Satoshi Uchida

List of Publications by Year
in descending order

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79 papers	2,839 citations	172207 29 h-index	174990 52 g-index
80 all docs	80 docs citations	80 times ranked	3586 citing authors

#	Article	IF	Citations
1	Hysteresis-free perovskite solar cells made of potassium-doped organometal halide perovskite. Scientific Reports, 2017, 7, 12183.	1.6	229
2	Designing Libraries of First Generation AB3and AB2Self-Assembling Dendrons via the Primary Structure Generated from Combinations of (AB)yâ˜AB3and (AB)yâ˜AB2Building Blocks. Journal of the American Chemical Society, 2004, 126, 6078-6094.	6.6	200
3	Material challenges for solar cells in the twenty-first century: directions in emerging technologies. Science and Technology of Advanced Materials, 2018, 19, 336-369.	2.8	162
4	Architecture of nanostructured polymers. Progress in Polymer Science, 2003, 28, 27-54.	11.8	158
5	Modulations of various alkali metal cations on organometal halide perovskites and their influence on photovoltaic performance. Nano Energy, 2018, 45, 184-192.	8.2	142
6	Exploring and Expanding the Three-Dimensional Structural Diversity of Supramolecular Dendrimers with the Aid of Libraries of Alkali Metals of Their AB3 Minidendritic Carboxylates. Chemistry - A European Journal, 2002, 8, 1106.	1.7	111
7	Surface Treatment of the Compact TiO2 Layer for Efficient Planar Heterojunction Perovskite Solar Cells. Chemistry Letters, 2015, 44, 674-676.	0.7	105
8	Origin of the Hysteresis in Iâ€“V Curves for Planar Structure Perovskite Solar Cells Rationalized with a Surface Boundary-induced Capacitance Model. Chemistry Letters, 2015, 44, 1750-1752.	0.7	102
9	Exploring and Expanding the Structural Diversity of Self-Assembling Dendrons through Combinations of AB, Constitutional Isomeric AB2, and AB3 Biphenyl-4-Methyl Ether Building Blocks. Chemistry - A European Journal, 2006, 12, 6216-6241.	1.7	88
10	Temperature Effects on the Photovoltaic Performance of Planar Structure Perovskite Solar Cells. Chemistry Letters, 2015, 44, 1557-1559.	0.7	83
11	Selfâ€Organized Superlattice and Phase Coexistence inside Thin Film Organometal Halide Perovskite. Advanced Materials, 2018, 30, 1705230.	11.1	79
12	Graphite-type activated carbon from coconut shell: a natural source for eco-friendly non-volatile storage devices. RSC Advances, 2021, 11, 2854-2865.	1.7	78
13	Synthesis of Vinylic Macromolecular Rotaxane Cross-Linkers Endowing Network Polymers with Toughness. ACS Macro Letters, 2015, 4, 598-601.	2.3	76
14	Poly(Oxazoline)s with Tapered Minidendritic Side Groups as Models for the Design of Synthetic Macromolecules with Tertiary Structure. A Demonstration of the Limitations of Living Polymerization in the Design of 3-D Structures Based on Single Polymer Chains. Biomacromolecules, 2001, 2, 729-740.	2.6	62
15	Star/Linear Polymer Topology Transformation Facilitated by Mechanical Linking of Polymer Chains. Angewandte Chemie - International Edition, 2015, 54, 6770-6774.	7.2	57
16	Effective Approach to Cyclic Polymer from Linear Polymer: Synthesis and Transformation of Macromolecular [1]Rotaxane. ACS Macro Letters, 2015, 4, 343-347.	2.3	55
17	Elucidating the Structure of the Pm$ar 3$n Cubic Phase of Supramolecular Dendrimers through the Modification of their Aliphatic to Aromatic Volume Ratio. Chemistry - A European Journal, 2009, 15, 8994-9004.	1.7	51
18	Thermoresponsive Shuttling of Rotaxane Containing Trichloroacetate Ion. Organic Letters, 2012, 14, 4122-4125.	2.4	51

