Jian Yu

List of Publications by Year in descending order

64 papers	2,808 citations	147801 31 h-index	175258 52 g-index
66 all docs	66 docs citations	66 times ranked	3146 citing authors

#	Article	IF	Citations
1	Application of ionic liquids for dissolving cellulose and fabricating cellulose-based materials: state of the art and future trends. Materials Chemistry Frontiers, 2017, 1, 1273-1290.	5.9	304
2	Heterogeneous nucleation uniformizing cell size distribution in microcellular nanocomposites foams. Polymer, 2006, 47, 7580-7589.	3.8	184
3	Phototunable Fullâ€Color Emission of Celluloseâ€Based Dynamic Fluorescent Materials. Advanced Functional Materials, 2018, 28, 1703548.	14.9	163
4	Thermoplastic Cellulose-graft-poly(<scp>l</scp>-lactide) Copolymers Homogeneously Synthesized in an Ionic Liquid with 4-Dimethylaminopyridine Catalyst. Biomacromolecules, 2009, 10, 2013-2018.	5.4	145
5	Cellulose Aerogel Membranes with a Tunable Nanoporous Network as a Matrix of Gel Polymer Electrolytes for Safer Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 24591-24599.	8.0	103
6	Flexible and Transparent Cellulose Aerogels with Uniform Nanoporous Structure by a Controlled Regeneration Process. ACS Sustainable Chemistry and Engineering, 2016, 4, 656-660.	6.7	99
7	Cell coalescence suppressed by crosslinking structure in polypropylene microcellular foaming. Polymer Engineering and Science, 2008, 48, 1312-1321.	3.1	91
8	All-Cellulose Nanocomposites Reinforced with in Situ Retained Cellulose Nanocrystals during Selective Dissolution of Cellulose in an Ionic Liquid. ACS Sustainable Chemistry and Engineering, 2016, 4, 4417-4423.	6.7	87
9	Foaming behavior of isotactic polypropylene in supercritical CO2 influenced by phase morphology via chain grafting. Polymer, 2008, 49, 3146-3156.	3.8	82
10	Celluloseâ€Based Solid Fluorescent Materials. Advanced Optical Materials, 2016, 4, 2044-2050.	7.3	81
11	Transparent Celluloseâ€“Silica Composite Aerogels with Excellent Flame Retardancy via an in Situ Solâ€“Gel Process. ACS Sustainable Chemistry and Engineering, 2017, 5, 11117-11123.	6.7	81
12	Crystallization kinetics of maleic anhydride grafted polypropylene ionomers. Polymer, 2000, 41, 891-898.	3.8	79
13	Transparent bionanocomposites with improved properties from poly(propylene carbonate) (PPC) and cellulose nanowhiskers (CNWs). Composites Science and Technology, 2013, 85, 83-89.	7.8	78
14	Foaming behavior of polypropylene/polystyrene blends enhanced by improved interfacial compatibility. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1641-1651.	2.1	63
15	Understanding cellulose dissolution: effect of the cation and anion structure of ionic liquids on the solubility of cellulose. Science China Chemistry, 2016, 59, 1421-1429.	8.2	62
16	Thermal degradation studies of cyclic olefin copolymers. Polymer Degradation and Stability, 2003, 81, 197-205.	5.8	57
17	All-cellulose composites based on the self-reinforced effect. Composites Communications, 2018, 9, 42-53.	6.3	51
18	Facile access to photo-switchable, dynamic-optical, multi-colored and solid-state materials from carbon dots and cellulose for photo-rewritable paper and advanced anti-counterfeiting. Chemical Engineering Journal, 2021, 406, 126794.	12.7	50

