

Jae Whan Cho

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2772163/publications.pdf>

Version: 2024-02-01

93
papers

4,765
citations

101543

36
h-index

98798

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. <i>Macromolecular Rapid Communications</i> , 2005, 26, 412-416.	3.9	547
2	Functionalization of carbon nanomaterials for advanced polymer nanocomposites: A comparison study between CNT and graphene. <i>Progress in Polymer Science</i> , 2017, 67, 1-47.	24.7	491
3	Functionalized graphene nanoplatelets for enhanced mechanical and thermal properties of polyurethane nanocomposites. <i>Applied Surface Science</i> , 2013, 266, 360-367.	6.1	275
4	Influence of carbon nanotubes and polypyrrole on the thermal, mechanical and electroactive shape-memory properties of polyurethane nanocomposites. <i>Composites Science and Technology</i> , 2007, 67, 1920-1929.	7.8	199
5	Effect of Functionalized Carbon Nanotubes on Molecular Interaction and Properties of Polyurethane Composites. <i>Macromolecular Chemistry and Physics</i> , 2006, 207, 1773-1780.	2.2	165
6	Polymeric Nanocomposites of Polyurethane Block Copolymers and Functionalized Multi-Walled Carbon Nanotubes as Crosslinkers. <i>Macromolecular Rapid Communications</i> , 2006, 27, 126-131.	3.9	133
7	Water-Responsive Shape Memory Polyurethane Block Copolymer Modified with Polyhedral Oligomeric Silsesquioxane. <i>Journal of Macromolecular Science - Physics</i> , 2006, 45, 453-461.	1.0	121
8	Influence of silica on shape memory effect and mechanical properties of polyurethane-silica hybrids. <i>European Polymer Journal</i> , 2004, 40, 1343-1348.	5.4	113
9	Electroactive Shape Memory Effect of Polyurethane Composites Filled with Carbon Nanotubes and Conducting Polymer. <i>Materials and Manufacturing Processes</i> , 2007, 22, 419-423.	4.7	104
10	Electrospun nonwovens of shape-memory polyurethane block copolymers. <i>Journal of Applied Polymer Science</i> , 2005, 96, 460-465.	2.6	103
11	Conducting Shape Memory Polyurethane-Polypyrrole Composites for an Electroactive Actuator. <i>Macromolecular Materials and Engineering</i> , 2005, 290, 1049-1055.	3.6	103
12	Polyurethane-Carbon Nanotube Nanocomposites Prepared by In-Situ Polymerization with Electroactive Shape Memory. <i>Journal of Macromolecular Science - Physics</i> , 2006, 45, 441-451.	1.0	101
13	Optically Active Multi-Walled Carbon Nanotubes for Transparent, Conductive Memory-Shape Polyurethane Film. <i>Macromolecules</i> , 2010, 43, 6106-6112.	4.8	81
14	Application of shape memory polyurethane in orthodontic. <i>Journal of Materials Science: Materials in Medicine</i> , 2010, 21, 2881-2886.	3.6	80
15	Synthesis and characterization of castor-oil-modified hyperbranched polyurethanes. <i>Journal of Applied Polymer Science</i> , 2009, 112, 736-743.	2.6	75
16	The synergistic effect of the combined thin multi-walled carbon nanotubes and reduced graphene oxides on photothermally actuated shape memory polyurethane composites. <i>Journal of Colloid and Interface Science</i> , 2014, 432, 128-134.	9.4	75
17	High-Speed Actuation and Mechanical Properties of Graphene-Incorporated Shape Memory Polyurethane Nanofibers. <i>Journal of Physical Chemistry C</i> , 2014, 118, 10408-10415.	3.1	74
18	Water vapor permeability and mechanical properties of fabrics coated with shape-memory polyurethane. <i>Journal of Applied Polymer Science</i> , 2004, 92, 2812-2816.	2.6	72