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19	Realâ€Time In Situ Observation of Microstructural Change in Organometal Halide Perovskite Induced by Thermal Degradation. Advanced Functional Materials, 2018, 28, 1804039.	7.8	45
20	Superlattice Formation on Star Polymer Solutions. Journal of Colloid and Interface Science, 1997, 192, 189-193.	5.0	42
21	A Novel Polymeric Chemosensor: Dual Colorimetric Detection of Metal Ions Through Click Synthesis. Macromolecular Rapid Communications, 2011, 32, 1804-1808.	2.0	38
22	Determination of unique power conversion efficiency of solar cell showing hysteresis in the I-V curve under various light intensities. Scientific Reports, 2017, 7, 11790.	1.6	38
23	Macromolecular [2]Rotaxanes: Effective Synthesis and Characterization. ACS Macro Letters, 2013, 2, 461-465.	2.3	37
24	Polyester-Containing Î±-Cyclodextrin-Based Polyrotaxane: Synthesis by Living Ring-Opening Polymerization, Polypseudorotaxanation, and End Capping Using Nitrile N-Oxide. ACS Macro Letters, 2013, 2, 527-530.	2.3	35
25	Colorimetric sensing of cations and anions by clicked polystyrenes bearing side chain donorâ€“acceptor chromophores. Polymer Chemistry, 2012, 3, 1996.	1.9	33
26	Mechanically Linked Block/Graft Copolymers: Effective Synthesis via Functional Macromolecular [2]Rotaxanes. ACS Macro Letters, 2014, 3, 324-328.	2.3	32
27	Synthesis of Highly Reactive Polymer Nitrile N-Oxides for Effective Solvent-Free Grafting. ACS Macro Letters, 2014, 3, 286-290.	2.3	32
28	Polymer nitrile N-oxides directed toward catalyst- and solvent-free click grafting. Chemical Communications, 2013, 49, 7723.	2.2	31
29	Stimuli-degradable cross-linked polymers synthesized by radical polymerization using a size-complementary [3]rotaxane cross-linker. Polymer Journal, 2014, 46, 67-72.	1.3	31
30	Tunnelingâ€Assisted Trapping as one of the Possible Mechanisms for the Origin of Hysteresis in Perovskite Solar Cells. Energy Technology, 2017, 5, 1767-1774.	1.8	31
31	Encapsulation of silver nanoparticles within double-cylinder-type copolymer brushes as templates. Polymers for Advanced Technologies, 2005, 16, 834-839.	1.6	29
32	Catalyst-free click cascade functionalization of unsaturated-bond-containing polymers using masked-ketene-tethering nitrile N-oxide. Polymer, 2013, 54, 4501-4510.	1.8	28
33	Structural Ordering in (AB)n-Type Star Copolymer Solutions. Journal of Colloid and Interface Science, 1995, 175, 293-296.	5.0	26
34	Synthesis and solution properties of alternating maleimide/styrene hyperbranched copolymers via controlled radical mechanism. Polymer International, 2003, 52, 1010-1015.	1.6	26
35	Effect of TiO₂ Surface Treatment on the Currentâ€“Voltage Hysteresis of Planarâ€Structure Perovskite Solar Cells Prepared on Rough and Flat Fluorineâ€Doped Tin Oxide Substrates. Energy Technology, 2017, 5, 1762-1766.	1.8	26
36	Encapsulation of Polypyrrole by Internal Domain Modification of Double-Cylinder-Type Copolymer Brushes. Macromolecules, 2002, 35, 10193-10197.	2.2	24

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37	Geometrical structure of star polymers in solution. Macromolecular Chemistry and Physics, 1997, 198, 3255-3265.	1.1	21
38	Fluorescent poly(boron enaminoketonate)s: synthesis via the direct modification of polyisoxazoles obtained from the click polymerization of a homoditopic nitrile N-oxide and diynes. Polymer Journal, 2014, 46, 609-616.	1.3	20
39	Exact helical polymer synthesis by a two-point-covalent-linking protocol between C₂-chiral spirobifluorene and C₂- or C_s-symmetric anthraquinone monomers. Chemical Communications, 2015, 51, 10423-10426.	2.2	19
40	Reversible Transformation of a One-Handed Helical Foldamer Utilizing a Planarity-Switchable Spacer andC2-Chiral Spirobifluorene Units. ACS Macro Letters, 2015, 4, 462-466.	2.3	19
41	Synthesis and characterization of a mechanically linked transformable polymer. Polymer Journal, 2014, 46, 546-552.	1.3	18
42	Preparation and microphase-separated structures of (AB) n starâ€“block copolymers composed of symmetric diblock arms. Polymer, 1999, 40, 1019-1023.	1.8	17
43	Direct Observation of the Tunneling Phenomenon in Organometal Halide Perovskite Solar Cells and Its Influence on Hysteresis. ACS Energy Letters, 2018, 3, 2743-2749.	8.8	17
44	Electronic structures and chemical states of methylammonium lead triiodide thin films and the impact of annealing and moisture exposure. Journal of Applied Physics, 2018, 123, .	1.1	16
45	Emulsion-Induced Ordered Microporous Films Based on Micelles of Amphiphilic Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 1 2007, 28, 882-887.	2.0	15
46	Novel synthesis and solution properties of hyperbranched poly(ethyl methacrylate)s by quasi-living radical copolymerization using photofunctional inimer. Polymer International, 2004, 53, 259-265.	1.6	14
47	Optimization of TiO2 compact layer formed by atomic layer deposition for efficient perovskite solar cells. Applied Physics Letters, 2019, 115, 203902.	1.5	14
48	Structural Ordering in (AB)nStar Copolymer Solutions. Journal of Colloid and Interface Science, 1998, 203, 153-156.	5.0	13
49	Synthesis and characterization of polyfunctional star-shaped macromonomers. Polymer, 1999, 40, 3229-3232.	1.8	10
50	Architecture of multi-component copolymer brushes. Designed Monomers and Polymers, 2002, 5, 23-38.	0.7	10
51	Free-Radical Polymerization of Macromonomers. Journal of Macromolecular Science - Pure and Applied Chemistry, 1995, 32, 1227-1234.	1.2	9
52	Novel synthesis of rodâ€coil block copolymers by combination of coordination polymerization and ATRP. Journal of Polymer Science Part A, 2007, 45, 4037-4042.	2.5	9
53	Architecture of hyperbranched polymers consisting of a stearyl methacrylate sequence via a living radical copolymerization. Journal of Colloid and Interface Science, 2008, 323, 242-246.	5.0	9
54	Synthesis of tailored coreâ€“brush polymer particles via a living radical polymerization and architecture of colloidal crystals. Journal of Colloid and Interface Science, 2011, 353, 69-75.	5.0	9

