Shimin Zhang

List of Publications by Year
in descending order

86 papers	5,087 citations	109321 35 h-index	88630 70 g-index
86 all docs	86 docs citations	86 times ranked	5052 citing authors

#	Article	IF	Citations
1	Nanoparticle layer via UV-induced directional migration of iron-doped titania nanoparticles in polyvinyl butyral films and superior UV-stability. Polymer, 2022, 254, 125107.	3.8	4
2	Magnesium hydroxide nanoparticles grafted by DOPO and its flame retardancy in ethyleneâ€vinyl acetate copolymers. Journal of Applied Polymer Science, 2021, 138, .	2.6	22
3	Double Phase Inversion of Pickering Emulsion Induced by Magnesium Hydroxide Nanosheets Adsorbed with Sodium Dodecyl Sulfate. Langmuir, 2021, 37, 4082-4090.	3.5	7
4	Effect of silicaâ€coated TiO 2 nanorods on the foamability of polypropylene and photostability of foamed polypropylene. Polymers for Advanced Technologies, 2021, 32, 3242-3252.	3.2	1
5	A green intumescent flame retardant system using an inositolâ€based carbon source: preparation and characteristics in polypropylene. Polymer International, 2021, 70, 1559-1569.	3.1	4
6	Crosslinking of Î²â€cyclodextrin and combining with ammonium polyphosphate for flameâ€retardant polypropylene. Journal of Applied Polymer Science, 2020, 137, 48320.	2.6	16
7	Preparation and characterization of cyclodextrin microencapsulated ammonium polyphosphate and its application in flame retardant polypropylene. Journal of Applied Polymer Science, 2020, 137, 49001.	2.6	20
8	Enhanced foamability of isotactic polypropylene/polypropyleneâ€graftedâ€nanosilica nanocomposites in supercritical carbon dioxide. Polymer Engineering and Science, 2020, 60, 1353-1364.	3.1	5
9	Synergistic effect of cocondensed nanosilica in intumescent flameâ€retardant polypropylene. Polymers for Advanced Technologies, 2019, 30, 1116-1125.	3.2	14
10	Antioxidant functionalized silica-coated TiO2 nanorods to enhance the thermal and photo stability of polypropylene. Applied Surface Science, 2019, 476, 682-690.	6.1	32
11	Conductive TiO2 nanorods via surface coating by antimony doped tin dioxide. Materials Chemistry and Physics, 2019, 225, 181-186.	4.0	13
12	Polymer dots grafted TiO2 nanohybrids as high performance visible light photocatalysts. Chemosphere, 2018, 197, 526-534.	8.2	23
13	Morphology control of rutile TiO₂ with tunable bandgap by preformed <i>Î²</i>-FeOOH nanoparticles. Nanotechnology, 2018, 29, 125602.	2.6	8
14	Synthesis of nanoparticleâ€immobilized antioxidants and their antioxidative performances in polymer matrices: a review. Polymer International, 2018, 67, 356-373.	3.1	14
15	Non-contact percolation of unstable graphene networks in poly(styrene-co-acrylonitrile) nanocomposites: Electrical and rheological properties. Composites Science and Technology, 2018, 155, 41-49.	7.8	24
16	Efficient grafting of polypropylene onto silica nanoparticles and the properties of PP/PP-g-SiO2 nanocomposites. Polymer, 2018, 151, 242-249.	3.8	34
17	Expandable graphite encapsulated by magnesium hydroxide nanosheets as an intumescent flame retardant for rigid polyurethane foams. Journal of Applied Polymer Science, 2018, 135, 46749.	2.6	24
18	Anti-aging behavior of amino-containing co-condensed nanosilica in polyethylene. Polymer Degradation and Stability, 2018, 154, 137-148.	5.8	13