#	ARTICLE	IF	CITATIONS
19	Use of acetylated softwood kraft lignin as filler in synthetic polymers. <i>Fibers and Polymers</i> , 2012, 13, 1310-1318.	2.1	65
20	Improved mechanical properties of shape-memory polyurethane block copolymers through the control of the soft-segment arrangement. <i>Journal of Applied Polymer Science</i> , 2004, 93, 2410-2415.	2.6	63
21	Synthesis of mechanically robust antimicrobial nanocomposites by click coupling of hyperbranched polyurethane and carbon nanotubes. <i>Polymer</i> , 2012, 53, 2023-2031.	3.8	63
22	Graphene-crosslinked polyurethane block copolymer nanocomposites with enhanced mechanical, electrical, and shape memory properties. <i>RSC Advances</i> , 2013, 3, 13796.	3.6	63
23	Cycloaddition Reactions: A Controlled Approach for Carbon Nanotube Functionalization. <i>Chemistry - A European Journal</i> , 2011, 17, 11092-11101.	3.3	62
24	Synthesis of multi-walled carbon nanotube/polyhedral oligomeric silsesquioxane nanohybrid by utilizing click chemistry. <i>Nanoscale Research Letters</i> , 2011, 6, 122.	5.7	59
25	Click coupled graphene for fabrication of high-performance polymer nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 39-47.	2.1	59
26	Highly stretchable, transparent and scalable elastomers with tunable dielectric permittivity. <i>Journal of Materials Chemistry</i> , 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 <i>Polymer Science</i> , 2002, 83, 27-37.	2.6	50
28	Functionalization of carbon nanotubes via Cu(i)-catalyzed Huisgen [3 + 2] cycloaddition "click chemistry". <i>Nanoscale</i> , 2010, 2, 2550.	5.6	50
29	Tailored and strong electro-responsive shape memory actuation in carbon nanotube-reinforced hyperbranched polyurethane composites. <i>Sensors and Actuators B: Chemical</i> , 2014, 193, 384-390.	7.8	50
30	Polyurethane-silver fibers prepared by infiltration and reduction of silver nitrate. <i>Materials Letters</i> , 2006, 60, 2653-2656.	2.6	47
31	Mechanically Robust, Electrically Conductive Biocomposite Films Using Antimicrobial Chitosan-Functionalized Graphenes. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 721-727.	2.3	46
32	Synthesis of a hybrid assembly composed of titanium dioxide nanoparticles and thin multi-walled carbon nanotubes using "click chemistry". <i>Journal of Colloid and Interface Science</i> , 2011, 358, 471-476.	9.4	43
33	Effect of interaction between poly(ethylene terephthalate) and carbon nanotubes on the morphology and properties of their nanocomposites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 900-910.	2.1	41
34	Non-isothermal crystallization of poly(μ -caprolactone)-grafted multi-walled carbon nanotubes. <i>Composites Part A: Applied Science and Manufacturing</i> , 2010, 41, 1524-1530.	7.6	41
35	Thermal stability and molecular interaction of polyurethane nanocomposites prepared by <i>in situ</i> polymerization with functionalized multiwalled carbon nanotubes. <i>Journal of Applied Polymer Science</i> , 2008, 108, 2857-2864.	2.6	38
36	Nanostructured hyperbranched polyurethane elastomer hybrids that incorporate polyhedral oligosilsesquioxane. <i>Reactive and Functional Polymers</i> , 2012, 72, 227-232.	4.1	37

#	ARTICLE	IF	CITATIONS
37	Dispersion and magnetic field-induced alignment of functionalized carbon nanotubes in liquid crystals. <i>Synthetic Metals</i> , 2013, 181, 10-17.	3.9	36
38	Title is missing!. <i>Journal of Materials Science</i> , 1997, 32, 5371-5376.	3.7	34
39	Synthesis and characterization of biocompatible poly(ethylene glycol)-functionalized polyurethane using click chemistry. <i>Polymer Bulletin</i> , 2010, 64, 401-411.	3.3	32
40	Highly branched polyurethane: Synthesis, characterization and effects of branching on dispersion of carbon nanotubes. <i>Composites Part B: Engineering</i> , 2013, 45, 165-171.	12.0	31
41	Thermal stability, crystallization behavior, and phase morphology of poly(μ - ϵ -caprolactone)diol- <i>g</i> rafted multiwalled carbon nanotubes. <i>Journal of Applied Polymer Science</i> , 2008, 110, 1550-1558.	2.6	30
42	The mechanical properties of polyurethane foam wound dressing hybridized with alginate hydrogel and jute fiber. <i>Fibers and Polymers</i> , 2013, 14, 173-181.	2.1	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. <i>Polymer</i> , 2019, 181, 121791.	3.8	30
44	Relationship between electrical resistance and strain of carbon fibers upon loading. <i>Journal of Applied Polymer Science</i> , 2000, 77, 2082-2087.	2.6	24
45	Enhanced mechanical and dielectric properties of poly(vinylidene fluoride)/poly(ethylene glycol) hybrid composites. <i>Journal of Applied Polymer Science</i> , 2007, 104, 756-760.	2.1	24
46	A reactive graphene sheet in situ functionalized hyperbranched polyurethane for high performance shape memory material. <i>RSC Advances</i> , 2014, 4, 15146-15153.	3.6	24
47	Crystallization of poly(vinylidene fluoride)-SiO ₂ hybrid composites prepared by a Sol-gel process. <i>Fibers and Polymers</i> , 2001, 2, 135-140.	2.1	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. <i>Journal of Applied Polymer Science</i> , 2004, 94, 308-316.	2.6	23
49	Functionalization of multi-walled carbon nanotubes with poly(μ - ϵ -caprolactone) using click chemistry. <i>Journal of Applied Polymer Science</i> , 2011, 119, 31-37.	2.6	23
50	Soluble conducting polymer-functionalized graphene oxide for air-operable actuator fabrication. <i>Journal of Materials Chemistry A</i> , 2014, 2, 4788-4794.	10.3	23
51	Electromechanical behavior of hybrid carbon/glass fiber composites with tension and bending. <i>Journal of Applied Polymer Science</i> , 2002, 83, 2447-2453.	2.6	21
52	Shape memory effects of polyurethane block copolymers cross-linked by celite. <i>Fibers and Polymers</i> , 2008, 9, 661-666.	2.1	21
53	Assembly of Gold Nanoparticles on Single-Walled Carbon Nanotubes by Using Click Chemistry. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3261-3263.	0.9	20
54	Crystallization, orientation, and mechanical properties of laser-heated photothermally drawn polypropylene/multi-walled carbon nanotube fibers. <i>European Polymer Journal</i> , 2017, 91, 70-80.	5.4	20

