Hiromu Saito

List of Publications by Year in Descending Order

113 papers	1,989 citations	26 h-index	39 g-index
123 ext. papers	2,158 ext. citations	3.6 avg, IF	4.57 L-index

#	Paper	IF	Citations
113	Cooperative progress of crystallization and spinodal decomposition in the blends of dissimilar polycarbonates. *Polymer*, **2022**, 238, 124418	3.9	0
112	Nucleation Effect of the Chemical Structure of Alkylammonium Salt on the Crystallization Behavior of Poly(Vinylidene Fluoride). *Polymer Crystallization*, **2022**, 2022, 1-9	0.9	0
111	Foaming of Polymers using Supercritical Fluids. *Nippon Gomu Kyokaishi*, **2021**, 94, 341-345	0	
110	Strengthening of mille-feuille structured high-density polyethylene by heat elongation. *Polymer*, **2021**, 124343	3.9	2
109	Control of crystallization in two-phase blends of poly(phenylene sulfide) and poly(vinylpyrrolidone). *Polymer Crystallization*, **2021**, 4, e10165	0.9	
108	Reduction of birefringence by dynamic asymmetry in miscible blends of dissimilar polycarbonates. *Polymer*, **2021**, 222, 123632	3.9	2
107	Synergetic toughening of poly(phenylene sulfide) by poly(phenylsulfone) and poly(ethylene-ran-methacrylate-ran-glycidyl methacrylate). *Journal of Applied Polymer Science*, **2021**, 138, 49994	2.9	4
106	Thermoelectric properties of PEDOT:PSS aerogel secondary-doped in supercritical CO2 atmosphere with low thermal conductivity. *Polymer*, **2020**, 206, 122912	3.9	5
105	UCST Type Phase Boundary and Accelerated Crystallization in PTT/PET Blends. *Polymers*, **2020**, 12,	4.5	3
104	Preparation of epoxy resins derived from lignin solubilized in tetrabutylphosphonium hydroxide aqueous solutions. *International Journal of Biological Macromolecules*, **2019**, 132, 585-591	7.9	12
103	Thermosensitive polysaccharide particles for pulmonary drug delivery. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 580, 123720	5.1	4
102	Tensile properties and interfacial adhesion of silicone rubber/polyethylene blends by reactive blending. *Journal of Applied Polymer Science*, **2018**, 135, 46192	2.9	6
101	Ductile-to-brittle transition behavior of low molecular weight polycarbonate under carbon dioxide. *Polymer Engineering and Science*, **2018**, 58, 683-690	2.3	3
100	Structural Evolution of Two-Phase Blends of Polycarbonate and PMMA by Simultaneous Biaxial Stretching. *Polymers*, **2018**, 10,	4.5	5
99	Evolution of Filament-Shaped Porous Structure in Polycarbonate by Stretching under Carbon Dioxide. *Polymers*, **2018**, 10,	4.5	1
98	Structure and deformation recovery of the thermoplastic polyurethane spherulite. *Journal of Polymer Science, Part B: Polymer Physics*, **2017**, 55, 1585-1594	2.6	1
97	Morphological evolution and mechanical property enhancement of natural rubber/polypropylene blend through compatibilization by nanoclay. *Journal of Applied Polymer Science*, **2017**, 134,	2.9	15

