clay nanocomposites and prediction of aspect ratio of nanoclay. Journal of Applied Polymer Science, 2007, 105, 435-445.	1.3	52
66	Unique Tackification Behavior of Needle-like Sepiolite Nanoclay in Brominated Isobutylene-co-p-methylstyrene (BIMS) Rubber. Macromolecules, 2010, 43, 4184-4193.	2.2	52
67	Surface properties of EPDM, silicone rubber, and their blend during aging. Journal of Applied Polymer Science, 1995, 57, 631-637.	1.3	51
68	Tailored Nanostructured Thermoplastic Elastomers from Polypropylene and Fluoroelastomer: Morphology and Functional Properties. Industrial & Engineering Chemistry Research, 2015, 54, 8137-8146.	1.8	51
69	Structural characterization of electron-beam crosslinked thermoplastic elastomeric films from blends of polyethylene and ethylene-vinyl acetate copolymers. Journal of Applied Polymer Science, 2001, 81, 1936-1950.	1.3	50
70	Chlorophenyl pendant decorated graphene sheet as a potential antimicrobial agent: synthesis and characterization. Journal of Materials Chemistry, 2012, 22, 22481.	6.7	50
71	Bionanowhiskers from jute: Preparation and characterization. Carbohydrate Polymers, 2013, 92, 1116-1123.	5.1	50
72	Electron beam induced structural modification of a fluorocarbon elastomer in the presence of polyfunctional monomers. Polymer, 1999, 40, 447-458.	1.8	49

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73	An effective strategy to develop nanostructured morphology and enhanced physico-mechanical properties of PP/EPDM thermoplastic elastomers. Journal of Materials Science, 2016, 51, 6722-6734.	1.7	49
74	Sulfonated Styrene-(ethylene-co-butylene)-styrene/Montmorillonite Clay Nanocomposites: Synthesis, Morphology, and Properties. Nanoscale Research Letters, 2008, 3, 36-44.	3.1	48
75	New generation layered nanocomposites derived from ethyleneâ€coâ€vinyl acetate and naturally occurring graphite. Journal of Applied Polymer Science, 2008, 108, 1603-1616.	1.3	48
76	Ageing of rocket insulator compound based on EPDM. Polymer Degradation and Stability, 1986, 16, 221-239.	2.7	47
77	Brominated poly(isobutylene-co-para-methylstyrene) (BIMS)-clay nanocomposites: Synthesis and characterization. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 4489-4502.	2.4	46
78	Preparation and characterization of nanocomposites based on thermoplastic elastomers from rubber-plastic blends. Journal of Applied Polymer Science, 2006, 99, 1645-1656.	1.3	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. Macromolecules, 2008, 41, 6246-6253.	2.2	46
80	Analysis of wear characteristics of natural rubber nanocomposites. Wear, 2010, 269, 152-166.	1.5	46
81	HIGH-TEMPERATURE THERMOPLASTIC ELASTOMERS FROM RUBBERâ€“PLASTIC BLENDS: A STATE-OF-THE-ART REVIEW. Rubber Chemistry and Technology, 2017, 90, 1-36.	0.6	46
82	Aging of EPDM rubber. Journal of Applied Polymer Science, 1987, 34, 2205-2222.	1.3	45
83	Influence of Matrix Polarity on the Properties of Ethylene Vinyl Acetateâ€“Carbon Nanofiller Nanocomposites. Nanoscale Research Letters, 2009, 4, 655-664.	3.1	45
84	Heat shrinkability of electron-beam-modified thermoplastic elastomeric films from blends of ethylene-vinylacetate copolymer and polyethylene. Radiation Physics and Chemistry, 2000, 59, 501-510.	1.4	44
85	Dynamic mechanical properties of styrene-butadiene rubber vulcanizate filled with electron beam modified surface-treated dual-phase filler. Journal of Applied Polymer Science, 2003, 88, 2992-3004.	1.3	44
86	Reactive processing of rubberâ€“plastic blends: Role of chemical compatibilizer. Journal of Applied Polymer Science, 1993, 50, 2055-2064.	1.3	43
87	Effect of Nanoclay on the Dynamic Mechanical Properties of Styrene Butadiene and Acrylonitrile Butadiene Rubber Vulcanizates. Rubber Chemistry and Technology, 2005, 78, 321-335.	0.6	43
88	Synthesis, Characterization and Properties of Montmorillonite Clay-Polyacrylate Hybrid Material and its Effect on the Properties of Engage-Clay Hybrid Composite. Rubber Chemistry and Technology, 2001, 74, 835-845.	0.6	42
89	Surface modification of argon/oxygen plasma treated vulcanized ethylene propylene diene polymethylene surfaces for improved adhesion with natural rubber. Applied Surface Science, 2011, 257, 2891-2904.	3.1	42
90	Nanomechanics and Origin of Rubber Elasticity of Novel Nanostructured Thermoplastic Elastomeric Blends Using Atomic Force Microscopy. Macromolecular Chemistry and Physics, 2015, 216, 1666-1674.	1.1	42

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91	Electron beam initiated grafting of trimethylol propane trimethacrylate onto polyethyleneâ€"structure and properties. Radiation Physics and Chemistry, 1995, 45, 829-833.	1.4	41
92	Design of a Molecular Architecture via a Green Route for an Improved Silica Reinforced Nanocomposite using Bioresources. ACS Sustainable Chemistry and Engineering, 2018, 6, 6599-6611.	3.2	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. Journal of Applied Polymer Science, 1999, 74, 1490-1501.	1.3	40
94	New fluoroelastomer nanocomposites from synthetic montmorillonite. Composites Science and Technology, 2008, 68, 1-9.	3.8	40
95	Effect of microstructure of acrylic copolymer/terpolymer on the properties of silica based nanocomposites prepared by solâ€"gel technique. Polymer, 2005, 46, 8079-8090.	1.8	39
96	Influence of ZnO nanoparticles on the cure characteristics and mechanical properties of carboxylated nitrile rubber. Journal of Applied Polymer Science, 2007, 106, 3077-3083.	1.3	39
97	Effect of polar modification on morphology and properties of styrene-(ethylene-co-butylene)-styrene triblock copolymer and its montmorillonite clay-based nanocomposites. Journal of Materials Science, 2009, 44, 903-918.	1.7	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. Journal of Applied Polymer Science, 2006, 99, 1633-1644.	1.3	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. Journal of Materials Chemistry A, 2013, 1, 8144.	5.2	38
100	Synthesis and properties of nanocomposite adhesives. Journal of Adhesion Science and Technology, 2006, 20, 371-385.	1.4	37
101	Ethyleneâ€"octene copolymer (engage)â€"clay nanocomposites: Preparation and characterization. Journal of Applied Polymer Science, 2006, 101, 603-610.	1.3	37
102	Tailorâ€made hybrid nanostructure of poly(ethyl acrylate)/clay by surfaceâ€initiated atom transfer radical polymerization. Journal of Polymer Science Part A, 2008, 46, 5014-5027.	2.5	37
103	Dynamic viscoelastic properties of fluoroelastomer/clay nanocomposites. Polymer Engineering and Science, 2007, 47, 1777-1787.	1.5	36
104	Effect of Various Nanofillers on Thermal Stability and Degradation Kinetics of Polymer Nanocomposites. Journal of Nanoscience and Nanotechnology, 2010, 10, 5056-5071.	0.9	36
105	Graphene Nanocomposites with High Molecular Weight Poly(Îµ-caprolactone) Grafts: Controlled Synthesis and Accelerated Crystallization. ACS Macro Letters, 2016, 5, 278-282.	2.3	36
106	Structure development during dynamic vulcanization of hydrogenated nitrile rubber/nylon blends. Journal of Applied Polymer Science, 1993, 49, 1893-1900.	1.3	35
107	Electron-beam-initiated grafting of triallyl cyanurate onto polyethylene: Structure and properties. Journal of Applied Polymer Science, 1994, 53, 141-150.	1.3	35
108	Fabrication and Properties of Ethylene Vinyl Acetate-Carbon Nanofiber Nanocomposites. Nanoscale Research Letters, 2008, 3, 508-15.	3.1	35

