Kohji Tashiro

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/6005210/kohji-tashiro-publications-by-year.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

293 10,034 50 87 g-index

298 10,828 4.5 6.25 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
293	Phase Transition Behavior of Polymer Crystals 2022 , 769-812		
292	Small-angle X-ray Scattering Method 2022 , 341-398		
291	Structure Analysis by Electron Diffraction Method 2022 , 321-340		
290	Crystal Structure Analysis by Wide-Angle X-ray Diffraction Method 2022 , 1-285		
289	Structure Analysis by Vibrational Spectroscopy 2022 , 399-660		
288	Structure Analysis by Wide-Angle Neutron Diffraction Method 2022 , 287-320		
287	STRUCTURES AND PHASE TRANSITIONS OF PLA AND ITS RELATED POLYMERS 2022 , 87-113		O
286	Crystal structures and phase transition of tetrafluoroethylene-vinyl alcohol alternating copolymer. <i>Polymer</i> , 2021 , 237, 124354	3.9	
285	A Role of Taut Tie Chains in the Heterogeneous Stress Distribution and Mechanical Deformation Behavior of Synthetic and Natural Fibers. <i>Journal of Fiber Science and Technology</i> , 2021 , 77, 88-117	0.8	1
284	Heterogeneous Stress Distribution and Hierarchical Structure in the Highly Oriented Nylon 6 Strings Annealed at Various Temperatures to Evaluate the True Crystallite Modulus. <i>Macromolecules</i> , 2021 , 54, 6449-6465	5.5	2
283	Forcibly Spinning Using Bombyx Mori Silkworm Anesthetized by the Water Narcosis Treatment. Journal of Natural Fibers, 2021 , 18, 419-429	1.8	
282	Effect of Methoxy Side Groups on the Crystal Structures of a Series of Syndiotactic Polymethoxystyrenes as Studied by the X-ray Diffraction Data Analysis. <i>Macromolecules</i> , 2021 , 54, 1881	-1893	1
281	High-Electric-Field-Induced Hierarchical Structure Change of Poly(vinylidene fluoride) as Studied by the Simultaneous Time-Resolved WAXD/SAXS/FTIR Measurements and Computer Simulations. <i>Macromolecules</i> , 2021 , 54, 2334-2352	5.5	7
280	Experimental confirmation of proton conductivity predicted from intermolecular hydrogen-bonding in spatially-confined novel histamine derivatives. <i>Journal of Solid State Chemistry</i> , 2021 , 299, 122182	3.3	
279	Influence of Tacticity on the Crystal Structures of Hydrogenated Ring-Opened Poly(norbornene)s. <i>Macromolecules</i> , 2021 , 54, 8122-8134	5.5	2
278	X-ray study of Poly(vinyl Alcohol)-Iodine complex prepared from the dilute iodine solution as a hint to know the inner structure of polarizer. <i>Polymer</i> , 2021 , 233, 124180	3.9	3
277	New Evolution in Crystal Structure Analysis of Synthetic Polymers on the Basis of Concerted Analysis of X-ray and Neutron Diffraction Data. <i>Nihon Kessho Gakkaishi</i> , 2021 , 63, 273-279	0	

(2018-2020)

276	Fiber Structure, Tensile Behavior and Antibacterial Activity of Polylactide/Poly(butylene terephthalate) Bicomponent Fibers Produced by High-Speed Melt-Spinning. <i>Journal of Macromolecular Science - Physics</i> , 2020 , 59, 440-456	1.4	4	
275	Crystalline Iodine Complexes of Amorphous Poly(vinyl acetate) as Studied by X-ray Diffraction, Vibrational Spectroscopy, and Computer Simulation. <i>Macromolecules</i> , 2020 , 53, 4395-4406	5.5	2	
274	Color and shape reversible, recoverable and repeatable mechanochromic shape memory polycaprolactone: a single material with dual functions. <i>Polymer Chemistry</i> , 2020 , 11, 91-101	4.9	5	
273	Metropolis Monte Carlo Simulation of Two-Dimensional Small-Angle X-ray Scattering Patterns of Oriented Polymer Materials. <i>Macromolecules</i> , 2020 , 53, 276-287	5.5	4	
272	Introduction of Disorder in the Crystal Structures of Atactic Poly(vinyl Alcohol) and Its Iodine Complex To Solve a Dilemma between X-ray and Neutron Diffraction Data Analyses. Macromolecules, 2020, 53, 6656-6671	5.5	8	
271	Crystallization behavior, structure, morphology, and thermal properties of crystalline and amorphous stereo diblock copolymers, poly(L-lactide)-b-poly(DL-lactide). <i>Polymer Chemistry</i> , 2020 , 11, 5711-5724	4.9	6	
270	Synthesis and Cyclization-Induced Charge Transfer of Rectangular Bisterthiophenesiloxanes. <i>Chemistry - A European Journal</i> , 2019 , 25, 13701-13704	4.8	1	
269	Crystal structure of cellulose-iodine complex. <i>Polymer</i> , 2019 , 171, 140-148	3.9	12	
268	A study of the extraordinarily strong and tough silk produced by bagworms. <i>Nature Communications</i> , 2019 , 10, 1469	17.4	35	
267	X-ray Crystal Structure Analysis of Poly(3-hydroxybutyrate) Form and the Proposition of a Mechanism of the Stress-Induced Fo-Phase Transition. <i>Macromolecules</i> , 2019 , 52, 2995-3009	5.5	24	
266	Structural Evolution Mechanism of Crystalline Polymers in the Isothermal Melt-Crystallization Process: A Proposition Based on Simultaneous WAXD/SAXS/FTIR Measurements. <i>Polymers</i> , 2019 , 11,	4.5	8	
265	pH-induced conformational changes in histamine in the solid state <i>RSC Advances</i> , 2019 , 9, 19375-19389	9 3.7	3	
264	Microstructural Analyses of Biaxially Oriented Polylactide/Modified Thermoplastic Starch Film with Drastic Improvement in Toughness. <i>Macromolecular Materials and Engineering</i> , 2019 , 304, 1900340	3.9	4	
263	Important Factors Necessary for Further Improvement of Elastic Modulus and Strength of Thermoplastics. <i>Seikei-Kakou</i> , 2019 , 31, 216-221	Ο		
262	Experimental Determination of the Geometrical Relation between Monomer and Polymer Species of 2,5-Distyrylpyrazine Single Crystal in the Topotactic Photoinduced Polymerization Reaction. <i>Macromolecules</i> , 2019 , 52, 2189-2202	5.5	7	
261	Synchrotron microbeam X-ray scattering study of the crystallite orientation in the spherulites of isotactic poly(butene-1) crystallized isothermally at different temperatures. <i>Polymer Journal</i> , 2019 , 51, 143-153	2.7	3	
260	Relationship between twisting phenomenon and structural discontinuity of stacked lamellae in the spherulite of poly(ethylene adipate) as studied by the synchrotron X-ray microbeam technique. <i>Polymer Journal</i> , 2019 , 51, 131-141	2.7	11	
259	Effect of Elevated Temperatures on the States of Water and Their Correlation with the Proton Conductivity of Nafion. <i>ACS Omega</i> , 2018 , 3, 349-360	3.9	23	

