Gengsheng Weng

List of Publications by Year
in descending order

50 papers	1,462 citations	361045 20 h-index	329751 37 g-index
50 all docs	50 docs citations	50 times ranked	1401 citing authors

#	Article	IF	Citations
1	A highly temperature- and pressure-sensitive soft sensor self-powered by a galvanic cell design. Journal of Materials Chemistry A, 2022, 10, 4408-4417.	5.2	11
2	Three-Dimensional Shape Transformation of Eu³⁺-Containing Polymer Films through Modulating Dynamic Eu³⁺-Iminodiacetate Coordination. Chemistry of Materials, 2022, 34, 2176-2186.	3.2	10
3	Dynamic coordination of metalâ€“alanine to control the multi-stimuli responsiveness of self-powered polymer hydrogels. Journal of Materials Chemistry A, 2021, 9, 16594-16604.	5.2	13
4	Iron (III) cross-linked thermoplastic nitrile butadiene elastomer with temperature-adaptable self-healing property. Journal of Polymer Research, 2021, 28, 1.	1.2	8
5	Metals in polymers: hybridization enables new functions. Journal of Materials Chemistry C, 2020, 8, 15956-15980.	2.7	32
6	Using facile one-pot thiol-ene reaction to prepare elastomers filled with silica. Journal of Polymer Research, 2020, 27, 1.	1.2	0
7	Fluorochromic polymer films containing ultrasmall silver nanoclusters. Nanotechnology, 2020, 31, 245703.	1.3	3
8	Adaptable Eu-containing polymeric films with dynamic control of mechanical properties in response to moisture. Soft Matter, 2020, 16, 2276-2284.	1.2	22
9	Fluorochromic polymeric elastomer film containing copper nanoclusters in response to multistimuli. Nanotechnology, 2020, 31, 475711.	1.3	1
10	An Adaptable Tough Elastomer with Moistureâ€Triggered Switchable Mechanical and Fluorescent Properties. Advanced Functional Materials, 2019, 29, 1903543.	7.8	70
11	Crack resistance improvement of rubber blend by a filler network of graphene. Journal of Applied Polymer Science, 2019, 136, 47278.	1.3	9
12	Dynamic Coordination of Euâ€“Iminodiacetate to Control Fluorochromic Response of Polymer Hydrogels to Multistimuli. Advanced Materials, 2018, 30, 1706526.	11.1	183
13	Nanocavitation in silica filled styreneâ€butadiene rubber regulated by varying silicaâ€rubber interfacial bonding. Polymers for Advanced Technologies, 2018, 29, 1779-1787.	1.6	12
14	Fluorochromic Hydrogels: Dynamic Coordination of Euâ€“Iminodiacetate to Control Fluorochromic Response of Polymer Hydrogels to Multistimuli (Adv. Mater. 11/2018). Advanced Materials, 2018, 30, 1870073.	11.1	4
15	Effect of interface on bulk polymer: control of glass transition temperature of rubber. Journal of Polymer Research, 2018, 25, 1.	1.2	15
16	Synthesis of high crystalline syndiotactic 1,2-polybutadienes and study on their reinforcing effect on cis-1,4 polybutadiene. Polymer, 2017, 111, 20-26.	1.8	26
17	Cross-linking of COOH-containing polymers using Ag(<scp>i</scp>)-catalyzed oxidative decarboxylation in aqueous solution. Soft Matter, 2017, 13, 5028-5037.	1.2	12
18	Crack growth behavior of natural rubber influenced by functionalized carbon nanotubes. Journal of Applied Polymer Science, 2017, 134, .	1.3	7