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109	Redox Emulsion Polymerization of Terpenes: Mapping the Effect of the System, Structure, and Reactivity. Industrial & Engineering Chemistry Research, 2019, 58, 20946-20960.	1.8	35
110	Degradation of Hydrogenated Styreneâ€"Butadiene Rubber at High Temperature. Rubber Chemistry and Technology, 1997, 70, 855-870.	0.6	34
111	Hysteresis loss in filled rubber vulcanizates and its relationship with heat generation. Journal of Applied Polymer Science, 1997, 64, 1541-1555.	1.3	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. Journal of Applied Polymer Science, 1998, 69, 2331-2340.	1.3	34
113	Electron beam initiated modification of acrylic elastomer in presence of polyfunctional monomers. Radiation Physics and Chemistry, 2004, 71, 1045-1058.	1.4	34
114	Highly transparent thermoplastic elastomer from isotactic polypropylene and styrene/ethyleneâ€butylene/styrene triblock copolymer: Structureâ€property correlations. Polymer Engineering and Science, 2010, 50, 331-341.	1.5	34
115	Improved dispersion and physicoâ€mechanical properties of rubber/silica composites through new silane grafting. Polymer Engineering and Science, 2020, 60, 3115-3134.	1.5	34
116	Preparation of hydrogenated nitrile rubber using palladium acetate catalyst: Its characterization and kinetics. Journal of Polymer Science Part A, 1992, 30, 471-484.	2.5	33
117	Controlled Synthesis of Nitrogen-Doped Graphene from a Heteroatom Polymer and Its Mechanism of Formation. Chemistry of Materials, 2015, 27, 716-725.	3.2	33
118	Thermoplastic elastomeric blends of poly(ethylene terephthalate) and acrylate rubber: 1. Influence of interaction on thermal, dynamic mechanical and tensile properties. Polymer, 1997, 38, 4337-4344.	1.8	32
119	Thermoplastic elastomeric hydrogenated styrene-butadiene elastomer: Optimization of reaction conditions, thermodynamics, and kinetics. Journal of Applied Polymer Science, 1997, 66, 1151-1162.	1.3	32
120	Phase modification of SEBS block copolymer by different additives and its effect on morphology, mechanical and dynamic mechanical properties. Journal of Applied Polymer Science, 1998, 67, 2015-2025.	1.3	32
121	Novel electron beam-modified surface-coated silica fillers: Physical and chemical characteristics. Journal of Applied Polymer Science, 2002, 83, 2255-2268.	1.3	32
122	Acrylic rubber-fluorocarbon rubber miscible blends: Effect of curatives and fillers on cure, mechanical, aging, and swelling properties. Journal of Applied Polymer Science, 2003, 89, 1442-1452.	1.3	32
123	Thermal Degradation of Elastomer Based Nanocomposites. Polymers and Polymer Composites, 2008, 16, 283-293.	1.0	32
124	Morphology and properties of stearateâ€intercalated layered double hydroxide nanoplateletâ€reinforced thermoplastic polyurethane. Polymer International, 2011, 60, 772-780.	1.6	32
125	An Insight into molecular structure and properties of flexible amorphous polymers: A molecular dynamics simulation approach. Journal of Applied Polymer Science, 2019, 136, 47457.	1.3	32
126	Influence of curative, filler, compatibilizer, domain size, and blend ratio on the dynamic mechanical properties of siliconeâ€"EPDM blends. Journal of Applied Polymer Science, 1993, 48, 529-545.	1.3	31

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127	Effect of layered silicate on EPDM/EVA blend nanocomposite: Dynamic mechanical, thermal, and swelling properties. Polymer Composites, 2008, 29, 443-450.	2.3	31
128	Distinct Melt Viscoelastic Properties of Novel Nanostructured and Microstructured Thermoplastic Elastomeric Blends from Polyamide 6 and Fluoroelastomer. Macromolecular Materials and Engineering, 2015, 300, 283-290.	1.7	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. Polymer, 2016, 99, 21-43.	1.8	31
130	Terpene based sustainable methacrylate copolymer series by emulsion polymerization: Synthesis and structureâ€property relationship. Journal of Polymer Science Part A, 2017, 55, 2639-2649.	2.5	31
131	Electron beam modification and crosslinking: Influence of nitrile and carboxyl contents and level of unsaturation on structure and properties of nitrile rubber. Radiation Physics and Chemistry, 2006, 75, 779-792.	1.4	30
132	Structure-property relationship in sol-gel derived polymer/silica hybrid nanocomposites prepared at various pH. Journal of Materials Science, 2006, 41, 5981-5993.	1.7	30
133	Adhesive tack and green strength of EPDM rubber. Polymer Engineering and Science, 1987, 27, 1195-1202.	1.5	29
134	Nanolamellar triblock of poly-<scp>d,l</scp>-lactideâ€“Î´-valerolactoneâ€“<scp>d,l</scp>-lactide with tuneable glass transition temperature and crystallinity for use as a drug-delivery vesicle. RSC Advances, 2014, 4, 27439-27451.	1.7	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. Journal of Applied Polymer Science, 2003, 90, 278-286.	1.3	28
136	Novel Thermoplastic Elastomers Based on Acrylonitrile-Butadiene-Styrene Terpolymer (ABS) from Waste Computer Equipment and Nitrile Rubber. Rubber Chemistry and Technology, 2003, 76, 1145-1163.	0.6	28
137	Epoxidized Natural Rubber / Silica Nanoscale Organic-Inorganic Hybrid Composites Prepared by Sol-Gel Technique. Rubber Chemistry and Technology, 2004, 77, 830-846.	0.6	28
138	Morphological mapping and analysis of poly[styrene-b-(ethylene-co-butylene)-b-styrene] and its clay nanocomposites by atomic force microscopy. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 52-66.	2.4	28
139	Chlorinated polyethylene nanocomposites: thermal and mechanical behavior. Journal of Materials Science, 2010, 45, 64-73.	1.7	28
140	Structure and properties of tailorâ€made poly(ethyl acrylate)/clay nanocomposites prepared by in situ atom transfer radical polymerization. Journal of Applied Polymer Science, 2008, 108, 2398-2407.	1.3	27
141	Influence of gel and molecular weight on the properties of natural rubber. Polymer, 1986, 27, 1889-1894.	1.8	26
142	Novel Thermoplastic Elastomers from Fluorocarbon Elastomer, Acrylate Rubber and Acrylate Plastics. Rubber Chemistry and Technology, 2001, 74, 662-676.	0.6	26
143	Wear Behavior of Silica Filled Tire Tread Compounds by Various Rock Surfaces. Rubber Chemistry and Technology, 2005, 78, 705-723.	0.6	26
144	Tailor-made poly(ethyl acrylate) by atom transfer radical polymerization. Journal of Polymer Science Part A, 2007, 45, 1661-1669.	2.5	26