258	Study of phase transition and ultimate mechanical properties of orthorhombic polyoxymethylene based on the refined crystal structure. <i>Polymer</i> , 2018 , 153, 474-484	3.9	7
257	Crystal polymorphism and structure models of Poly(dimethylsiloxane). <i>Polymer</i> , 2018 , 153, 507-520	3.9	6
256	Comprehensive Study on the Formation of Higher-Order Structure of Bombyx mori Silkworm Fibers: Influence of Sericin Fractions, Modulation of Spinning Process, and Metal Ion Interactions. Journal of Fiber Science and Technology, 2018, 74, 95-108	0.8	6
255	Structural study of the ordering processes of cold drawn trans-1,4-polyisoprene samples in the heating process on the basis of wide- and small-angle X-ray scattering measurements. <i>Journal of Physics: Conference Series</i> , 2018 , 1095, 012029	0.3	1
254	Structure Analysis and Derivation of Deformed Electron Density Distribution of Polydiacetylene Giant Single Crystal by the Combination of X-ray and Neutron Diffraction Data. <i>Macromolecules</i> , 2018 , 51, 3911-3922	5.5	6
253	Crystal structures and phase transition behavior of Poly(nonamethylene terephthalamide) and its model compounds. <i>Polymer</i> , 2017 , 116, 378-394	3.9	4
252	Phase Transition Mechanism of Poly(l-lactic acid) among the Hand Forms on the Basis of the Reinvestigated Crystal Structure of the Form. <i>Macromolecules</i> , 2017 , 50, 3285-3300	5.5	35
251	Reinvestigation of the Eto-Ecrystal Phase Transition of Poly(butylene adipate) by the Time-Resolved X-ray Scattering and FTIR Spectral Measurements in the Temperature-Jump Process. <i>Macromolecules</i> , 2017 , 50, 3883-3889	5.5	29
250	Observation of Water-Stimulated Supercontraction of Uniaxially Oriented Poly(vinyl alcohol) and the Related Hierarchical Structure Change Revealed by the Time-Resolved WAXD/SAXS Measurements. <i>Macromolecules</i> , 2017 , 50, 2803-2813	5.5	3
249	Confirmation of the X-ray-Analyzed Heterogeneous Distribution of the PDLA and PLLA Chain Stems in the Crystal Lattice of Poly(lactic acid) Stereocomplex on the Basis of the Vibrational Circular Dichroism IR Spectral Measurement. <i>Macromolecules</i> , 2017 , 50, 8066-8071	5.5	27
248	Crystal Structure of Poly(lactic acid) Stereocomplex: Random Packing Model of PDLA and PLLA Chains As Studied by X-ray Diffraction Analysis. <i>Macromolecules</i> , 2017 , 50, 8048-8065	5.5	71
247	Transformation of Coiled ⊞elices into Cross-⊞heets Superstructure. <i>Biomacromolecules</i> , 2017 , 18, 3892-3903	6.9	7
246	Infrared Spectroscopy and X-ray Diffraction Characterization of Dimorphic Crystalline Structures of Polyethylenes with Halogens Placed at Equal Distance along the Backbone. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 10166-10179	3.4	16
245	Effect of Crystal Status Transformation on the Thermal Shrinkage Characteristics and Extensional Characteristics of Acetaldehyde Solvent-Induced Crystalization PET Film. <i>Transactions of the Materials Research Society of Japan</i> , 2017 , 42, 107-111	0.2	O
244	Molecular assembly of highly symmetric molecules under a hydrogen bond framework controlled by alkyl building blocks: a simple approach to fine-tune nanoscale structures. <i>Soft Matter</i> , 2016 , 12, 486	5-346	3
243	Details of the intermolecular interactions in poly(vinyl alcohol)-iodine complexes as studied by quantum chemical calculations. <i>Polymer</i> , 2016 , 99, 566-579	3.9	16
242	Constructing Electron-Conjugated Diarylbutadiyne-Based Polydiacetylene under Molecular Framework Controlled by Hydrogen Bond and Side-Chain Substituent Position. <i>Macromolecular Rapid Communications</i> , 2016 , 37, 685-90	4.8	13
241	Reinvestigation of Crystal Structure and Intermolecular Interactions of Biodegradable Poly(3-Hydroxybutyrate) Form and the Prediction of Its Mechanical Property. <i>Macromolecules</i> , 2016 , 49, 581-594	5.5	46

(2015-2016)

240	Relation between higher-order structure and crystalline phase transition of oriented isotactic polybutene-1 investigated by temperature-dependent time-resolved simultaneous WAXD/SAXS measurements. <i>Polymer</i> , 2016 , 90, 165-177	3.9	27
239	Molecular Orientation Enhancement of Silk by the Hot-Stretching-Induced Transition from Helix-HFIP Complex to Eheet. <i>Biomacromolecules</i> , 2016 , 17, 1437-48	6.9	31
238	Refinement of the Crystal Structures of Forms I and II of Isotactic Polybutene-1 and a Proposal of Phase Transition Mechanism between Them. <i>Macromolecules</i> , 2016 , 49, 1392-1404	5.5	80
237	Isotope effect on the structural evolution process in the isothermal crystallization phenomenon of polyoxymethylene. <i>Polymer</i> , 2016 , 90, 76-88	3.9	6
236	The effect of counter cation species on the formation of various crystal forms and their phase transition behavior of poly(vinyl alcohol)-iodine complex. <i>Polymer</i> , 2016 , 89, 81-93	3.9	10
235	Time-Resolved Imaging of the Phase Transition in the Melt-Grown Spherulites of Isotactic Polybutene-1 as Detected by the Two-Dimensional Polarized IR Imaging Technique. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 4689-98	3.4	14
234	Progress in Structure Analysis Techniques of Fibers 2016 , 21-47		
233	Microscopically Viewed Relationship Between Structure and Mechanical Property of Crystalline Polymers: An Important Guiding Principle for the Development of Super Fibers 2016 , 95-108		3
232	Proton transfer mechanism of 1,3,5-tri(2-benzimidazolyl) benzene with a unique triple-stranded hydrogen bond network as studied by DFT-MD simulations. <i>Chemical Engineering Science</i> , 2015 , 137, 404-411	4.4	7
231	Quantitative Crystal Structure Analysis of Poly(vinyl Alcohol) I bdine Complexes on the Basis of 2D X-ray Diffraction, Raman Spectra, and Computer Simulation Techniques. <i>Macromolecules</i> , 2015 , 48, 213	8 ⁵ 2 ⁵ 148	3 ²
230	Phenomenological study of the isotope effect on the equilibrium melting point of polymer crystal. <i>Polymer</i> , 2015 , 80, 138-145	3.9	2
229	Nanostructures and dielectric properties of PVDF-based polymer films with high energy density and low energy losses. <i>Materials Research Society Symposia Proceedings</i> , 2015 , 1740, 13		
228	DFT Study of Proton Transfer in Methyl Urocanate and Butyl Urocanate. <i>Macromolecular Symposia</i> , 2015 , 354, 99-103	0.8	
227	A Study on Crystallization Behavior for Poly (Lactic Acid) in Addition of Cardo Materials. <i>Zairyo/Journal of the Society of Materials Science, Japan</i> , 2015 , 64, 1-6	0.1	4
226	Isotropically small crystalline lamellae induced by high biaxial-stretching rate as a key microstructure for super-tough polylactide film. <i>Polymer</i> , 2015 , 68, 234-245	3.9	48
225	Isotope Effect on the Melt I sothermal Crystallization of Polyoxymethylene D/H Random Copolymers and D/H Blend Samples. <i>Macromolecules</i> , 2015 , 48, 8070-8081	5.5	9
224	Effect of OH Segmental Length on the Iodine Complex Formation of Ethylenellinyl Alcohol Random Copolymers. <i>Macromolecules</i> , 2015 , 48, 8867-8876	5.5	16
223	Detailed analysis of temperature dependences of spherulite morphology and crystallite orientation of poly(vinylidene fluoride) via a combinatorial method. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2015 , 53, 253-261	2.6	6

