Takuya Isono

List of Publications by Year
in descending order

107 papers	2,487 citations	172207 29 h-index	253896 43 g-index
109 all docs	109 docs citations	109 times ranked	2259 citing authors

#	Article	IF	Citations
1	One-step synthesis of sequence-controlled multiblock polymers with up to 11 segments from monomer mixture. Nature Communications, 2022, 13, 163.	5.8	37
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.	2.2	9
3	Self-assembly of carbohydrate-based block copolymer systems: glyconanoparticles and highly nanostructured thin films. Polymer Journal, 2022, 54, 455-464.	1.3	9
4	Unimodal and Well-Defined Nanomicelles Assembled by Topology-Controlled Bicyclic Block Copolymers. Macromolecules, 2022, 55, 862-872.	2.2	2
5	Trapping probabilities of multiple rings in end-linked gels. Polymer, 2022, 245, 124683.	1.8	7
6	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.	2.0	2
7	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.	3.8	11
8	Fabrication of Ultrafine, Highly Ordered Nanostructures Using Carbohydrate-Inorganic Hybrid Block Copolymers. Nanomaterials, 2022, 12, 1653.	1.9	2
9	Improving the performance of photonic transistor memory devices using conjugated block copolymers as a floating gate. Journal of Materials Chemistry C, 2021, 9, 1259-1268.	2.7	28
10	Topologically controlled phase transitions and nanoscale film self-assemblies of cage poly(<i>Îµ</i>-caprolactone) and its counterparts. Polymer Chemistry, 2021, 12, 744-758.	1.9	9
11	Correlations of nanoscale film morphologies and topological confinement of three-armed cage block copolymers. Polymer Chemistry, 2021, 12, 3451-3460.	1.9	4
12	Stretchable OFET Memories: Tuning the Morphology and the Charge-Trapping Ability of Conjugated Block Copolymers through Soft Segment Branching. ACS Applied Materials & Interfaces, 2021, 13, 2932-2943.	4.0	42
13	Synthesis of functional and architectural polyethers via the anionic ring-opening polymerization of epoxide monomers using a phosphazene base catalyst. Polymer Journal, 2021, 53, 753-764.	1.3	8
14	Influence of Topological Confinement on Nanoscale Film Morphologies of Tricyclic Block Copolymers. Macromolecules, 2021, 54, 4120-4127.	2.2	5
15	Cyclization of PEG and Pluronic Surfactants and the Effects of the Topology on Their Interfacial Activity. Langmuir, 2021, 37, 6974-6984.	1.6	4
16	Smart Access to Sequentially and Architecturally Controlled Block Polymers via a Simple Catalytic Polymerization System. ACS Catalysis, 2021, 11, 5999-6009.	5.5	49
17	Highly Ordered Nanoscale Film Morphologies of Block Copolymers Governed by Nonlinear Topologies. ACS Macro Letters, 2021, 10, 811-818.	2.3	9
18	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.	3.2	8

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19	Oneâ€Shot Intrablock Crossâ€Linking of Linear Diblock Copolymer to Realize Janusâ€Shaped Singleâ€Chain Nanoparticles. Angewandte Chemie, 2021, 133, 18270-18276.	1.6	3
20	Oneâ€Shot Intrablock Crossâ€Linking of Linear Diblock Copolymer to Realize Janusâ€Shaped Singleâ€Chain Nanoparticles. Angewandte Chemie - International Edition, 2021, 60, 18122-18128.	7.2	13
21	Facile one-pot synthesis of rod-coil bio-block copolymers and uncovering their role in forming the efficient stretchable touch-responsive light emitting diodes. Chemical Engineering Journal, 2021, 418, 129421.	6.6	17
22	Engineered Îµ-decalactone lipomers bypass the liver to selectively <i>in vivo</i> deliver mRNA to the lungs without targeting ligands. Materials Horizons, 2021, 8, 2251-2259.	6.4	18
23	Densely Arrayed Cage-Shaped Polymer Topologies Synthesized via Cyclopolymerization of Star-Shaped Macromonomers. Macromolecules, 2021, 54, 9079-9090.	2.2	5