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145	Nanoclay distribution and its influence on the mechanical properties of rubber blends. Journal of Applied Polymer Science, 2010, 115, 1237-1246.	1.3	26
146	Computer simulation of thermoplastic elastomers from rubber-plastic blends and comparison with experiments. Polymer, 2016, 103, 233-242.	1.8	26
147	Synthesis and Characterization of a Terpene-Based Sustainable Polymer: Poly-alloocimene. ACS Sustainable Chemistry and Engineering, 2017, 5, 7659-7669.	3.2	26
148	Effect of acrylic copolymer and terpolymer composition on the properties of in-situ polymer/silica hybrid nanocomposites. Journal of Materials Science, 2006, 41, 927-936.	1.7	25
149	XNBR/LDH nanocomposites: Effect of vulcanization and organic modifier on nanofiller dispersion and strainâ€induced crystallization. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 2302-2311.	2.4	25
150	Surface Chlorination of Ground Rubber Tire and its Characterization. Rubber Chemistry and Technology, 2001, 74, 645-661.	0.6	24
151	Effect of reaction parameters on the structure and properties of acrylic rubber/silica hybrid nanocomposites prepared by sol-gel technique. Journal of Applied Polymer Science, 2005, 95, 1418-1429.	1.3	24
152	Rheological Behavior of Hybrid Rubber Nanocomposites. Rubber Chemistry and Technology, 2005, 78, 806-826.	0.6	24
153	Reactive molecular dynamics simulation for analysis of thermal decomposition of oligomeric polyacrylicester model nanocomposite and its experimental verification. Polymer, 2018, 137, 38-53.	1.8	24
154	Influence of highly dispersible silica filler on the physical properties, tearing energy, and abrasion resistance of tire tread compound. Journal of Applied Polymer Science, 2019, 136, 47560.	1.3	24
155	Influence of layered nanofillers on the mechanical properties and thermal degradation of polyacrylicester polymer: Theoretical and experimental investigations. Composites Part B: Engineering, 2019, 169, 65-78.	5.9	24
156	Degradation of silane- and peroxide-cross-linked polyethylene and ethylene propylene rubber. Polymer Degradation and Stability, 1992, 36, 281-289.	2.7	23
157	New composites based on short melamine fiber reinforced epdm rubber. Polymer Composites, 2002, 23, 574-591.	2.3	23
158	Electron-beam modification of nitrile rubber in the presence of polyfunctional monomers. Journal of Applied Polymer Science, 2005, 95, 435-447.	1.3	23
159	Methacrylate/acrylate ABA triblock copolymers by atom transfer radical polymerization; their properties and application as a mediator for organically dispersible gold nanoparticles. Polymer, 2009, 50, 3259-3268.	1.8	23
160	Viscoelastic properties and melt rheology of novel polyamide 6/fluoroelastomer nanostructured thermoplastic vulcanizates. Journal of Materials Science, 2016, 51, 252-261.	1.7	23
161	Synthesis and Characterization of Phenol Furfural Resin from Moringa Oleifera Gum and Biophenol and Its Application in Styrene Butadiene Rubber. Industrial & Engineering Chemistry Research, 2019, 58, 18519-18532.	1.8	23
162	Hydrogenation of nitrile rubber using a new homogeneous palladium (II) catalyst: Synthesis and characterization. Journal of Applied Polymer Science, 1990, 41, 1357-1363.	1.3	22

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163	Preparation and Characterization of Styrene Butadiene Rubber Based Nanocomposites and Study of their Mechanical Properties. Advanced Engineering Materials, 2004, 6, 738-742.	1.6	22
164	Unique compatibilized thermoplastic elastomer from polypropylene and epichlorohydrin rubber. Polymer, 2019, 183, 121866.	1.8	22
165	Strength of thermoplastic elastomers from rubber-polyolefin blends. Journal of Materials Science, 1990, 25, 161-167.	1.7	21
166	Characterization of electron-beam-modified surface coated clay fillers and their influence on physical properties of rubbers. Radiation Physics and Chemistry, 2002, 65, 627-640.	1.4	21
167	Rheological properties of styreneâ€“butadiene rubber filled with electron beam modified surface treated dual phase fillers. Radiation Physics and Chemistry, 2004, 69, 91-98.	1.4	21
168	Prediction of properties of rubber by using artificial neural networks. Journal of Applied Polymer Science, 2006, 100, 2227-2237.	1.3	21
169	Influence of phase modifiers on morphology and properties of thermoplastic elastomers prepared from ethylene propylene diene rubber and isotactic polypropylene. Polymer Engineering and Science, 2008, 48, 477-489.	1.5	21
170	Conducting Instant Adhesives by Grafting of Silane Polymer onto Expanded Graphite. ACS Applied Materials & Interfaces, 2014, 6, 16097-16105.	4.0	21
171	Degradation of polyacrylic elastomers: Theoretical and experimental studies. Polymer Degradation and Stability, 2016, 134, 60-75.	2.7	21
172	Expanded graphite as an agent towards controlling the dispersion of carbon black in poly (styrene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 multifunctional composite. Polymer, 2018, 146, 31-41.	1.8	21
173	Sustainable selfâ€healing elastomers with thermoreversible network derived from biomass via emulsion polymerization. Journal of Polymer Science Part A, 2019, 57, 738-751.	2.5	21
174	Influence of styrene content on the hydrogenation of styrene-butadiene copolymer. Journal of Applied Polymer Science, 1999, 71, 1581-1595.	1.3	20
175	Influence of block molecular weight on the properties of styrene-ethylenebutylene-styrene block copolymers. Journal of Applied Polymer Science, 2000, 77, 1621-1628.	1.3	20
176	New Thermoplastic Elastomers from Poly(Ethylene-Octene) (Engage), Poly(Ethylene-Vinyl Acetate) and Low-Density Polyethylene by Electron Beam Technology: Structural Characterization and Mechanical Properties. Rubber Chemistry and Technology, 2001, 74, 815-833.	0.6	20
177	Electron beam irradiated polyamide-6,6 filmsâ€”II: mechanical and dynamic mechanical properties and water absorption behavior. Radiation Physics and Chemistry, 2005, 72, 751-757.	1.4	20
178	Compatibility and viscoelastic properties of brominated isobutyleneâ€coâ€pâ€methylstyrene rubber/tackifier blends. Journal of Applied Polymer Science, 2008, 110, 1485-1497.	1.3	20
179	Tailor-Made Fibrous Nanohydroxyapatite/Polydimethylsiloxane Composites: Excavating the Role of Nanofiller Aspect Ratio, Amorphicity, and Noncovalent Surface Interaction. Journal of Physical Chemistry C, 2012, 116, 8763-8772.	1.5	20
180	In situ preparation, morphology and electrical properties of carbon nanofiber/polydimethylsiloxane nanocomposites. Journal of Materials Science, 2012, 47, 272-281.	1.7	20