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19	Photo- and thermo-oxidative aging of polypropylene filled with surface modified fumed nanosilica. Composites Communications, 2017, 3, 51-58.	6.3	25
20	Synthesis of a heatâ€resistant <scp>DOPO</scp> derivative and its application as flameâ€retardant in engineering plastics. Journal of Applied Polymer Science, 2017, 134, .	2.6	17
21	Thermal-oxidative effect of a co-condensed nanosilica-based antioxidant in polypropylene. Polymer, 2017, 112, 369-376.	3.8	31
22	The yield stress of model waxy oil after incorporation of organic montmorillonite. Fuel, 2017, 203, 570-578.	6.4	14
23	Facile fabrication of hybrid PA6-decorated TiO2 fabrics with excellent photocatalytic, anti-bacterial, UV light-shielding, and super hydrophobic properties. RSC Advances, 2017, 7, 52375-52381.	3.6	20
24	Core-shell expandable graphite @ aluminum hydroxide as a flame-retardant for rigid polyurethane foams. Polymer Degradation and Stability, 2017, 146, 267-276.	5.8	80
25	Preparation of nanosilica-immobilized antioxidant and the antioxidative behavior in low density polyethylene. Polymer Degradation and Stability, 2017, 135, 1-7.	5.8	33
26	Isothermal crystallization of polypropylene/surface modified silica nanocomposites. Science China Chemistry, 2016, 59, 1283-1290.	8.2	15
27	Influence of the nano-hybrid pour point depressant on flow properties of waxy crude oil. Fuel, 2016, 167, 40-48.	6.4	100
28	Nanosilicaâ€immobilized <scp>UV</scp> absorber: synthesis and photostability of polyolefins. Polymer International, 2015, 64, 1053-1059.	3.1	18
29	Conductive composites with segregated structure and ultralow percolation threshold via flocculation-assembled PVDF/graphene coreâ€"shell particles. Materials Letters, 2015, 158, 428-431.	2.6	11
30	Low temperature synthesis and mechanism of finely dispersed nanorod rutile titanium dioxide. RSC Advances, 2015, 5, 62160-62166.	3.6	12
31	Transparent epoxyâ€"ZnO/CdS nanocomposites with tunable UV and blue light-shielding capabilities. Journal of Materials Chemistry C, 2015, 3, 5065-5072.	5.5	50
32	Photostabilization of polypropylene by surface modified rutileâ€type TiO₂ nanorods. Journal of Applied Polymer Science, 2014, 131, .	2.6	20
33	Conjugation-Grafted-TiO₂ Nanohybrid for High Photocatalytic Efficiency under Visible Light. ACS Applied Materials & Interfaces, 2014, 6, 2370-2376.	8.0	60
34	Graphene Networks with Low Percolation Threshold in ABS Nanocomposites: Selective Localization and Electrical and Rheological Properties. ACS Applied Materials & Interfaces, 2014, 6, 12252-12260.	8.0	128
35	Preparation, characterization and properties of a halogenâ€free phosphorous flameâ€retarded poly(butylene terephthalate) composite based on a DOPO derivative. Journal of Applied Polymer Science, 2013, 130, 1301-1307.	2.6	28
36	Synergistic effect of DOPO immobilized silica nanoparticles in the intumescent flame retarded polypropylene composites. Polymers for Advanced Technologies, 2013, 24, 732-739.	3.2	52