222	Crystal structure analyses of arylate polyesters with long methylene segments and their model compounds on the basis of 2-D X-ray diffractions and infrared progression bands. <i>Polymer</i> , 2014 , 55, 1228-1248	3.9	11
221	Hierarchical Structural Change in the Stress-Induced Phase Transition of Poly(tetramethylene terephthalate) As Studied by the Simultaneous Measurement of FTIR Spectra and 2D Synchrotron Undulator WAXD/SAXS Data. <i>Macromolecules</i> , 2014 , 47, 2052-2061	5.5	27
220	Polymorphism and Phase Transitions of Precisely Halogen-Substituted Polyethylene. (1) Crystal Structures of Various Crystalline Modifications of Bromine-Substituted Polyethylene on Every 21st Backbone Carbon. <i>Macromolecules</i> , 2014 , 47, 4738-4749	5.5	24
219	Kinetic Control of Chlorine Packing in Crystals of a Precisely Substituted Polyethylene. Toward Advanced Polyolefin Materials. <i>Macromolecules</i> , 2014 , 47, 236-245	5.5	32
218	In-house simultaneous collection of small-angle X-ray scattering, wide-angle X-ray diffraction and Raman scattering data from polymeric materials. <i>Journal of Applied Crystallography</i> , 2014 , 47, 922-930	3.8	8
217	Microscopically-viewed relationship between the chain conformation and ultimate Young's modulus of a series of arylate polyesters with long methylene segments. <i>Polymer</i> , 2014 , 55, 1799-1808	3.9	15
216	Molecular mobility of imidazoles in molten state as a key factor to enhance proton conductivity. Journal of Power Sources, 2014 , 249, 185-192	8.9	13
215	Clarification of cross-linkage structure in boric acid doped poly(vinyl alcohol) and its model compound as studied by an organized combination of X-ray single-crystal structure analysis, Raman spectroscopy, and density functional theoretical calculation. <i>Journal of Physical Chemistry B</i> , 2014 ,	3.4	26
214	Accurate Structure Analyses of Polymer Crystals on the Basis of Wide-Angle X-ray and Neutron Diffractions. <i>Kobunshi Ronbunshu</i> , 2014 , 71, 508-526	О	5
213	Crystal Structure and Crystallization Behavior of POM and its Microscopically liewed Relation with the Physical and Thermal Properties on the Basis of X flay Scattering, Vibrational Spectroscopy and Lattice Dynamical Theory 2014 , 193-226		1
212	Shifting from hydrogen bond network to Estacking: a key mechanism for reversible thermochromic sulfonated poly(ether ether ketone). <i>Macromolecular Rapid Communications</i> , 2014 , 35, 1397-401	4.8	2
211	Self-assembled aromatic polyamide nanofibers with trifluoromethyl groups via precipitation polymerization. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014 , 447, 148-154	5.1	3
210	Structural Information Necessary for the Development of Ultimate Functions and the Relationship between Structure and Properties of Polymers. <i>Seikei-Kakou</i> , 2014 , 26, 258-263	О	
209	Growth of Polymer Crystals 2013 , 165-196		3
208	Stress concentration in carbon fiber revealed by the quantitative analysis of X-ray crystallite modulus and Raman peak shift evaluated for the variously-treated monofilaments under constant tensile forces. <i>Carbon</i> , 2013 , 53, 29-37	10.4	25
207	Density functional molecular dynamics simulations investigation of proton transfer and inter-molecular reorientation under external electrostatic field perturbation: Case studies for water and imidazole systems. <i>Journal of Power Sources</i> , 2013 , 229, 141-148	8.9	4
206	Application of the simultaneous measurement system of WAXD, SAXS and transmission FTIR spectra to the study of structural changes in the cold- and melt-crystallization processes of trans-1,4-polyisoprene. <i>Polymer Journal</i> , 2013 , 45, 1019-1026	2.7	14
205	Phase-transition behavior of a crystalline polymer near the melting point: case studies of the ferroelectric phase transition of poly(vinylidene fluoride) and the £to-£transition of trans-1,4-polyisoprene. <i>Polymer Journal</i> , 2013 , 45, 1107-1114	2.7	17

204	Crystallization behavior of poly(lactic acid)/microfibrillated cellulose composite. <i>Polymer</i> , 2013 , 54, 341	7333425	5 59
203	Influence of the third monomer component on the X-ray-analyzed crystal structure of ethyleneEetrafluoroethylene copolymer. <i>European Polymer Journal</i> , 2013 , 49, 1532-1540	5.2	4
202	Experimental station for multiscale surface structural analyses of soft-material films at SPring-8 via a GISWAX/GIXD/XR-integrated system. <i>Polymer Journal</i> , 2013 , 45, 109-116	2.7	44
201	Effect of the third monomer unit on the phase transition of oriented ethylene-tetrafluoroethylene copolymer studied by the temperature-dependent measurements of 2D X-ray scattering and polarized infrared spectroscopy. <i>Polymer Journal</i> , 2013 , 45, 545-554	2.7	4
200	Encyclopedia of Polymers and Composites 2013 , 1-28		
199	Physical characteristics of the electrospun nanofiber consisting of the blends of conductive polymer and aromatic polymer. <i>Journal of Textile Engineering</i> , 2013 , 59, 25-35	0.3	
198	Synchronous and separate homo-crystallization of enantiomeric poly(l-lactic acid)/poly(d-lactic acid) blends. <i>Polymer</i> , 2012 , 53, 747-754	3.9	58
197	Influence of the third monomer component on the temperature-dependent crystallite modulus and tie chain fraction evaluated for ethylene-tetrafluoroethylene copolymers. <i>Polymer</i> , 2012 , 53, 740-746	3.9	11
196	Macromol. Chem. Phys. 20/2012. Macromolecular Chemistry and Physics, 2012, 213, 2204-2204	2.6	
195	Experimentally- and theoretically-evaluated ultimate 3-dimensional elastic constants of trans-1,4-polyisoprene and Erystalline forms on the basis of the newly-refined crystal structure information. <i>Polymer</i> , 2012 , 53, 3548-3558	3.9	23
194	Optical Birefringence Patterns and Corresponding Lamellar Alteration Induced by Solvent Vapor on Poly(l-lactic acid) Diluted with Poly(1,4-butylene adipate). <i>Macromolecules</i> , 2012 , 45, 7313-7316	5.5	12
193	Separate Crystallization and Cocrystallization of Poly(L-lactide) in the Presence of L-Lactide-Based Copolymers With Low Crystallizability, Poly(L-lactide-co-glycolide) and Poly(L-lactide-co-D-lactide). <i>Macromolecular Chemistry and Physics</i> , 2012 , 213, 2099-2112	2.6	20
192	Theoretical and Experimental Evaluation of Crystallite Moduli of Various Crystalline Forms of Poly(l-lactic acid). <i>Macromolecules</i> , 2012 , 45, 7019-7026	5.5	36
191	New Developments in the Simultaneous Measurement System of Wide-Angle and Small-Angle X-ray Scatterings and Vibrational Spectra for the Static and Dynamic Analyses of the Hierarchical Structures of Polymer Solids. <i>Kobunshi Ronbunshu</i> , 2012 , 69, 213-227	О	10
190	Stress-induced microstructural changes and crystallite modulus of carbon fiber as measured by X-ray scattering. <i>Carbon</i> , 2012 , 50, 1163-1169	10.4	29
189	Mono-Substituted Phenol-Based Benzoxazines: Inevitable Dimerization Via Self-Termination and Its Metal Complexation 2011 , 111-126		3
188	Supramolecular Chemistry of Benzoxazines: From Simple, Selective, Effective, and Efficient Macrocyclization Pathways to Host-Guest Properties 2011 , 331-354		2
187	Polyethylenimine containing benzimidazole branching: a model system providing a balance of hydrogen bond network or chain mobility enhances proton conductivity. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 11359-67	3.4	19