#	Article	IF	Citations
181	Terpene-Based Sustainable Elastomers: Vulcanization and Reinforcement Characteristics. Industrial & Engineering Chemistry Research, 2018, 57, 5197-5206.	1.8	20
182	Dynamic mechanical properties of electron beam modified fluorocarbon rubber. Journal of Applied Polymer Science, 1998, 69, 2079-2087.	1.3	19
183	New Miscible Elastomer Blends From Acrylate Rubber and Fluorocarbon Rubber. Rubber Chemistry and Technology, 2000, 73, 889-901.	0.6	19
184	Influence of untreated and novel electron beam modified surface coated silica filler on dynamic mechanical thermal properties of ethylene-octene copolymer. Polymer Engineering and Science, 2004, 44, 163-178.	1.5	19
185	Effect of tackifier compatibility and blend viscoelasticity on peel strength behavior of vulcanized EPDM rubber co-cured with unvulcanized rubber. International Journal of Adhesion and Adhesives, 2010, 30, 489-499.	1.4	19
186	Influence of molecular parameters on thermal, mechanical, and dynamic mechanical properties of hydrogenated nitrile rubber and its nanocomposites. Polymer Engineering and Science, 2010, 50, 1389-1399.	1.5	19
187	Thermoplastic vulcanizates from post consumer computer plastics/nitrile rubber blends by dynamic vulcanization. Journal of Material Cycles and Waste Management, 2013, 15, 300-309.	1.6	19
188	Ionic liquid modification of graphene oxide and its role towards controlling the porosity, and mechanical robustness of polyurethane foam. Polymer, 2017, 127, 106-118.	1.8	19
189	Electron beam modification offilled fluorocarbon rubber. Journal of Applied Polymer Science, 2000, 76, 2016-2025.	1.3	18
190	Effect of stabilizers in photodegradation of thermoplastic elastomeric rubberâ€“polyethylene blendsâ€”a preliminary study. Polymer Degradation and Stability, 2001, 74, 513-521.	2.7	18
191	Influence of Novel Electron Beam Modified Surface Treated Dual Phase Filler on Rheometric and Mechanical Properties of Styrene Butadiene Rubber Vulcanizates. Rubber Chemistry and Technology, 2003, 76, 299-317.	0.6	18
192	Atomic Force Microscopy Studies on Morphology and Distribution of Surface Modified Silica and Clay Fillers in an Ethylene-Octene Copolymer Rubber. Rubber Chemistry and Technology, 2003, 76, 1091-1105.	0.6	18
193	Comparative studies on rubber biodegradation through solid-state and submerged fermentation. Process Biochemistry, 2006, 41, 181-186.	1.8	18
194	Synergy in carbon black filled natural rubber nanocomposites. Part II: Abrasion and viscoelasticity in tire like applications. Journal of Materials Science, 2010, 45, 6139-6150.	1.7	18
195	Computer aided simulation of thermoplastic elastomer from poly (vinylidene fluoride)/hydrogenated nitrile rubber blend and its experimental verification. Polymer, 2017, 112, 402-413.	1.8	18
196	Mechanical and dynamic mechanical thermal properties of heat- and oil-resistant thermoplastic elastomeric blends of poly(butylene terephthalate) and acrylate rubber. Journal of Applied Polymer Science, 2000, 78, 1001-1008.	1.3	17
197	Rheological and viscoelastic properties of multiphase acrylic rubber/fluoroelastomer/polyacrylate blends. Polymer Engineering and Science, 2003, 43, 975-986.	1.5	17
198	Influence of various crosslinking systems on the mechanical properties of gas phase EPDM/PP thermoplastic vulcanizates. Journal of Applied Polymer Science, 2006, 102, 5463-5471.	1.3	17

#	Article	IF	Citations
199	Structureâ€“property correlation of polyurethane nanocomposites: Influence of loading and nature of nanosilica and microstructure of hyperbranched polyol. Journal of Applied Polymer Science, 2013, 127, 4492-4504.	1.3	17
200	Design and properties of a series of highâ€temperature thermoplastic elastomeric blends from polyamides and functionalized rubbers. Journal of Applied Polymer Science, 2017, 134, 45353.	1.3	17
201	Thermoplastic elastomeric blend of nitrile rubber and poly(styrene-co-acrylonitrile). I. Effect of mixing sequence and dynamic vulcanization on mechanical properties. Journal of Applied Polymer Science, 2003, 88, 1976-1987.	1.3	16
202	Waste natural gum as a multifunctional additive in rubber. Journal of Applied Polymer Science, 2006, 102, 4897-4907.	1.3	16
203	Chemical modification of metalloceneâ€based polyolefinic elastomers by acrylic acid and its influence on physicoâ€mechanical properties: Effect of reaction parameters, crystallinity and pendant chain length. Journal of Polymer Science Part A, 2007, 45, 5529-5540.	2.5	16
204	Effect of electron beam-cross-linked gels on the rheological properties of raw natural rubber. Radiation Physics and Chemistry, 2008, 77, 630-642.	1.4	16
205	Exfoliation of Nanolayer Assemblies for Improved Natural Rubber Properties: Methods and Theory. Journal of Elastomers and Plastics, 2010, 42, 517-537.	0.7	16
206	Stress Generation and Tailoring of Electronic Properties of Expanded Graphite by Click Chemistry. ACS Applied Materials & Interfaces, 2014, 6, 7244-7253.	4.0	16
207	High-temperature pyrolysis simulation of acrylonitrile-butadiene model compound with experimental evidence. Journal of Analytical and Applied Pyrolysis, 2017, 125, 243-257.	2.6	16
208	Reactive grafting of 3-octanoylthio-1-propyltriethoxysilane in styrene butadiene rubber: Characterization and its effect on silica reinforced tire composites. Polymer, 2019, 179, 121693.	1.8	16
209	Effect of electron beam radiation on structural changes of trimethylol propane trimethacrylate, ethylene vinyl acetate, and their blends. Journal of Applied Polymer Science, 1996, 60, 1329-1341.	1.3	15
210	Effect of casting solvents on physical properties of hydrogenated styreneâ€“butadiene copolymer. Polymer, 1999, 40, 1201-1208.	1.8	15
211	Adhesion of Vulcanized Rubber Surfaces: Characterization of Unmodified and Electron Beam Modified EPDM Surfaces and Their Co-vulcanization with Natural Rubber. Journal of Adhesion Science and Technology, 2009, 23, 1763-1786.	1.4	15
212	Electron beam crosslinked gelsâ€”Preparation, characterization and their effect on the mechanical, dynamic mechanical and rheological properties of rubbers. Radiation Physics and Chemistry, 2010, 79, 289-296.	1.4	15
213	Interplay between bulk viscoelasticity and surface energy in autohesive tack of rubberâ€tackifier blends. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 972-982.	2.4	15
214	Elegant Way of Strengthening Polymerâ^'Polymer Interface Using Nanoclay. ACS Applied Materials & Interfaces, 2010, 2, 2933-2943.	4.0	15
215	Characterization of EPDM Vulcanizates Modified with Gamma Irradiation and Trichloroisocyanuric Acid and Their Adhesion Behavior with Natural Rubber. Journal of Adhesion, 2010, 86, 306-334.	1.8	15
216	Synthesis and characterization of a biocompatible monotyrosine-based polymer and its interaction with DNA. Journal of Materials Chemistry B, 2014, 2, 6236-6248.	2.9	15

