# Kohji Tashiro

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6005210/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 288 papers | 11,973 citations | 28274 55 h-index | 37204 96 g-index |
| 298 all docs | 298 docs citations | 298 times ranked | 7396 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Molecular Vibrations of Three Crystal Forms of Poly(vinylidene fluoride). Macromolecules, 1975, 8, 158-171. | 4.8 | 743 |
| 2 | Disorder-to-Order Phase Transition and Multiple Melting Behavior of Poly(<scp>l</scp>-lactide) Investigated by Simultaneous Measurements of WAXD and DSC. Macromolecules, 2008, 41, 1352-1357. | 4.8 | 737 |
| 3 | Theoretical evaluation of three-dimensional elastic constants of native and regenerated celluloses: role of hydrogen bonds. Polymer, 1991, 32, 1516-1526. | 3.8 | 419 |
| 4 | Elastic Moduli and Molecular Structures of Several Crystalline Polymers, Including Aromatic Polyamides. Macromolecules, 1977, 10, 413-420. | 4.8 | 259 |
| 5 | Investigation of Phase Transitional Behavior of Poly(l-lactide)/Poly(d-lactide) Blend Used to Prepare the Highly-Oriented Stereocomplex. Macromolecules, 2007, 40, 1049-1054. | 4.8 | 217 |
| 6 | Electrospinning as a New Technique To Control the Crystal Morphology and Molecular Orientation of Polyoxymethylene Nanofibers. Journal of the American Chemical Society, 2008, 130, 15460-15466. | 13.7 | 200 |
| 7 | Crystal Structure Analysis of Poly(<scp>l</scp>-lactic Acid) Î± Form On the basis of the 2-Dimensional Wide-Angle Synchrotron X-ray and Neutron Diffraction Measurements. Macromolecules, 2011, 44, 6441-6452. | 4.8 | 198 |
| 8 | Vibrational spectra and disorder-order transition of poly(vinylidene fluoride) form III. Macromolecules, 1981, 14, 1757-1764. | 4.8 | 193 |
| 9 | Crystal Engineering for Topochemical Polymerization of Muconic Esters Using Halogenâ^'Halogen and CH/Ï€ Interactions as Weak Intermolecular Interactions. Journal of the American Chemical Society, 2002, 124, 8891-8902. | 13.7 | 180 |
| 10 | Crystal structure and disorder in Poly(l-lactic acid) Î´ form (Î±â€² form) and the phase transition mechanism to the ordered Î± form. Polymer, 2011, 52, 6097-6109. | 3.8 | 178 |
| 11 | Structural Investigation of Orthorhombic-to-Hexagonal Phase Transition in Polyethylene Crystal:Â The Experimental Confirmation of the Conformationally Disordered Structure by X-ray Diffraction and Infrared/Raman Spectroscopic Measurements. Macromolecules, 1996, 29, 7460-7469. | 4.8 | 177 |
| 12 | Structural phase transition in ferroelectric fluorine polymers: X-ray diffraction and infrared/Raman spectroscopic study. Phase Transitions, 1989, 18, 213-246. | 1.3 | 171 |
| 13 | Structural phase transitions of syndiotactic polystyrene. Progress in Polymer Science, 2009, 34, 280-315. | 24.7 | 157 |
| 14 | Solid-State Transition of Poly(butylene terephthalate) Induced by Mechanical Deformation. Macromolecules, 1980, 13, 137-145. | 4.8 | 152 |
| 15 | Structure and ferroelectric phase transition of vinylidene fluoride-trifluoroethylene copolymers: 2. VDF 55% copolymer. Polymer, 1984, 25, 195-208. | 3.8 | 147 |
| 16 | Confirmation of DisorderÎ± Form of Poly(L-lactic acid) by the X-ray Fiber Pattern and Polarized IR/Raman Spectra Measured for Uniaxially-Oriented Samples. Macromolecular Symposia, 2006, 242, 274-278. | 0.7 | 135 |
| 17 | Calculation of Three-Dimensional Elastic Constants of Polymer Crystals. 2. Application to Orthorhombic Polyethylene and Poly(vinyl alcohol). Macromolecules, 1978, 11, 914-918. | 4.8 | 134 |
