Changyu Han

List of Publications by Year
in descending order

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65 papers	1,616 citations	279487 23 h-index	329751 37 g-index
66 all docs	66 docs citations	66 times ranked	1585 citing authors

#	Article	IF	Citations
1	Thermomechanical and optical properties of biodegradable poly(<scp>L</scp>â€lactide)/silica nanocomposites by melt compounding. Journal of Applied Polymer Science, 2009, 114, 3379-3388.	1.3	92
2	Rheology and biodegradation of polylactide/silica nanocomposites. Polymer Composites, 2012, 33, 1719-1727.	2.3	81
3	Morphology and properties of biodegradable and biosourced polylactide blends with poly(3â€hydroxybutyrateâ€coâ€4â€hydroxybutyrate). Polymer Composites, 2012, 33, 850-859.	2.3	72
4	Study of the thermal stabilization mechanism of biodegradable poly(<scp>L</scp>â€lactide)/silica nanocomposites. Polymer International, 2011, 60, 202-210.	1.6	65
5	Morphology, crystallization and enzymatic hydrolysis of poly(<scp>L</scp>â€lactide) nucleated using layered metal phosphonates. Polymer International, 2011, 60, 284-295.	1.6	63
6	Isothermal and Nonisothermal Cold Crystallization Behaviors of Asymmetric Poly(<scp>l</scp>-lactide)/Poly(<scp>d</scp>-lactide) Blends. Industrial & Engineering Chemistry Research, 2012, 51, 15927-15935.	1.8	54
7	Effect of peroxide crosslinking on thermal and mechanical properties of poly(É›-caprolactone). Polymer International, 2007, 56, 593-600.	1.6	52
8	Bioresource-based blends of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) and stereocomplex polylactide with improved rheological and mechanical properties and enzymatic hydrolysis. Journal of Materials Chemistry A, 2014, 2, 8881.	5.2	52
9	Morphology and properties of the biosourced poly(lactic acid)/poly(ethylene oxideâ€bâ€amideâ€12) blends. Polymer Composites, 2013, 34, 122-130.	2.3	50
10	Improvement in toughness and crystallization of poly(<scp>L</scp>â€lactic acid) by melt blending with poly(epichlorohydrinâ€coâ€ethylene oxide). Polymer Engineering and Science, 2011, 51, 2370-2380.	1.5	49
11	Preparation and characterization of biodegradable poly(3â€hydroxybutyrateâ€coâ€4â€hydroxybutyrate)/silica nanocomposites. Polymer Engineering and Science, 2012, 52, 250-258.	1.5	45
12	Stereocomplex crystallite network in poly(<scp>d</scp>,<scp>l</scp>-lactide): formation, structure and the effect on shape memory behaviors and enzymatic hydrolysis of poly(<scp>d</scp>,<scp>l</scp>-lactide). RSC Advances, 2015, 5, 24352-24362.	1.7	45
13	The physical properties of poly(l-lactide) and functionalized eggshell powder composites. International Journal of Biological Macromolecules, 2016, 85, 63-73.	3.6	43
14	Thermal, mechanical, and rheological properties of polylactide/poly(1,2â€propylene glycol adipate). Polymer Engineering and Science, 2013, 53, 112-118.	1.5	42
15	Improvement in toughness and crystallization of poly(<scp>L</scp>â€lactic acid) by melt blending with ethylene/methyl acrylate/glycidyl methacrylate terpolymer. Polymer Engineering and Science, 2013, 53, 2498-2508.	1.5	36
16	Intriguing crystallization behavior and rheological properties of radical-based crosslinked biodegradable poly(3-hydroxybutyrate-co-4-hydroxybutyrate). CrystEngComm, 2014, 16, 2702.	1.3	34
17	Effects of molten poly(d,l-lactide) on nonisothermal crystallization in stereocomplex of poly(l-lactide) with poly(d-lactide). Thermochimica Acta, 2013, 573, 193-199.	1.2	30
18	Poly(ethylene glycolâ€coâ€propylene glycol) as a macromolecular plasticizing agent for polylactide: Thermomechanical properties and aging. Journal of Applied Polymer Science, 2009, 114, 1105-1117.	1.3	28