#	ARTICLE	IF	CITATIONS
55	Effects of mechanical strain on the electric conductivity of multiwalled carbon nanotube (MWCNT)/polyurethane (PU) composites. <i>Fibers and Polymers</i> , 2009, 10, 71-76.	2.1	19
56	Click coupled stitched graphene sheets and their polymer nanocomposites with enhanced photothermal and mechanical properties. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016, 87, 78-85.	7.6	19
57	Dehydrofluorination of a copolymer of vinylidene fluoride and tetrafluoroethylene by phase transfer catalysis reaction. <i>Journal of Polymer Science Part A</i> , 1995, 33, 2109-2112.	2.3	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.	2.1	18
59	Dynamic mechanical properties of sandwich-structured epoxy beam composites containing poly(ethyleneterephthalate)/poly(ethyleneglycol) copolymer with shape memory effect. <i>Journal of Applied Polymer Science</i> , 2003, 90, 3141-3149.	2.6	18
60	Synthesis and properties of shape memory polyurethane nanocomposites reinforced with poly(ϵ -caprolactone)-grafted carbon nanotubes. <i>Fibers and Polymers</i> , 2008, 9, 247-254.	2.1	18
61	Core-sheath polyurethane-carbon nanotube nanofibers prepared by electrospinning. <i>Fibers and Polymers</i> , 2011, 12, 721-726.	2.1	18
62	Synthesis of triazine-based hyperbranched polyurethane for novel carbon nanotube dispersed nanocomposites. <i>Journal of Applied Polymer Science</i> , 2011, 120, 474-483.	2.6	18
63	Functionalization of graphene with self-doped conducting polypyrrole by click coupling. <i>Journal of Colloid and Interface Science</i> , 2015, 455, 63-70.	9.4	18
64	Nanodiamond-grafted hyperbranched polymers anchored with carbon nanotubes: Mechanical, thermal, and photothermal shape-recovery properties. <i>Polymer</i> , 2019, 160, 204-209.	3.8	18
65	Rapid remote actuation in shape memory hyperbranched polyurethane composites using cross-linked photothermal reduced graphene oxide networks. <i>Sensors and Actuators B: Chemical</i> , 2020, 321, 128468.	7.8	18
66	Recent Trends of Polymer-Protein Conjugate Application in Biocatalysis: A Review. <i>Polymer Reviews</i> , 2015, 55, 163-198.	10.9	17
67	Effects of Hard Segment of Polyurethane with Disulfide Bonds on Shape Memory and Self-Healing Ability. <i>Macromolecular Research</i> , 2020, 28, 234-240.	2.4	17
68	Aging and cold crystallization of melt-extruded poly(trimethylene terephthalate) films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 1920-1927.	2.1	16
69	Characterization of castor oil/polycaprolactone polyurethane biocomposites reinforced with hemp fibers. <i>Fibers and Polymers</i> , 2009, 10, 154-160.	2.1	16
70	Tailored dielectric and mechanical properties of noncovalently functionalized carbon nanotube/poly(styrene- <i>b</i> - ϵ (ethylene-co- <i>i</i> -butylene)- <i>b</i> -styrene) nanocomposites. <i>Journal of Applied Polymer Science</i> , 2013, 129, 2305-2312.	2.6	16
71	Thermomechanical and water-responsive shape memory properties of carbon nanotubes reinforced hyperbranched polyurethane composites. <i>Journal of Applied Polymer Science</i> , 2013, 127, 2670-2677.	2.6	14
72	Cocrystallization and Miscibility in Blends of Vinylidene Fluoride-Tetrafluoroethylene and Vinylidene Fluoride-Hexafluoroacetone Copolymers. <i>Polymer Journal</i> , 1993, 25, 1267-1274.	2.7	13

