

# Satoshi Uchida

## List of Publications by Year in descending order

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79  
papers

2,839  
citations

172386

29  
h-index

175177

52  
g-index

80  
all docs

80  
docs citations

80  
times ranked

3586  
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of chloride atoms to induce organohalide perovskite intermediate crystal phase: a simulation rationale. Applied Physics Express, 2022, 15, 075504.	1.1	2
2	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
3	Electronic structure of the clean interface between single crystal CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> and an organic hole transporting material spiro-OMeTAD. Applied Physics Letters, 2020, 116, .	1.5	8
4	Microstructural investigation of a compact TiO <sub>2</sub> layer for improvement of perovskite solar cells. Applied Physics Letters, 2019, 115, 053902.	1.5	1
5	Post-functionalization of polyvinylcarbazoles: An open route towards hole transporting materials for perovskite solar cells. Solar Energy, 2019, 193, 878-884.	2.9	8
6	Optimization of TiO <sub>2</sub> compact layer formed by atomic layer deposition for efficient perovskite solar cells. Applied Physics Letters, 2019, 115, 203902.	1.5	14
7	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
8	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
9	Self-Organized Superlattice and Phase Coexistence inside Thin Film Organometal Halide Perovskite. Advanced Materials, 2018, 30, 1705230.	11.1	79
10	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
11	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
12	Real-Time In Situ Observation of Microstructural Change in Organometal Halide Perovskite Induced by Thermal Degradation. Advanced Functional Materials, 2018, 28, 1804039.	7.8	45
13	Tunneling-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
14	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
15	Hysteresis-free perovskite solar cells made of potassium-doped organometal halide perovskite. Scientific Reports, 2017, 7, 12183.	1.6	229
16	Effect of TiO <sub>2</sub> Surface Treatment on the Current-Voltage Hysteresis of Planar Structure Perovskite Solar Cells Prepared on Rough and Flat Fluorine-Doped Tin Oxide Substrates. Energy Technology, 2017, 5, 1762-1766.	1.8	26
17	Origin of the Hysteresis in $J-V$ Curves for Planar Structure Perovskite Solar Cells Rationalized with a Surface Boundary-induced Capacitance Model. Chemistry Letters, 2015, 44, 1750-1752.	0.7	102
18	Temperature Effects on the Photovoltaic Performance of Planar Structure Perovskite Solar Cells. Chemistry Letters, 2015, 44, 1557-1559.	0.7	83

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19	Star/Linear Polymer Topology Transformation Facilitated by Mechanical Linking of Polymer Chains. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6770-6774.	7.2	57
20	Effective Approach to Cyclic Polymer from Linear Polymer: Synthesis and Transformation of Macromolecular [1]Rotaxane. <i>ACS Macro Letters</i> , 2015, 4, 343-347.	2.3	55
21	Synthesis of Vinyllic Macromolecular Rotaxane Cross-Linkers Endowing Network Polymers with Toughness. <i>ACS Macro Letters</i> , 2015, 4, 598-601.	2.3	76
22	Exact helical polymer synthesis by a two-point-covalent-linking protocol between C <sub>2</sub> -chiral spirobifluorene and C <sub>2</sub> - or C <sub>s</sub> -symmetric anthraquinone monomers. <i>Chemical Communications</i> , 2015, 51, 10423-10426.	2.2	19
23	Surface Treatment of the Compact TiO <sub>2</sub> Layer for Efficient Planar Heterojunction Perovskite Solar Cells. <i>Chemistry Letters</i> , 2015, 44, 674-676.	0.7	105
24	Reversible Transformation of a One-Handed Helical Foldamer Utilizing a Planarity-Switchable Spacer and C <sub>2</sub> -Chiral Spirobifluorene Units. <i>ACS Macro Letters</i> , 2015, 4, 462-466.	2.3	19
25	Novel Topological Cross-Linkers Synthesized for Vinyl Polymer Systems. <i>Kobunshi Ronbunshu</i> , 2015, 72, 93-103.	0.2	0
26	Stimuli-degradable cross-linked polymers synthesized by radical polymerization using a size-complementary [3]rotaxane cross-linker. <i>Polymer Journal</i> , 2014, 46, 67-72.	1.3	31
27	Fluorescent poly(boron enaminoke-tonate)s: synthesis via the direct modification of polyisoxazoles obtained from the click polymerization of a homoditopic nitrile N-oxide and diynes. <i>Polymer Journal</i> , 2014, 46, 609-616.	1.3	20
28	Synthesis and characterization of a mechanically linked transformable polymer. <i>Polymer Journal</i> , 2014, 46, 546-552.	1.3	18
29	Mechanically Linked Block/Graft Copolymers: Effective Synthesis via Functional Macromolecular [2]Rotaxanes. <i>ACS Macro Letters</i> , 2014, 3, 324-328.	2.3	32
30	Synthesis of Highly Reactive Polymer Nitrile N-Oxides for Effective Solvent-Free Grafting. <i>ACS Macro Letters</i> , 2014, 3, 286-290.	2.3	32
31	Synthesis of main chain-type liquid crystalline polyrotaxanes: influence of the wheel components and their mobility on liquid crystalline properties. <i>Polymer Journal</i> , 2014, 46, 553-558.	1.3	6
32	Polymer nitrile N-oxides directed toward catalyst- and solvent-free click grafting. <i>Chemical Communications</i> , 2013, 49, 7723.	2.2	31
33	Catalyst-free click cascade functionalization of unsaturated-bond-containing polymers using masked-ketene-tethering nitrile N-oxide. <i>Polymer</i> , 2013, 54, 4501-4510.	1.8	28
34	Polyester-Containing $\beta$ -Cyclodextrin-Based Polyrotaxane: Synthesis by Living Ring-Opening Polymerization, Polypseudorotaxanation, and End Capping Using Nitrile N-Oxide. <i>ACS Macro Letters</i> , 2013, 2, 527-530.	2.3	35
35	Macromolecular [2]Rotaxanes: Effective Synthesis and Characterization. <i>ACS Macro Letters</i> , 2013, 2, 461-465.	2.3	37
36	Thermoresponsive Shuttling of Rotaxane Containing Trichloroacetate Ion. <i>Organic Letters</i> , 2012, 14, 4122-4125.	2.4	51

