

Hiroki Uehara

List of Publications by Year in descending order

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102
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citing authors

#	ARTICLE	IF	CITATIONS
1	Size-Selective Diffusion in Nanoporous but Flexible Membranes for Glucose Sensors. ACS Nano, 2009, 3, 924-932.	14.6	120
2	Deconvolution Analyses of Differential Scanning Calorimetry Profiles of $\hat{1}^2$ -Crystallized Polypropylenes with Synchronized X-ray Measurements. Macromolecules, 2007, 40, 2745-2750.	4.8	84
3	Nanoporous Polyethylene Film Prepared from Bicontinuous Crystalline/Amorphous Structure of Block Copolymer Precursor. Macromolecules, 2006, 39, 3971-3974.	4.8	70
4	Structure Development upon Melt Drawing of Ultrahigh Molecular Weight Polyethylene: Effect of Prior Thermal History. Macromolecules, 2000, 33, 2632-2641.	4.8	68
5	Relationship between Solid-State Molecular Motion and Morphology for Ultrahigh Molecular Weight Polyethylene Crystallized under Different Conditions. Macromolecules, 2000, 33, 4861-4870.	4.8	68
6	Tensile properties of highly syndiotactic polypropylene. Polymer, 1996, 37, 57-64.	3.8	59
7	Melt Drawability of Ultrahigh Molecular Weight Polyethylene. Macromolecules, 1999, 32, 2761-2769.	4.8	56
8	Real-Time X-ray Diffraction Study on Two-Stage Drawing of Ultra-High Molecular Weight Polyethylene Reactor Powder above the Static Melting Temperature. Macromolecules, 1996, 29, 1540-1547.	4.8	51
9	Structural characterization of ultrahigh-molecular-weight polyethylene reactor powders based on fuming nitric acid etching. Polymer, 1998, 39, 6127-6135.	3.8	45
10	Stereo-Complex Crystallization of Poly(lactic acid)s in Block-Copolymer Phase Separation. ACS Applied Materials & Interfaces, 2010, 2, 2707-2710.	8.0	45
11	Phase Development Mechanism during Drawing from Highly Entangled Polyethylene Melts. Macromolecular Rapid Communications, 2006, 27, 966-970.	3.9	44
12	Enhanced electrical properties of highly oriented poly(vinylidene fluoride) films prepared by solid-state coextrusion. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 2549-2556.	2.1	42
13	Comparison of Macro- and Nanotribological Behavior with Surface Plastic Deformation of Polystyrene. Langmuir, 2001, 17, 2153-2159.	3.5	42
14	Transient crystallization during drawing from ultra-high molecular weight polyethylene melts having different entanglement characteristics. Polymer, 2006, 47, 8053-8060.	3.8	41
15	Solid-State ^1H NMR Relaxation Analysis of Ultrahigh Molecular Weight Polyethylene Reactor Powder. Macromolecules, 2002, 35, 2640-2647.	4.8	37
16	In situ SAXS analysis of extended-chain crystallization during melt-drawing of ultra-high molecular weight polyethylene. Polymer, 2007, 48, 7385-7392.	3.8	36
17	Melt drawing of ultra-high molecular weight polyethylene: Comparison of Ziegler- and metallocene-catalyzed reactor powders. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 1921-1930.	2.1	33
18	Effects of molecular characteristics and processing conditions on melt-drawing behavior of ultrahigh molecular weight polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2455-2467.	2.1	33

