Takuya Yamamoto

List of Publications by Year in descending order

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103 papers 3,455 citations

30 h-index 56 g-index

109 all docs

109 docs citations

109 times ranked 3028 citing authors

#	Article	IF	CITATIONS
1	Comparative Thermodynamic Studies of the Micellization of Amphiphilic Block Copolymers before and after Cyclization. Langmuir, 2022, 38, 5033-5039.	3.5	6
2	PEGylation of silver nanoparticles by physisorption of cyclic poly(ethylene glycol) for enhanced dispersion stability, antimicrobial activity, and cytotoxicity. Nanoscale Advances, 2022, 4, 532-545.	4.6	9
3	Topology and Sequence-Dependent Micellization and Phase Separation of Pluronic L35, L64, 10R5, and 17R4: Effects of Cyclization and the Chain Ends. Polymers, 2022, 14, 1823.	4.5	2
4	Improving the mechanical properties of polycaprolactone using functionalized nanofibrillated bacterial cellulose with high dispersibility and long fiber length as a reinforcement material. Composites Part A: Applied Science and Manufacturing, 2022, 158, 106978.	7.6	11
5	Fabrication of Ultrafine, Highly Ordered Nanostructures Using Carbohydrate-Inorganic Hybrid Block Copolymers. Nanomaterials, 2022, 12, 1653.	4.1	2
6	Metalâ€Organic Frameworks for Practical Separation of Cyclic and Linear Polymers. Angewandte Chemie - International Edition, 2021, 60, 11830-11834.	13.8	18
7	Metalâ€Organic Frameworks for Practical Separation of Cyclic and Linear Polymers. Angewandte Chemie, 2021, 133, 11936-11940.	2.0	O
8	Cyclization of PEG and Pluronic Surfactants and the Effects of the Topology on Their Interfacial Activity. Langmuir, 2021, 37, 6974-6984.	3 . 5	4
9	Enhanced Self-Assembly and Mechanical Properties of Cellulose-Based Triblock Copolymers: Comparisons with Amylose-Based Triblock Copolymers. ACS Sustainable Chemistry and Engineering, 2021, 9, 9779-9788.	6.7	8
10	Oneâ€Shot Intrablock Crossâ€Linking of Linear Diblock Copolymer to Realize Janusâ€Shaped Singleâ€Chain Nanoparticles. Angewandte Chemie, 2021, 133, 18270-18276.	2.0	3
11	Oneâ€Shot Intrablock Crossâ€Linking of Linear Diblock Copolymer to Realize Janusâ€Shaped Singleâ€Chain Nanoparticles. Angewandte Chemie - International Edition, 2021, 60, 18122-18128.	13.8	13
12	Effect of hydrogen–deuterium exchange in amide linkages on properties of electrospun polyamide nanofibers. Polymer, 2021, 229, 123994.	3.8	5
13	Densely Arrayed Cage-Shaped Polymer Topologies Synthesized via Cyclopolymerization of Star-Shaped Macromonomers. Macromolecules, 2021, 54, 9079-9090.	4.8	5
14	Suzuki–Miyaura Catalyst-Transfer Polycondensation of Triolborate-Type Carbazole Monomers. Polymers, 2021, 13, 4168.	4 . 5	3
15	Topology-Dependent Interaction of Cyclic Poly(ethylene glycol) Complexed with Gold Nanoparticles against Bovine Serum Albumin for a Colorimetric Change. Langmuir, 2021, , .	3. 5	2
16	Facile synthesis of poly(trimethylene carbonate) by alkali metal carboxylate-catalyzed ring-opening polymerization. Polymer Journal, 2020, 52, 103-110.	2.7	15
17	Detailed Structural Analyses of Nanofibrillated Bacterial Cellulose and Its Application as Binder Material for a Display Device. Biomacromolecules, 2020, 21, 581-588.	5.4	9
18	Suzuki–Miyaura catalyst-transfer polycondensation of triolborate-type fluorene monomer: toward rapid access to polyfluorene-containing block and graft copolymers from various macroinitiators. Polymer Chemistry, 2020, 11, 6832-6839.	3.9	15