186	Systematic study of aggregation structure and thermal behavior of a series of unique H-shape alkane molecules. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 9537-46	3.4	4
185	Structural Regularization in the Crystallization Process from the Glass or Melt of Poly(l-lactic Acid) Viewed from the Temperature-Dependent and Time-Resolved Measurements of FTIR and Wide-Angle/Small-Angle X-ray Scatterings. <i>Macromolecules</i> , 2011 , 44, 9650-9660	5.5	102
184	Crystal Structure Analysis of Poly(l-lactic Acid) Form On the basis of the 2-Dimensional Wide-Angle Synchrotron X-ray and Neutron Diffraction Measurements. <i>Macromolecules</i> , 2011 , 44, 6441	<i>-6</i> 452	157
183	Static and Dynamic Structure Analyses of Polymer Crystals. <i>Nihon Kessho Gakkaishi</i> , 2011 , 53, 387-395	О	
182	Cocrystallization phenomenon of polyoxymethylene blend samples between the deuterated and hydrogenated species. <i>Polymer Journal</i> , 2011 , 43, 66-73	2.7	15
181	Crystal structure and disorder in Poly(l-lactic acid) Form (Aform) and the phase transition mechanism to the ordered Form. <i>Polymer</i> , 2011 , 52, 6097-6109	3.9	140
180	Poly(acrylic acid-co-4-vinylimidazole)/Sulfonated poly(ether ether ketone) blend membranes: A role of polymer chain with proton acceptor and donor for enhancing proton transfer in anhydrous system. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 10384-10391	6.7	24
179	Multipurpose soft-material SAXS/WAXS/GISAXS beamline at SPring-8. <i>Polymer Journal</i> , 2011 , 43, 471-4	7 3 .7	100
178	Crystal Structure Analysis of Ethylene T etrafluoroethylene Alternating Copolymer. <i>Macromolecules</i> , 2011 , 44, 1540-1548	5.5	20
177	Structural heterogeneity and stress distribution in carbon fiber monofilament as revealed by synchrotron micro-beam X-ray scattering and micro-Raman spectral measurements. <i>Carbon</i> , 2011 , 49, 1646-1652	10.4	48
176	Systematic studies on benzimidazole derivatives: Molecular structures and their hydrogen bond networks formation toward proton transfer efficiency. <i>Journal of Power Sources</i> , 2011 , 196, 6144-6152	8.9	24
175	Effect of chain-length of n-alkane on solvent-induced crystallization and solvent exchange phenomenon in syndiotactic polystyrene. <i>Polymer</i> , 2011 , 52, 822-829	3.9	15
174	Enhanced Contrast of Wavelength-Selective Mid-Infrared Detectors Stable against Incident Angle and Temperature Changes. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 037201	1.4	2
173	Enhanced Contrast of Wavelength-Selective Mid-Infrared Detectors Stable against Incident Angle and Temperature Changes. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 037201	1.4	1
172	Contrast Enhancement of Wavelength-Selective Detection of Mid-Infrared Using Localized Atmospheric-Pressure Plasma Treatment. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 04DL18	1.4	2
171	Correlation of Structure Changes in the Water-Induced Phase Transitions of Poly(ethylenimine) Viewed from Molecular, Crystal, and Higher-Order Levels As Studied by Simultaneous WAXD/SAXS/Raman Measurements. <i>Macromolecules</i> , 2010 , 43, 402-408	5.5	10
170	Six types of spherulite morphologies with polymorphic crystals in poly(heptamethylene terephthalate). <i>Polymer</i> , 2010 , 51, 5592-5603	3.9	18
169	Sulfur hexafluoride plasma surface modification of Gly-Ala and Ala-Gly as Bombyx mori silk model compounds: Mechanism investigations. <i>Journal of Molecular Structure</i> , 2010 , 963, 130-136	3.4	8

(2009-2010)

168	Polymorphic Crystals in Poly(heptamethylene terephthalate). <i>Macromolecular Rapid Communications</i> , 2010 , 31, 1343-7	4.8	12
167	Mesomorphic phase in oriented poly(pentamethylene 2,6-naphthalate). <i>Polymer</i> , 2010 , 51, 998-1001	3.9	5
166	Influence of alternating sequential fraction on the melting and glass transition temperatures of ethyleneEetrafluoroethylene copolymer. <i>Polymer</i> , 2010 , 51, 4831-4835	3.9	20
165	Real-time investigation of crystallization in nylon 6-clay nano-composite probed by infrared spectroscopy. <i>Polymer</i> , 2010 , 51, 5585-5591	3.9	31
164	Friction-induced dynamic chemical changes of tricresyl phosphate as lubricant additive observed under boundary lubrication with 2D fast imaging FTIR-ATR spectrometer. <i>Wear</i> , 2010 , 268, 911-916	3.5	16
163	Influence of the monomer sequential distribution on the mechanical properties and temperature dependence of an ethyleneEetrafluoroethylene copolymer in association with the phase-transition behavior. <i>Journal of Applied Polymer Science</i> , 2009 , 114, 1710-1716	2.9	10
162	Investigation of structural changes related to temperature: An understanding of H-bond based proton transfer in 4(5)-vinylimidazole and acrylic acid copolymer membrane. <i>Solid State Ionics</i> , 2009 , 180, 132-140	3.3	5
161	Investigation of the role of benzimidazole-based model compounds on thermal stability and anhydrous proton conductivity of sulfonated poly(ether ether ketone). <i>Solid State Ionics</i> , 2009 , 180, 738	3-745	23
160	Crystallization, spherulite growth, and structure of blends of crystalline and amorphous poly(lactide)s. <i>Polymer</i> , 2009 , 50, 4007-4017	3.9	101
159	Influence of side branch on the elastic modulus of ethyleneEetrafluoroethylene terpolymers. <i>Polymer</i> , 2009 , 50, 4612-4617	3.9	8
158	Amorphous phase and crystalline morphology in blend of two polymorphic polyesters: Poly(hexamethylene terephthalate) and poly(heptamethylene terephthalate). <i>Polymer</i> , 2009 , 50, 6312-	6322	11
157	Structural phase transitions of syndiotactic polystyrene. <i>Progress in Polymer Science</i> , 2009 , 34, 280-315	29.6	132
156	Isothermal Crystallization Behavior of Isotactic Polypropylene H/D Blends as Viewed from Time-Resolved FTIR and Synchrotron SAXS/WAXD Measurements. <i>Macromolecules</i> , 2009 , 42, 4191-4199	9 ^{5.5}	55
155	In Situ FTIR-ATR Observation of Phase Transition Behavior of n-Alkane Molecules Induced by Friction Motion on a Metal Interface. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 3287-3291	3.8	8
154	Relationship between morphological change and crystalline phase transitions of polyethylene-poly(ethylene oxide) diblock copolymers, revealed by the temperature-dependent synchrotron WAXD/SAXS and infrared/Raman spectral measurements. <i>Journal of Physical Chemistry</i>	3.4	32
153	Relationship between morphological change and crystalline phase transitions of polyethylene-poly(ethylene oxide) diblock copolymers. 3. Dependence of morphological transition phenomena on the PE/PEO segmental lengths and its possible origins. <i>Journal of Physical Chemistry</i>	3.4	18
152	Isotope Effect on the Isothermal Crystallization Behavior of Isotactic Polypropylene Blends between the Deuterated and Hydrogenated Species. <i>Macromolecules</i> , 2009 , 42, 1672-1678	5.5	21
151	Crystal structures of n-alkane with three functional groups in the middle and at both ends. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 2632-9	2.8	3