24	Suzukiâ€"Miyaura Catalyst-Transfer Polycondensation of Triolborate-Type Carbazole Monomers. Polymers, 2021, 13, 4168.	2.0	3
25	Artificial polyhydroxyalkanoate poly[2-hydroxybutyrate-block-3-hydroxybutyrate] elastomer-like material. Scientific Reports, 2021, 11, 22446.	1.6	12
26	Topology-Dependent Interaction of Cyclic Poly(ethylene glycol) Complexed with Gold Nanoparticles against Bovine Serum Albumin for a Colorimetric Change. Langmuir, 2021, , .	1.6	2
27	Facile synthesis of poly(trimethylene carbonate) by alkali metal carboxylate-catalyzed ring-opening polymerization. Polymer Journal, 2020, 52, 103-110.	1.3	15
28	Characterization of the secondary structure and orderâ€"disorder transition of a Î^2-(1Ââ†'Â3, 1Ââ†'Â6)-glucan from Aureobasidium pullulans. International Journal of Biological Macromolecules, 2020, 154, 1382-1391.	3.6	16
29	Organicâ€"Inorganic Nanocomposite Film for Highâ€Performance Stretchable Resistive Memory Device. Macromolecular Rapid Communications, 2020, 41, 1900542.	2.0	18
30	Light Down-Converter Based on Luminescent Nanofibers from the Blending of Conjugated Rod-Coil Block Copolymers and Perovskite through Electrospinning. Polymers, 2020, 12, 84.	2.0	10
31	Detailed Structural Analyses of Nanofibrillated Bacterial Cellulose and Its Application as Binder Material for a Display Device. Biomacromolecules, 2020, 21, 581-588.	2.6	9
32	Manufacturing method of the heat-storable carbon fiber reinforced plastics with applying trans-1,4-polybutadiene by using cellulose nanofibers and electrodeposition solution. Journal of Energy Storage, 2020, 31, 101636.	3.9	3
33	Suzukiâ€"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.	1.9	15
34	Highly Stretchable Semiconducting Polymers for Field-Effect Transistors through Branched Softâ€"Hardâ€"Soft Type Triblock Copolymers. Macromolecules, 2020, 53, 7496-7510.	2.2	36
35	characterization of d-LA homo-oligomer degradation by the isolated strains. Polymer Degradation and Stability, 2020, 179, 109231.	2.7	11
36	Enhanced dispersion stability of gold nanoparticles by the physisorption of cyclic poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	5.8	105

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37	Highâ€Performance Nonvolatile Organic Photonic Transistor Memory Devices using Conjugated Rodâ€“Coil Materials as a Floating Gate. Advanced Materials, 2020, 32, e2002638.	11.1	80
38	Bicyclic Topology Transforms Self-Assembled Nanostructures in Block Copolymer Thin Films. Nano Letters, 2020, 20, 6520-6525.	4.5	14
39	Highly asymmetric lamellar nanostructures from nanoparticleâ€“linear hybrid block copolymers. Nanoscale, 2020, 12, 16526-16534.	2.8	8
40	Programmed folding into spiro-multicyclic polymer topologies from linear and star-shaped chains. Communications Chemistry, 2020, 3, .	2.0	13
41	Rapid access to discrete and monodisperse block co-oligomers from sugar and terpenoid toward ultrasmall periodic nanostructures. Communications Chemistry, 2020, 3, .	2.0	19
42	An organocatalytic ring-opening polymerization approach to highly alternating copolymers of lactic acid and glycolic acid. Polymer Chemistry, 2020, 11, 6365-6373.	1.9	18
43	Design of Self-Cross-Linkable Poly(<i>n</i>-butyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 507 Td (acrylate)-<i>co</i>-poly[<i>N and Self-Healing Properties. ACS Applied Polymer Materials, 2020, 2, 5432-5443.	2.0	17
44	Chemically Controlled Volatile and Nonvolatile Resistive Memory Characteristics of Novel Oxygen-Based Polymers. ACS Applied Materials & Interfaces, 2020, 12, 28435-28445.	4.0	10
45	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.	2.2	24