96	Phenolic resin-crosslinked natural rubber/clay nanocomposites: Influence of clay loading and interfacial adhesion on strain-induced crystallization behavior. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a	2.9	9
95	Effects of plasticization and hydrostatic pressure on tensile properties of PMMA under compressed carbon dioxide and nitrogen. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a	2.9	7
94	Significant correlation between refractive index and activity of mitochondria: single mitochondrion study. *Biomedical Optics Express*, **2015**, 6, 859-69	3.5	36
93	Relationship between modulus and structure of annealed thermoplastic polyurethane. *Materials Today Communications*, **2015**, 2, e9-e15	2.5	17
92	Strain-induced crystallization behavior of phenolic resin crosslinked natural rubber/clay nanocomposites. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	11
91	Introduction of Polymer Blends. *Seikei-Kakou*, **2015**, 27, 120-124	0	
90	Sustainable cycloolefin polymer from pine tree oil for optoelectronics material: living cationic polymerization of β-pinene and catalytic hydrogenation of high-molecular-weight hydrogenated poly(β-pinene). *Polymer Chemistry*, **2014**, 5, 3222-3230	4.9	65
89	Zero-Birefringence Composition and Orientation Birefringence of PMMA/PVB Blends. *Kobunshi Ronbunshu*, **2014**, 71, 119-124	0	
88	Birefringence behavior of a flexible S-SEB-S/PPE nano-alloy. *Polymer Journal*, **2014**, 46, 250-253	2.7	2
87	Flexible and flame-retardant S-SEB-S triblock copolymer/PPE nano-alloy. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a	2.9	5
86	SAXS study on deformation behavior of isotactic polypropylene under pressurized CO2. *Journal of Applied Polymer Science*, **2013**, 127, 1228-1236	2.9	11
85	Thermal annealing behavior and structure development of crystalline hard segment domain in a melt-quenched thermoplastic polyurethane. *Polymer*, **2013**, 54, 2183-2189	3.9	38
84	Surface melting of crystallized poly(vinylidene fluoride) under carbon dioxide. *Polymer*, **2013**, 54, 2406-2413	3.9	6
83	The optical transparency and structural change of quenched poly(vinylidene fluoride) caused by cold-drawing. *Polymer Journal*, **2013**, 45, 1033-1040	2.7	18
82	Mechanical properties and network structure of phenol resin crosslinked hydrogenated acrylonitrile-butadiene rubber. *Journal of Applied Polymer Science*, **2013**, 129, 3396-3403	2.9	17
81	Mechanical properties and microphase structure of hydrogenated S-SB-S triblock copolymers. *Polymer Journal*, **2013**, 45, 1140-1145	2.7	6
80	Synthesis of aromatic poly(ether ketone)s bearing optically active macrocycles through Suzuki coupling polymerization. *Polymer Journal*, **2012**, 44, 315-320	2.7	36
79	Intramolecular friedel-crafts cyclization and subsequent hydrogenation of styrene-isoprene random copolymers prepared by anionic polymerization for thermally-resistant and optical applications. *Journal of Polymer Science Part A*, **2012**, 50, 1298-1307	2.5	9

78	Nucleation effect of clay on crystallization of polypropylene under carbon dioxide. *Polymer Engineering and Science*, **2012**, 52, 2228-2236	2.3	7
77	Crystallization Behavior of Polymer Blends. *Kobunshi Ronbunshu*, **2011**, 68, 353-369	0	1
76	Light Scattering Method for Analyzing Deformation Behavior of Elastomers. *Nippon Gomu Kyokaishi* , **2011**, 84, 94-99	0	
75	Fabrication of porous film based on poly(2,6-dimetyl-1,4-phenylene ether) block copolymer by supercritical carbon dioxide treatment. *Reactive and Functional Polymers*, **2011**, 71, 958-963	4.6	3
74	Dielectric relaxation study of the crystalline chain motion of poly(vinylidene fluoride) under carbon dioxide. *Polymer Journal*, **2010**, 42, 419-422	2.7	6
73	Perpendicular Orientation of Cylindrical Microdomains in Extruded Triblock Copolymer. *Macromolecules*, **2010**, 43, 2088-2091	5.5	5
72	Nucleation effect of inclusion complexes with different polyolefin as guest molecules on the crystallization of polypropylene. *Journal of Applied Polymer Science*, **2010**, 115, 1098-1104	2.9	8
71	Morphology development and exclusion of noncrystalline polymer during crystallization in PVDF/PMMA blends. *Polymer*, **2010**, 51, 1494-1500	3.9	75
70	Nucleation effect of cyclodextrin inclusion complexes on the crystallization of isotactic poly(1-butene). *Journal of Polymer Science, Part B: Polymer Physics*, **2010**, 48, 389-395	2.6	11
69	The influence of side chains on formation of inclusion complexes prepared with polyolefin and cyclodextrins. *Polymer Bulletin*, **2009**, 63, 779-788	2.4	5
68	Nucleation effect of cyclodextrin inclusion compounds on the crystallization of polypropylene. *Journal of Polymer Science, Part B: Polymer Physics*, **2009**, 47, 130-137	2.6	10
67	Orientation of cylindrical microdomains of triblock copolymers by in situ stress□train-birefringence measurements. *Journal of Polymer Science, Part B: Polymer Physics*, **2009**, 47, 715-723	2.6	12
66	Orientation Relaxation of Triblock Copolymer with Cylindrical Microdomain by in situ Stress-Birefringence Measurements. *Polymer Journal*, **2009**, 41, 562-567	2.7	9
65	Mechanism of Permeability Modification in Polyethylene Foams. *Journal of Cellular Plastics*, **2008**, 44, 107-123	1.5	9
64	Bleeding Surfactant at the Surface of Polyethylene Blend Films. *Kobunshi Ronbunshu*, **2008**, 65, 98-103	0	
63	A novel nanoporous structure on the surface of bubbles in polycarbonate foams. *Journal of Polymer Science, Part B: Polymer Physics*, **2008**, 46, 843-846	2.6	12
62	TfOH-mediated electrophilic aromatic aroylation polycondensation of 2,2?-bis[4-(trifluoromethylated aroyl)phenoxy]biphenyls with arenedicarbonyl dichlorides. *Reactive and Functional Polymers*, **2008**, 68, 340-350	4.6	6
61	Growth and Disappearance of Nanobubbles during the Foaming of Polycarbonate. *Polymer Journal*, **2008**, 40, 339-342	2.7	2