150	Crystallization behavior of polyethylene on silicon wafers in solution casting processes traced by time-resolved measurements of synchrotron grazing-incidence small-angle and wide-angle X-ray scattering. <i>Journal of Physics: Conference Series</i> , 2009 , 184, 012015	0.3	3
149	Structural evolution process ofisotacticpolypropylene in the isothermal crystallization from the melt. <i>Journal of Physics: Conference Series</i> , 2009 , 184, 012001	0.3	1
148	Structural evolution in the isothermal crystallization process of the molten nylon 10/10 traced by time-resolved infrared spectral measurements and synchrotron SAXS/WAXD measurements. Journal of Physics: Conference Series, 2009, 184, 012002	0.3	7
147	First detection of lamella-gyroid-cylinder phase transition of neat polyethylene-poly(ethylene oxide) diblock copolymers on the basis of synchrotron WAXD/SAXS and infrared/Raman spectral measurements. <i>Journal of Physics: Conference Series</i> , 2009 , 184, 012003	0.3	1
146	Evolution Process of Regular Structure in Isothermal Crystallization Phenomena of Crystalline Polymers Viewed from Synchrotron Small- and Wide-Angle X-ray Scatterings and Vibrational Spectroscopy. <i>Kobunshi Ronbunshu</i> , 2009 , 66, 536-549	0	8
145	Combinatory usage of X-ray and neutron diffraction techniques for the refined structure analysis of polymer crystals: From hydrogen atoms to bonded electron density distribution. <i>Journal of Physics: Conference Series</i> , 2009 , 184, 012012	0.3	6
144	Correlated changes in meso- and nano-scale hierarchical structure of Vinylidene fluoride-trifluoroethylene random copolymers investigated by simultaneous measurements of DSC and SAXS/WAXD utilizing synchrotron radiation. <i>Journal of Physics: Conference Series</i> , 2009 , 184, 012016	0.3 4	1
143	Investigating the proton transferring route in a heteroaromatic compound part I: a trial to develop di- and trifunctional benzimidazole model compounds inducing the molecular packing structure with a hydrogen bond network. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 10348-58	2.8	16
142	Disorder-to-Order Phase Transition and Multiple Melting Behavior of Poly(l-lactide) Investigated by Simultaneous Measurements of WAXD and DSC. <i>Macromolecules</i> , 2008 , 41, 1352-1357	5.5	622
141	Electrospinning as a new technique to control the crystal morphology and molecular orientation of polyoxymethylene nanofibers. <i>Journal of the American Chemical Society</i> , 2008 , 130, 15460-6	16.4	177
140	Cocrystallization Phenomenon between the H and D Species of Isotactic Polypropylene Blends As Revealed by Thermal and Infrared Spectroscopic Analyses for a Series of D/H Blend Samples. <i>Macromolecules</i> , 2008 , 41, 9807-9813	5.5	29
139	Role of Solvent Molecules as a Trigger for the Crystal Phase Transition of Syndiotactic Polystyrene/Solvent Complex. <i>Macromolecules</i> , 2008 , 41, 9814-9818	5.5	18
138	Structural Correlation between Crystal Lattice and Lamellar Morphology in the Phase Transitions of Uniaxially Oriented Syndiotactic Polystyrene (and Forms) As Revealed by Simultaneous Measurements of Wide-Angle and Small-Angle X-ray Scatterings. <i>Macromolecules</i> , 2008 , 41, 2541-2547	5.5	32
137	Development of new in situ observation system for dynamic study of lubricant molecules on metal friction surfaces by two-dimensional fast-imaging Fourier-transform infrared-attenuated total reflection spectrometer. <i>Review of Scientific Instruments</i> , 2008 , 79, 123702	1.7	16
136	Electrical and mechanical properties of iodine-doped highly elongated ultrahigh molecular weight polyethylene films filled with multiwalled carbon nanotubes. <i>Physical Review B</i> , 2008 , 77,	3.3	24
135	Molecular Functionalization of Cold-Plasma-Treated Bombyx mori Silk. <i>Macromolecular Symposia</i> , 2008 , 264, 107-112	0.8	10
134	Polyglycolide as a Biodegradable Nucleating Agent for Poly(L-lactide). <i>Macromolecular Materials and Engineering</i> , 2008 , 293, 947-951	3.9	55
133	Preparation of 4(5)-vinylimidazole-co-acrylic acid copolymer and thermal performances related to applicability as PEM fuel cells. <i>Polymer Degradation and Stability</i> , 2008 , 93, 1389-1395	4.7	16

(2006-2008)

132	contents, Part 1: Structure at room temperature investigated for uniaxially-oriented samples by an organized combination of 2D-WAXD/SAXS and IR/Raman spectra. <i>Polymer</i> , 2008 , 49, 561-569	3.9	21
131	Crystallization behavior of nano-composite based on poly(vinylidene fluoride) and organically modified layered titanate. <i>Polymer</i> , 2008 , 49, 4298-4306	3.9	32
130	Structural study of a series of ethylenetetrafluoroethylene copolymers with various ethylene contents, Part 2: Phase transition behavior investigated by temperature dependent measurements of X-ray fiber diagrams. <i>Polymer</i> , 2008 , 49, 5072-5083	3.9	18
129	Real-time investigation of crystallization in poly(vinylidene fluoride)-based nano-composites probed by infrared spectroscopy. <i>Polymer</i> , 2008 , 49, 5186-5190	3.9	27
128	Influence of third monomer on the crystal phase transition behavior of ethyleneEetrafluoroethylene copolymer. <i>Polymer</i> , 2008 , 49, 5497-5503	3.9	19
127	Structural Changes during Thermally Induced Phase Transitions Observed for Uniaxially Oriented Ill Form of Syndiotactic Polystyrene. <i>Macromolecules</i> , 2007 , 40, 6291-6295	5.5	23
126	Effect of Solvent Molecules on Phase Transition Phenomena of Syndiotactic Polystyrene. <i>Macromolecules</i> , 2007 , 40, 5366-5371	5.5	20
125	Investigation of Phase Transitional Behavior of Poly(l-lactide)/Poly(d-lactide) Blend Used to Prepare the Highly-Oriented Stereocomplex. <i>Macromolecules</i> , 2007 , 40, 1049-1054	5.5	192
124	Structural investigation on water-induced phase transitions of poly(ethylene imine), Part IV: Changes of intra- and intermolecular hydrogen bonds in the hydration processes as revealed by time-resolved Raman spectral measurements. <i>Polymer</i> , 2007 , 48, 7614-7622	3.9	10
123	Structural Refinement and Extraction of Hydrogen Atomic Positions in Polyoxymethylene Crystal Based on the First Successful Measurements of 2-Dimensional High-Energy Synchrotron X-ray Diffraction and Wide-Angle Neutron Diffraction Patterns of Hydrogenated and Deuterated Species.	2.7	28
122	Development of Synchrotron DSC/WAXD/SAXS Simultaneous Measurement System for Polymeric Materials at the BL40B2 in SPring-8 and its Application to the Study of Crystal Phase Transitions of Fluorine Polymers. <i>Polymer Journal</i> , 2007 , 39, 1281-1289	2.7	21
121	. Chinese Journal of Polymer Science (English Edition), 2007 , 25, 73	3.5	16
120	Structural correlation between crystal lattice and lamellar morphology in the ferroelectric phase transition of vinylidene fluoridelirifluoroethylene copolymers as revealed by the simultaneous measurements of wide-angle and small-angle X-ray scatterings. <i>Polymer</i> , 2006 , 47, 5433-5444	3.9	33
119	Structural Phase Transitions of Aliphatic Nylons Viewed from the Simultaneous Measurements of WAXD and SAXS. <i>Macromolecular Symposia</i> , 2006 , 242, 250-256	0.8	9
118	Crystal and Lamella Structure and CHIIIOC Hydrogen Bonding of Poly(3-hydroxyalkanoate) Studied by X-ray Diffraction and Infrared Spectroscopy. <i>Macromolecules</i> , 2006 , 39, 1525-1531	5.5	103
117	Supramolecular structure of N,N-Bis(2-hydroxybenzyl)alkylamine: flexible molecular assembly framework for host without guest and host with guest. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 2136	55 ² 70	18
116	Polymorphism in Nylon-11: Characterization using HTWAXS and HTFTIR. <i>Macromolecular Symposia</i> , 2006 , 242, 216-226	0.8	15
115	Crystalline Phases in Nylon-11: Studies Using HTWAXS and HTFTIR. <i>Macromolecules</i> , 2006 , 39, 2841-28-	48 .5	74