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19	Enhanced dispersion stability of gold nanoparticles by the physisorption of cyclic poly(ethylene) Tj ETQq1 1 0.784	314 rgBT 12.8	/Qyerlock 1
20	Highly asymmetric lamellar nanostructures from nanoparticle–linear hybrid block copolymers. Nanoscale, 2020, 12, 16526-16534.	5.6	8
21	Programmed folding into spiro-multicyclic polymer topologies from linear and star-shaped chains. Communications Chemistry, 2020, 3, .	4.5	13
22	Rapid access to discrete and monodisperse block co-oligomers from sugar and terpenoid toward ultrasmall periodic nanostructures. Communications Chemistry, 2020, 3, .	4.5	19
23	An organocatalytic ring-opening polymerization approach to highly alternating copolymers of lactic acid and glycolic acid. Polymer Chemistry, 2020, 11, 6365-6373.	3.9	18
24	Direct Synthesis of Chainâ€endâ€functionalized Poly(3â€hexylthiophene) without Protecting Groups Using a Zincate Complex. Macromolecular Rapid Communications, 2020, 41, 2000148.	3.9	2
25	Self-Assembly of Linear and Cyclic Polylactide Stereoblock Copolymers with a Parallel and Antiparallel Chain Arrangement Distinguishing Their Directions on a Water Surface. Langmuir, 2020, 36, 6216-6221.	3.5	6
26	Carbohydrates as Hard Segments for Sustainable Elastomers: Carbohydrates Direct the Self-Assembly and Mechanical Properties of Fully Bio-Based Block Copolymers. Macromolecules, 2020, 53, 5408-5417.	4.8	24
27	Metallopolymer- <i>block</i> -oligosaccharide for sub-10 nm microphase separation. Polymer Chemistry, 2020, 11, 2995-3002.	3.9	11
28	A versatile synthetic strategy for macromolecular cages: intramolecular consecutive cyclization of star-shaped polymers. Chemical Science, 2019, 10, 440-446.	7.4	28
29	Microphase separation of carbohydrate-based star-block copolymers with sub-10 nm periodicity. Polymer Chemistry, 2019, 10, 1119-1129.	3.9	29
30	Downsizing feature of microphase-separated structures <i>via</i> intramolecular crosslinking of block copolymers. Chemical Science, 2019, 10, 3330-3339.	7.4	14
31	Installing a functional group into the inactive ï‰-chain end of PMMA and PS- <i>b</i> -PMMA by terminal-selective transesterification. Polymer Chemistry, 2019, 10, 3390-3398.	3.9	5
32	Micelle Structure Details and Stabilities of Cyclic Block Copolymer Amphiphile and Its Linear Analogues. Polymers, 2019, 11, 163.	4.5	16
33	Programmed Polymer Folding with Periodically Positioned Tetrafunctional Telechelic Precursors by Cyclic Ammonium Salt Units as Nodal Points. Journal of the American Chemical Society, 2019, 141, 7526-7536.	13.7	29
34	Trimethyl Glycine as an Environmentally Benign and Biocompatible Organocatalyst for Ring-Opening Polymerization of Cyclic Carbonate. ACS Sustainable Chemistry and Engineering, 2019, 7, 8868-8875.	6.7	12
35	Synthesis and Unimolecular ESA-CF Polymer Cyclization of Zwitterionic Telechelic Precursors. Macromolecules, 2019, 52, 9208-9219.	4.8	7
36	Macrocyclic poly(<i>p</i> -phenylenevinylene)s by ring expansion metathesis polymerisation and their characterisation by single-molecule spectroscopy. Chemical Science, 2018, 9, 2934-2941.	7.4	19