60	Crystallization after Orientation Relaxation in Polypropylene. *Polymer Journal*, **2008**, 40, 900-904	2.7	7
59	Facile Syntheses of Aromatic Polyesters Bearing Alicyclic Units in the Main Chains. *Polymer Journal*, **2008**, 40, 629-633	2.7	1
58	Convenient Synthesis of Aromaric Poly(ether ketone)s Containing Alicyclic Units. *Polymer Journal*, **2008**, 40, 861-866	2.7	3
57	Superior Nanoporous Polyimides via Supercritical CO2 Drying of Jungle-Gym-Type Polyimide Gels. *Macromolecular Rapid Communications*, **2007**, 28, 96-100	4.8	71
56	Light scattering studies on the crystalline morphology of stretched poly(ethylene 2,6-naphthalate) film. *Polymer*, **2007**, 48, 2395-2403	3.9	4
55	Electrophilic aromatic aroylation polycondensation synthesis of wholly aromatic polyketone composed of 2,2?-dimethoxy-1,1?-binaphthylylene moiety. *Reactive and Functional Polymers*, **2007**, 67, 1243-1251	4.6	6
54	Synthesis of Wholly Aromatic Polyketones Containing Optically Active Macrocycles. *Polymer Journal*, **2007**, 39, 342-346	2.7	6
53	Porous structure of crystalline polymers by exclusion effect of carbon dioxide. *Polymer*, **2006**, 47, 7564-7571	3.9	38
52	Role of Amorphous Region on the Deformation Behavior of Crystalline Polymers. *Polymer Journal*, **2006**, 38, 542-547	2.7	14
51	Synthesis of optically active aromatic poly(ether ketone)s containing 2,2?-bis (4-benzoylphenoxy)-1,1?-binaphthyl-6,6?-ene backbones. *Reactive and Functional Polymers*, **2005**, 65, 229-237	4.6	20
50	Development of co-continuous structure in liquid crystalline polyester. *Polymer*, **2005**, 46, 8313-8320	3.9	6
49	Synthesis of Optically Active Aromatic Poly(ether ketone)s via Nucleophilic Aromatic Substitution Polymerization. *Polymer Journal*, **2005**, 37, 707-710	2.7	20
48	Nickel Complex-Mediated Synthesis of Optically Active Wholly Aromatic Polyketones Bearing 2,2?-Dimethoxy-1,1?-binaphthyl-6,6?-ene Units. *Polymer Journal*, **2005**, 37, 736-741	2.7	22
47	Exclusion effect of carbon dioxide on the crystallization of polypropylene. *Journal of Polymer Science, Part B: Polymer Physics*, **2004**, 42, 1565-1572	2.6	45
46	Morphology control of polypropylene by crystallization under carbon dioxide. *Journal of Polymer Science, Part B: Polymer Physics*, **2004**, 42, 2738-2746	2.6	26
45	Crystallization of polycarbonate induced by spinodal decomposition in polymer blends. *Polymer*, **2004**, 45, 1027-1032	3.9	60
44	In-Situ Investigation of Liquid–Liquid Phase Separation in Polycarbonate/Carbon Dioxide System. *Macromolecules*, **2004**, 37, 7358-7363	5.5	17
43	Conformational Change of Phenyl Ring Side Group during Stress Relaxation in Glassy Poly(styrene-co-acrylonitrile). *Macromolecules*, **2004**, 37, 1062-1066	5.5	19