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37	Immobilization of TiO2 nanoparticles in polymeric substrates by chemical bonding for multi-cycle photodegradation of organic pollutants. Journal of Hazardous Materials, 2012, 227-228, 185-194.	12.4	140
38	Improvement of thermal stability of polypropylene using DOPO-immobilized silica nanoparticles. Colloid and Polymer Science, 2012, 290, 1371-1380.	2.1	49
39	A polycarbonate/magnesium oxide nanocomposite with high flame retardancy. Journal of Applied Polymer Science, 2012, 123, 1085-1093.	2.6	45
40	Highly Exfoliated Poly(Ethylene Terephthalate)/Clay Nanocomposites via Melt Compounding: Effects of Silane Grafting. Polymer-Plastics Technology and Engineering, 2011, 50, 362-371.	1.9	23
41	The effect of nanohybrid materials on the pour-point and viscosity depressing of waxy crude oil. Science Bulletin, 2011, 56, 14-17.	1.7	58
42	<i>In situ</i> synthesis of ZnO nanocrystal/PET hybrid nanofibers via electrospinning. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1360-1368.	2.1	20
43	The Effect of Encapsulation of Nano Zinc Oxide with Silica on the UV Resistance of Polypropylene. Polymer-Plastics Technology and Engineering, 2011, 50, 1375-1382.	1.9	27
44	Effects of silane grafting on the morphology and thermal stability of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (tereph	4.6	14
45	In-situ growth of titania nanoparticles in electrospun polymer nanofibers at low temperature. Materials Letters, 2009, 63, 1401-1403.	2.6	26
46	Degradation of poly(ethylene terephthalate)/clay nanocomposites during melt extrusion: Effect of clay catalysis and chain extension. Polymer Degradation and Stability, 2009, 94, 113-123.	5.8	128
47	Preparation of photodegradable polypropylene/clay composites based on nanoscaled TiO₂ immobilized organoclay. Polymer Composites, 2009, 30, 543-549.	4.6	25
48	Effect of the grafted silane on the dispersion and orientation of clay in polyethylene nanocomposites. Polymer Composites, 2009, 30, 1234-1242.	4.6	24
49	Solâ€“gel immobilization of SiO2/TiO2 on hydrophobic clay and its removal of methyl orange from water. Journal of Sol-Gel Science and Technology, 2008, 46, 195-200.	2.4	36
50	The thermal conductivity of Nylon 6/clay nanocomposites. Journal of Applied Polymer Science, 2008, 108, 3822-3827.	2.6	29
51	Crystallization behavior of poly(ethylene terephthalate)/multiwalled carbon nanotubes composites. Journal of Applied Polymer Science, 2008, 108, 4080-4089.	2.6	31
52	Antioxidant behaviour of a nanosilica-immobilized antioxidant in polypropylene. Polymer Degradation and Stability, 2008, 93, 1467-1471.	5.8	69
53	Preparation and characterization of montmorilloniteâ€“silica nanocomposites: A solâ€“gel approach to modifying clay surfaces. Physica B: Condensed Matter, 2008, 403, 3231-3238.	2.7	45
54	Effect of Clay Modification on Photooxidation of Polyethylene/Clay Nanocomposites. Polymers and Polymer Composites, 2008, 16, 535-546.	1.9	2