| 18 | Molecular Mechanism of Solvent-Induced Crystallization of Syndiotactic Polystyrene Glass. 1. Time-Resolved Measurements of Infrared/Raman Spectra and X-ray Diffraction. Macromolecules, 2001, 34, 310-315. | 4.8 | 130 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Intercalation of alkylamines into an organic polymer crystal. Nature, 2000, 405, 328-330. | 27.8 | 128 |
| 20 | Asymmetric Mono-oxazine:Â An Inevitable Product from Mannich Reaction of Benzoxazine Dimers. Journal of the American Chemical Society, 2001, 123, 9947-9955. | 13.7 | 123 |
| 21 | Structural Regularization in the Crystallization Process from the Glass or Melt of Poly(<scp>l</scp>-lactic Acid) Viewed from the Temperature-Dependent and Time-Resolved Measurements of FTIR and Wide-Angle/Small-Angle X-ray Scatterings. Macromolecules, 2011, 44, 9650-9660. | 4.8 | 121 |
| 22 | Multipurpose soft-material SAXS/WAXS/GISAXS beamline at SPring-8. Polymer Journal, 2011, 43, 471-477. | 2.7 | 112 |
| 23 | Crystallization, spherulite growth, and structure of blends of crystalline and amorphous poly(lactide)s. Polymer, 2009, 50, 4007-4017. | 3.8 | 110 |
| 24 | Crystal and Lamella Structure and Câ^'HÂ·Â·Â·OC Hydrogen Bonding of Poly(3-hydroxyalkanoate) Studied by X-ray Diffraction and Infrared Spectroscopy. Macromolecules, 2006, 39, 1525-1531. | 4.8 | 109 |
| 25 | Reaction Principles and Crystal Structure Design for the Topochemical Polymerization of 1,3-Dienes. Angewandte Chemie - International Edition, 2002, 41, 2502-2505. | 13.8 | 107 |
| 26 | Refinement of the Crystal Structures of Forms I and II of Isotactic Polybutene-1 and a Proposal of Phase Transition Mechanism between Them. Macromolecules, 2016, 49, 1392-1404. | 4.8 | 104 |
| 27 | Molecular theory of mechanical properties of crystalline polymers. Progress in Polymer Science, 1993, 18, 377-435. | 24.7 | 103 |
| 28 | Structural Changes in Thermally Induced Phase Transitions of Uniaxially Oriented Î´eForm of Syndiotactic Polystyrene Investigated by Temperature-Dependent Measurements of X-ray Fiber Diagrams and Polarized Infrared Spectra. Macromolecules, 2006, 39, 8412-8418. | 4.8 | 101 |
| 29 | Crystal Structure of Poly(lactic acid) Stereocomplex: Random Packing Model of PDLA and PLLA Chains As Studied by X-ray Diffraction Analysis. Macromolecules, 2017, 50, 8048-8065. | 4.8 | 100 |
| 30 | Structural change in the Brill transition of Nylon m/n (2) conformational disordering as viewed from the temperature-dependent infrared spectral measurements. Polymer, 2003, 44, 6407-6417. | 3.8 | 94 |
| 31 | Crystalline Phases in Nylon-11:Â Studies Using HTWAXS and HTFTIR. Macromolecules, 2006, 39, 2841-2848. | 4.8 | 93 |
| 32 | Crystal Structure and Packing Disorder of Poly(p-phenylenebenzobisoxazole):Â Structural Analysis by an Organized Combination of X-ray Imaging Plate System and Computer Simulation Technique. Macromolecules, 1998, 31, 5430-5440. | 4.8 | 85 |
| 33 | Cocrystallization and phase segregation of polyethylene blends. 1. Thermal and vibrational spectroscopic study by utilizing the deuteration technique. Macromolecules, 1992, 25, 1801-1808. | 4.8 | 84 |
| 34 | Structural changes in isothermal crystallization process of polyoxymethylene investigated by time-resolved FTIR, SAXS and WAXS measurements. Polymer, 2003, 44, 6973-6988. | 3.8 | 82 |
| 35 | 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. Macromolecules, 1998, 31, 2129-2136. | 4.8 | 79 |
| 36 | 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. Macromolecules, 2002, 35, 410-414. | 4.8 | 79 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Calculation of three-dimensional elastic constants of polymer crystals. 3. Î± and Î³ Forms of nylon 6. Macromolecules, 1981, 14, 781-785. | 4.8 | 76 |
| 38 | Polarized Raman spectra and LO-TO splitting of poly(vinylidene fluoride) crystal form I. Macromolecules, 1985, 18, 2600-2606. | 4.8 | 74 |