42	????? ?????????????*Seikei-Kakou*, **2004**, 16, 556-560	0	
41	Thermal reversibility in crystalline morphology of LLDPE crystallites. *Polymer*, **2002**, 43, 2101-2107	3.9	22
40	Morphology and Elastomeric Properties of Isotactic Polypropylene/Hydrogenated Polybutadiene Blends. *Polymer Journal*, **2000**, 32, 915-920	2.7	8
39	Rhythmic Growth of Target and Spiral Spherulites of Crystalline Polymer Blends. *Physical Review Letters*, **1999**, 83, 2749-2752	7.4	102
38	Morphology and elastomeric properties of isotactic polypropylene/ hydrogenated poly(styrene-co-butadiene) blends: a potential for a new thermoplastic elastomer. *Polymer*, **1999**, 40, 559-564	3.9	10
37	Physical aging in poly(methyl methacrylate) glass: densification via density fluctuation. *Polymer*, **1999**, 40, 3729-3733	3.9	38
36	Strain recovery mechanism of PBT/rubber thermoplastic elastomer. *Polymer*, **1999**, 40, 3657-3663	3.9	26
35	Visualized Polymers. Patterns Formed by Polymeric Systems. I. Polarized Microscopic Texture of High-Birefringence Spherulite.. *Kobunshi Ronbunshu*, **1999**, 56, 635-638	0	7
34	Effect of Physical Aging on the Stress and Birefringence Relaxation Behaviors in Polycarbonate Glass.. *Nihon Reoroji Gakkaishi*, **1999**, 27, 43-48	0.8	3
33	Dielectric studies of specific interaction and molecular motion in single-phase mixture of poly(methyl methacrylate) and poly(vinylidene fluoride). *Polymer*, **1998**, 39, 129-134	3.9	27
32	Phase behaviour and morphology development in a blend of isotactic polypropylene and hydrogenated poly(styrene-co-butadiene). *Polymer*, **1998**, 39, 1533-1538	3.9	15
31	Persistent lamellar structure in binary blends of polyethylene and hydrogenated butadiene block copolymer. *Polymer*, **1998**, 39, 1643-1645	3.9	3
30	Polysulfide containing s-triazine rings as a new thermoplastic elastomer: Spherulite morphology arid strain recovery behaviour. *Polymer*, **1998**, 39, 2089-2093	3.9	8
29	Physical characterization of a polyolefinic thermoplastic elastomer. *Polymer*, **1998**, 39, 3365-3372	3.9	22
28	Crystallization in Polyamide 6/Polysulfone Blends: Effect of Polysulfone Particle Size. *Macromolecules*, **1998**, 31, 4963-9	5.5	22
27	Spiral Crystal Growth in Blends of Poly(vinylidene fluoride) and Poly(vinyl acetate). *Macromolecules*, **1998**, 31, 5823-5829	5.5	55
26	Exclusion of non-crystalline polymer from the interlamellar region in polymer blends: poly(ether ether ketone)/poly(ether imide) blend by small-angle X-ray scattering. *Polymer*, **1997**, 38, 31-34	3.9	13
25	An Immiscibility Loop in Isotactic Polypropylene/Partially Hydrogenated Oligo(styrene-co-indene) Blend. *Macromolecules*, **1996**, 29, 4274-4277	5.5	18