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19	Miscibility, thermal properties and polymorphism of stereocomplexation of high-molecular-weight polylactide/poly(D,L-lactide) blends. Thermochimica Acta, 2014, 580, 53-62.	1.2	28
20	Crystallization and morphology studies of biodegradable poly(Îµâ€caprolactone)/silica nanocomposites. Polymer Composites, 2013, 34, 131-140.	2.3	27
21	Poly(<scp>L</scp>â€lactide)/Poly(<scp>D</scp>â€lactide)/clay nanocomposites: Enhanced dispersion, crystallization, mechanical properties, and hydrolytic degradation. Polymer Engineering and Science, 2014, 54, 914-924.	1.5	27
22	Toughening mechanism behind intriguing stressâ€“strain curves in tensile tests of highly enhanced compatibilization of biodegradable poly(lactic acid)/poly(3-hydroxybutyrate-co-4-hydroxybutyrate) blends. RSC Advances, 2014, 4, 41722-41733.	1.7	26
23	Rheology, mechanical properties, and biodegradation of poly(Îµ-caprolactone)/silica nanocomposites. Polymer Composites, 2013, 34, 1620-1628.	2.3	25
24	Effect of crystallization on microstructure and mechanical properties of poly[(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (ox	1.6	24
25	Preparation and characteristics of a novel nanoâ€sized calcium carbonate (nanoâ€CaCo₃)â€supported nucleating agent of poly(<scp>L</scp>â€lactide). Polymer Engineering and Science, 2012, 52, 1474-1484.	1.5	23
26	Enhancing cold crystallization of poly(l-lactide) by a montmorillonitic substrate favoring nucleation. Thermochimica Acta, 2014, 588, 47-56.	1.2	23
27	Thermal and mechanical properties of poly(É›-caprolactone) crosslinked with Î³ radiation in the presence of triallyl isocyanurate. Journal of Applied Polymer Science, 2007, 103, 2676-2681.	1.3	22
28	An investigation of the effect of silane waterâ€crosslinking on the properties of poly(Lâ€lactide). Polymer International, 2010, 59, 695-703.	1.6	22
29	Polycaprolactone nanocomposite reinforced by bioresource starch-based nanoparticles. International Journal of Biological Macromolecules, 2017, 102, 1304-1311.	3.6	22
30	Uniaxial stretching and properties of fully biodegradable poly(lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (acid)/poly(3-hydroxyb Macromolecules, 2019, 129, 1-12.	3.6	22
31	Crystallization behaviors of poly(lactic acid) composites fabricated using functionalized eggshell powder and poly(ethylene glycol). Thermochimica Acta, 2018, 663, 67-76.	1.2	21
32	The excellent gas barrier properties and unique mechanical properties of poly(propylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (c	1.7	20
33	Isothermal and nonisothermal cold crystallization kinetics of poly(l-lactide)/functionalized eggshell powder composites. Journal of Thermal Analysis and Calorimetry, 2018, 131, 2213-2223.	2.0	20
34	Enhancing the crystallization of poly(<scp>l</scp>-lactide) using a montmorillonitic substrate favoring nucleation. CrystEngComm, 2014, 16, 3896-3905.	1.3	19
35	Confinement crystallization of poly(l-lactide) induced by multiwalled carbon nanotubes and graphene nanosheets. Journal of Thermal Analysis and Calorimetry, 2015, 122, 379-391.	2.0	18
36	Hydrophobic modification of polypropylene/starch blend foams through tailoring cell diameter for oil-spill cleanup. RSC Advances, 2016, 6, 82088-82095.	1.7	18