#	ARTICLE	IF	CITATIONS
73	Mechanical properties of nylon 6 fibers gel-spun from benzyl alcohol solution. <i>Journal of Applied Polymer Science</i> , 1996, 62, 771-778.	2.6	13
74	Vibration control ability of multilayered composite material made of epoxy beam and polyurethane copolymer with shape memory effect. <i>Journal of Applied Polymer Science</i> , 2004, 94, 302-307.	2.6	13
75	Synthesis and electrochemical properties of conducting polyaniline/graphene hybrids by click chemistry. <i>RSC Advances</i> , 2014, 4, 23936-23942.	3.6	13
76	Functionalized multi-walled carbon nanotubes with hyperbranched aromatic polyamide for poly(methyl methacrylate) composites. <i>Fibers and Polymers</i> , 2013, 14, 182-187.	2.1	12
77	Surface morphology and electrical properties of polyurethane nanofiber webs spray-coated with carbon nanotubes. <i>Surface and Interface Analysis</i> , 2012, 44, 405-411.	1.8	11
78	Conducting core-shell nanofibers for electroactive shape-memory applications. <i>Polymers for Advanced Technologies</i> , 2013, 24, 609-614.	3.2	10
79	Mechanical and photothermal shape memory properties of in-situ polymerized hyperbranched polyurethane composites with functionalized graphene. <i>Fibers and Polymers</i> , 2015, 16, 1766-1771.	2.1	10
80	Characterization and mechanical properties of prepolymer and polyurethane block copolymer with a shape memory effect. <i>Fibers and Polymers</i> , 2003, 4, 114-118.	2.1	9
81	Polyurethane nanocomposites with click-coupled nanodiamonds exhibiting enhanced mechanical and shape memory effects. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45465.	2.6	8
82	Silicone-based cholesteric liquid crystalline polymers: Effect of crosslinking agent on phase transition behavior. <i>Journal of Applied Polymer Science</i> , 2009, 114, 3566-3573.	2.6	6
83	An environmentally friendly approach to functionalizing carbon nanotubes for fabricating a strong biocomposite Film. <i>RSC Advances</i> , 2014, 4, 5382.	3.6	6
84	Near infrared laser-heated electrospinning and mechanical properties of poly(ethylene terephthalate) fibers. <i>Journal of Applied Polymer Science</i> , 2010, 116, 302-307.	3.6	6
85	Acid-sensitivity and physical properties of polymethylmethacrylate and polyurethane films containing polymeric styryl dye. <i>Fibers and Polymers</i> , 2004, 5, 239-244.	2.1	5
86	Orientation and mechanical properties of laser-induced photothermally drawn fibers composed of multiwalled carbon nanotubes and poly(ethylene terephthalate). <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 603-609.	2.1	5
87	Synthesis and properties of click coupled graphene oxide sheets with three-dimensional macromolecules. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	2.6	5
88	Synthesis and characterization of polyurethane-based side-chain cholesteric liquid crystal polymers. <i>Fibers and Polymers</i> , 2009, 10, 569-575.	2.1	4
89	Synthesis of click-coupled graphene sheets with hyperbranched polyurethane: Effective exfoliation and enhancement of nanocomposite properties. <i>Journal of Applied Polymer Science</i> , 2017, 134, .	2.6	3
90	Crystallization and molecular relaxation of poly(ethylene terephthalate) annealed in supercritical carbon dioxide. <i>Fibers and Polymers</i> , 2005, 6, 284-288.	2.1	2

#	ARTICLE	IF	CITATIONS
91	Synthesis of calix[4]arene-segmented polyurethane and its nanocomposites with single-walled carbon nanotubes. <i>Polymer Bulletin</i> , 2013, 70, 1697-1707.	3.3	2
92	Size-controlled nanoparticles of poly(acrylonitrile-co-methyl methacrylate) for moisture-absorbing heat release applications. <i>Fibers and Polymers</i> , 2011, 12, 989-996.	2.1	0
93	Biocomposites: Mechanically Robust, Electrically Conductive Biocomposite Films Using Antimicrobial Chitosan-Functionalized Graphenes (Part. Part. Syst. Charact. 8/2013). <i>Particle and Particle Systems Characterization</i> , 2013, 30, 648-648.	2.3	0