114	Structural Changes in Thermally Induced Phase Transitions of Uniaxially Oriented & Form of Syndiotactic Polystyrene Investigated by Temperature-Dependent Measurements of X-ray Fiber Diagrams and Polarized Infrared Spectra. <i>Macromolecules</i> , 2006 , 39, 8412-8418	5.5	92
113	Factors governing the three-dimensional hydrogen-bond network structure of poly(m-phenylene isophthalamide) and a series of its model compounds (4): similarity in local conformation and packing structure between a complicated three-arm model compound and the linear model	3.4	14
112	Confirmation of Disorder Form of Poly(L-lactic acid) by the X-ray Fiber Pattern and Polarized IR/Raman Spectra Measured for Uniaxially-Oriented Samples. <i>Macromolecular Symposia</i> , 2006 , 242, 27	4-278	121
111	Structural Study on Water-induced Phase Transitions of Poly(ethylene imine) as Viewed from the Simultaneous Measurements of Wide-Angle X-ray Diffractions and DSC Thermograms. <i>Macromolecular Symposia</i> , 2006 , 242, 262-267	0.8	7
110	Supramolecular Structure of N,N-Bis(2-hydroxy-benzyl)alkylamine: From Hydrogen Bond Assembly to Coordination Network in Guest Acceptance. <i>Macromolecular Symposia</i> , 2006 , 242, 40-48	0.8	16
109	Structural Study of Phase Transition Behavior of Uniaxially-Oriented Ethylene-Tetrafluoroethylene Alternating Copolymer. <i>Macromolecular Symposia</i> , 2006 , 242, 268-273	0.8	6
108	Thermally-Induced Phase Transitions in the Uniaxially-Oriented Form of Syndiotactic Polystyrene. <i>Macromolecular Symposia</i> , 2006 , 242, 257-261	0.8	8
107	A near-infrared study of thermally induced structural changes in polyethylene crystal. <i>Polymer</i> , 2006 , 47, 2010-2017	3.9	21
106	Crystal structures of n-alkanes with branches of different size in the middle. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 10668-75	3.4	8
105	Structural Evolution Process in Solvent-Induced Crystallization Phenomenon of Syndiotactic Polystyrene. <i>Macromolecular Symposia</i> , 2005 , 222, 115-120	0.8	5
104	Structural deformation behavior of isotactic polypropylene with different molecular characteristics during hot drawing process. <i>Polymer</i> , 2005 , 46, 8846-8858	3.9	44
103	Molecular dynamics simulation of the structural and mechanical property changes in the Brill transition of nylon 10/10 crystal. <i>Polymer</i> , 2004 , 45, 4337-4348	3.9	43
102	Conformational disorder in the Brill transition of uniaxially-oriented nylon 10/10 sample investigated through the temperature-dependent measurement of X-ray fiber diagram. <i>Polymer</i> , 2004 , 45, 6349-6355	3.9	34
101	Structural changes in isothermal crystallization processes of synthetic polymers studied by time-resolved measurements of synchrotron-sourced X-ray scatterings and vibrational spectra. <i>Macromolecular Research</i> , 2004 , 12, 1-10	1.9	10
100	Time-resolved wide-angle X-ray scattering measurements during the isothermal crystallization and ferroelectric phase-transition processes of a vinylidene fluoride/trifluoroethylene copolymer. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 4175-4181	2.6	9
99	Extraction of Hydrogen-Atom Positions in Polyethylene Crystal Lattice from Wide-Angle Neutron Diffraction Data Collected by a Two-Dimensional Imaging Plate System: Comparison with the X-ray and Electron Diffraction Results. <i>Macromolecules</i> , 2004 , 37, 4109-4117	5.5	28
98	Structural Analysis of Polyoxymethylene Whisker Single Crystal by the Electron Diffraction Method. <i>Macromolecules</i> , 2004 , 37, 826-830	5.5	21
97	Solvent Effect on the Glass Transition Temperature of Syndiotactic Polystyrene Viewed from Time-Resolved Measurements of Infrared Spectra at the Various Temperatures and Its Simulation by Molecular Dynamics Calculation. <i>Macromolecules</i> , 2004 , 37, 467-472	5.5	44

96	Crystal Structure of 20-Methyl-Nonatriacontane ((C19H39)2CHCH3) and Its Compatibility with Nonatriacontane (C39H80). <i>Journal of Physical Chemistry B</i> , 2004 , 108, 5827-5835	3.4	14
95	Microscopically-viewed structural changes in solvent-induced phase transitions of synthetic polymers. <i>Macromolecular Symposia</i> , 2003 , 203, 13-26	0.8	2
94	Structural change in the Brill transition of Nylon m/n (1) Nylon 10/10 and its model compounds. <i>Polymer</i> , 2003 , 44, 7007-7019	3.9	60
93	Structural changes in isothermal crystallization process of polyoxymethylene investigated by time-resolved FTIR, SAXS and WAXS measurements. <i>Polymer</i> , 2003 , 44, 6973-6988	3.9	74
92	Modern interpretation on the high-stretching of natural rubber attained by the classic Eacking method. <i>Polymer</i> , 2003 , 44, 283-288	3.9	7
91	Structural changes in non-isothermal crystallization process of melt-cooled polyoxymethylene[II] evolution of lamellar stacking structure derived from SAXS and WAXS data analysis. <i>Polymer</i> , 2003 , 44, 2159-2168	3.9	50
90	Structural changes in non-isothermal crystallization process of melt-cooled polyoxymethylene. [I] Detection of infrared bands characteristic of folded and extended chain crystal morphologies and extraction of a lamellar stacking model. <i>Polymer</i> , 2003 , 44, 3107-3116	3.9	64
89	Thermally- and solvent-induced crystallization kinetics of syndiotactic polystyrene viewed from time-resolved measurements of infrared spectra at the various temperatures (1) estimation of glass transition temperature shifted by solvent absorption. <i>Polymer</i> , 2003 , 44, 6681-6688	3.9	24
88	Quantitative evaluation of stress distribution in bulk polymer samples through the comparison of mechanical behaviors between giant single-crystal and semicrystalline samples of poly(trans-1,4-diethyl muconate). <i>Journal of Polymer Science, Part B: Polymer Physics,</i> 2003 , 41, 444-453	2.6	22
87	New interpretation of progression bands observed in infrared spectra of nylon-m/n. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003 , 41, 1294-1307	2.6	21
86	Structural investigation of water-induced phase transitions of poly(ethylene imine). III. The thermal behavior of hydrates and the construction of a phase diagram. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003 , 41, 2937-2948	2.6	12
85	Crystallization of poly(ethylene imine) amorphous sample in water vapor atmosphere. <i>Polymer</i> , 2003 , 44, 1721-1724	3.9	12
84	Structural change in the Brill transition of Nylon m/n (2) conformational disordering as viewed from the temperature-dependent infrared spectral measurements. <i>Polymer</i> , 2003 , 44, 6407-6417	3.9	80
83	Factors Governing the Three-Dimensional Hydrogen-Bond Network Structure of Poly(m-phenylene isophthalamide) and a Series of Its Model Compounds. 3. Energy Terms Indispensable to the Crystal Structure Prediction. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 8343-8350	3.4	10
82	PolymerBolvent Interactions in Crystalline Form of Syndiotactic Polystyrene Viewed from the Solvent-Exchange Process in the Form and the Solvent Evaporation Phenomenon in the Thermally Induced Phase Transition. <i>Macromolecules</i> , 2003 , 36, 3593-3600	5.5	50
81	Infrared Bands Sensitive to the Chain Packing Mode in the Crystalline [16], and [Forms of Syndiotactic Polystyrene. <i>Macromolecules</i> , 2003 , 36, 3001-3003	5.5	41
80	Structural Changes in Phase Transitions of Nylon Model Compounds. 1. Transition Behavior of Model Compounds of R-NHCO-RIType. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 11835-11842	3.4	32
79	Stress-Induced Reversible Phase Transition of Poly(tetramethylene naphthalate). <i>Macromolecules</i> , 2003 , 36, 359-367	5.5	15