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37	Production and characterization of sustainable poly(lactic acid)/functionalized-eggshell composites plasticized by epoxidized soybean oil. Journal of Materials Science, 2018, 53, 14386-14397.	1.7	18
38	Biodegradable blends of poly(butylene adipate-co-terephthalate) and stereocomplex polylactide with enhanced rheological, mechanical properties and thermal resistance. Colloid and Polymer Science, 2020, 298, 463-475.	1.0	18
39	Effect of content and particle size of talc on nonisothermal melt crystallization behavior of poly(l-lactide). Journal of Thermal Analysis and Calorimetry, 2019, 135, 2049-2058.	2.0	17
40	Effect of loadings of nanocellulose on the significantly improved crystallization and mechanical properties of biodegradable poly(Îµ-caprolactone). International Journal of Biological Macromolecules, 2020, 147, 34-45.	3.6	17
41	High-performance biodegradable polylactide composites fabricated using a novel plasticizer and functionalized eggshell powder. International Journal of Biological Macromolecules, 2018, 112, 46-53.	3.6	16
42	Miscibility and crystallization behaviors of stereocomplex-type poly(l- and d-lactide)/poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	2.0	15
43	Enhancement of the properties of biosourced poly(3-hydroxybutyrate-co-4-hydroxybutyrate) by the incorporation of natural orotic acid. International Journal of Biological Macromolecules, 2019, 136, 764-773.	3.6	15
44	Ternary blends from biological poly(3-hydroxybutyrate-co-4-hydroxyvalerate), poly(L-lactic acid), and poly(vinyl acetate) with balanced properties. International Journal of Biological Macromolecules, 2021, 181, 60-71.	3.6	15
45	Microâ€gels for impact protection. Journal of Applied Polymer Science, 2013, 130, 2345-2351.	1.3	14
46	Morphological, thermal, rheological and mechanical properties of poly (butylene carbonate) reinforced by stereocomplex polylactide. International Journal of Biological Macromolecules, 2019, 137, 1169-1178.	3.6	12
47	Dramatic Improvements in Mechanical Properties of Poly(<scp>L</scp>â€lactide)/Silica Nanocomposites by Addition of Hyperbranched Poly(ester amide). Macromolecular Materials and Engineering, 2010, 295, 415-419.	1.7	11
48	Morphology and properties in the binary blends of polypropylene and propyleneâ€“ethylene random copolymers. Polymer Bulletin, 2019, 76, 2851-2866.	1.7	11
49	Thermal and mechanical properties of blends of polylactide and poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (2050-2057.	1.3	9
50	Miscibility, morphology, and properties of poly(butylene succinate)/poly(vinyl acetate) blends. Colloid and Polymer Science, 2021, 299, 105-116.	1.0	9
51	Miscibility, crystallization and mechanical properties of poly[(3â€hydroxybutyrate)â€coâ€(4â€hydroxyvalerate)]/poly(propylene carbonate)/poly(vinyl acetate) ternary blends. Polymer International, 2021, 70, 1544-1553.	1.6	9
52	Crystallization behavior, mechanical properties, and enzymatic degradation of biosourced poly(3-hydroxybutyrate-co-4-hydroxybutyrate)/graphene nanocomposites. Journal of Thermal Analysis and Calorimetry, 2016, 124, 1705-1715.	2.0	8
53	Miscibility, crystallization, rheological and mechanical properties of biodegradable poly(3-hydroxybutyrate-co-4-hydroxybutyrate)/poly(vinyl acetate) blends. Thermochimica Acta, 2020, 693, 178755.	1.2	8
54	Poly(<scp>l</scp>â€lactide)/poly(<scp>d</scp>â€lactide)/multiwalled carbon nanotubes nanocomposites: Enhanced dispersion, crystallization, mechanical properties, and hydrolytic degradation. Journal of Applied Polymer Science, 2013, 130, 3919-3929.	1.3	7

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55	Crystallization and melting characteristics of iPP nucleated by a sustainable eggshell powder-supported Î²-nucleating agent. Journal of Thermal Analysis and Calorimetry, 2017, 128, 1093-1106.	2.0	7
56	Enhanced rheological properties and heat resistance of poly (propylene carbonate) composites with carbon fiber. Composites Communications, 2020, 21, 100422.	3.3	7
57	Thermal and mechanical properties of stereocomplex polylactide enhanced by nanosilica. Colloid and Polymer Science, 2021, 299, 1161-1172.	1.0	5
58	Miscibility, crystallization, mechanical, and rheological properties of poly (L-lactic acid)/poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.0	5
59	Toward environmentâ€friendly composites of poly(Îµâ€caprolactone) reinforced with stereocomplexâ€type poly(<scp>l</scp>â€lactide)/poly(<scp>d</scp>â€lactide). Journal of Applied Polymer Science, 2014, 131, .	1.3	4
60	Improving the stereocomplexation and toughness of poly(<scp>L</scp>-lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 552 Td (acid)/poly(methacrylate terpolymer. Journal of Macromolecular Science - Pure and Applied Chemistry, 2021, 58, 419-430.	1.2	4
61	Structure variation and properties enhancement of uniaxial stretching poly(l â€lactic acid)/eggshell powder composites. Journal of Applied Polymer Science, 2019, 136, 48158.	1.3	3
62	Effect of the molecular weight of poly(vinyl acetate) on the polymorphism and thermomechanical properties of poly(L-lactic acid)/poly(D-lactic acid) blends. Journal of Thermal Analysis and Calorimetry, 2022, 147, 3171-3184.	2.0	3
63	Biodegradable poly(butylene adipate-co-terephthalate)/poly(vinyl acetate) blends with improved rheological and mechanical properties. Journal of Polymer Research, 2022, 29, 1.	1.2	3
64	Enhancing the crystallization of biodegradable poly(Îµ-caprolactone) using a polyvinyl alcohol fiber favoring nucleation. Thermochimica Acta, 2021, 706, 179065.	1.2	2
65	Blends of biodegradable poly(Îµ-caprolactone) and sustainable poly(propylene carbonate) with enhanced mechanical and rheological properties. Colloid and Polymer Science, 2022, 300, 59-68.	1.0	2