Jae Whan Cho

List of Publications by Year
in descending order

93 papers	4,765 citations	101384 36 h-index	98622 67 g-index
93 all docs	93 docs citations	93 times ranked	5118 citing authors

#	Article	IF	Citations
1	Electroactive Shape-Memory Polyurethane Composites Incorporating Carbon Nanotubes. Macromolecular Rapid Communications, 2005, 26, 412-416.	2.0	547
2	Functionalization of carbon nanomaterials for advanced polymer nanocomposites: A comparison study between CNT and graphene. Progress in Polymer Science, 2017, 67, 1-47.	11.8	491
3	Functionalized graphene nanoplatelets for enhanced mechanical and thermal properties of polyurethane nanocomposites. Applied Surface Science, 2013, 266, 360-367.	3.1	275
4	Influence of carbon nanotubes and polypyrrole on the thermal, mechanical and electroactive shape-memory properties of polyurethane nanocomposites. Composites Science and Technology, 2007, 67, 1920-1929.	3.8	199
5	Effect of Functionalized Carbon Nanotubes on Molecular Interaction and Properties of Polyurethane Composites. Macromolecular Chemistry and Physics, 2006, 207, 1773-1780.	1.1	165
6	Polymeric Nanocomposites of Polyurethane Block Copolymers and Functionalized Multi-Walled Carbon Nanotubes as Crosslinkers. Macromolecular Rapid Communications, 2006, 27, 126-131.	2.0	133
7	Waterâ€Responsive Shape Memory Polyurethane Block Copolymer Modified with Polyhedral Oligomeric Silsesquioxane. Journal of Macromolecular Science - Physics, 2006, 45, 453-461.	0.4	121
8	Influence of silica on shape memory effect and mechanical properties of polyurethaneâ€“silica hybrids. European Polymer Journal, 2004, 40, 1343-1348.	2.6	113
9	Electroactive Shape Memory Effect of Polyurethane Composites Filled with Carbon Nanotubes and Conducting Polymer. Materials and Manufacturing Processes, 2007, 22, 419-423.	2.7	104
10	Electrospun nonwovens of shape-memory polyurethane block copolymers. Journal of Applied Polymer Science, 2005, 96, 460-465.	1.3	103
11	Conducting Shape Memory Polyurethane-Polypyrrole Composites for an Electroactive Actuator. Macromolecular Materials and Engineering, 2005, 290, 1049-1055.	1.7	103
12	Polyurethaneâ€Carbon Nanotube Nanocomposites Prepared by Inâ€Situ Polymerization with Electroactive Shape Memory. Journal of Macromolecular Science - Physics, 2006, 45, 441-451.	0.4	101
13	Optically Active Multi-Walled Carbon Nanotubes for Transparent, Conductive Memory-Shape Polyurethane Film. Macromolecules, 2010, 43, 6106-6112.	2.2	81
14	Application of shape memory polyurethane in orthodontic. Journal of Materials Science: Materials in Medicine, 2010, 21, 2881-2886.	1.7	80
15	Synthesis and characterization of castorâ€oilâ€modified hyperbranched polyurethanes. Journal of Applied Polymer Science, 2009, 112, 736-743.	1.3	75
16	The synergistic effect of the combined thin multi-walled carbon nanotubes and reduced graphene oxides on photothermally actuated shape memory polyurethane composites. Journal of Colloid and Interface Science, 2014, 432, 128-134.	5.0	75
17	High-Speed Actuation and Mechanical Properties of Graphene-Incorporated Shape Memory Polyurethane Nanofibers. Journal of Physical Chemistry C, 2014, 118, 10408-10415.	1.5	74
18	Water vapor permeability and mechanical properties of fabrics coated with shape-memory polyurethane. Journal of Applied Polymer Science, 2004, 92, 2812-2816.	1.3	72