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37	Alkali Metal Carboxylate as an Efficient and Simple Catalyst for Ring-Opening Polymerization of Cyclic Esters. Macromolecules, 2018, 51, 689-696.	4.8	61
38	Synthesis, Isolation, and Properties of All Head-to-Tail Cyclic Poly(3-hexylthiophene): Fully Delocalized Exciton over the Defect-Free Ring Polymer. Macromolecules, 2018, 51, 9284-9293.	4.8	17
39	Facile and Efficient Modification of Polystyrene- <i>block</i> -poly(methyl methacrylate) for Achieving Sub-10 nm Feature Size. Macromolecules, 2018, 51, 8064-8072.	4.8	35
40	Topology effects of cyclic polymers: Controlling the topology for innovative functionalities. Reactive and Functional Polymers, 2018, 132, 43-50.	4.1	7
41	Chain-End Functionalization with a Saccharide for 10 nm Microphase Separation: "Classical― PS- <i>b</i> >PMMA versus PS- <i>b</i> >li>-PMMA versus PS- <i>b</i>	4.8	25
42	Multicyclic Polymer Synthesis through Controlled/Living Cyclopolymerization of α,ï‰-Dinorbornenyl-Functionalized Macromonomers. Macromolecules, 2018, 51, 3855-3864.	4.8	33
43	Synthesis of \hat{l} ¹ / ₄ -ABC Tricyclic Miktoarm Star Polymer via Intramolecular Click Cyclization. Polymers, 2018, 10, 877.	4.5	6
44	Load-Induced Frictional Transition at a Well-Defined Alkane Loop Surface. Langmuir, 2017, 33, 2396-2401.	3.5	4
45	A facile strategy for manipulating micellar size and morphology through intramolecular cross-linking of amphiphilic block copolymers. Polymer Chemistry, 2017, 8, 3647-3656.	3.9	15
46	Synthesis of Well-Defined Three- and Four-Armed Cage-Shaped Polymers via "Topological Conversion― from Trefoil- and Quatrefoil-Shaped Polymers. Macromolecules, 2017, 50, 97-106.	4.8	43
47	One-Step Production of Amphiphilic Nanofibrillated Cellulose Using a Cellulose-Producing Bacterium. Biomacromolecules, 2017, 18, 3432-3438.	5.4	29
48	A <i>Twisting</i> Ring Polymer: Synthesis and Thermally Induced Chiroptical Responses of a Cyclic Poly(tetrahydrofuran) Having Axially Chiral Units. Macromolecules, 2017, 50, 5323-5331.	4.8	3
49	Synthesis of Cyclic Polymers and Characterization of Their Diffusive Motion in the Melt State at the Single Molecule Level. Journal of Visualized Experiments, 2016, , .	0.3	0
50	Topological "interfacial―polymer chemistry: Dependency of polymer "shape―on surface morphology and stability of layer structures when heating organized molecular films of cyclic and linear block copolymers of <i>n</i> hotyl acrylate-ethylene oxide. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 486-498.	2.1	9
51	Construction of Hybrid-Multicyclic Polymer Topologies Composed of Dicyclic Structure Units by Means of An ESA-CF/Click-Linking Protocol. Macromolecules, 2016, 49, 4076-4087.	4.8	21
52	Formation and Properties of Vesicles from Cyclic Amphiphilic PS–PEO Block Copolymers. Langmuir, 2016, 32, 10344-10349.	3.5	13
53	ESA-CF Synthesis of Linear and Cyclic Polymers Having Densely Appended Perylene Units and Topology Effects on Their Thin-Film Electron Mobility. Macromolecules, 2016, 49, 5831-5840.	4.8	13
54	Hydrogel formation by the  topological conversion' of cyclic PLA–PEO block copolymers. Polymer Journal, 2016, 48, 391-398.	2.7	12