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19	Novel in situ NMR Measurement System for Evaluating Molecular Mobility during Drawing from Highly Entangled Polyethylene Melts. <i>Macromolecular Rapid Communications</i> , 2008, 29, 1571-1576.	3.9	33
20	Phase Transitions during Heating of Melt-Drawn Ultrahigh Molecular Weight Polyethylenes Having Different Molecular Characteristics. <i>Journal of Physical Chemistry B</i> , 2008, 112, 5311-5316.	2.6	33
21	Continuous Film Processing from Ultrahigh-Molecular-Weight Polyethylene Reactor Powder and Mechanical Property Development by Melt Drawing. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 7801-7806.	3.7	29
22	Oriented Crystallization Induced by Uniaxial Drawing from Poly(tetrafluoroethylene) Melt. <i>Macromolecules</i> , 2007, 40, 9413-9419.	4.8	28
23	Nanowrinkled and Nanoporous Polyethylene Membranes Via Entanglement Arrangement Control. <i>Advanced Functional Materials</i> , 2012, 22, 2048-2057.	14.9	27
24	Tetraalkoxyphenanthrene- π -Fused Dehydroannulenes: Synthesis, Self-Assembly, and Electronic, Optical, and Electrochemical Properties. <i>Chemistry - A European Journal</i> , 2013, 19, 12138-12151.	3.3	27
25	Surface Deformation Properties of Polystyrene as Evaluated from the Morphology of Surfaces Scratched by Using the Tip of a Scanning Force Microscope. <i>Langmuir</i> , 2001, 17, 5688-5692.	3.5	26
26	Structure and characterization of nylon 46. <i>Journal of Molecular Structure</i> , 2007, 829, 80-87.	3.6	23
27	Solid-state characterization of polyethylene reactor powders and their structural changes upon annealing. <i>Polymer</i> , 2007, 48, 4547-4557.	3.8	23
28	In Situ Analysis of Melt-Drawing Behavior of Ultrahigh Molecular Weight Polyethylene Films with Different Molecular Weights: Roles of Entanglements on Oriented Crystallization. <i>Journal of Physical Chemistry B</i> , 2015, 119, 5062-5070.	2.6	23
29	Uniaxial drawing of polytetrafluoroethylene virgin powder by extrusion plus cold tensile draw. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998, 36, 2551-2562.	2.1	21
30	Single-Walled Carbon Nanotube Nucleated Solution-Crystallization of Polyethylene. <i>Journal of Physical Chemistry C</i> , 2007, 111, 18950-18957.	3.1	21
31	Novel Design Solving the Conductivity vs Water-Uptake Trade-Off for Polymer Electrolyte Membrane by Bicontinuous Crystalline/Amorphous Morphology of Block Copolymer. <i>Macromolecules</i> , 2009, 42, 7627-7630.	4.8	21
32	High Modulus Films of Polytetrafluoroethylene Prepared by Two-Stage Drawing of Reactor Powder. <i>Polymer Journal</i> , 1997, 29, 198-200.	2.7	17
33	Tribology of ultra-high molecular weight polyethylene disks molded at different temperatures. <i>Wear</i> , 2007, 262, 742-748.	3.1	17
34	Hierarchical constraint distribution of ultra-high molecular weight polyethylene fibers with different preparation methods. <i>Journal of Materials Science</i> , 2010, 45, 2574-2579.	3.7	17
35	Non-solvent processing for robust but thin membranes of ultra-high molecular weight polyethylene. <i>Journal of Materials Chemistry A</i> , 2014, 2, 5252-5257.	10.3	17
36	Practical NMR Analysis of Morphology and Structure of Polymers. <i>Annual Reports on NMR Spectroscopy</i> , 2010, 70, 203-239.	1.5	16