#	Article	IF	Citations
19	Use of acetylated softwood kraft lignin as filler in synthetic polymers. Fibers and Polymers, 2012, 13, 1310-1318.	1.1	65
20	Improved mechanical properties of shape-memory polyurethane block copolymers through the control of the soft-segment arrangement. Journal of Applied Polymer Science, 2004, 93, 2410-2415.	1.3	63
21	Synthesis of mechanically robust antimicrobial nanocomposites by click coupling of hyperbranched polyurethane and carbon nanotubes. Polymer, 2012, 53, 2023-2031.	1.8	63
22	Graphene-crosslinked polyurethane block copolymer nanocomposites with enhanced mechanical, electrical, and shape memory properties. RSC Advances, 2013, 3, 13796.	1.7	63
23	Cycloaddition Reactions: A Controlled Approach for Carbon Nanotube Functionalization. Chemistry - A European Journal, 2011, 17, 11092-11101.	1.7	62
24	Synthesis of multi-walled carbon nanotube/polyhedral oligomeric silsesquioxane nanohybrid by utilizing click chemistry. Nanoscale Research Letters, 2011, 6, 122.	3.1	59
25	Click coupled graphene for fabrication of highâ€performance polymer nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 39-47.	2.4	59
26	Highly stretchable, transparent and scalable elastomers with tunable dielectric permittivity. Journal of Materials Chemistry, 2011, 21, 7686.	6.7	55
27	Enhanced dynamic mechanical and shape-memory properties of a poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 T Polymer Science, 2002, 83, 27-37.	1.3	50
28	Functionalization of carbon nanotubes via Cu(i)-catalyzed Huisgen [3 + 2] cycloaddition â€œclick chemistryâ€• Nanoscale, 2010, 2, 2550.	2.8	50
29	Tailored and strong electro-responsive shape memory actuation in carbon nanotube-reinforced hyperbranched polyurethane composites. Sensors and Actuators B: Chemical, 2014, 193, 384-390.	4.0	50
30	Polyurethaneâ€“silver fibers prepared by infiltration and reduction of silver nitrate. Materials Letters, 2006, 60, 2653-2656.	1.3	47
31	Mechanically Robust, Electrically Conductive Biocomposite Films Using Antimicrobial Chitosanâ€Functionalized Graphenes. Particle and Particle Systems Characterization, 2013, 30, 721-727.	1.2	46
32	Synthesis of a hybrid assembly composed of titanium dioxide nanoparticles and thin multi-walled carbon nanotubes using â€œclick chemistryâ€• Journal of Colloid and Interface Science, 2011, 358, 471-476.	5.0	43
33	Effect of interaction between poly(ethylene terephthalate) and carbon nanotubes on the morphology and properties of their nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 900-910.	2.4	41
34	Non-isothermal crystallization of poly(Îµ-caprolactone)-grafted multi-walled carbon nanotubes. Composites Part A: Applied Science and Manufacturing, 2010, 41, 1524-1530.	3.8	41
35	Thermal stability and molecular interaction of polyurethane nanocomposites prepared by in situ polymerization with functionalized multiwalled carbon nanotubes. Journal of Applied Polymer Science, 2008, 108, 2857-2864.	1.3	38
36	Nanostructured hyperbranched polyurethane elastomer hybrids that incorporate polyhedral oligosilsesquioxane. Reactive and Functional Polymers, 2012, 72, 227-232.	2.0	37

#	Article	IF	Citations
37	Dispersion and magnetic field-induced alignment of functionalized carbon nanotubes in liquid crystals. Synthetic Metals, 2013, 181, 10-17.	2.1	36
38	Title is missing!. Journal of Materials Science, 1997, 32, 5371-5376.	1.7	34
39	Synthesis and characterization of biocompatible poly(ethylene glycol)-functionalized polyurethane using click chemistry. Polymer Bulletin, 2010, 64, 401-411.	1.7	32
40	Highly branched polyurethane: Synthesis, characterization and effects of branching on dispersion of carbon nanotubes. Composites Part B: Engineering, 2013, 45, 165-171.	5.9	31
41	Thermal stability, crystallization behavior, and phase morphology of poly(Ìµâ€caprolactone)diolâ€graftedâ€multiwalled carbon nanotubes. Journal of Applied Polymer Science, 2008, 110, 1550-1558.	1.3	30
42	The mechanical properties of polyurethane foam wound dressing hybridized with alginate hydrogel and jute fiber. Fibers and Polymers, 2013, 14, 173-181.	1.1	30
43	Interaction of photothermal graphene networks with polymer chains and laser-driven photo-actuation behavior of shape memory polyurethane/epoxy/epoxy-functionalized graphene oxide nanocomposites. Polymer, 2019, 181, 121791.	1.8	30
44	Relationship between electrical resistance and strain of carbon fibers upon loading. Journal of Applied Polymer Science, 2000, 77, 2082-2087.	1.3	24
45	Enhanced mechanical and dielectric properties of poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (fluoride)/poly 756-760.	1.1	24
46	A reactive graphene sheet in situ functionalized hyperbranched polyurethane for high performance shape memory material. RSC Advances, 2014, 4, 15146-15153.	1.7	24
47	Crystallization of poly(vinylidene fluoride)-SiO2 hybrid composites prepared by a Sol-gel process. Fibers and Polymers, 2001, 2, 135-140.	1.1	23
48	Shape memory effect of poly(ethylene terephthalate) and poly(ethylene glycol) copolymer cross-linked with glycerol and sulfoisophthalate group and its application to impact-absorbing composite material. Journal of Applied Polymer Science, 2004, 94, 308-316.	1.3	23
49	Functionalization of multiâ€walled carbon nanotubes with poly(Ìµâ€caprolactone) using click chemistry. Journal of Applied Polymer Science, 2011, 119, 31-37.	1.3	23
50	Soluble conducting polymer-functionalized graphene oxide for air-operable actuator fabrication. Journal of Materials Chemistry A, 2014, 2, 4788-4794.	5.2	23
51	Electromechanical behavior of hybrid carbon/glass fiber composites with tension and bending. Journal of Applied Polymer Science, 2002, 83, 2447-2453.	1.3	21
52	Shape memory effects of polyurethane block copolymers cross-linked by celite. Fibers and Polymers, 2008, 9, 661-666.	1.1	21
53	Assembly of Gold Nanoparticles on Single-Walled Carbon Nanotubes by Using Click Chemistry. Journal of Nanoscience and Nanotechnology, 2009, 9, 3261-3263.	0.9	20
54	Crystallization, orientation, and mechanical properties of laser-heated photothermally drawn polypropylene/multi-walled carbon nanotube fibers. European Polymer Journal, 2017, 91, 70-80.	2.6	20

