Kazuki Fukushima

List of Publications by Year
in descending order

46 papers	4,329 citations	117625 34 h-index	223800 46 g-index
46 all docs	46 docs citations	46 times ranked	4702 citing authors

#	Article	IF	Citations
1	Biodegradable nanostructures with selective lysis of microbial membranes. Nature Chemistry, 2011, 3, 409-414.	13.6	522
2	Stereocomplexed polylactides (Neo-PLA) as high-performance bio-based polymers: their formation, properties, and application. Polymer International, 2006, 55, 626-642.	3.1	408
3	Poly(trimethylene carbonate)-based polymers engineered for biodegradable functional biomaterials. Biomaterials Science, 2016, 4, 9-24.	5.4	252
4	A Simple and Efficient Synthesis of Functionalized Cyclic Carbonate Monomers Using a Versatile Pentafluorophenyl Ester Intermediate. Journal of the American Chemical Society, 2010, 132, 14724-14726.	13.7	179
5	Controlled crystal nucleation in the melt-crystallization of poly(l-lactide) and poly(l-lactide)/poly(d-lactide) stereocomplex. Polymer, 2003, 44, 5635-5641.	3.8	177
6	Organocatalytic depolymerization of poly(ethylene terephthalate). Journal of Polymer Science Part A, 2011, 49, 1273-1281.	2.3	172
7	Hydrogen bonding-enhanced micelle assemblies for drug delivery. Biomaterials, 2010, 31, 8063-8071.	11.4	170
8	Advanced chemical recycling of poly(ethylene terephthalate) through organocatalytic aminolysis. Polymer Chemistry, 2013, 4, 1610-1616.	3.9	136
9	Broadâ€Spectrum Antimicrobial and Biofilmâ€Disrupting Hydrogels: Stereocomplexâ€Driven Supramolecular Assemblies. Angewandte Chemie - International Edition, 2013, 52, 674-678.	13.8	128
10	Design of biocompatible and biodegradable polymers based on intermediate water concept. Polymer Journal, 2015, 47, 114-121.	2.7	126
11	Enhanced Stereocomplex Formation of Poly(L-lactic acid) and Poly(D-lactic acid) in the Presence of Stereoblock Poly(lactic acid). Macromolecular Bioscience, 2007, 7, 829-835.	4.1	114
12	Mixed Micelle Formation through Stereocomplexation between Enantiomeric Poly(lactide) Block Copolymers. Macromolecules, 2009, 42, 25-29.	4.8	113
13	An efficient solidâ€state polycondensation method for synthesizing stereocomplexed poly(lactic acid)s with high molecular weight. Journal of Polymer Science Part A, 2008, 46, 3714-3722.	2.3	111
14	Simple Approach to Stabilized Micelles Employing Miktoarm Terpolymers and Stereocomplexes with Application in Paclitaxel Delivery. Biomacromolecules, 2009, 10, 1460-1468.	5.4	111
15	Stereoblock Poly(lactic acid): Synthesis via Solid-State Polycondensation of a Stereocomplexed Mixture of Poly(L-lactic acid) and Poly(D-lactic acid). Macromolecular Bioscience, 2005, 5, 21-29.	4.1	106
16	Catalytic insights into acid/base conjugates: highly selective bifunctional catalysts for the ring-opening polymerization of lactide. Chemical Communications, 2011, 47, 3105.	4.1	106
17	Thermoresponsive nanostructured polycarbonate block copolymers as biodegradable therapeutic delivery carriers. Biomaterials, 2011, 32, 5505-5514.	11.4	102
18	Organocatalytic Approach to Amphiphilic Comb-Block Copolymers Capable of Stereocomplexation and Self-Assembly. Biomacromolecules, 2008, 9, 3051-3056.	5.4	99