| 39 | Crystallization behavior of poly(lactic acid)/microfibrillated cellulose composite. Polymer, 2013, 54, 3417-3425. | 3.8 | 74 |
| 40 | Phase transition at a temperature immediately below the melting point of poly(vinylidene fluoride) from I: A proposition for the ferroelectric Curie point. Polymer, 1983, 24, 199-204. | 3.8 | 71 |
| 41 | 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. Macromolecules, 1992, 25, 1809-1815. | 4.8 | 70 |
| 42 | Structural change in the Brill transition of Nylon m/n (1) Nylon 10/10 and its model compounds. Polymer, 2003, 44, 7007-7019. | 3.8 | 70 |
| 43 | Isotropically small crystalline lamellae induced by high biaxial-stretching rate as a key microstructure for super-tough polylactide film. Polymer, 2015, 68, 234-245. | 3.8 | 69 |
| 44 | 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. Polymer, 2003, 44, 3107-3116. | 3.8 | 68 |
| 45 | Synchronous and separate homo-crystallization of enantiomeric poly(l-lactic acid)/poly(d-lactic acid) blends. Polymer, 2012, 53, 747-754. | 3.8 | 67 |
| 46 | Cocrystallization and Phase Segregation of Polyethylene Blends between the D and H Species. 3.Blend Content Dependence of the Crystallization Behavior. Macromolecules, 1994, 27, 1221-1227. | 4.8 | 65 |
| 47 | Isothermal Crystallization Behavior of Isotactic Polypropylene H/D Blends as Viewed from Time-Resolved FTIR and Synchrotron SAXS/WAXD Measurements. Macromolecules, 2009, 42, 4191-4199. | 4.8 | 64 |
| 48 | First Success in Direct Analysis of Microscopic Deformation Mechanism of Polydiacetylene Single Crystal by the X-ray Imaging-Plate System. Macromolecules, 1996, 29, 8188-8196. | 4.8 | 63 |
| 49 | Crystal Structure of Ethyleneâ^'Vinyl Alcohol Copolymers. Macromolecules, 1999, 32, 5860-5871. | 4.8 | 62 |
| 50 | Reinvestigation of Crystal Structure and Intermolecular Interactions of Biodegradable Poly(3-Hydroxybutyrate) Î±-Form and the Prediction of Its Mechanical Property. Macromolecules, 2016, 49, 581-594. | 4.8 | 60 |
| 51 | Polyglycolide as a Biodegradable Nucleating Agent for Poly(<scp>L</scp>â€lactide). Macromolecular Materials and Engineering, 2008, 293, 947-951. | 3.6 | 59 |
| 52 | A study of the extraordinarily strong and tough silk produced by bagworms. Nature Communications, 2019, 10, 1469. | 12.8 | 59 |
| 53 | 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. Macromolecules, 1995, 28, 8477-8483. | 4.8 | 58 |
| 54 | Microscopically viewed structural change of PE during the isothermal crystallization from the melt. Polymer, 1999, 40, 7125-7135. | 3.8 | 58 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Structural heterogeneity and stress distribution in carbon fiber monofilament as revealed by synchrotron micro-beam X-ray scattering and micro-Raman spectral measurements. Carbon, 2011, 49, 1646-1652. | 10.3 | 58 |
| 56 | Calculation of Three-Dimensional Elastic Constants of Polymer Crystals. 1. Method of Calculation. Macromolecules, 1978, 11, 908-913. | 4.8 | 56 |
| 57 | Microscopically-Viewed Structural Change of Polyethylene during Isothermal Crystallization from the Melt I. Time-Resolved FT-IR Spectral Measurements. Polymer Journal, 1998, 30, 485-491. | 2.7 | 56 |
| 58 | Structural changes in non-isothermal crystallization process of melt-cooled polyoxymethylene[II] evolution of lamellar stacking structure derived from SAXS and WAXS data analysis. Polymer, 2003, 44, 2159-2168. | 3.8 | 56 |
| 59 | Theoretical Elastic Moduli and Conformations of Polymer Chains. Macromolecules, 1977, 10, 731-736. | 4.8 | 55 |