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55	Synthesis and polyelectrolyte behavior of poly(methacrylic acid) star polymers. Journal of Applied Polymer Science, 2007, 105, 1543-1550.	1.3	8
56	Emulsionâ€induced ordered microporous films using amphiphilic poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (oxide)â€< Science, 2008, 108, 3753-3759.	1.3	8
57	Architecture of polymer particles composed of brush structure at surfaces and construction of colloidal crystals. Journal of Colloid and Interface Science, 2009, 340, 27-34.	5.0	8
58	Post-functionalization of polyvinylcarbazoles: An open route towards hole transporting materials for perovskite solar cells. Solar Energy, 2019, 193, 878-884.	2.9	8
59	Electronic structure of the clean interface between single crystal CH3NH3PbI3 and an organic hole transporting material spiro-OMeTAD. Applied Physics Letters, 2020, 116, .	1.5	8
60	Ordered Microporous Surface Films Formed by Core-Shell-Type Nanospheres. Macromolecular Rapid Communications, 2006, 27, 961-965.	2.0	7
61	Structural Ordering in Star Polymer Solutions. Polymer-Plastics Technology and Engineering, 1997, 36, 461-471.	1.9	6
62	Novel synthesis of poly(methyl methacrylate) brush encapsulated silica particles. Journal of Applied Polymer Science, 2008, 109, 3968-3974.	1.3	6
63	Synthesis of main chain-type liquid crystalline polyrotaxanes: influence of the wheel components and their mobility on liquid crystalline properties. Polymer Journal, 2014, 46, 553-558.	1.3	6
64	Synthesis and Structural Ordering of Gradient-Modulus Star Copolymers. Journal of Colloid and Interface Science, 1999, 213, 62-67.	5.0	5
65	Architecture and solution properties of amphiphilic polymer brushes with peripheral charged ions. Journal of Colloid and Interface Science, 2003, 261, 552-558.	5.0	5
66	Encapsulation of silver nanoparticles within micropores of block copolymers constructed by emulsionâ€induced method. Journal of Polymer Science Part A, 2008, 46, 3429-3432.	2.5	4
67	Architecture of rodâ€“brush block copolymers synthesized by a combination of coordination polymerization and atom transfer radical polymerization. Journal of Applied Polymer Science, 2008, 108, 3346-3352.	1.3	4
68	Synthesis of silica hybrid nanoparticles modified with photofunctional polymers and construction of colloidal crystals. Journal of Applied Polymer Science, 2009, 112, 2434-2440.	1.3	4
69	Two-dimensional regular nanopatterning on block copolymer substrate having lamellar morphology using star-hyperbranched nanospheres by electrostatic interaction. Journal of Applied Polymer Science, 2006, 101, 4206-4210.	1.3	3
70	Synthesis and Characterization of Alternating and Random Copolymer Brushes. Macromolecular Chemistry and Physics, 2009, 210, 1717-1725.	1.1	3
71	Architecture of prototype copolymer brushes composed of alternating structure and intramolecular phase separation of side chains in solution. Journal of Applied Polymer Science, 2010, 116, 2298-2304.	1.3	3
72	Effect of branching topology on polymer crystallinity. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1525-1527.	2.4	2

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73	Architecture of rod consisting of hyperbranched pendant chainsâ€coil block copolymers by ATRP approach. Journal of Applied Polymer Science, 2008, 109, 3554-3561.	1.3	2
74	Miktoâ€Arm Star Copolymers with Hyperbranched Core Structure: Synthesis by Combination of Living Radical and Condensation Polymerization. Macromolecular Chemistry and Physics, 2010, 211, 1984-1989.	1.1	2
75	Architecture of colloidal crystals constructed by silica hybrid nanoparticles. Journal of Applied Polymer Science, 2011, 120, 43-49.	1.3	2
76	The effect of chloride atoms to induce organohalide perovskite intermediate crystal phase: a simulation rationale. Applied Physics Express, 2022, 15, 075504.	1.1	2
77	Microstructural investigation of a compact TiO2 layer for improvement of perovskite solar cells. Applied Physics Letters, 2019, 115, 053902.	1.5	1
78	Synthesis and Micelle Formation of Diblock Copolymers Containing of Polyisocyanates as a Rod Segment. Kobunshi Ronbunshu, 2007, 64, 937-942.	0.2	0
79	Novel Topological Cross-Linkers Synthesized for Vinyl Polymer Systems. Kobunshi Ronbunshu, 2015, 72, 93-103.	0.2	0