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55	Light- and Heat-Triggered Reversible Linear–Cyclic Topological Conversion of Telechelic Polymers with Anthryl End Groups. Journal of the American Chemical Society, 2016, 138, 3904-3911.	13.7	126
56	Folding Construction of a Pentacyclic Quadruply <i>fused</i> Polymer Topology with Tailored <i>kyklo</i> â€Telechelic Precursors. Angewandte Chemie - International Edition, 2015, 54, 8688-8692.	13.8	36
57	Phase separation and self-assembly of cyclic amphiphilic block copolymers with a main-chain liquid crystalline segment. Polymer Chemistry, 2015, 6, 4167-4176.	3.9	22
58	Single-molecule imaging reveals topological isomer-dependent diffusion by 4-armed star and dicyclic 8-shaped polymers. Polymer Chemistry, 2015, 6, 4109-4115.	3.9	10
59	Concise Click/ESA-CF Synthesis of Periodically-Positioned Trifunctional kyklo-Telechelic Poly(THF)s. Macromolecules, 2015, 48, 6077-6086.	4.8	9
60	NMR Relaxometry for the Thermal Stability and Phase Transition Mechanism of Flower-like Micelles from Linear and Cyclic Amphiphilic Block Copolymers. Langmuir, 2015, 31, 8739-8744.	3.5	16
61	A study on emulsion stabilization induced with linear and cyclized polystyrene-poly(ethylene oxide) block copolymer surfactants. Polymer Journal, 2015, 47, 408-412.	2.7	5
62	Photoinduced topological transformation of cyclized polylactides for switching the properties of homocrystals and stereocomplexes. Polymer Chemistry, 2015, 6, 3591-3600.	3.9	51
63	Cyclic polymers revealing topology effects upon self-assemblies, dynamics and responses. Soft Matter, 2015, 11, 7458-7468.	2.7	130
64	Construction of Double-Eight and Double-Trefoil Polymer Topologies with Core-Clickable <i>kyklo</i> -Telechelic Precursors. Macromolecules, 2014, 47, 8214-8223.	4.8	30
65	Synthesis of core-fluorescent four-armed star and dicyclic 8-shaped poly(THF)s by electrostatic self-assembly and covalent fixation (ESA–CF) protocol. Reactive and Functional Polymers, 2014, 80, 3-8.	4.1	7
66	Click Construction of Spiro†and Bridgedâ€Quatrefoil Polymer Topologies with Kykloâ€Telechelics Having an Azide Group. Macromolecular Rapid Communications, 2014, 35, 412-416.	3.9	23
67	S _N 2 regioselectivity in the esterification of 5- and 7-membered azacycloalkane quaternary salts: a DFT study to reveal the transition state ring conformation prevailing over the ground state ring strain. Organic and Biomolecular Chemistry, 2014, 12, 6717-6724.	2.8	6
68	Constructing a Macromolecular K _{3,3} Graph through Electrostatic Self-Assembly and Covalent Fixation with a Dendritic Polymer Precursor. Journal of the American Chemical Society, 2014, 136, 10148-10155.	13.7	53
69	Structural Characteristics of Amphiphilic Cyclic and Linear Block Copolymer Micelles in Aqueous Solutions. ACS Macro Letters, 2014, 3, 233-239.	4.8	57
70	Molecular Arrangement of Organized Molecular Films of Linear and Cyclic Amphiphilic Block Copolymers with Different Shapes. Transactions of the Materials Research Society of Japan, 2014, 39, 79-82.	0.2	3
71	Dependency of the "Shape" on Surface Morphology of Organized Molecular Films of Cyclic and Linear Block Copolymer of Polyethylene Oxide $\hat{a} \in \text{``Butyl Acrylate. Transactions of the Materials Research Society of Japan, 2014, 39, 83-86.}$	0.2	0
72	Single-Molecule Study on Polymer Diffusion in a Melt State: Effect of Chain Topology. Analytical Chemistry, 2013, 85, 7369-7376.	6.5	33

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73	Straightforward synthesis of functionalized cyclic polymers in high yield via RAFT and thiolactone–disulfide chemistry. Polymer Chemistry, 2013, 4, 184-193.	3.9	71
74	Regioselective Ring-Emitting Esterification on Azacyclohexane Quaternary Salts: A DFT and Synthetic Study for Covalent Fixation of Electrostatic Polymer Self-Assemblies. Journal of Organic Chemistry, 2013, 78, 3086-3094.	3.2	9
75	Systematic Synthesis of Block Copolymers Consisting of Topological Amphiphilic Segment Pairs from <i>kyklo</i> - and <i>kentro</i> -Telechelic PEO and Poly(THF). ACS Macro Letters, 2013, 2, 427-431.	4.8	10
76	Folding Construction of Doubly Fused Tricyclic, \hat{l}^2 - and \hat{l}^3 -Graph Polymer Topologies with kyklo-Telechelic Precursors Obtained through an Orthogonal Click/ESA-CF Protocol. Macromolecules, 2013, 46, 7303-7315.	4.8	27
77	SELF-ASSEMBLY AND FUNCTIONS OF CYCLIC POLYMERS. , 2013, , 329-347.		0
78	Tuneable enhancement of the salt and thermal stability of polymeric micelles by cyclized amphiphiles. Nature Communications, 2013 , 4 , 1574 .	12.8	149
79	Synthesis of cyclic polymers and topology effects on their diffusion and thermal properties. Polymer Journal, 2013, 45, 711-717.	2.7	40
80	Effective Synthesis and Crystal Structure of a 24-Membered Cyclic Decanedisulfide Dimer. Chemistry Letters, 2012, 41, 1678-1680.	1.3	2
81	ATRPâ€"RCMpolymercyclization: synthesis of amphiphilic cyclic polystyrene-b-poly(ethylene oxide) copolymers. Polymer Chemistry, 2012, 3, 1903-1909.	3.9	26
82	Synthesis of Orientationally Isomeric Cyclic Stereoblock Polylactides with Head-to-Head and Head-to-Tail Linkages of the Enantiomeric Segments. ACS Macro Letters, 2012, 1, 902-906.	4.8	74
83	Topological polymer chemistry: a cyclic approach toward novel polymer properties and functions. Polymer Chemistry, 2011, 2, 1930.	3.9	255
84	A Programmed Polymer Folding:ClickandClipConstruction of DoublyFusedTricyclic and TriplyFusedTetracyclic Polymer Topologies. Journal of the American Chemical Society, 2011, 133, 19694-19697.	13.7	70
85	Emergence of Functionalities Originating from the Topology of Polymers. Kobunshi Ronbunshu, 2011, 68, 550-561.	0.2	2
86	Topological Polymer Chemistry: New Synthesis of Cyclic and Multicyclic Polymers and <i>Topology Effects</i> Thereby. Kobunshi Ronbunshu, 2011, 68, 782-794.	0.2	4
87	Topological polymer chemistry by programmed self-assembly and effective linking chemistry. European Polymer Journal, 2011, 47, 535-541.	5.4	16
88	Multimode Diffusion of Ring Polymer Molecules Revealed by a Singleâ€Molecule Study. Angewandte Chemie - International Edition, 2010, 49, 1418-1421.	13.8	76
89	Effective Click Construction of <i>Bridged</i> - and <i>Spiro</i> -Multicyclic Polymer Topologies with Tailored Cyclic Prepolymers (<i>kyklo</i> -Telechelics). Journal of the American Chemical Society, 2010, 132, 14790-14802.	13.7	129
90	Synthesis and Topological Conversion of an 8-shaped Poly(THF) Having a Metathesis-Cleavable Unit at the Focal Position. Macromolecules, 2010, 43, 7062-7067.	4.8	19