78	Vibrational Spectroscopic Study on the Molecular Deformation Mechanism of a Poly(trans-1,4-diethyl muconate) Single Crystal Subjected to Tensile Stress. <i>Macromolecules</i> , 2003 , 36, 109-117	5.5	15
77	Reaction principles and crystal structure design for the topochemical polymerization of 1,3-dienes. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 2502-5	16.4	90
76	Development of a simultaneous measurement system of x-ray diffraction and raman spectra: Application to structural study of crystalline-phase transitions of chain molecules. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2002 , 40, 495-506	2.6	27
75	Stress distribution in poly-p-phenylenebenzobisoxazole (PBO) fiber estimated from vibrational spectroscopic measurement under tension. II. Analysis of inhomogeneous stress distribution in PBO fiber. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2002 , 40, 1281-1287	2.6	25
74	Stress distribution in poly-p-phenylenebenzobisoxazole (PBO) fiber as viewed from vibrational spectroscopic measurement under tension. I. Stress-induced frequency shifts of Raman bands and molecular deformation mechanism. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2002 , 40, 1269-1	2.6 280	34
73	Factors Governing the Three-Dimensional Hydrogen Bond Network Structure of Poly(m-phenylene isophthalamide) and a Series of Its Model Compounds: (1) Systematic Classification of Structures Analyzed by the X-ray Diffraction Method. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 6842-6848	3.4	27
72	Factors Governing the 3-Dimensional Hydrogen-Bond Network Structure of Poly(m-phenylene isophthalamide) and a Series of Its Model Compounds (2) Computer Simulation of Crystal Structures of Aromatic Amide Compounds and Comparison with X-ray Analyzed Structures. <i>Journal</i>	3.4	10
71	Structural Investigation on Water-Induced Phase Transitions of Poly(ethylene imine). 1. Time-Resolved Infrared Spectral Measurements in the Hydration Process. <i>Macromolecules</i> , 2002 , 35, 4330-4336	5.5	40
70	Crystal engineering for topochemical polymerization of muconic esters using halogen-halogen and CH/pi interactions as weak intermolecular interactions. <i>Journal of the American Chemical Society</i> , 2002 , 124, 8891-902	16.4	153
69	Molecular Mechanism of Solvent-Induced Crystallization of Syndiotactic Polystyrene Glass. 2. Detection of Enhanced Motion of the Amorphous Chains in the Induction Period of Crystallization. <i>Macromolecules</i> , 2002 , 35, 410-414	5.5	71
68	Crystalline Structure of Polyethylene Containing 1,2- or 1,3-Disubstituted Cyclopentane Units in the Main Chain. <i>Macromolecules</i> , 2002 , 35, 9999-10003	5.5	21
67	Comparison of Crystal Structure between Low- and High-Temperature Phases of Diethyl (Z,Z)-muconate. A Trial to Investigate the Reasons Why the Solid-State Polymerization Reaction Is Ceased at Low Temperature. <i>Polymer Journal</i> , 2001 , 33, 199-203	2.7	8
66	Moisture Effect on Structure and Mechanical Property of Nylon 6 as Studied by the Time-Resolved and Simultaneous Measurements of FT-IR and Dynamic Viscoelasticity under the Controlled Humidity at Constant Scanning Rate. <i>Polymer Journal</i> , 2001 , 33, 344-355	2.7	14
65	Vibrational spectroscopic study on the photo-induced solid-state reactions of a series of muconate diesters with various side groups. <i>Polymer</i> , 2001 , 42, 6747-6757	3.9	6
64	Confirmation of the crystal structure of poly(p-phenylene benzobisoxazole) by the X-ray structure analysis of model compounds and the energy calculation. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001 , 39, 1296-1311	2.6	21
63	Diffusion and aggregation of hydrogeneous and deuterated polyethylene chains at their interfacial boundary as studied by time- and space-resolved FTIR microscopic measurements. <i>Polymer</i> , 2001 , 42, 8987-8998	3.9	6
62	Molecular Mechanism of Solvent-Induced Crystallization of Syndiotactic Polystyrene Glass. 1. Time-Resolved Measurements of Infrared/Raman Spectra and X-ray Diffraction. <i>Macromolecules</i> , 2001 , 34, 310-315	5.5	116
61	Relationship between Packing Structure and Monomer Reactivity in the Photoinduced Solid-State Polymerizations of Muconic Diesters with Different Side Groups. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 4155-4165	3.4	16

60	Asymmetric mono-oxazine: an inevitable product from Mannich reaction of benzoxazine dimers. Journal of the American Chemical Society, 2001 , 123, 9947-55	16.4	111
59	Intercalation of alkylamines into an organic polymer crystal. <i>Nature</i> , 2000 , 405, 328-30	50.4	102
58	Feature of ERadiation Polymerization of Muconic Acid Derivatives in the Crystalline State. <i>Macromolecules</i> , 2000 , 33, 7786-7792	5.5	24
57	Spatial Distribution of Chain Stems and Chain Folding Mode in Polyethylene Lamellae as Revealed by Coupled Information of DSC, FT-IR, SANS, and WANS. <i>Polymer Journal</i> , 1999 , 31, 677-686	2.7	17
56	Temperature dependence of crystal structure of uniaxially-oriented polyethylene analysed by an X-ray imaging plate system. <i>Polymer</i> , 1999 , 40, 3469-3478	3.9	22
55	Annealing effect on the ferroelectric phase transition behavior and domain structure of vinylidene fluoride (VDF)Erifluoroethylene copolymers: a comparison between uniaxially oriented VDF 73 and 65% copolymers. <i>Polymer</i> , 1999 , 40, 3855-3865	3.9	45
54	Microscopically viewed structural change of PE during the isothermal crystallization from the melt. <i>Polymer</i> , 1999 , 40, 7125-7135	3.9	49
53	Structure Analysis of Monomer and Polymer Crystals in the Photoinduced Solid-State Polymerization Reaction of Diethyl cis, cis-Muconate. <i>Macromolecules</i> , 1999 , 32, 7946-7950	5.5	43
52	Structural Change in the Topochemical Solid-State Polymerization Process of Diethylcis,cis-Muconate Crystal. 1. Investigation of Polymerization Process by Means of X-ray Diffraction, Infrared/Raman Spectra, and DSC. <i>Macromolecules</i> , 1999 , 32, 2449-2454	5.5	38
51	Crystal Structure of Ethylene⊠inyl Alcohol Copolymers. <i>Macromolecules</i> , 1999 , 32, 5860-5871	5.5	55
50	Detection of Sharp DSC Peak during the Phase Transition from the Low-Temperature Phase to the Cooled Phase of Vinylidene Fluoride Irifluoroethylene Copolymers. <i>Macromolecules</i> , 1999 , 32, 514-517	5.5	8
49	Structural changes in solvent-induced crystallization of syndiotactic polystyrene viewed from the time-resolved measurements of infrared/Raman spectra and X-ray diffraction. <i>Macromolecular Symposia</i> , 1999 , 141, 33-46	0.8	5
48	Crystal Structure and Packing Disorder of Poly(p-phenylenebenzobisoxazole): Structural Analysis by an Organized Combination of X-ray Imaging Plate System and Computer Simulation Technique. <i>Macromolecules</i> , 1998 , 31, 5430-5440	5.5	70
47	Crystalline-State Polymerization of Diethyl(Z,Z)-2,4-Hexadienedioate via a Radical Chain Reaction Mechanism To Yield an Ultrahigh-Molecular-Weight and Stereoregular Polymer. <i>Macromolecules</i> , 1998 , 31, 2129-2136	5.5	65
46	Microscopically-Viewed Structural Change of Polyethylene during Isothermal Crystallization from the Melt I. Time-Resolved FT-IR Spectral Measurements. <i>Polymer Journal</i> , 1998 , 30, 485-491	2.7	49
45	Development of a new software for the X-ray structural analysis of polymer crystals by utilizing the X-ray imaging plate system. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1997 , 35, 1677-1700	2.6	34
44	Development of a new software for the X-ray structural analysis of polymer crystals by utilizing the X-ray imaging plate system 1997 , 35, 1677		3
43	First Success in Direct Analysis of Microscopic Deformation Mechanism of Polydiacetylene Single Crystal by the X-ray Imaging-Plate System. <i>Macromolecules</i> , 1996 , 29, 8188-8196	5.5	56