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37	Structural and property changes during uniaxial drawing of ethylene-tetrafluoroethylene copolymer films as analyzed by in-situ X-ray measurements. <i>Polymer</i> , 2011, 52, 1172-1179.	3.8	15
38	Structure and Property Gradation from Surface to Bulk of Poly(L-lactic acid) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (acid)/F Scanning Probe Microscopy. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 633-638.	8.0	14
39	Remnant Features in Melt Crystallized Samples of Polyethylenes Originated from Reactor Powders. <i>Journal of Macromolecular Science - Physics</i> , 2006, 45, 407-415.	1.0	12
40	Effects of knot characteristics on tensile breaking of a polymeric monofilament. <i>New Journal of Physics</i> , 2007, 9, 65-65.	2.9	12
41	Molecular Weight Segregation on Surfaces of Polyethylene Blended Films as Estimated from Nanoscratch Tests Using Scanning Probe Microscopy. <i>Langmuir</i> , 2007, 23, 5882-5885.	3.5	11
42	Modification of physical properties of poly(L-lactic acid) by addition of methyl- β -cyclodextrin. <i>Beilstein Journal of Organic Chemistry</i> , 2014, 10, 2997-3006.	2.2	11
43	Characterizations of PDMS-graft copolyimide membrane and the permselectivity of gases and aqueous organic mixtures. <i>Polymer</i> , 2016, 103, 214-223.	3.8	11
44	Thermal Properties of Syndiotactic Polypropylene.. <i>Kobunshi Ronbunshu</i> , 1994, 51, 597-604.	0.2	10
45	Robust and transparent membrane of crystalline silicone via a melt-drawing technique. <i>Journal of Materials Chemistry C</i> , 2014, 2, 373-381.	5.5	10
46	Stereocomplex poly(lactic acid) nanoparticles crystallized through nanoporous membranes and application as nucleating agent. <i>RSC Advances</i> , 2016, 6, 13971-13980.	3.6	10
47	Tetraalkoxyphenanthrene-Fused Hexadecadehydro[20]- and Tetracosadehydro[30]annulenes: Syntheses, Aromaticity/Antiaromaticity, Electronic Properties, and Self-Assembly. <i>Journal of Organic Chemistry</i> , 2017, 82, 8882-8896.	3.2	10
48	2,4,5,7,9,10-Hexaethynylpyrenes: Synthesis, Properties, and Self-Assembly. <i>Organic Letters</i> , 2018, 20, 7530-7534.	4.6	10
49	Structural arrangement of crystalline/amorphous phases of polyethylene-block-polystyrene copolymer as induced by orientation techniques. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 1731-1737.	2.1	9
50	Protein crystallization induced by strong photons-molecules coupling fields photochemical reaction. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011, 221, 268-272.	3.9	9
51	Highly Transparent and Robust Poly(tetrafluoroethylene) Membrane Prepared by Biaxial Melt-Drawing. <i>Macromolecular Materials and Engineering</i> , 2014, 299, 669-673.	3.6	9
52	Phase Transition during Heating of Nanostructured Ultrahigh Molecular Weight Polyethylene Membranes. <i>Journal of Physical Chemistry B</i> , 2015, 119, 15909-15918.	2.6	9
53	Tetraalkoxyphenanthrene-Fused Thiadiazoloquinoxalines: Synthesis, Electronic, Optical, and Electrochemical Properties, and Self-Assembly. <i>Journal of Organic Chemistry</i> , 2017, 82, 3132-3143.	3.2	9
54	Crystallization and hardening of poly(ethylene-co-vinyl acetate) mouthguards during routine use. <i>Scientific Reports</i> , 2017, 7, 44672.	3.3	9