#	Article	IF	Citations
55	Effects of mechanical strain on the electric conductivity of multiwalled carbon nanotube (MWCNT)/polyurethane (PU) composites. Fibers and Polymers, 2009, 10, 71-76.	1.1	19
56	Click coupled stitched graphene sheets and their polymer nanocomposites with enhanced photothermal and mechanical properties. Composites Part A: Applied Science and Manufacturing, 2016, 87, 78-85.	3.8	19
57	Dehydrofluorination of a copolymer of vinylidene fluoride and tetrafluoroethylene by phase transfer catalysis reaction. Journal of Polymer Science Part A, 1995, 33, 2109-2112.	2.5	18
58	Thermoreversible gelation of blend of poly(vinylidene fluoride) and poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (fluorid Physics, 1996, 34, 1605-1611.	2.4	18
59	Dynamic mechanical properties of sandwich-structured epoxy beam composites containing poly(ethyleneterephthalate)/poly(ethyleneglycol) copolymer with shape memory effect. Journal of Applied Polymer Science, 2003, 90, 3141-3149.	1.3	18
60	Synthesis and properties of shape memory polyurethane nanocomposites reinforced with poly(É›-caprolactone)-grafted carbon nanotubes. Fibers and Polymers, 2008, 9, 247-254.	1.1	18
61	Core-sheath polyurethane-carbon nanotube nanofibers prepared by electrospinning. Fibers and Polymers, 2011, 12, 721-726.	1.1	18
62	Synthesis of sâ€triazineâ€based hyperbranched polyurethane for novel carbonâ€nanotubeâ€dispersed nanocomposites. Journal of Applied Polymer Science, 2011, 120, 474-483.	1.3	18
63	Functionalization of graphene with self-doped conducting polypyrrole by click coupling. Journal of Colloid and Interface Science, 2015, 455, 63-70.	5.0	18
64	Nanodiamond-grafted hyperbranched polymers anchored with carbon nanotubes: Mechanical, thermal, and photothermal shape-recovery properties. Polymer, 2019, 160, 204-209.	1.8	18
65	Rapid remote actuation in shape memory hyperbranched polyurethane composites using cross-linked photothermal reduced graphene oxide networks. Sensors and Actuators B: Chemical, 2020, 321, 128468.	4.0	18
66	Recent Trends of Polymer-Protein Conjugate Application in Biocatalysis: A Review. Polymer Reviews, 2015, 55, 163-198.	5.3	17
67	Effects of Hard Segment of Polyurethane with Disulfide Bonds on Shape Memory and Self-Healing Ability. Macromolecular Research, 2020, 28, 234-240.	1.0	17
68	Aging and cold crystallization of melt-extruded poly(trimethylene terephthalate) films. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 1920-1927.	2.4	16
69	Characterization of castor oil/polycaprolactone polyurethane biocomposites reinforced with hemp fibers. Fibers and Polymers, 2009, 10, 154-160.	1.1	16
70	Tailored dielectric and mechanical properties of noncovalently functionalized carbon nanotube/poly(styreneâ€bâ€(ethyleneâ€coâ€butylene)â€bâ€styrene) nanocomposites. Journal of Applied Polymer Science, 2013, 129, 2305-2312.	1.3	16
71	Thermomechanical and waterâ€responsive shape memory properties of carbon nanotubesâ€reinforced hyperbranched polyurethane composites. Journal of Applied Polymer Science, 2013, 127, 2670-2677.	1.3	14
72	Cocrystallization and Miscibility in Blends of Vinylidene Fluoride-Tetrafluoroethylene and Vinylidene Fluoride-Hexafluoroacetone Copolymers. Polymer Journal, 1993, 25, 1267-1274.	1.3	13