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55	Modeling the thermal conductivity of exfoliated polymer/clay nanocomposites. Journal of Applied Physics, 2007, 102, 084312.	2.5	5
56	Fiber breakage and dispersion in carbonâ€fiberâ€reinforced nylon 6/clay nanocomposites. Journal of Applied Polymer Science, 2007, 106, 1751-1756.	2.6	13
57	Preparation, structure and thermomechanical properties of nylon-6 nanocomposites with lamella-type and fiber-type sepiolite. Composites Science and Technology, 2007, 67, 2334-2341.	7.8	91
58	Immobilization of antioxidant on nanosilica and the antioxidative behavior in low density polyethylene. Polymer, 2007, 48, 7309-7315.	3.8	94
59	Melt blending of polypropylene-blend- polyamide 6-blend-organoclay systems. Polymer International, 2007, 56, 50-56.	3.1	28
60	Anatase TiO2 nanoparticles/carbon nanotubes nanofibers: preparation, characterization and photocatalytic properties. Journal of Materials Science, 2007, 42, 7162-7170.	3.7	96
61	Photo-oxidation of Polyolefin/Clay Composites. Studies in Surface Science and Catalysis, 2006, , 233-236.	1.5	3
62	Low percolation thresholds of electrical conductivity and rheology in poly(ethylene terephthalate) through the networks of multi-walled carbon nanotubes. Polymer, 2006, 47, 480-488.	3.8	434
63	Porous polyphenylene sulfide membrane with high durability against solvents by the thermally induced phase-separation method. Journal of Applied Polymer Science, 2006, 102, 2959-2966.	2.6	29
64	Mechanical, thermal and flammability properties of polyethylene/clay nanocomposites. Polymer Degradation and Stability, 2005, 87, 183-189.	5.8	320
65	Effects of processing history and annealing on polymorphic structure of nylon-6/montmorillonite nanocomposites. Polymer, 2005, 46, 5417-5427.	3.8	68
66	Synthesis and characterization of multi-walled carbon nanotubes reinforced polyamide 6 via in situ polymerization. Polymer, 2005, 46, 5125-5132.	3.8	209
67	Flame retardant mechanism of polymer/clay nanocomposites based on polypropylene. Polymer, 2005, 46, 8386-8395.	3.8	230
68	Photo-oxidative degradation of polypropylene/montmorillonite nanocomposites. Polymer, 2005, 46, 3149-3156.	3.8	130
69	Zero-order kinetics of the thermal degradation of polypropylene/clay nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3713-3719.	2.1	33
70	Influence of annealing treatment on the heat distortion temperature of nylon-6/montmorillonite nanocomposites. Polymer Engineering and Science, 2005, 45, 1247-1253.	3.1	41
71	Tensile fracture morphologies of nylon-6/montmorillonite nanocomposites. Polymer International, 2005, 54, 1673-1680.	3.1	28
72	The influence of interlayer cations on the photo-oxidative degradation of polyethylene/montmorillonite composites. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3006-3012.	2.1	109

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73	The ?-crystalline form of isotactic polypropylene in blends of isotactic polypropylene and polyamide-6/clay nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3428-3438.	2.1	34
74	Effect of clay on the morphology of blends of poly(propylene) and polyamide 6/clay nanocomposites. Polymer International, 2004, 53, 1529-1537.	3.1	58
75	Polypropylene/montmorillonite composites and their application in hybrid fiber preparation by melt-spinning. Journal of Applied Polymer Science, 2004, 92, 552-558.	2.6	52
76	Synthesis and characterization of poly(propylene)/montmorillonite nanocomposites by simultaneous grafting-intercalation. Journal of Applied Polymer Science, 2004, 94, 1018-1023.	2.6	19
77	Thermal stability and flammability of polypropylene/montmorillonite composites. Polymer Degradation and Stability, 2004, 85, 807-813.	5.8	223
78	Functionalized carbon nanotubes containing isocyanate groups. Journal of Solid State Chemistry, 2004, 177, 4394-4398.	2.9	117
79	Thermal stability and flammability of polyamide 66/montmorillonite nanocomposites. Polymer, 2003, 44, 7533-7538.	3.8	197
80	Photo-oxidative degradation of polyethylene/montmorillonite nanocomposite. Polymer Degradation and Stability, 2003, 81, 497-500.	5.8	155
81	Synthesis and properties of poly(methyl methacrylate)/montmorillonite (PMMA/MMT) nanocomposites. Polymer International, 2003, 52, 892-898.	3.1	95
82	Crystallization behaviors of polypropylene/montmorillonite nanocomposites. Journal of Applied Polymer Science, 2002, 83, 1978-1985.	2.6	196
83	Preparation and characterization of high-performance dehydrating pervaporation alginate membranes. Journal of Applied Polymer Science, 1998, 68, 959-968.	2.6	26
84	Pervaporation Membranes. Separation Science and Technology, 1995, 30, 1-31.	2.5	75
85	On the coupling effect in pervaporation. Journal of Membrane Science, 1993, 81, 43-55.	8.2	61
86	Recovery of pyridine from aqueous solution by membrane pervaporation. Journal of Membrane Science, 1993, 80, 309-318.	8.2	35