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55	In-situ analysis for melt-drawing behavior of ultra-high molecular weight polyethylene / normal molecular weight polyethylene blend films. <i>Polymer</i> , 2021, 213, 123213.	3.8	9
56	Nanoperiodic Arrangement of Crystal/Amorphous Phases Induced by Tensile Drawing of Highly Entangled Polyethylene. <i>Macromolecules</i> , 2007, 40, 5820-5826.	4.8	8
57	Structure and molecular mobility of nascent isotactic polypropylene powders. <i>Polymer Journal</i> , 2012, 44, 764-771.	2.7	8
58	Trithiazolyl-1,3,5-triazines bearing decyloxybenzene moieties: synthesis, photophysical and electrochemical properties, and self-assembly behavior. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 3584-3595.	2.8	8
59	Control of Tribological Properties with a Series of Random Copolymers. <i>Langmuir</i> , 2002, 18, 2949-2951.	3.5	7
60	High-performance polypropylene film prepared from reactor powders having different characteristics. <i>Polymer</i> , 2006, 47, 7145-7152.	3.8	7
61	Solid-state ¹ H-NMR relaxation behavior for ultra-high-molecular-weight polyethylene reactor powders with different morphologies. <i>Polymer Journal</i> , 2012, 44, 795-801.	2.7	7
62	<i>In Situ</i> NMR Measurement of Novel Silicone Elastomer Obtained by Cross-Linking of Silicones Having Phenylene Backbone and Hyperbranched Molecular Architectures. <i>Macromolecules</i> , 2014, 47, 888-896.	4.8	7
63	Property Development for Biaxial Drawing of Ethylene-Tetrafluoroethylene Copolymer Films and Resultant Fractural Behavior Analyzed by <i>In Situ</i> X-ray Measurements. <i>Journal of Physical Chemistry B</i> , 2015, 119, 4284-4293.	2.6	7
64	Structure and physical properties of poly(lactic acid) and cyclodextrin composite. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2019, 93, 117-126.	1.6	7
65	Actuation mechanism of drawn polyethylene evaluated by structural change during cyclic stretching/shrinking. <i>Sensors and Actuators A: Physical</i> , 2021, 323, 112634.	4.1	7
66	Drawing of Poly(vinylidene fluoride): Effects of Initial Morphology and Technique on the Structure and Properties of Drawn Products.. <i>Kobunshi Ronbunshu</i> , 1996, 53, 555-562.	0.2	6
67	Surface-Deformation Characteristics of Uniaxially Oriented Poly(ethylene terephthalate) Film as Evaluated from Nanoscratch Tests with Scanning Probe Microscopy. <i>Langmuir</i> , 2006, 22, 4985-4991.	3.5	6
68	Structural change with blending of crystalline/amorphous block copolymers having different types of microphase separations. <i>Polymer</i> , 2011, 52, 6146-6153.	3.8	6
69	Phase Transition of Poly(tetramethyl- <i>p</i> -silphenylenesiloxane) As Revealed by <i>In Situ</i> X-ray and NMR Measurements. <i>Macromolecules</i> , 2012, 45, 7446-7453.	4.8	6
70	Nanoporous morphology control of polyethylene membranes by block copolymer blends. <i>RSC Advances</i> , 2014, 4, 42467-42477.	3.6	6
71	Effect of blending small amount of high-density polyethylene on molecular entanglements during melt-drawing of ultrahigh-molecular-weight polyethylene. <i>Polymer</i> , 2022, 241, 124528.	3.8	6
72	Pd- and Au-Induced Circular and Fibrous Polymer Gelation via Thiocarbonyl Groups and High Pd Catalyst Activity. <i>ACS Applied Polymer Materials</i> , 2020, 2, 2211-2219.	4.4	5