#	Article	IF	Citations
73	Mechanical properties of nylon 6 fibers gel-spun from benzyl alcohol solution. Journal of Applied Polymer Science, 1996, 62, 771-778.	1.3	13
74	Vibration control ability of multilayered composite material made of epoxy beam and polyurethane copolymer with shape memory effect. Journal of Applied Polymer Science, 2004, 94, 302-307.	1.3	13
75	Synthesis and electrochemical properties of conducting polyaniline/graphene hybrids by click chemistry. RSC Advances, 2014, 4, 23936-23942.	1.7	13
76	Functionalized multi-walled carbon nanotubes with hyperbranched aromatic polyamide for poly(methyl methacrylate) composites. Fibers and Polymers, 2013, 14, 182-187.	1.1	12
77	Surface morphology and electrical properties of polyurethane nanofiber webs sprayâ€coated with carbon nanotubes. Surface and Interface Analysis, 2012, 44, 405-411.	0.8	11
78	Conducting coreâ€sheath nanofibers for electroactive shapeâ€memory applications. Polymers for Advanced Technologies, 2013, 24, 609-614.	1.6	10
79	Mechanical and photothermal shape memory properties of in-situ polymerized hyperbranched polyurethane composites with functionalized graphene. Fibers and Polymers, 2015, 16, 1766-1771.	1.1	10
80	Characterization and mechanical properties of prepolymer and polyurethane block copolymer with a shape memory effect. Fibers and Polymers, 2003, 4, 114-118.	1.1	9
81	Polyurethane nanocomposites with clickâ€coupled nanodiamonds exhibiting enhanced mechanical and shape memory effects. Journal of Applied Polymer Science, 2017, 134, 45465.	1.3	8
82	Siliconeâ€based cholesteric liquid crystalline polymers: Effect of crosslinking agent on phase transition behavior. Journal of Applied Polymer Science, 2009, 114, 3566-3573.	1.3	6
83	An environmentally friendly approach to functionalizing carbon nanotubes for fabricating a strong biocomposite Film. RSC Advances, 2014, 4, 5382.	1.7	6
84	Near infrared laser-heated electrospinning and mechanical properties of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (ter	1.7	6
85	Acid-sensitivity and physical properties of polymethylmethacrylate and polyurethane films containing polymeric styryl dye. Fibers and Polymers, 2004, 5, 239-244.	1.1	5
86	Orientation and mechanical properties of laser-induced photothermally drawn fibers composed of multiwalled carbon nanotubes and poly(ethylene terephthalate). Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 603-609.	2.4	5
87	Synthesis and properties of click coupled graphene oxide sheets with threeâ€dimensional macromolecules. Journal of Applied Polymer Science, 2016, 133, .	1.3	5
88	Synthesis and characterization of polyurethane-based side-chain cholesteric liquid crystal polymers. Fibers and Polymers, 2009, 10, 569-575.	1.1	4
89	Synthesis of clickâ€coupled graphene sheets with hyperbranched polyurethane: Effective exfoliation and enhancement of nanocomposite properties. Journal of Applied Polymer Science, 2017, 134, .	1.3	3
90	Crystallization and molecular relaxation of poly(ethylene terephthalate) annealed in supercritical carbon dioxide. Fibers and Polymers, 2005, 6, 284-288.	1.1	2

#	Article	IF	Citations
91	Synthesis of calix[4]arene-segmented polyurethane and its nanocomposites with single-walled carbon nanotubes. Polymer Bulletin, 2013, 70, 1697-1707.	1.7	2
92	Size-controlled nanoparticles of poly(acrylonitrile-co-methyl methacrylate) for moisture-absorbing heat release applications. Fibers and Polymers, 2011, 12, 989-996.	1.1	0
93	Biocomposites: Mechanically Robust, Electrically Conductive Biocomposite Films Using Antimicrobial Chitosan-Functionalized Graphenes (Part. Part. Syst. Charact. 8/2013). Particle and Particle Systems Characterization, 2013, 30, 648-648.	1.2	0