24	Time-Resolved Small-Angle X-ray Scattering Studies on the Crystallization of Poly(ethylene terephthalate). *Macromolecules*, **1996**, 29, 7034-7037	5.5	44
23	Morphology Development in Isotactic Polypropylene/Partially Hydrogenated Oligo(styrene-co-indene) Blend. *Macromolecules*, **1995**, 28, 8096-8101	5.5	26
22	Dielectric study of the crystal-amorphous interphase in poly(vinylidene fluoride)/poly(methyl methacrylate) blends. *Polymer*, **1994**, 35, 475-479	3.9	31
21	Kinetic studies of crystallization in mixtures of isotactic polystyrene and atactic polystyrene. *Polymer*, **1994**, 35, 5699-5705	3.9	26
20	Exclusion of noncrystalline polymer from the interlamellar region in poly(vinylidene fluoride)/poly(methyl methacrylate) blends. *Macromolecules*, **1994**, 27, 216-218	5.5	61
19	Time-resolved light scattering studies on the early stage of crystallization in poly(ethylene terephthalate). *Macromolecules*, **1993**, 26, 6566-6569	5.5	52
18	Kinetics of crystal growth in mixtures of isotactic polypropylene and liquid paraffin. *Polymer*, **1993**, 34, 4752-4755	3.9	5
17	Time-resolved light scattering studies on the early stage of crystallization in isotactic polypropylene. *Macromolecules*, **1992**, 25, 1908-1911	5.5	59
16	Crystal Morphology of Binary Mixtures of Polyoxymethylene and Novolak Resin.. *Kobunshi Ronbunshu*, **1992**, 49, 175-179	0	2
15	Cooperative chain relaxation in a single-phase mixture of dissimilar polymers: definition and implication of the cooperativity. *Macromolecules*, **1992**, 25, 1824-1827	5.5	18
14	Light scattering analysis of upper critical solution temperature behavior in a poly(vinylidene fluoride)/poly(methyl methacrylate) blend. *Macromolecules*, **1992**, 25, 1611-1614	5.5	63
13	Aramid/poly(ether sulphone) blend: crystallization accelerated by the presence of amorphous polymer. *Polymer*, **1992**, 33, 3210-3214	3.9	17
12	Miscibility of Polyoxymethylene with Novolak Resin.. *Kobunshi Ronbunshu*, **1991**, 48, 443-447	0	6
11	Crystallization Kinetics of Binary Mixtures of Polyoxymethylene and Novolak Resin.. *Kobunshi Ronbunshu*, **1991**, 48, 771-774	0	3
10	Depolarized light scattering studies on single-phase mixtures of dissimilar polymers: Evidence for local ordering. *Journal of Polymer Science, Part B: Polymer Physics*, **1991**, 29, 1541-1546	2.6	12
9	Crystallization kinetics in the mixtures of poly(vinylidene fluoride) and poly(methyl methacrylate): two-step diffusion mechanism. *Macromolecules*, **1991**, 24, 4446-4449	5.5	49
8	Chain relaxation behavior in single-phase mixtures of dissimilar polymers. *Macromolecules*, **1991**, 24, 6536-6538	5.5	13
7	Temperature Dependence of the Flory Interaction Parameter in a Single-Phase Mixture of Poly(hydroxy ether of bisphenol-A) and Poly(ether sulfone). *Polymer Journal*, **1990**, 22, 128-134	2.7	10

6	Effect of nucleating agent on the structure development in isotactic polypropylene/liquid paraffin mixture. *Polymer*, **1990**, 31, 469-472	3.9	4
5	Nonlinear crystal growth in the mixture of isotactic polypropylene and liquid paraffin. *Macromolecules*, **1990**, 23, 3865-3868	5.5	26
4	Short-Range Order in a Miscible Polymer Blend. *Polymer Journal*, **1989**, 21, 357-360	2.7	7
3	Cooperative chain relaxation in miscible polymer blends. *Journal of Polymer Science, Part B: Polymer Physics*, **1988**, 26, 1761-1768	2.6	19
2	Upper Critical Solution Temperature Behavior in Poly(vinylidene fluoride)/Poly(methyl methacrylate) Blends. *Polymer Journal*, **1987**, 19, 405-412	2.7	45
1	Chain orientation and intrinsic anisotropy in birefringence-free polymer blends. *Journal of Polymer Science, Part B: Polymer Physics*, **1987**, 25, 1629-1636	2.6	65