| 60 | Polymerâ^'Solvent Interactions in Crystalline Î´ Form of Syndiotactic Polystyrene Viewed from the Solvent-Exchange Process in the Î´ Form and the Solvent Evaporation Phenomenon in the Thermally Induced Î´â^'Î³ Phase Transition. Macromolecules, 2003, 36, 3593-3600. | 4.8 | 54 |
| 61 | Annealing effect on the ferroelectric phase transition behavior and domain structure of vinylidene fluoride (VDF)â€“trifluoroethylene copolymers: a comparison between uniaxially oriented VDF 73 and 65% copolymers. Polymer, 1999, 40, 3855-3865. | 3.8 | 53 |
| 62 | Phase Transition Mechanism of Poly(<scp>l</scp>-lactic acid) among the Î±, Î´, and Î² Forms on the Basis of the Reinvestigated Crystal Structure of the Î² Form. Macromolecules, 2017, 50, 3285-3300. | 4.8 | 53 |
| 63 | Theoretical Young's moduli of poly(p-phenylenebenzobisthiazole) and poly(p-phenylenebenzobisoxazole). Macromolecules, 1991, 24, 3706-3708. | 4.8 | 52 |
| 64 | 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. Macromolecules, 1994, 27, 1240-1244. | 4.8 | 51 |
| 65 | Molecular dynamics simulation of the structural and mechanical property changes in the Brill transition of nylon 10/10 crystal. Polymer, 2004, 45, 4337-4348. | 3.8 | 51 |
| 66 | Experimental station for multiscale surface structural analyses of soft-material films at SPring-8 via a GISWAX/GIXD/XR-integrated system. Polymer Journal, 2013, 45, 109-116. | 2.7 | 51 |
| 67 | Structure Analysis of Monomer and Polymer Crystals in the Photoinduced Solid-State Polymerization Reaction of Diethyl cis,cis-Muconate. Macromolecules, 1999, 32, 7946-7950. | 4.8 | 50 |
| 68 | 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. Macromolecules, 2004, 37, 467-472. | 4.8 | 50 |
| 69 | Structural Investigation on Water-Induced Phase Transitions of Poly(ethylene imine). 1. Time-Resolved Infrared Spectral Measurements in the Hydration Process. Macromolecules, 2002, 35, 4330-4336. | 4.8 | 48 |
| 70 | Structure of Physical Gels Formed in Syndiotactic Polystyrene/Solvent Systems Studied by Small-Angle Neutron Scattering. Macromolecules, 1994, 27, 1349-1354. | 4.8 | 47 |
| 71 | Vibrational Spectra and Theoretical Three-Dimensional Elastic Constants of Isotactic Polypropylene Crystal. An Important Role of Anharmonic Vibrations.. Polymer Journal, 1992, 24, 899-916. | 2.7 | 47 |
| 72 | Structural study of the ferroelectric phase transition of vinylidene fluoride-trifluoroethylene copolymers: 4. Poling effect on structure and phase transition. Polymer, 1986, 27, 667-676. | 3.8 | 46 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Structural deformation behavior of isotactic polypropylene with different molecular characteristics during hot drawing process. Polymer, 2005, 46, 8846-8858. | 3.8 | 46 |
| 74 | 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. Ferroelectrics, 1995, 171, 145-162. | 0.6 | 45 |
| 75 | Theoretical and Experimental Evaluation of Crystallite Moduli of Various Crystalline Forms of Poly(<scp>l</scp>-lactic acid). Macromolecules, 2012, 45, 7019-7026. | 4.8 | 45 |
| 76 | Quantitative Crystal Structure Analysis of Poly(vinyl Alcohol)â€“Iodine Complexes on the Basis of 2D X-ray Diffraction, Raman Spectra, and Computer Simulation Techniques. Macromolecules, 2015, 48, 2138-2148. | 4.8 | 45 |
| 77 | 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. Macromolecules, 1999, 32, 2449-2454. | 4.8 | 42 |
| 78 | Structural changes in ferroelectric phase transitions of vinylidene fluoride-tetrafluoroethylene copolymers: 1. Vinylidene fluoride content dependence of the transition behaviour. Polymer, 1992, 33, 2915-2928. | 3.8 | 41 |
| 79 | Infrared Bands Sensitive to the Chain Packing Mode in the Crystalline Î´, Î´e, and Î³ Forms of Syndiotactic Polystyrene. Macromolecules, 2003, 36, 3001-3003. | 4.8 | 41 |