46	Sweet Pluronic poly(propylene oxide)-b-oligosaccharide block copolymer systems: Toward sub-4Ânm thin-film nanopattern resolution. European Polymer Journal, 2020, 134, 109831.	2.6	8
47	Solid-state relaxation NMR dataset for a water-soluble Î²-(1â†’3, 1â†’6)-glucan from Aureobasidium pullulans and schizophyllan from Schizophyllum commune. Data in Brief, 2020, 28, 104993.	0.5	3
48	Metallopolymer-<i>block</i>-oligosaccharide for sub-10 nm microphase separation. Polymer Chemistry, 2020, 11, 2995-3002.	1.9	11
49	Nanostructure- and Orientation-Controlled Resistive Memory Behaviors of Carbohydrate-<i>block</i>-Polystyrene with Different Molecular Weights via Solvent Annealing. ACS Applied Materials & Interfaces, 2020, 12, 23217-23224.	4.0	16
50	Fabrication of heat-storable CFRP by incorporating trans-1,4-polybutadiene with the application of the electrodeposition resin molding method. Journal of Energy Storage, 2019, 26, 100980.	3.9	5
51	Effect of a conjugated/elastic block sequence on the morphology and electronic properties of polythiophene based stretchable block copolymers. Polymer Chemistry, 2019, 10, 5452-5464.	1.9	29
52	A versatile synthetic strategy for macromolecular cages: intramolecular consecutive cyclization of star-shaped polymers. Chemical Science, 2019, 10, 440-446.	3.7	28
53	Microphase separation of carbohydrate-based star-block copolymers with sub-10 nm periodicity. Polymer Chemistry, 2019, 10, 1119-1129.	1.9	29
54	Downsizing feature of microphase-separated structures <i>via</i> intramolecular crosslinking of block copolymers. Chemical Science, 2019, 10, 3330-3339.	3.7	14

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55	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.	1.9	5
56	Biodegradable Compatibilizers for Poly(hydroxyalkanoate)/Poly(Îµ-caprolactone) Blends through Click Reactions with End-Functionalized Microbial Poly(hydroxyalkanoate)s. ACS Sustainable Chemistry and Engineering, 2019, 7, 7969-7978.	3.2	27
57	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.	3.2	12
58	Synthesis and characterization of cyclic P3HT as a donor polymer for organic solar cells. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 266-271.	2.4	3
59	Post-polymerization modification of PS-b-PMMA for achieving directed self-assembly with sub-10nm feature size. , 2019, , .		1
60	Synthesis, Thermal Properties, and Morphologies of Amphiphilic Brush Block Copolymers with Tacticity-Controlled Polyether Main Chain. Macromolecules, 2018, 51, 2939-2950.	2.2	10
61	Alkali Metal Carboxylate as an Efficient and Simple Catalyst for Ring-Opening Polymerization of Cyclic Esters. Macromolecules, 2018, 51, 689-696.	2.2	61
62	Dynamic Changes of Intracellular Monomer Levels Regulate Block Sequence of Polyhydroxyalkanoates in Engineered <i>Escherichia coli</i>. Biomacromolecules, 2018, 19, 662-671.	2.6	27
63	Highly Ordered Cylinder Morphologies with 10 nm Scale Periodicity in Biomass-Based Block Copolymers. Macromolecules, 2018, 51, 428-437.	2.2	23
64	Synthesis of Hardâ€“Softâ€“Hard Triblock Copolymers, Poly(2-naphthyl glycidyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 392 Td (ether)-<i ether]-<i>block</i>-poly(2-naphthyl glycidyl ether), for Solid Electrolytes. Macromolecules, 2018, 51, 2293-2301.	2.2	33
65	A Comparative Study of Dynamic Light and X-Ray Scatterings on Micelles of Topological Polymer Amphiphiles. Polymers, 2018, 10, 1347.	2.0	20
66	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.	2.2	17
67	Facile and Efficient Modification of Polystyrene-<i>block</i>-poly(methyl methacrylate) for Achieving Sub-10 nm Feature Size. Macromolecules, 2018, 51, 8064-8072.	2.2	35
68	Chain-End Functionalization with a Saccharide for 10 nm Microphase Separation: â€œClassicalâ€• PS-<i>b</i>-PMMA versus PS-<i>b</i>-PMMA-Saccharide. Macromolecules, 2018, 51, 8870-8877.	2.2	25