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37	Colorimetric sensing of cations and anions by clicked polystyrenes bearing side chain donor-acceptor chromophores. <i>Polymer Chemistry</i> , 2012, 3, 1996.	1.9	33
38	A Novel Polymeric Chemosensor: Dual Colorimetric Detection of Metal Ions Through Click Synthesis. <i>Macromolecular Rapid Communications</i> , 2011, 32, 1804-1808.	2.0	38
39	Architecture of colloidal crystals constructed by silica hybrid nanoparticles. <i>Journal of Applied Polymer Science</i> , 2011, 120, 43-49.	1.3	2
40	Synthesis of tailored core-brush polymer particles via a living radical polymerization and architecture of colloidal crystals. <i>Journal of Colloid and Interface Science</i> , 2011, 353, 69-75.	5.0	9
41	Architecture of prototype copolymer brushes composed of alternating structure and intramolecular phase separation of side chains in solution. <i>Journal of Applied Polymer Science</i> , 2010, 116, 2298-2304.	1.3	3
42	Mikto-Arm Star Copolymers with Hyperbranched Core Structure: Synthesis by Combination of Living Radical and Condensation Polymerization. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1984-1989.	1.1	2
43	Elucidating the Structure of the $Pm\bar{3}n$ Cubic Phase of Supramolecular Dendrimers through the Modification of their Aliphatic to Aromatic Volume Ratio. <i>Chemistry - A European Journal</i> , 2009, 15, 8994-9004.	1.7	51
44	Synthesis and Characterization of Alternating and Random Copolymer Brushes. <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 1717-1725.	1.1	3
45	Synthesis of silica hybrid nanoparticles modified with photofunctional polymers and construction of colloidal crystals. <i>Journal of Applied Polymer Science</i> , 2009, 112, 2434-2440.	1.3	4
46	Architecture of polymer particles composed of brush structure at surfaces and construction of colloidal crystals. <i>Journal of Colloid and Interface Science</i> , 2009, 340, 27-34.	5.0	8
47	Encapsulation of silver nanoparticles within micropores of block copolymers constructed by emulsion-induced method. <i>Journal of Polymer Science Part A</i> , 2008, 46, 3429-3432.	2.5	4
48	Effect of branching topology on polymer crystallinity. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 1525-1527.	2.4	2
49	Architecture of rod-brush block copolymers synthesized by a combination of coordination polymerization and atom transfer radical polymerization. <i>Journal of Applied Polymer Science</i> , 2008, 108, 3346-3352.	1.3	4
50	Emulsion-induced ordered microporous films using amphiphilic poly(ethylene oxide)- <i>Journal of Applied Polymer Science</i> , 2008, 108, 3753-3759.	1.3	8
51	Architecture of rod consisting of hyperbranched pendant chains-coil block copolymers by ATRP approach. <i>Journal of Applied Polymer Science</i> , 2008, 109, 3554-3561.	1.3	2
52	Novel synthesis of poly(methyl methacrylate) brush encapsulated silica particles. <i>Journal of Applied Polymer Science</i> , 2008, 109, 3968-3974.	1.3	6
53	Architecture of hyperbranched polymers consisting of a stearyl methacrylate sequence via a living radical copolymerization. <i>Journal of Colloid and Interface Science</i> , 2008, 323, 242-246.	5.0	9
54	Synthesis and Micelle Formation of Diblock Copolymers Containing of Polyisocyanates as a Rod Segment. <i>Kobunshi Ronbunshu</i> , 2007, 64, 937-942.	0.2	0