#	Article	IF	Citations
217	EFFECT OF SILICA LOADING AND COUPLING AGENT ON WEAR AND FATIGUE PROPERTIES OF A TREAD COMPOUND. Rubber Chemistry and Technology, 2019, 92, 326-349.	0.6	15
218	INFLUENCE OF NANOFILLER ON THERMAL DEGRADATION RESISTANCE OF HYDROGENATED NITRILE BUTADIENE RUBBER. Rubber Chemistry and Technology, 2019, 92, 263-285.	0.6	15
219	Unique approach to debundle carbon nanotubes in polymer matrix using carbon dots for enhanced properties. European Polymer Journal, 2020, 123, 109454.	2.6	15
220	Modification of the peel test for testing of rubber-to-rubber joints. Polymer Testing, 1987, 7, 153-163.	2.3	14
221	Title is missing!. Angewandte Makromolekulare Chemie, 1991, 191, 15-30.	0.3	14
222	Friction behaviour of electron beam modified ethyleneâ€“propylene diene monomer rubber surface. Wear, 1998, 221, 15-23.	1.5	14
223	Novel Styrenic Thermoplastic Elastomers from Blends with Special Reference to Compatibilization and Dynamic Vulcanization. Rubber Chemistry and Technology, 2005, 78, 893-909.	0.6	14
224	Synthesis and properties of new fluoroelastomer nanocomposites from tailored anionic layered magnesium silicates (hectorite). Journal of Applied Polymer Science, 2009, 111, 1094-1104.	1.3	14
225	Unique Behavior of Hydrocarbon Resin Tackifier on Unaged and Aged Tack of Brominated Isobutylene-co-p-methylstyrene (BIMS) Rubber. Journal of Adhesion Science and Technology, 2008, 22, 2039-2058.	1.4	14
226	Quantification of surface forces of thermoplastic elastomeric nanocomposites based on poly(styreneâ€ethyleneâ€coâ€butyleneâ€styrene) and clay by atomic force microscopy. Journal of Applied Polymer Science, 2009, 111, 2104-2115.	1.3	14
227	Effect of different nanoparticles on thermal, mechanical and dynamic mechanical properties of hydrogenated nitrile butadiene rubber nanocomposites. Journal of Applied Polymer Science, 2010, 116, 1428-1441.	1.3	14
228	Liquid Silicone Rubber Vulcanizates: Network Structure - Property Relationship and Cure Kinetics. Polymers and Polymer Composites, 2010, 18, 477-488.	1.0	14
229	Electron-beam-modified surface-coated clay: influence on mechanical, dynamic mechanical and rheological properties of ethyleneâ€“octene copolymer. Radiation Physics and Chemistry, 2002, 65, 259-267.	1.4	13
230	Chemical modification of metallocene-based polyethyleneâ€“octene elastomer through solution grafting of acrylic acid and its effect on the physico-mechanical properties. Journal of Applied Polymer Science, 2007, 105, 3409-3417.	1.3	13
231	Influence of carbonâ€based nanofillers on the electrical and dielectric properties of ethylene vinyl acetate nanocomposites. Polymer Composites, 2010, 31, 218-225.	2.3	13
232	Ethylene vinyl acetate/ethylene propylene diene terpolymerâ€blendâ€layered double hydroxide nanocomposites. Polymer Engineering and Science, 2009, 49, 585-591.	1.5	13
233	Preparation and characterization of elastomerâ€based nanocomposite gels using an unique latex blending technique. Journal of Applied Polymer Science, 2010, 118, 81-90.	1.3	13
234	Correlation of Vulcanization and Viscoelastic Properties of Nanocomposites Based on Natural Rubber and Different Nanofillers, with Molecular and Supramolecular Structure. Rubber Chemistry and Technology, 2010, 83, 16-34.	0.6	13