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19	Empty Î´ Crystal as an Intermediate Form for the Î´ to Î³ Transition of Syndiotactic Polystyrene in Supercritical Carbon Dioxide. Macromolecules, 2005, 38, 4755-4760.	4.8	49
20	Micron-size uniform poly(methyl methacrylate) particles by dispersion polymerization in polar media. Chemical Engineering Journal, 2000, 78, 211-215.	12.7	47
21	Influence of Long-Chain Branching on the Crystallization and Melting Behavior of Polycarbonates in Supercritical CO2. Macromolecules, 2007, 40, 73-80.	4.8	47
22	Ultrasonic irradiation enhanced cell nucleation: An effective approach to microcellular foams of both high cell density and expansion ratio. Polymer, 2008, 49, 2430-2434.	3.8	45
23	Transparent and flame retardant cellulose/aluminum hydroxide nanocomposite aerogels. Science China Chemistry, 2016, 59, 1335-1341.	8.2	45
24	Facile Access to Solid-State Carbon Dots with High Luminescence Efficiency and Excellent Formability via Cellulose Derivative Coatings. ACS Sustainable Chemistry and Engineering, 2020, 8, 5937-5945.	6.7	45
25	Homogeneous esterification of cellulose in room temperature ionic liquids. Polymer International, 2015, 64, 963-970.	3.1	39
26	Direct Formation ofÎ³Form Crystal of Syndiotactic Polystyrene from Amorphous State in Supercritical CO2. Macromolecules, 2004, 37, 6912-6917.	4.8	38
27	Direct and complete utilization of agricultural straw to fabricate all-biomass films with high-strength, high-haze and UV-shielding properties. Carbohydrate Polymers, 2019, 223, 115057.	10.2	38
28	Visual and Precise Detection of pH Values under Extreme Acidic and Strong Basic Environments by Cellulose-Based Superior Sensor. Analytical Chemistry, 2019, 91, 3085-3092.	6.5	37
29	Cellulose nanosphere: Preparation and applications of the novel nanocellulose. Carbohydrate Polymers, 2022, 277, 118863.	10.2	37
30	Directly Converting Agricultural Straw into All-Biomass Nanocomposite Films Reinforced with Additional in Situ-Retained Cellulose Nanocrystals. ACS Sustainable Chemistry and Engineering, 2017, 5, 5127-5133.	6.7	36
31	Enhanced Crystallization of Bisphenol A Polycarbonate in Thin and Ultrathin Films by Supercritical Carbon Dioxide. Macromolecules, 2011, 44, 5743-5749.	4.8	34
32	Thermal Behavior of Poly(<scp>l</scp>-lactide) Having Low <scp>l</scp>-Isomer Content of 94% after Compressed CO₂ Treatment. Macromolecules, 2010, 43, 8602-8609.	4.8	30
33	Preparation and morphology of different types of cellulose spherulites from concentrated cellulose ionic liquid solutions. Soft Matter, 2013, 9, 3013.	2.7	29
34	User-centric social context information management: an ontology-based approach and platform. Personal and Ubiquitous Computing, 2014, 18, 1061-1083.	2.8	29
35	Transparent cellulose/Laponite nanocomposite films. Journal of Materials Science, 2016, 51, 4125-4133.	3.7	27
36	A Reexamination of andMeof Syndiotactic Polypropylenes with Metallocene Catalysts. Macromolecules, 2004, 37, 9279-9282.	4.8	23