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19	Production ofD-Lactic Acid by Bacterial Fermentation of Rice Starch. Macromolecular Bioscience, 2004, 4, 1021-1027.	4.1	95
20	Broad-Spectrum Antimicrobial Supramolecular Assemblies with Distinctive Size and Shape. ACS Nano, 2012, 6, 9191-9199.	14.6	87
21	Synthesis and Characterization of Stereoblock Poly(lactic acid)s with Nonequivalent D/L Sequence Ratios. Macromolecules, 2007, 40, 3049-3055.	4.8	84
22	Supramolecular high-aspect ratio assemblies with strong antifungal activity. Nature Communications, 2013, 4, 2861.	12.8	79
23	Mechanisms of Organocatalytic Amidation and Trans-Esterification of Aromatic Esters As a Model for the Depolymerization of Poly(ethylene) Terephthalate. Journal of Physical Chemistry A, 2012, 116, 12389-12398.	2.5	73
24	Unexpected efficiency of cyclic amidine catalysts in depolymerizing poly(ethylene terephthalate). Journal of Polymer Science Part A, 2013, 51, 1606-1611.	2.3	70
25	Rational design of biodegradable cationic polycarbonates for gene delivery. Journal of Controlled Release, 2011, 152, 120-126.	9.9	66
26	Design of Polymeric Biomaterials: The â€œIntermediate Water Conceptâ€• Bulletin of the Chemical Society of Japan, 2019, 92, 2043-2057.	3.2	65
27	Catalyst Chelation Effects in Organocatalyzed Ring-Opening Polymerization of Lactide. ACS Macro Letters, 2012, 1, 19-22.	4.8	64
28	From plastic waste to polymer electrolytes for batteries through chemical upcycling of polycarbonate. Journal of Materials Chemistry A, 2020, 8, 13921-13926.	10.3	60
29	A Novel Synthetic Approach to Stereo-Block Poly(lactic acid). Macromolecular Symposia, 2005, 224, 133-144.	0.7	58
30	Delivery of Anticancer Drugs Using Polymeric Micelles Stabilized by Hydrogenâ€Bonding Urea Groups. Macromolecular Rapid Communications, 2010, 31, 1187-1192.	3.9	50
31	Polycarbonate-Based Brush Polymers with Detachable Disulfide-Linked Side Chains. ACS Macro Letters, 2013, 2, 332-336.	4.8	48
32	A Supramolecularly Assisted Transformation of Blockâ€Copolymer Micelles into Nanotubes. Angewandte Chemie - International Edition, 2009, 48, 4508-4512.	13.8	47
33	Spiropyran Dimer Toward Photo-Switchable Molecular Machine. Chemistry of Materials, 2007, 19, 644-646.	6.7	45
34	Organocatalysis: A Paradigm Shift in the Synthesis of Aliphatic Polyesters and Polycarbonates. Macromolecules, 2020, 53, 5018-5022.	4.8	37
35	Monoether-Tagged Biodegradable Polycarbonate Preventing Platelet Adhesion and Demonstrating Vascular Cell Adhesion: A Promising Material for Resorbable Vascular Grafts and Stents. Biomacromolecules, 2017, 18, 3834-3843.	5.4	28
36	Supramolecular nanofibers self-assembled from cationic small molecules derived from repurposed poly(ethylene teraphthalate) for antibiotic delivery. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 165-172.	3.3	26

#	Article	IF	Citations
37	Biodegradable functional biomaterials exploiting substituted trimethylene carbonates and organocatalytic transesterification. Polymer Journal, 2016, 48, 1103-1114.	2.7	21
38	Evaluation of the hemocompatibility of hydrated biodegradable aliphatic carbonyl polymers with a subtle difference in the backbone structure based on the intermediate water concept and surface hydration. Polymer Journal, 2015, 47, 469-473.	2.7	18
39	Synthesis of antithrombotic poly(carbonate-urethane)s through a sequential process of ring-opening polymerization and polyaddition facilitated by organocatalysts. European Polymer Journal, 2017, 95, 728-736.	5.4	17
40	Modulating bioactivities of primary ammonium-tagged antimicrobial aliphatic polycarbonates by varying length, sequence and hydrophobic side chain structure. Biomaterials Science, 2019, 7, 2288-2296.	5.4	15
41	Biocompatibility and hemocompatibility evaluation of polyether urethanes synthesized using DBU organocatalyst. European Polymer Journal, 2016, 84, 750-758.	5.4	14
42	Formation of bis-benzimidazole and bis-benzoxazole through organocatalytic depolymerization of poly(ethylene terephthalate) and its mechanism. Polymer Chemistry, 2020, 11, 4904-4913.	3.9	13
43	Methoxy-Functionalized Glycerol-Based Aliphatic Polycarbonate: Organocatalytic Synthesis, Blood Compatibility, and Hydrolytic Property. ACS Biomaterials Science and Engineering, 2021, 7, 472-481.	5.2	13
44	ROP of Cyclic Carbonates. RSC Polymer Chemistry Series, 2018, , 274-327.	0.2	2
45	Functionalization and Precise Synthesis of Biodegradable Polymers Towards Biomedical Applications. Journal of Fiber Science and Technology, 2016, 72, P-571-P-573.	0.0	1
46	Anisotropic, Degradable Polymer Assemblies Driven by a Rigid Hydrogen-Bonding Motif That Induce Shape-Specific Cell Responses. Macromolecules, 2022, 55, 15-25.	4.8	1