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73	Crystalline Surface Free Energy of Linear Polyethylene as Estimated from a Combination of Crystal Thickness Distribution and DSC Melting Curve Shapes.. Kobunshi Ronbunshu, 2001, 58, 326-331.	0.2	4
74	Sono-activatable Photosensitizer for Photodynamic Therapy. Chemistry Letters, 2014, 43, 1423-1425.	1.3	4
75	Development of highly functional membranes through structural control of crystalline/amorphous phases. Polymer Journal, 2019, 51, 319-325.	2.7	3
76	Structural development of dynamically asymmetric polymer blends under uniaxial stretching. Journal of Applied Crystallography, 2007, 40, s656-s661.	4.5	2
77	Reconstruction of Calorimetric Curves from X-ray Diffraction Data during the Melting-Recrystallization Process of Polymers: Simultaneous Calorimetry/X-ray Diffraction Measurements of Isotactic Poly(1-butene) in Form III. Journal of Macromolecular Science - Physics, 2012, 51, 338-347.	1.0	2
78	<i>In Situ&/i> SAXS Analysis during Uniaxial Drawing of Polyethylene-<i>block&/i>-Polystyrene Copolymer Film. Key Engineering Materials, 0, 596, 50-54.	0.4	2
79	Structural and Property Development of Silicone Elastomer Blended with Crystalline Component. Kobunshi Ronbunshu, 2015, 72, 110-117.	0.2	2
80	Structural Control and Property Development of Silicone Polymers. Nippon Gomu Kyokaishi, 2017, 90, 338-345.	0.0	2
81	Effect of Kneading and Composition on the Structure and Physical Properties of EPDM/PP Thermoplastic Elastomer. Kobunshi Ronbunshu, 2018, 75, 337-346.	0.2	2
82	Development and Applications of <i>in situ&/i> Pulse NMR Measurement System for Drawing of Polymeric Materials. Kobunshi Ronbunshu, 2012, 69, 235-241.	0.2	2
83	<i>In-Situ&/i> X-Ray Analyses of Structural Change During Drawing and Shrinking of Linear Low-Density Polyethylene Film. Journal of Robotics and Mechatronics, 2022, 34, 310-315.	1.0	2
84	Morphology of melt-crystallized syndiotactic polypropylene. Journal of Electron Microscopy, 2002, 51, 157-166.	0.9	1
85	Structural and Property Development for Conventional Polymers Utilizing Molecular Anisotropy and Entanglement Characteristics. Kobunshi Ronbunshu, 2007, 64, 525-538.	0.2	1
86	Effect of Blending Asymmetry for Poly(L-Lactic Acid)/Poly(D-Lactic Acid) on Structural Change during Heating. Key Engineering Materials, 0, 534, 71-75.	0.4	1
87	Effect of water spray on degradation of styrene-butadiene-rubber during accelerated weathering tests. Polymer Degradation and Stability, 2020, 182, 109379.	5.8	1
88	Nanoporous Membranes Prepared from Homogeneous Lamellar Structure Developed via Biaxial Melt–Drawing of Ultra–High Molecular Weight Polyethylene/Normal Molecular Weight Polyethylene Blend Films. Macromolecular Materials and Engineering, 2021, 306, 2100095.	3.6	1
89	New Testing Method for the Thermoplastic Vulcanization Processing Analysis by Dynamic Viscoelastic Properties. Nippon Gomu Kyokaishi, 2017, 90, 183-189.	0.0	1
90	Visualized Polymers. Patterns Formed by Polymeric Systems. I. A Staining Method of Polymeric Powders for Transmission Electron Microscope Observation and Its Application to Polyethylene Single Crystals.. Kobunshi Ronbunshu, 1999, 56, 702-708.	0.2	0

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91	Nano-Platelet Structure of Clay Materials Observed by Atomic Force Microscope. Key Engineering Materials, 2010, 459, 57-61.	0.4	0
92	Nanoporous Membranes: Nanowrinkled and Nanoporous Polyethylene Membranes Via Entanglement Arrangement Control (Adv. Funct. Mater. 10/2012). Advanced Functional Materials, 2012, 22, 1994-1994.	14.9	0
93	Preparation of Nano-Particles of Stereo-Complex Crystals of Poly(lactic acid). Hosokawa Powder Technology Foundation ANNUAL REPORT, 2015, 23, 57-64.	0.0	0
94	Structural Control and Property Development of Silicone Polymers. International Polymer Science and Technology, 2018, 45, 129-136.	0.1	0
95	Effect of Strain on the Weathering Resistance of Styrene-butadiene Rubber. Nippon Gomu Kyokaishi, 2021, 94, 87-94.	0.0	0
96	Evaluation of Structure and Property of Polymeric Surface by SPM Nano-Scratch Test. Seikei-Kakou, 2013, 25, 367-371.	0.0	0
97	Isothermal Crystallization Behavior of Polyethylene/Polystyrene Block Copolymer Estimated by Deconvolution Analysis of Differential Scanning Calorimetry Profiles. Kobunshi Ronbunshu, 2019, 76, 150-156.	0.2	0
98	Effect of Raw Material Powder on Melt-Drawing Behavior of Ultrahigh-Molecular-Weight Polyethylene. Seikei-Kakou, 2022, 34, 103-110.	0.0	0