#	Article	IF	Citations
235	Influence of nanoclay on adhesion of EPDM vulcanizate. International Journal of Adhesion and Adhesives, 2011, 31, 209-219.	1.4	13
236	Synthesis, characterization and properties of self-healable ionomeric carboxylated styreneâ€“butadiene polymer. Journal of Materials Science, 2019, 54, 14986-14999.	1.7	13
237	Improved tire tread compounds using functionalized styrene butadiene rubberâ€silica filler/hybrid filler systems. Journal of Applied Polymer Science, 2021, 138, 51236.	1.3	13
238	Atomic force microscopy, X-ray diffraction, X-ray photoelectron spectroscopy and thermal studies of the new melamine fiber. Journal of Adhesion Science and Technology, 2002, 16, 1957-1978.	1.4	12
239	Surface morphology of styrene-butadiene rubber vulcanizate filled with novel electron beam modified dual phase filler by atomic force microscopy. Journal of Adhesion Science and Technology, 2003, 17, 1167-1186.	1.4	12
240	Studies of Terminalia bellerica (Bahera), a natural gum, as an additive in a water-based adhesive composition. Journal of Adhesion Science and Technology, 2005, 19, 1349-1361.	1.4	12
241	Influence of Nanoclay on the Adhesive and Physico-Mechanical Properties of Liquid Polysulfide Elastomer. Journal of Adhesion Science and Technology, 2009, 23, 2013-2029.	1.4	12
242	Influence of the Nature of Acrylates on the Reactivity, Structure, and Properties of Polyurethane Acrylates. Industrial & Engineering Chemistry Research, 2015, 54, 47-54.	1.8	12
243	SMART THERMOPLASTIC ELASTOMERS WITH HIGH EXTENSIBILITY FROM POLY (VINYLIDENE FLUORIDE) AND HYDROGENATED NITRILE RUBBER: PROCESSINGâ€“STRUCTUREâ€“PROPERTY RELATIONSHIP. Rubber Chemistry and Technology, 2018, 91, 268-295.	0.6	12
244	Effect of structure development on the rheological properties of PVDF/HNBRâ€based thermoplastic elastomer and its vulcanizates. Journal of Applied Polymer Science, 2020, 137, 48758.	1.3	12
245	Understanding thermo-oxidative degradation of polyacrylic ester elastomer and its nanocomposites through molecular dynamics simulation and experiments. Polymer Degradation and Stability, 2021, 183, 109457.	2.7	12
246	Wear of Tank Track Pad Rubber Vulcanizates by Various Rocks. Rubber Chemistry and Technology, 1992, 65, 31-45.	0.6	11
247	Structure-property relationship of specialty elastomer-clay nanocomposites. Bulletin of Materials Science, 2008, 31, 455-459.	0.8	11
248	Influence of Aging on Autohesive Tack of Brominated Isobutylene-co-p-methylstyrene (BIMS) Rubber in the Presence of Phenolic Resin Tackifier. Journal of Adhesion, 2008, 84, 764-787.	1.8	11
249	Montmorillonite nanocomposites with electron-beam modified atactic polypropylene. Applied Clay Science, 2010, 49, 200-204.	2.6	11
250	Novel in situ carbon nanofiber/polydimethylsiloxane nanocomposites: Synthesis, morphology, and physicoâ€mechanical properties. Journal of Applied Polymer Science, 2012, 123, 3675-3687.	1.3	11
251	Effect of curing temperature and curing system on network structure and technical properties of polybutadiene and styreneâ€“butadiene rubber. Journal of Applied Polymer Science, 1981, 26, 529-541.	1.3	10
252	Chemical Modification of EPDM Rubber and its Properties. Journal of Elastomers and Plastics, 1997, 29, 201-215.	0.7	10

#	Article	IF	Citations
253	Electron beam-initiated surface modification of elastomers. Journal of Adhesion Science and Technology, 1998, 12, 831-856.	1.4	10
254	Rheological and Mechanical Properties of Gum and Filled Blends of Acrylate Rubber and Fluororubber. Polymers and Polymer Composites, 2001, 9, 263-274.	1.0	10
255	Influence of Electron Beam Irradiation as One of the Mixed Crosslinking Systems on the Structure and Properties of Nitrile Rubber. Rubber Chemistry and Technology, 2004, 77, 624-645.	0.6	10
256	Effect of solution concentration on the properties of nanocomposites. Journal of Applied Polymer Science, 2006, 101, 2407-2411.	1.3	10
257	Accelerated weathering behavior of poly(phenylene ether)-based TPE. Journal of Materials Science, 2008, 43, 3338-3350.	1.7	10
258	Probing the viscoelastic properties of brominated isobutyleneâ€coâ€pâ€methylstyrene rubber/tackifier blends using a rubber process analyzer. Polymer Engineering and Science, 2008, 48, 2400-2409.	1.5	10
259	Facile one-pot synthesis and characterization of maleated hydrocarbon resin tackifier for improved adhesion. International Journal of Adhesion and Adhesives, 2010, 30, 200-207.	1.4	10
260	Efficacy of Novel Nanoclay in Autohesive Tack of Brominated Isobutylene-co-p-Methylstyrene (BIMS) Rubber. Journal of Adhesion Science and Technology, 2010, 24, 789-809.	1.4	10
261	NOVEL IN SITU SILICA/POLYDIMETHYLSILOXANE NANOCOMPOSITES: FACILE ONE-POT SYNTHESIS AND CHARACTERIZATION. Rubber Chemistry and Technology, 2012, 85, 92-107.	0.6	10
262	Influence of the nanofiller type and content on permeation characteristics of multifunctional NR nanocomposites and their modeling. Polymers for Advanced Technologies, 2012, 23, 596-610.	1.6	10
263	Efficacy of clay content and microstructure of curing agents on the structureâ€"property relationship of newâ€generation polyurethane nanocomposites. Polymers for Advanced Technologies, 2012, 23, 1311-1320.	1.6	10
264	The role of tackifiers on the auto-adhesion behavior of EPDM rubber. Journal of Materials Science, 2012, 47, 3166-3176.	1.7	10
265	Butyl lithium assisted direct grafting of polyoligomeric silsesquioxane onto graphene. RSC Advances, 2014, 4, 8649.	1.7	10
266	Controlled Methodology for Development of a Polydimethylsiloxaneâ€"Polytetrafluoroethylene-Based Composite for Enhanced Chemical Resistance: A Structureâ€"Property Relationship Study. ACS Omega, 2020, 5, 22482-22493.	1.6	10
267	Study of reinforcement mechanism and structural elucidation of expanded graphiteâ€carbon black hybrid fillerâ€SBR nanocomposites through comprehensive analysis of mechanical properties and small angle Xâ€ray data. Journal of Applied Polymer Science, 2021, 138, 49093.	1.3	10
268	Excavating the unique synergism of nanofibers and carbon black in Natural rubber based tire tread composition. Journal of Applied Polymer Science, 2021, 138, 49682.	1.3	10
269	Effect of model fillers on the adhesive strength of pressure-sensitive tapes. Journal of Adhesion Science and Technology, 1989, 3, 371-381.	1.4	9
270	Homogeneous catalytic hydrogenation of liquid carboxylated nitrile rubber. Journal of Polymer Science Part A, 1992, 30, 1961-1968.	2.5	9