| 80 | Effect of Elevated Temperatures on the States of Water and Their Correlation with the Proton Conductivity of Nafion. ACS Omega, 2018, 3, 349-360. | 3.5 | 40 |
| 81 | Molecular theoretical study of the intimate relationships between structure and mechanical properties of polymer crystals. Polymer, 1996, 37, 1775-1786. | 3.8 | 39 |
| 82 | Conformational disorder in the Brill transition of uniaxially-oriented nylon 10/10 sample investigated through the temperature-dependent measurement of X-ray fiber diagram. Polymer, 2004, 45, 6349-6355. | 3.8 | 39 |
| 83 | Structural correlation between crystal lattice and lamellar morphology in the ferroelectric phase transition of vinylidene fluorideâ€“trifluoroethylene copolymers as revealed by the simultaneous measurements of wide-angle and small-angle X-ray scatterings. Polymer, 2006, 47, 5433-5444. | 3.8 | 39 |
| 84 | 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. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 1269-1280. | 2.1 | 38 |
| 85 | Kinetic Control of Chlorine Packing in Crystals of a Precisely Substituted Polyethylene. Toward Advanced Polyolefin Materials. Macromolecules, 2014, 47, 236-245. | 4.8 | 38 |
| 86 | X-ray Crystal Structure Analysis of Poly(3-hydroxybutyrate) Î²-Form and the Proposition of a Mechanism of the Stress-Induced Î±-to-Î² Phase Transition. Macromolecules, 2019, 52, 2995-3009. | 4.8 | 38 |
| 87 | Development of a new software for the X-ray structural analysis of polymer crystals by utilizing the X-ray imaging plate system. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 1677-1700. | 2.1 | 37 |
| 88 | Structural Changes in Phase Transitions of Nylon Model Compounds. 1. Transition Behavior of Model Compounds of R-NHCO-Râ€˜ Type. Journal of Physical Chemistry B, 2003, 107, 11835-11842. | 2.6 | 37 |
| 89 | Structural Correlation between Crystal Lattice and Lamellar Morphology in the Phase Transitions of Uniaxially Oriented Syndiotactic Polystyrene (Î´ and Î´<sub>e</sub> Forms) As Revealed by Simultaneous Measurements of Wide-Angle and Small-Angle X-ray Scatterings. Macromolecules, 2008, 41, 2541-2547. | 4.8 | 37 |
| 90 | Relationship between Morphological Change and Crystalline Phase Transitions of Polyethyleneâ€“Poly(ethylene Oxide) Diblock Copolymers, Revealed by the Temperature-dependent Synchrotron WAXD/SAXS and Infrared/Raman Spectral Measurements. Journal of Physical Chemistry B, 2009, 113, 2338-2346. | 2.6 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Molecular Orientation Enhancement of Silk by the Hot-Stretching-Induced Transition from Î±-Helix-HFIP Complex to Î²-Sheet. Biomacromolecules, 2016, 17, 1437-1448. | 5.4 | 37 |
| 92 | 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. Macromolecules, 2017, 50, 8066-8071. | 4.8 | 37 |
| 93 | Cocrystallization and Phase Segregation of Polyethylene Blends between the D and H Species.4.The Crystallization Behavior As Viewed from the Infrared Spectral Changes. Macromolecules, 1994, 27, 1228-1233. | 4.8 | 36 |
| 94 | 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. Macromolecules, 1995, 28, 8484-8490. | 4.8 | 36 |
| 95 | 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. Macromolecules, 1989, 22, 758-765. | 4.8 | 35 |
| 96 | Relation between higher-order structure and crystalline phase transition of oriented isotactic polybutene-1 investigated by temperature-dependent time-resolved simultaneous WAXD/SAXS measurements. Polymer, 2016, 90, 165-177. | 3.8 | 35 |
| 97 | Reinvestigation of the Î²-to-Î± Crystal Phase Transition of Poly(butylene adipate) by the Time-Resolved X-ray Scattering and FTIR Spectral Measurements in the Temperature-Jump Process. Macromolecules, 2017, 50, 3883-3889. | 4.8 | 35 |