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55	Synthesis and polyelectrolyte behavior of poly(methacrylic acid) star polymers. <i>Journal of Applied Polymer Science</i> , 2007, 105, 1543-1550.	1.3	8
56	Emulsion-Induced Ordered Microporous Films Based on Micelles of Amphiphilic Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 2007, 28, 882-887.	2.0	15
57	Novel synthesis of rod-coil block copolymers by combination of coordination polymerization and ATRP. <i>Journal of Polymer Science Part A</i> , 2007, 45, 4037-4042.	2.5	9
58	Exploring and Expanding the Structural Diversity of Self-Assembling Dendrons through Combinations of AB, Constitutional Isomeric AB <sub>2</sub> , and AB <sub>3</sub> Biphenyl-4-Methyl Ether Building Blocks. <i>Chemistry - A European Journal</i> , 2006, 12, 6216-6241.	1.7	88
59	Two-dimensional regular nanopatterning on block copolymer substrate having lamellar morphology using star-hyperbranched nanospheres by electrostatic interaction. <i>Journal of Applied Polymer Science</i> , 2006, 101, 4206-4210.	1.3	3
60	Ordered Microporous Surface Films Formed by Core-Shell-Type Nanospheres. <i>Macromolecular Rapid Communications</i> , 2006, 27, 961-965.	2.0	7
61	Encapsulation of silver nanoparticles within double-cylinder-type copolymer brushes as templates. <i>Polymers for Advanced Technologies</i> , 2005, 16, 834-839.	1.6	29
62	Novel synthesis and solution properties of hyperbranched poly(ethyl methacrylate)s by quasi-living radical copolymerization using photofunctional inimer. <i>Polymer International</i> , 2004, 53, 259-265.	1.6	14
63	Designing Libraries of First Generation AB <sub>3</sub> and AB <sub>2</sub> Self-Assembling Dendrons via the Primary Structure Generated from Combinations of (AB) <sub>3</sub> and (AB) <sub>2</sub> Building Blocks. <i>Journal of the American Chemical Society</i> , 2004, 126, 6078-6094.	6.6	200
64	Architecture and solution properties of amphiphilic polymer brushes with peripheral charged ions. <i>Journal of Colloid and Interface Science</i> , 2003, 261, 552-558.	5.0	5
65	Synthesis and solution properties of alternating maleimide/styrene hyperbranched copolymers via controlled radical mechanism. <i>Polymer International</i> , 2003, 52, 1010-1015.	1.6	26
66	Architecture of nanostructured polymers. <i>Progress in Polymer Science</i> , 2003, 28, 27-54.	11.8	158
67	Architecture of multi-component copolymer brushes. <i>Designed Monomers and Polymers</i> , 2002, 5, 23-38.	0.7	10
68	Encapsulation of Polypyrrole by Internal Domain Modification of Double-Cylinder-Type Copolymer Brushes. <i>Macromolecules</i> , 2002, 35, 10193-10197.	2.2	24
69	Exploring and Expanding the Three-Dimensional Structural Diversity of Supramolecular Dendrimers with the Aid of Libraries of Alkali Metals of Their AB <sub>3</sub> Minidendritic Carboxylates. <i>Chemistry - A European Journal</i> , 2002, 8, 1106.	1.7	111
70	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. <i>Biomacromolecules</i> , 2001, 2, 729-740.	2.6	62
71	Synthesis and characterization of polyfunctional star-shaped macromonomers. <i>Polymer</i> , 1999, 40, 3229-3232.	1.8	10
72	Preparation and microphase-separated structures of (AB) <sub>n</sub> star block copolymers composed of symmetric diblock arms. <i>Polymer</i> , 1999, 40, 1019-1023.	1.8	17

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73	Synthesis and Structural Ordering of Gradient-Modulus Star Copolymers. Journal of Colloid and Interface Science, 1999, 213, 62-67.	5.0	5
74	Structural Ordering in (AB) <sub>n</sub> Star Copolymer Solutions. Journal of Colloid and Interface Science, 1998, 203, 153-156.	5.0	13
75	Structural Ordering in Star Polymer Solutions. Polymer-Plastics Technology and Engineering, 1997, 36, 461-471.	1.9	6
76	Geometrical structure of star polymers in solution. Macromolecular Chemistry and Physics, 1997, 198, 3255-3265.	1.1	21
77	Superlattice Formation on Star Polymer Solutions. Journal of Colloid and Interface Science, 1997, 192, 189-193.	5.0	42
78	Structural Ordering in (AB) <sub>n</sub> -Type Star Copolymer Solutions. Journal of Colloid and Interface Science, 1995, 175, 293-296.	5.0	26
79	Free-Radical Polymerization of Macromonomers. Journal of Macromolecular Science - Pure and Applied Chemistry, 1995, 32, 1227-1234.	1.2	9