#	Article	IF	Citations
271	Wetting behavior of functionalized silicone and EPDM rubber. Journal of Applied Polymer Science, 1996, 61, 501-506.	1.3	9
272	Influence of the concentration of trimethylol propane triacrylate on the electron beam-induced surface modification of EPDM rubber. Journal of Adhesion Science and Technology, 1997, 11, 1321-1342.	1.4	9
273	Thermorheological studies of novel thermoplastic elastomeric blends of nitrile rubber (NBR) and scrap computer plastics (SCP) based on acrylonitrileâ€"butadieneâ€"styrene terpolymer (ABS). Plastics, Rubber and Composites, 2003, 32, 377-384.	0.9	9
274	Effects of quasiâ€nanogel particles on the rheological and mechanical properties of natural rubber: A new insight. Journal of Applied Polymer Science, 2008, 107, 2755-2767.	1.3	9
275	Influence of Nanogels on Mechanical, Dynamic Mechanical, and Thermal Properties of Elastomers. Nanoscale Research Letters, 2009, 4, 420-430.	3.1	9
276	Biocompatible composites of fibrous nanohydroxyapatite embedded in a polydimethylsiloxane. Journal of Materials Science, 2013, 48, 5132-5139.	1.7	9
277	Graphene-Based Elastomer Nanocomposites: Functionalization Techniques, Morphology, and Physical Properties. Advances in Polymer Science, 2016, , 267-318.	0.4	9
278	Facile Synthesis and Characterization of Few-Layer Multifunctional Graphene from Sustainable Precursors by Controlled Pyrolysis, Understanding of the Graphitization Pathway, and Its Potential Application in Polymer Nanocomposites. ACS Omega, 2021, 6, 1809-1822.	1.6	9
279	Thermoplastic Elastomers. , 2008, , 101-164.		9
280	Influence of untreated and novel electron-beam-modified surface-coated silica filler on the thermorheological properties of ethylene-octene copolymer. Journal of Applied Polymer Science, 2003, 90, 2453-2459.	1.3	8
281	Anomalous mechanical behavior upon recycling of poly(phenyleneâ€etherâ€b based thermoplastic elastomer. Polymer Engineering and Science, 2008, 48, 496-504.	1.5	8
282	Influence of Nanoclay on the Morphology, Adhesive and Mechanical Properties of Polysulfide Modified Epoxy Resin. Polymers and Polymer Composites, 2010, 18, 123-131.	1.0	8
283	Dynamic Transitions and Creep in Carbon Nanofiber/Polydimethylsiloxane Nanocomposites with Meticulously Architectured Polymerâ€"Filler Interfaces. Industrial & Engineering Chemistry Research, 2012, 51, 9571-9580.	1.8	8
284	Selective Orientation of Needlelike Sepiolite Nanoclay in Polymer Blend for Controlled Properties. ACS Omega, 2018, 3, 11691-11702.	1.6	8
285	Microstructure and relaxation behavior of flexible dielectric PVDF and HNBR blends: An assessment through smallâ€angle xâ€ray scattering and dielectric relaxation spectroscopy. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 851-866.	2.4	8
286	Flourishing an Electrochemical Synthetic Route toward Carbon Black-Intercalated Graphene As a Neoteric Hybrid Nanofiller for Multifunctional Polymer Nanocomposites. Industrial & Engineering Chemistry Research, 2021, 60, 5758-5769.	1.8	8
287	Tack and green strength of filled blends of bromobutyl and EPDM rubbers. Journal of Adhesion Science and Technology, 1987, 1, 227-238.	1.4	7
288	Photodegradation of thermoplastic elastomeric rubber-polyethylene blends. Journal of Applied Polymer Science, 2002, 86, 2393-2402.	1.3	7

#	Article	IF	Citations
289	Effect of liquid additives on morphology and properties of thermoplastic elastomers prepared from phase-modified EPDM elastomer and isotactic polypropylene blends. Journal of Materials Science, 2008, 43, 6167-6176.	1.7	7
290	Ionomeric modification of a metalloceneâ€based polyolefinic elastomer and its influence on the physicomechanical properties: Effects of the crystallinity and pendent chain length. Journal of Applied Polymer Science, 2009, 114, 3906-3914.	1.3	7
291	Ionomeric modification of metallocene-based polyolefinic elastomers with varied pendant chain length and its influence on physico-mechanical properties. Journal of Materials Science, 2009, 44, 3125-3134.	1.7	7
292	Dynamic stress relaxation behavior of nanogel filled elastomers. Journal of Polymer Research, 2011, 18, 489-497.	1.2	7
293	Raman and NMR Spectroscopic Studies on Hydrolytic Degradation of <scp>d</scp>,<scp>l</scp>-Lactideâ^Î´-Valerolactoneâ€“<scp>d</scp>,<scp>l</scp>-Lactide Copolymer. ACS Sustainable Chemistry and Engineering, 2015, 3, 1381-1393.	3.2	7
294	<scp>3â€Octanoylthio</scp>â€1â€propyltriethoxysilane functionalized silica/rubber composites for application in tire: Structure, performance and synergism. Polymer Composites, 2022, 43, 7575-7599.	2.3	7
295	Thermostable Insulating Thermoplastic Elastomers from Rubber Polycarbonate Blends. Journal of Elastomers and Plastics, 1996, 28, 161-181.	0.7	6
296	Atomic force microscopy studies of molded thin films of segmented polyamides. Journal of Materials Science Letters, 2000, 19, 2161-2165.	0.5	6
297	Photomechanical degradation of thermoplastic elastomers. Journal of Applied Polymer Science, 2006, 99, 150-161.	1.3	6
298	Synthesis and Characterization of Chemically Crosslinked Styrene-Butadiene Rubber Nanogels and their Effect on Various Properties of the Rubber. Rubber Chemistry and Technology, 2008, 81, 842-864.	0.6	6
299	Effect of polar modifications on cure characteristics, solvent resistance and thermo-mechanical properties of metallocene-based polyolefinic elastomers. European Polymer Journal, 2010, 46, 364-373.	2.6	6
300	Highâ€temperature degradation of butadieneâ€based model elastomers by reactive molecular dynamics simulation. Journal of Applied Polymer Science, 2020, 137, 48592.	1.3	6
301	Polyvinylidene Fluoride/Hydrogenated Nitrile Rubber-Based Flexible Electroactive Polymer Blend and Its Nanocomposites with Improved Actuated Strain: Characterization and Analysis of Electrostrictive Behavior. Industrial & Engineering Chemistry Research, 2020, 59, 3413-3424.	1.8	6
302	Photoelastic Studies on Rubber-to-Rubber Joints. Journal of Adhesion, 1991, 36, 161-175.	1.8	5
303	Nanocomposites Based on Thermoplastic Elastomeric Blends of Styrene Acrylonitrile and Ethylene Vinyl Acetate: Effect of Nature and Loading of Nanoclays and Dynamic Vulcanization. Polymers and Polymer Composites, 2006, 14, 515-525.	1.0	5
304	Compositional trend analysis on poly(phenylene ether) based thermoplastic elastomers. Journal of Applied Polymer Science, 2007, 106, 3743-3756.	1.3	5
305	Sulfonation of metalloceneâ€based polyolefinic elastomers and its influence on physicomechanical properties: Effect of reaction parameters, styrene grafting, and pendant chain length. Journal of Polymer Science Part A, 2008, 46, 8023-8040.	2.5	5
306	Tailor-Made Fibrous Hydroxyapatite/Polydimethylsiloxane Composites: Insight into the Kinetics of Polymerization in the Presence of Filler and Structureâ€“Property Relationship. Journal of Physical Chemistry C, 2012, 116, 26551-26560.	1.5	5