69	Unraveling the stress effects on the optical properties of stretchable rod-coil polyfluorene-poly(<i>n</i>-butyl acrylate) block copolymer thin films. Polymer Chemistry, 2018, 9, 3820-3831.	1.9	28
70	Multicyclic Polymer Synthesis through Controlled/Living Cyclopolymerization of Î±,Ï‰-Dinorbornenyl-Functionalized Macromonomers. Macromolecules, 2018, 51, 3855-3864.	2.2	33
71	Synthesis of Î¼-ABC Tricyclic Miktoarm Star Polymer via Intramolecular Click Cyclization. Polymers, 2018, 10, 877.	2.0	6
72	Control over Molecular Architectures of Carbohydrate-Based Block Copolymers for Stretchable Electrical Memory Devices. Macromolecules, 2018, 51, 4966-4975.	2.2	32

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73	Stretchable Conjugated Rodâ€“Coil Poly(3-hexylthiophene)-<i>block</i>-poly(butyl acrylate) Thin Films for Field Effect Transistor Applications. Macromolecules, 2017, 50, 1442-1452.	2.2	83
74	A facile strategy for manipulating micellar size and morphology through intramolecular cross-linking of amphiphilic block copolymers. Polymer Chemistry, 2017, 8, 3647-3656.	1.9	15
75	Synthesis of Well-Defined Three- and Four-Armed Cage-Shaped Polymers via â€œTopological Conversionâ€• from Trefoil- and Quatrefoil-Shaped Polymers. Macromolecules, 2017, 50, 97-106.	2.2	43
76	Synthesis of lactate (LA)-based poly(ester-urethane) using hydroxyl-terminated LA-based oligomers from a microbial secretion system. Journal of Polymer Research, 2017, 24, 1.	1.2	13
77	One-Step Production of Amphiphilic Nanofibrillated Cellulose Using a Cellulose-Producing Bacterium. Biomacromolecules, 2017, 18, 3432-3438.	2.6	29
78	Well-defined and stable nanomicelles self-assembled from brush cyclic and tadpole copolymer amphiphiles: a versatile smart carrier platform. NPG Asia Materials, 2017, 9, e453-e453.	3.8	36
79	Design and synthesis of thermoresponsive aliphatic polyethers with a tunable phase transition temperature. Polymer Chemistry, 2017, 8, 5698-5707.	1.9	27
80	Donorâ€“Acceptor Poly(3â€hexylthiophene)â€<i>block</i>â€Pendent Poly(isoindigo) with Dual Roles of Charge Transporting and Storage Layer for Highâ€Performance Transistorâ€Type Memory Applications. Advanced Functional Materials, 2016, 26, 2695-2705.	7.8	49
81	Intramolecular olefin metathesis as a robust tool to synthesize single-chain nanoparticles in a size-controlled manner. Polymer Chemistry, 2016, 7, 4782-4792.	1.9	23
82	High-performance stretchable resistive memories using donorâ€“acceptor block copolymers with fluorene rods and pendent isoindigo coils. NPG Asia Materials, 2016, 8, e298-e298.	3.8	40
83	Heat Storage and Release Tests of Heat Storage Material with Crystal Transformation. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2016, 14, Pi_1-Pi_6.	0.1	0
84	Influence of Degradation on Storage of Heat of Heat Storage Material with Crystal Transformation. Netsu Bussei, 2016, 29, 173-178.	0.1	3
85	Self-Assembly of Maltoheptaose-<i>block</i>-polycaprolactone Copolymers: Carbohydrate-Decorated Nanoparticles with Tunable Morphology and Size in Aqueous Media. Macromolecules, 2016, 49, 4178-4194.	2.2	29
86	Synthesis of Well-Defined Amphiphilic Star-Block and Miktoarm Star Copolyethers via <i>t</i>-Bu-P₄-Catalyzed Ring-Opening Polymerization of Glycidyl Ethers. Macromolecules, 2016, 49, 499-509.	2.2	39
87	Sequential Mukaiyamaâ€“Michael reaction induced by carbon acids. Chemical Communications, 2016, 52, 3280-3283.	2.2	17
88	Synthesis, morphology, and electrical memory application of oligosaccharide-based block copolymers with Ï€-conjugated pyrene moieties and their supramolecules. Polymer Chemistry, 2016, 7, 1249-1263.	1.9	15