42	Structural Investigation of Orthorhombic-to-Hexagonal Phase Transition in Polyethylene Crystal: The Experimental Confirmation of the Conformationally Disordered Structure by X-ray Diffraction and Infrared/Raman Spectroscopic Measurements. <i>Macromolecules</i> , 1996 , 29, 7460-7469	5.5	159
41	First application of an X-ray imaging plate system for the accurate evaluation of the crystallite modulus of polymers. <i>Macromolecular Rapid Communications</i> , 1996 , 17, 633-638	4.8	7
40	Molecular theoretical study of the intimate relationships between structure and mechanical properties of polymer crystals. <i>Polymer</i> , 1996 , 37, 1775-1786	3.9	33
39	Annealing effect on ferroelectric phase transitional behavior of vinylidene fluoride-trifluoroethylene copolymers: An interpretation based on the concept of domain and trans-gauche conformational disorder. <i>Ferroelectrics</i> , 1995 , 171, 145-162	0.6	39
38	Cocrystallization and Phase Segregation of Polyethylene Blends between the D and H Species. 7. Time-Resolved Synchrotron-Source Small-Angle X-ray Scattering Measurements for Studying the Isothermal Crystallization Kinetics: Comparison with the FTIR Data. <i>Macromolecules</i> , 1995 , 28, 8477-848	5.5 3	52
37	Cocrystallization and Phase Segregation of Polyethylene Blends between the D and H Species. 8. Small-Angle Neutron Scattering Study of the Molten State and the Structural Relationship of Chains between the Melt and the Crystalline State. <i>Macromolecules</i> , 1995 , 28, 8484-8490	5.5	32
36	Mechanical properties and deformation mechanism of polyoxymethylene chain in the crystalline state. <i>Polymer Engineering and Science</i> , 1994 , 34, 308-317	2.3	10
35	Cocrystallization and Phase Segregation of Polyethylene Blends between the D and H Species.6.Time-Resolved FTIR Measurements for Studying the Crystallization Kinetics of the Blends under Isothermal Conditions. <i>Macromolecules</i> , 1994 , 27, 1240-1244	5.5	42
34	Cocrystallization and Phase Segregation of Polyethylene Blends between the D and H Species. 3.Blend Content Dependence of the Crystallization Behavior. <i>Macromolecules</i> , 1994 , 27, 1221-1227	5.5	54
33	Structure of Physical Gels Formed in Syndiotactic Polystyrene/Solvent Systems Studied by Small-Angle Neutron Scattering. <i>Macromolecules</i> , 1994 , 27, 1349-1354	5.5	41
32	Cocrystallization and phase segregation of polyethylene blends between the D and H species. 5. Structural studies of the blends as viewed from different levels of unit cell to spherulite. <i>Macromolecules</i> , 1994 , 27, 1234-1239	5.5	27
31	Cocrystallization and Phase Segregation of Polyethylene Blends between the D and H Species.4.The Crystallization Behavior As Viewed from the Infrared Spectral Changes. <i>Macromolecules</i> , 1994 , 27, 1228-1233	5.5	29
30	Molecular theory of mechanical properties of crystalline polymers. <i>Progress in Polymer Science</i> , 1993 , 18, 377-435	29.6	81
29	Cocrystallization and phase segregation of polyethylene blends. 2. Synchrotron-sourced x-ray scattering and small-angle light scattering study of the blends between the D and H species. <i>Macromolecules</i> , 1992 , 25, 1809-1815	5.5	56
28	Cocrystallization and phase segregation of polyethylene blends. 1. Thermal and vibrational spectroscopic study by utilizing the deuteration technique. <i>Macromolecules</i> , 1992 , 25, 1801-1808	5.5	73
27	Quasiharmonic treatment of infrared and raman vibrational frequency shifts induced by tensile deformation of polymer chains. II. Application to the polyoxymethylene and isotactic polypropylene single chains and the three-dimensional orthorhombic polyethylene crystal. <i>Journal of Polymer</i>	2.6	26
26	Structural changes in ferroelectric phase transitions of vinylidene fluoride-tetrafluoroethylene copolymers: 2. Normal-modes analysis of the infra-red and Raman spectra at room temperature. <i>Polymer</i> , 1992 , 33, 2929-2933	3.9	16
25	Structural changes in ferroelectric phase transitions of vinylidene fluoride-tetrafluoroethylene copolymers: 1. Vinylidene fluoride content dependence of the transition behaviour. <i>Polymer</i> , 1992 , 33, 2915-2928	3.9	38

(1980-1992)

24	Vibrational Spectra and Theoretical Three-Dimensional Elastic Constants of Isotactic Polypropylene Crystal. An Important Role of Anharmonic Vibrations <i>Polymer Journal</i> , 1992 , 24, 899-916	2.7	37
23	Lattice-dynamical prediction of the limiting Young's modulus of liquid crystalline arylate polymers: comparison with typical rigid-rod polymers. <i>Polymer</i> , 1991 , 32, 454-463	3.9	17
22	Theoretical evaluation of three-dimensional elastic constants of native and regenerated celluloses: role of hydrogen bonds. <i>Polymer</i> , 1991 , 32, 1516-1526	3.9	372
21	Theoretical Young's moduli of poly(p-phenylenebenzobisthiazole) and poly(p-phenylenebenzobisoxazole). <i>Macromolecules</i> , 1991 , 24, 3706-3708	5.5	39
20	Quasiharmonic treatment of infrared and raman vibrational frequency shifts induced by tensile deformation of polymer chains. <i>Journal of Polymer Science, Part B: Polymer Physics,</i> 1990 , 28, 2527-2553	2.6	24
19	Structural phase transition in ferroelectric fluorine polymers: X-ray diffraction and infrared/Raman spectroscopic study. <i>Phase Transitions</i> , 1989 , 18, 213-246	1.3	146
18	A study on mechanical deformation of highly oriented poly(oxymethylene) by vibrational spectroscopy and X-ray diffraction: stress and temperature dependences of Young's modulus. <i>Macromolecules</i> , 1989 , 22, 758-765	5.5	25
17	X-ray study of lattice tensile properties of fully extended aromatic polyamide fibers over a wide temperature range. <i>Macromolecules</i> , 1987 , 20, 347-351	5.5	31
16	Structural study of the ferroelectric phase transition of vinylidene fluoride-trifluoroethylene copolymers: 4. Poling effect on structure and phase transition. <i>Polymer</i> , 1986 , 27, 667-676	3.9	40
15	Stress-induced crystalline phase transition in block copolymers of poly(tetramethylene terephthalate) and poly(tetramethylene oxide). I Dependence of transitional behavior on hard/soft segmental ratio <i>Journal of Fiber Science and Technology</i> , 1986 , 42, T597-T605	О	10
14	Stress-induced crystalline phase transition in block copolymers of poly(tetramethylene terephthalate) and poly(tetramethylene oxide). II Phase transition and inhomogeneous deformation <i>Journal of Fiber Science and Technology</i> , 1986 , 42, T659-T664	0	8
13	Polarized Raman spectra and LO-TO splitting of poly(vinylidene fluoride) crystal form I. <i>Macromolecules</i> , 1985 , 18, 2600-2606	5.5	65
12	Structure and ferroelectric phase transition of vinylidene fluoride-trifluoroethylene copolymers: 2. VDF 55% copolymer. <i>Polymer</i> , 1984 , 25, 195-208	3.9	125
11	A preliminary X-ray study on ferroelectric phase transition of poly(vinylidene ruoride) crystal form I. <i>Polymer Bulletin</i> , 1983 , 10, 464-469	2.4	17
10	Phase transition at a temperature immediately below the melting point of poly(vinylidene fluoride) from I: A proposition for the ferroelectric Curie point. <i>Polymer</i> , 1983 , 24, 199-204	3.9	62
9	Vibrational spectra and disorder-order transition of poly(vinylidene fluoride) form III. Macromolecules, 1981 , 14, 1757-1764	5.5	155
8	Calculation of three-dimensional elastic constants of polymer crystals. 3. Hand [Forms of nylon 6. <i>Macromolecules</i> , 1981 , 14, 781-785	5.5	62
7	Solid-State Transition of Poly(butylene terephthalate) Induced by Mechanical Deformation. <i>Macromolecules</i> , 1980 , 13, 137-145	5.5	118

6	Calculation of Three-Dimensional Elastic Constants of Polymer Crystals. 2. Application to Orthorhombic Polyethylene and Poly(vinyl alcohol). <i>Macromolecules</i> , 1978 , 11, 914-918	5.5	99
5	Calculation of Three-Dimensional Elastic Constants of Polymer Crystals. 1. Method of Calculation. <i>Macromolecules</i> , 1978 , 11, 908-913	5.5	42
4	Theoretical Elastic Moduli and Conformations of Polymer Chains. <i>Macromolecules</i> , 1977 , 10, 731-736	5.5	37
3	Elastic Moduli and Molecular Structures of Several Crystalline Polymers, Including Aromatic Polyamides. <i>Macromolecules</i> , 1977 , 10, 413-420	5.5	192
2	Molecular Vibrations of Three Crystal Forms of Poly(vinylidene fluoride). <i>Macromolecules</i> , 1975 , 8, 158-	1₹.ţ	626
1	Microscopically Viewed Structural Characteristics of Polyethylene Blends between Deuterated and Hydrogenated Species: Cocrystallization and Phase Separation97-120		