#	Article	IF	Citations
307	2-Methyl oxazoline-grafted carbon nanofibers: preparation, characterization and their role in elastomeric actuators. Journal of Materials Science, 2012, 47, 4178-4186.	1.7	5
308	Influence of nanofillers on the sorption and diffusion characteristics of the solvent in vulcanized hydrogenated nitrile rubber nanocomposite. Journal of Applied Polymer Science, 2013, 128, 2556-2562.	1.3	5
309	Processing of abasic site damaged lesions by APE1 enzyme on DNA adsorbed over normal and organomodified clay. Chemosphere, 2014, 112, 503-510.	4.2	5
310	Synthesis and characterization of epoxidized neem oil: A <scp>bioâ€derived</scp> natural processing aid for elastomer. Journal of Applied Polymer Science, 2021, 138, 50440.	1.3	5
311	Influence of Functionalization of Multi-Walled Carbon Nanotubes on the Properties of Ethylene Vinyl Acetate Nanocomposites. Journal of Nanoscience and Nanotechnology, 2008, 8, 1913-1921.	0.9	5
312	Development of high melt strength polypropylene and its application in thermoplastic elastomeric composition. Journal of Elastomers and Plastics, 2022, 54, 429-456.	0.7	5
313	<scp>Nanofiberâ€Carbon</scp> black dual filler reinforced sustainable <scp>highâ€performance</scp> Natural Rubber nanocomposites. Polymer Engineering and Science, 2022, 62, 2668-2683.	1.5	5
314	Fatigue Failure of Rubber-to-Rubber Joints. Journal of Adhesion, 1992, 37, 225-237.	1.8	4
315	Hydroformylation of nitrile rubber and its characterization. Angewandte Makromolekulare Chemie, 1992, 198, 1-14.	0.3	4
316	Mill processability of brominated isobutylene-co-paramethylstyrene and its blends with EPDM. Journal of Applied Polymer Science, 2001, 82, 1483-1494.	1.3	4
317	Impeded repair of abasic site damaged lesions in DNA adsorbed over functionalized multiwalled carbon nanotube and graphene oxide. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2016, 803-804, 39-46.	0.9	4
318	Catalyst driven preferential growth of in-situ generated nanosilica particles in the phases of incompatible polymer blend and its effect on physico-mechanical properties. Polymer, 2018, 156, 186-202.	1.8	4
319	Sustainable Water Responsive Mechanically Adaptive and Self-Healable Polymer Composites Derived from Biomass. Processes, 2020, 8, 726.	1.3	4
320	Preparation and Properties of Ionic Polychloroprene Rubber. Journal of Elastomers and Plastics, 2000, 32, 152-161.	0.7	3
321	Influence of fillers and oil on mill processability of brominated isobutylene-co-paramethylstyrene and its blends with EPDM. Polymer Engineering and Science, 2001, 41, 2266-2280.	1.5	3
322	Studies on the adhesion behavior of water-based adhesives blended with asan gum. Journal of Adhesion Science and Technology, 2005, 19, 639-658.	1.4	3
323	Development and Properties of Novel Thermoplastic Elastomer Based on Poly (Phenylene Ether). Rubber Chemistry and Technology, 2007, 80, 642-660.	0.6	3
324	An imidazolium-functionalized isobutylene polymer having improved mechanical and barrier properties: Synthesis and characterization. Journal of Applied Polymer Science, 2013, 128, 2911-2918.	1.3	3

#	Article	IF	Citations
325	Spectroscopic and Morphology Studies of Biodegradable Nanolamellar Lactone Based Triblocks. Journal of Physical Chemistry C, 2014, 118, 22325-22338.	1.5	3
326	Influence of microstructure of lactoneâ€based triblock copolymers on drug release behavior of their microspheres. Journal of Applied Polymer Science, 2017, 134, 45284.	1.3	3
327	METAL-ORGANIC FRAMEWORK: A SMART REPLACEMENT FOR CONVENTIONAL NANOFILLERS FOR THE ENHANCEMENT OF MECHANICAL PROPERTIES AND THERMAL STABILITY OF SBR NANOCOMPOSITE. Rubber Chemistry and Technology, 2021, 94, 515-532.	0.6	3
328	NATURAL RUBBER NANOCOMPOSITES BASED ON NEW FIBROUS NANOFILLERS WITH IMPROVED BARRIER PROPERTIES FOR USE IN TIRE INNERLINER APPLICATIONS. Rubber Chemistry and Technology, 2020, , 000-000.	0.6	3
329	Adhesion Between Unvulcanized Elastomers: A Critical Review. Reviews of Adhesion and Adhesives, 2017, 5, 195-267.	3.3	3
330	Influence of Maleation of Ground Rubber Tyre (GRT) on the Thermorheological behaviour of Thermoplastic Elastomers Based on Ethylene Propylene Diene Rubber, GRT and Ethylene-co-acrylic acid. Polymers and Polymer Composites, 2002, 10, 427-432.	1.0	2
331	Rheological behavior of gelâ€filled raw natural rubber and styreneâ€butadiene rubber with reference to gelâ€matrix intermixing. Polymer Engineering and Science, 2009, 49, 1050-1062.	1.5	2
332	Studies of reinforcement behavior of unique elastomerâ€based nanocomposite gels. Polymer Composites, 2011, 32, 103-113.	2.3	2
333	Synthesis and characterization of fibrous nanosilica/polydimethylsiloxane composites. Journal of Applied Polymer Science, 2013, 130, 1005-1019.	1.3	2
334	Synthesis, optical, and electrical properties of RNA-mediated Ag/PVA nanobiocomposites. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	2
335	The unique microsphere of ruthenium manganate: Synthesis, structure elucidation, morphology analyses and magnetic property. Materials Chemistry and Physics, 2020, 246, 122845.	2.0	2
336	WASTE MORINGA OLEIFERA GUM AS A MULTIFUNCTIONAL ADDITIVE FOR UNFILLED SBR COMPOUND. Rubber Chemistry and Technology, 2021, , .	0.6	2
337	Influence of functionalization of multi-walled carbon nanotubes on the properties of ethylene vinyl acetate nanocomposites. Journal of Nanoscience and Nanotechnology, 2008, 8, 1913-21.	0.9	2
338	Mill processability of brominated isobutylene-co-paramethyl styrene and its blends with ethylene propylene diene terpolymer (EPDM) in the continuous milling operation. Journal of Applied Polymer Science, 2002, 85, 1484-1495.	1.3	1
339	Sustainable bionanocomposite from <scp>d</scp>,<scp>l</scp>â€lactide/Îˆâ€valerolactone triblock and bionanowhiskers: Preparation, characterization, and properties. Journal of Applied Polymer Science, 2018, 135, 46035.	1.3	1
340	Structural characterization of electronâ€beam crosslinked thermoplastic elastomeric films from blends of polyethylene and ethyleneâ€vinyl acetate copolymers. Journal of Applied Polymer Science, 2001, 81, 1936-1950.	1.3	1
341	PENETRATION RESISTANCE OF RUBBER VULCANIZATES. Rubber Chemistry and Technology, 2020, 93, 704-728.	0.6	1
342	Special Issue â€œGreen Synthesis Processes of Polymers & Compositesâ€. Processes, 2021, 9, 628.	1.3	0