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91	Topology-Directed Control on Thermal Stability: Micelles Formed from Linear and Cyclized Amphiphilic Block Copolymers. Journal of the American Chemical Society, 2010, 132, 10251-10253.	13.7	200
92	Effective Synthesis of Polymer Catenanes by Cooperative Electrostatic/Hydrogen-Bonding Self-Assembly and Covalent Fixation. Macromolecules, 2010, 43, 168-176.	4.8	32
93	Recent Developments in the Synthesis of Cyclic Polymers by Ring-Expansion Polymerization. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2009, 67, 947-948.	0.1	0
94	Conductive Oneâ€Handed Nanocoils by Coassembly of Hexabenzocoronenes: Control of Morphology and Helical Chirality. Angewandte Chemie - International Edition, 2008, 47, 1672-1675.	13.8	94
95	Self-Assembled Nanotubes and Nanocoils from ss-Conjugated Building Blocks. , 2008, , 1-27.		7
96	Coordination-Driven Face-Directed Self-Assembly of Trigonal Prisms. Face-Based Conformational Chirality. Journal of the American Chemical Society, 2008, 130, 7620-7628.	13.7	100
97	Radially Diblock Nanotube:  Site-Selective Functionalization of a Tubularly Assembled Hexabenzocoronene. Journal of the American Chemical Society, 2008, 130, 1530-1531.	13.7	57
98	Stabilization of a Kinetically Favored Nanostructure:Â Surface ROMP of Self-Assembled Conductive Nanocoils from a Norbornene-Appended Hexa-peri-hexabenzocoronene. Journal of the American Chemical Society, 2006, 128, 14337-14340.	13.7	86
99	Self-Assembly of Nanoscale Supramolecular Truncated Tetrahedra. Journal of Organic Chemistry, 2005, 70, 4861-4864.	3.2	49
100	Synthesis of a Bis(pyridyl)-Substituted Perylene Diimide Ligand and Incorporation into a Supramolecular Rhomboid and Rectangle via Coordination Driven Self-Assembly. Journal of Organic Chemistry, 2005, 70, 797-801.	3.2	77
101	Self-Assembly of Flexible Supramolecular Metallacyclic Ensembles:Â Structures and Adsorption Properties of Their Nanoporous Crystalline Frameworks. Journal of the American Chemical Society, 2004, 126, 10645-10656.	13.7	101
102	Dynamic Equilibrium of a Supramolecular Dimeric Rhomboid and Trimeric Hexagon and Determination of Its Thermodynamic Constants. Journal of the American Chemical Society, 2003, 125, 12309-12317.	13.7	102
103	Self-Assembly of Molecular Prisms via an Organometallic "Clip― Organic Letters, 2002, 4, 913-915.	4.6	74