89	Sub-20 nm Microphase-Separated Structures in Hybrid Block Copolymers Consisting of Polycaprolactone and Maltoheptaose. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 635-642.	0.1	8
90	Phosphazene Base-Catalyzed Living Ring-Opening Polymerization System for Substituted Epoxides. Kobunshi Ronbunshu, 2015, 72, 295-305.	0.2	1

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91	Organophosphate-catalyzed bulk ring-opening polymerization as an environmentally benign route leading to block copolyesters, end-functionalized polyesters, and polyester-based polyurethane. Polymer Chemistry, 2015, 6, 4374-4384.	1.9	53
92	Sub-10 nm Scale Nanostructures in Self-Organized Linear Di- and Triblock Copolymers and Miktoarm Star Copolymers Consisting of Maltoheptaose and Polystyrene. Macromolecules, 2015, 48, 1509-1517.	2.2	51
93	Controlled/Living Ring-Opening Polymerization of Glycidylamine Derivatives Using <i>t</i>-Bu-P₄/Alcohol Initiating System Leading to Polyethers with Pendant Primary, Secondary, and Tertiary Amino Groups. Macromolecules, 2015, 48, 3217-3229.	2.2	40
94	Complex Thin Film Morphologies of Poly(<i>n</i>-hexyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (isocyanate)(5k,10k)â€“Poly(Îµ-ca Macromolecules, 2015, 48, 5816-5833.	2.2	16
95	Rodâ€“coil type miktoarm star copolymers consisting of polyfluorene and polylactide: precise synthesis and structureâ€“morphology relationship. Polymer Chemistry, 2015, 6, 6959-6972.	1.9	11
96	Synthesis of end-functionalized poly(methyl methacrylate) by organocatalyzed group transfer polymerization using functional silyl ketene acetals and Î±-phenylacrylates. Polymer Chemistry, 2015, 6, 1830-1837.	1.9	20
97	Poly(cyclic olefin)s. , 2015, , 1677-1683.		0
98	Hierarchical Structures in Thin Films of Miktoarm Star Polymers: Poly(<i>n</i>-hexyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (isocy	2.2	32
99	Stereoblock-like Brush Copolymers Consisting of Poly(<scp>l</scp>-lactide) and Poly(<scp>d</scp>-lactide) Side Chains along Poly(norbornene) Backbone: Synthesis, Stereocomplex Formation, and Structureâ€“Property Relationship. Macromolecules, 2014, 47, 7118-7128.	2.2	46
100	Synthesis of Linear, Cyclic, Figure-Eight-Shaped, and Tadpole-Shaped Amphiphilic Block Copolyethers via <i>t</i>-Bu-P₄-Catalyzed Ring-Opening Polymerization of Hydrophilic and Hydrophobic Glycidyl Ethers. Macromolecules, 2014, 47, 2853-2863.	2.2	75
101	Grazing Incidence Small-Angle X-ray Scattering Studies of the Thin Film Morphologies of Miktoarm Crystalline Star Polymers. Science of Advanced Materials, 2014, 6, 2526-2531.	0.1	3
102	Synthesis and Stereocomplex Formation of Star-Shaped Stereoblock Polylactides Consisting of Poly(<scp>l</scp>-lactide) and Poly(<scp>d</scp>-lactide) Arms. Macromolecules, 2013, 46, 8509-8518.	2.2	103
103	Synthesis of Star- and Figure-Eight-Shaped Polyethers by <i>t</i>-Bu-P₄-Catalyzed Ring-Opening Polymerization of Butylene Oxide. Macromolecules, 2013, 46, 3841-3849.	2.2	56
104	Synthesis, Self-Assembly, and Thermal Caramelization of Maltoheptaose-Conjugated Polycaprolactones Leading to Spherical, Cylindrical, and Lamellar Morphologies. Macromolecules, 2013, 46, 8932-8940.	2.2	52
105	Sub-10 nm Nano-Organization in AB₂- and AB₃-Type Miktoarm Star Copolymers Consisting of Maltoheptaose and Polycaprolactone. Macromolecules, 2013, 46, 1461-1469.	2.2	90
106	10 nm Scale Cylinderâ€“Cubic Phase Transition Induced by Caramelization in Sugar-Based Block Copolymers. ACS Macro Letters, 2012, 1, 1379-1382.	2.3	55
107	Oneâ€pot synthesis of polyrotaxane by clipping and cyclopolymerization of Î±,Ï‰â€diethynyl isophthalamide with pyridiniumdicarboxamide chloride. Journal of Polymer Science Part A, 2011, 49, 3184-3192.	2.5	14