#	Article	IF	Citations
19	Crack growth of natural rubber filled with functionalized silica particles. Journal of Applied Polymer Science, 2016, 133, .	1.3	7
20	Tensile and impact properties of microcellular isotactic polypropylene (PP) foams obtained by supercritical carbon dioxide. Journal of Supercritical Fluids, 2016, 111, 63-73.	1.6	109
21	Crack growth mechanism of styrene-butadiene rubber filled with silica nanoparticles studied by small angle X-ray scattering. RSC Advances, 2016, 6, 8406-8415.	1.7	17
22	Influences of preâ€ordered melt structures on the crystallization behavior and polymorphic composition of Î²â€nucleated isotactic polypropylene with different stereoâ€defect distribution. Journal of Applied Polymer Science, 2015, 132, .	1.3	5
23	Effect of silane coupling agent on the fatigue crack propagation of silicaâ€filled natural rubber. Journal of Applied Polymer Science, 2015, 132, .	1.3	10
24	Synthesis of mixed-ligand cobalt complexes and their applications in high cis-1,4-selective butadiene polymerization. Inorganica Chimica Acta, 2015, 436, 132-138.	1.2	24
25	Understanding the effects of nucleating agent concentration on the polymorphic behavior of Î²-nucleated isotactic polypropylene with different melt structures. Colloid and Polymer Science, 2015, 293, 2061-2073.	1.0	14
26	Toughening rubbers with a hybrid filler network of graphene and carbon nanotubes. Journal of Materials Chemistry A, 2015, 3, 22385-22392.	5.2	106
27	Crystallization and melting behaviors of the Î²-nucleated isotactic polypropylene with different melt structures â€“ The role of molecular weight. Thermochimica Acta, 2015, 599, 42-51.	1.2	23
28	Tensile and impact behavior of polystyrene microcellular foams with bi-modal cell morphology. Journal of Cellular Plastics, 2014, 50, 381-393.	1.2	33
29	Reduced graphene oxide enhances the crystallization and orientation of poly(Îµ-caprolactone). Composites Science and Technology, 2014, 96, 63-70.	3.8	42
30	Homogenization of natural rubber network induced by nanoclay. Journal of Applied Polymer Science, 2014, 131, .	1.3	6
31	Crack growth mechanism of natural rubber under fatigue loading studied by a real-time crack tip morphology monitoring method. RSC Advances, 2014, 4, 43942-43950.	1.7	27
32	New understanding in the influence of melt structure and Î²-nucleating agents on the polymorphic behavior of isotactic polypropylene. RSC Advances, 2014, 4, 29514-29526.	1.7	63
33	Synthesis of a New Nanosilica-Based Antioxidant and Its Influence on the Anti-Oxidation Performance of Natural Rubber. Journal of Macromolecular Science - Physics, 2013, 52, 84-94.	0.4	18
34	Strainâ€induced crystallization of natural rubber with high strain rates. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1630-1637.	2.4	16
35	Improved resistance to crack growth of natural rubber by the inclusion of nanoclay. Polymers for Advanced Technologies, 2012, 23, 85-91.	1.6	26
36	Study on the selfâ€crosslinking behavior based on polychloroprene rubber and epoxidized natural rubber. Journal of Applied Polymer Science, 2012, 125, 1084-1090.	1.3	15

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37	Crack initiation of natural rubber under high temperature fatigue loading. Journal of Applied Polymer Science, 2012, 124, 4274-4280.	1.3	3
38	Dynamic Fatigue Behavior of Natural Rubber Reinforced with Nanoclay and Carbon Black. Journal of Macromolecular Science - Physics, 2011, 50, 1646-1657.	0.4	3
39	Crack initiation and evolution in vulcanized natural rubber under high temperature fatigue. Polymer Degradation and Stability, 2011, 96, 2221-2228.	2.7	31
40	Structural evolution during uniaxial deformation of natural rubber reinforced with nanoâ€alumina. Polymers for Advanced Technologies, 2011, 22, 2001-2008.	1.6	10
41	Strainâ€induced crystallization behavior of natural rubber and transâ€1,4â€polyisoprene crosslinked blends. Journal of Applied Polymer Science, 2011, 120, 1346-1354.	1.3	13
42	Strainâ€induced crystallization behavior of polychloroprene rubber. Journal of Applied Polymer Science, 2011, 121, 37-42.	1.3	15
43	New insights into thermodynamic description of strain-induced crystallization of peroxide cross-linked natural rubber filled with clay by tube model. Polymer, 2011, 52, 3234-3242.	1.8	75
44	Improved mechanical properties and special reinforcement mechanism of natural rubber reinforced by in situ polymerization of zinc dimethacrylate. Journal of Applied Polymer Science, 2010, 116, 920-928.	1.3	7
45	Cure kinetics and morphology of natural rubber reinforced by the in situ polymerization of zinc dimethacrylate. Journal of Applied Polymer Science, 2010, 115, 99-106.	1.3	115
46	Relationship between the material properties and fatigue crackâ€growth characteristics of natural rubber filled with different carbon blacks. Journal of Applied Polymer Science, 2010, 117, 3441-3447.	1.3	11
47	Natural rubber with low heat generation achieved by the inclusion of boron carbide. Journal of Applied Polymer Science, 2010, 118, 2050-2055.	1.3	7
48	Synergistic reinforcement of nanoclay and carbon black in natural rubber. Polymer International, 2010, 59, 1397-1402.	1.6	60
49	Large-Scale Orientation in a Vulcanized Stretched Natural Rubber Network: Proved by In Situ Synchrotron X-ray Diffraction Characterization. Journal of Physical Chemistry B, 2010, 114, 7179-7188.	1.2	65
50	Remarkable reinforcement of natural rubber by deformation-induced crystallization in the presence of organophilic montmorillonite. Acta Materialia, 2009, 57, 5053-5060.	3.8	48