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37	Molecular weight characterization of cellulose using ionic liquids. Polymer Testing, 2021, 93, 106985.	4.8	20
38	A oneâ€pot method to prepare transparent poly(methyl methacrylate)/montmorillonite nanocomposites using imidazoliumâ€based ionic liquids. Polymer International, 2012, 61, 1382-1388.	3.1	18
39	Process analysis of phase transformation of Î± to Î²-form crystal of syndiotactic polystyrene investigated in supercritical CO2. Polymer, 2005, 46, 5789-5796.	3.8	17
40	Supercritical Fluid Assisted Crystal Transition of?-Form Crystal in Syndiotactic Polystyrene. Macromolecular Rapid Communications, 2005, 26, 112-115.	3.9	15
41	Stability of crystal forms of syndiotactic polystyrene correlated with their formation in different media having different solubility parameters. Polymer, 2005, 46, 11104-11111.	3.8	15
42	Free volume and crystallinity of poly(ethylene naphthalate) treated in pressurized carbon dioxide. Polymer, 2010, 51, 146-152.	3.8	15
43	Effect of substituents on electronic properties, thin film structure and device performance of dithienothiopheneâ€“phenylene cooligomers. Thin Solid Films, 2009, 517, 2968-2973.	1.8	14
44	Cosolvent effect of water in supercritical carbon dioxide facilitating induced crystallization of polycarbonate. Polymer Engineering and Science, 2007, 47, 1338-1343.	3.1	13
45	A Novel Cellulose/Ionic Liquid Complex Crystal. Crystal Growth and Design, 2018, 18, 4260-4264.	3.0	13
46	Time-Dependent Elastic Tensor of Cellulose Nanocrystal Probed by Hydrostatic Pressure and Uniaxial Stretching. Journal of Physical Chemistry Letters, 2021, 12, 3779-3785.	4.6	12
47	A biaxially stretched cellulose film prepared from ionic liquid solution. Carbohydrate Polymers, 2021, 260, 117816.	10.2	12
48	Preparation of conductive polypyrrole (PPy) composites under supercritical carbon dioxide conditions. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2007, 2, 118-122.	0.4	11
49	An unusual spherulite morphology induced by nano-fillers from a concentrated cellulose/ionic liquid solution. RSC Advances, 2015, 5, 44648-44651.	3.6	11
50	Plasticization of [C₁₂MIM][PF₆] Ionic Liquid on Foaming Performance of Poly(methyl methacrylate) in Supercritical CO₂. Industrial & Engineering Chemistry Research, 2012, 51, 12329-12336.	3.7	10
51	Thermostable and Redispersible Cellulose Nanocrystals with Thixotropic Gelation Behavior by a Facile Desulfation Process. ACS Sustainable Chemistry and Engineering, 2020, 8, 11737-11746.	6.7	10
52	Poly(propylene carbonate)/clay nanocomposites with enhanced mechanical property, thermal stability and oxygen barrier property. Composites Communications, 2020, 22, 100520.	6.3	9
53	Immobilization of Ionic Liquids with a New Cellulose Ester Containing Imidazolium Cation for Highâ€Performance CO 2 Separation Membranes. Macromolecular Rapid Communications, 2021, 42, 2000494.	3.9	9
54	Stability of form II of syndiotactic polypropylene confirmed by cold and melt crystallization in supercritical carbon dioxide. Polymer, 2007, 48, 1741-1748.	3.8	7

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55	Competitive influence of atactic polystyrene and supercritical carbon dioxide on the conformation of syndiotactic polystyrene. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1755-1764.	2.1	6
56	Establishing a three-dimensional diagram with solubility parameter representing the general behavior of crystallization for amorphous poly(ethylene 2,6-naphthalate). Polymer International, 2007, 56, 1298-1304.	3.1	6
57	Synergistic Effect of 1-Dodecyl-3-methylimidazolium Hexafluorophosphate Ionic Liquid and Montmorillonite on Microcellular Foaming Behavior of Poly(methyl methacrylate) by Supercritical CO₂. Industrial & Engineering Chemistry Research, 2013, 52, 11988-11995.	3.7	5
58	Direct formation of banded spherulites in poly(l-lactide) from the glassy state: Unexpected synergistic role of chain structure and compressed CO2. Polymer, 2016, 99, 662-670.	3.8	5
59	Reâ€Dispersible 1D and 2D Nanoparticle Solid Powders without any Surfactant. ChemNanoMat, 2019, 5, 163-168.	2.8	5
60	Supercritical CO2 conditioning promotes Î³-crystal formation in amorphous syndiotactic polystyrene during further heating. Polymer, 2014, 55, 1108-1112.	3.8	3
61	Cellulose aerogels prepared from cellulose/AmimCl solutions. Scientia Sinica Chimica, 2011, 41, 1331-1337.	0.4	3
62	Supercritical carbon dioxide assisted preparation of conductive polypyrrole/cellulose diacetate composites. Journal of Applied Polymer Science, 2006, 100, 4575-4580.	2.6	2
63	Hydrothermal Oxidation of Industrial Alkali Lignin for Producing Small Molecular Organic Acids. Advanced Materials Research, 0, 608-609, 1399-1406.	0.3	2
64	Nucleation Enhancement in Stereodefective Poly(l-lactide) by Free Volume Expansion Resulting from Low-Temperature Pressure CO2 Preconditioning. Polymers, 2018, 10, 120.	4.5	1