| 98 | X-ray study of lattice tensile properties of fully extended aromatic polyamide fibers over a wide temperature range. Macromolecules, 1987, 20, 347-351. | 4.8 | 34 |
| 99 | Crystallization behavior of nano-composite based on poly(vinylidene fluoride) and organically modified layered titanate. Polymer, 2008, 49, 4298-4306. | 3.8 | 34 |
| 100 | Real-time investigation of crystallization in nylon 6-clay nano-composite probed by infrared spectroscopy. Polymer, 2010, 51, 5585-5591. | 3.8 | 34 |
| 101 | Stress-induced microstructural changes and crystallite modulus of carbon fiber as measured by X-ray scattering. Carbon, 2012, 50, 1163-1169. | 10.3 | 34 |
| 102 | Hierarchical Structural Change in the Stress-Induced Phase Transition of Poly(tetramethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Undulator WAXD/SAXS Data. Macromolecules, 2014, 47, 2052-2061. | 4.8 | 34 |
| 103 | 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. Macromolecules, 1994, 27, 1234-1239. | 4.8 | 33 |
| 104 | Development of a simultaneous measurement system of x-ray diffraction and raman spectra: Application to structural study of crystalline-phase transitions of chain molecules. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 495-506. | 2.1 | 33 |
| 105 | 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. Macromolecules, 2008, 41, 9807-9813. | 4.8 | 33 |
| 106 | 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. Journal of Physical Chemistry B, 2014, 118, 6032-6037. | 2.6 | 33 |
| 107 | Extraction of Hydrogen-Atom Positions in Polyethylene Crystal Lattice from Wide-Angle Neutron Diffraction Data Collected by a Two-Dimensional Imaging Plate System:Â Comparison with the X-ray and Electron Diffraction Results. Macromolecules, 2004, 37, 4109-4117. | 4.8 | 32 |
| 108 | Factors Governing the Three-Dimensional Hydrogen Bond Network Structure of Poly(m-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Analyzed by the X-ray Diffraction Method. Journal of Physical Chemistry B, 2002, 106, 6842-6848. | 2.6 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | 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. Polymer Journal, 2007, 39, 1253-1273. | 2.7 | 31 |
| 110 | Quasiharmonic treatment of infrared and raman vibrational frequency shifts induced by tensile deformation of polymer chains. Journal of Polymer Science, Part B: Polymer Physics, 1990, 28, 2527-2553. | 2.1 | 30 |
| 111 | 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. Journal of Polymer Science, Part B: Polymer Physics, 1992, 30, 1143-1155. | 2.1 | 30 |
| 112 | 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. Carbon, 2013, 53, 29-37. | 10.3 | 30 |
| 113 | Real-time investigation of crystallization in poly(vinylidene fluoride)-based nano-composites probed by infrared spectroscopy. Polymer, 2008, 49, 5186-5190. | 3.8 | 28 |
| 114 | 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. International Journal of Hydrogen Energy, 2011, 36, 10384-10391. | 7.1 | 27 |
| 115 | Systematic studies on benzimidazole derivatives: Molecular structures and their hydrogen bond networks formation toward proton transfer efficiency. Journal of Power Sources, 2011, 196, 6144-6152. | 7.8 | 27 |
| 116 | Stress distribution in poly-p-phenylenebenzobisoxazole (PBO) fiber estimated from vibrational spectroscopic measurement under tension. II. Analysis of inhomogeneous stress distribution in PBO fiber. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 1281-1287. | 2.1 | 26 |
| 117 | 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. Polymer, 2003, 44, 6681-6688. | 3.8 | 26 |
| 118 | Structural Changes during Thermally Induced Phase Transitions Observed for Uniaxially Oriented Î´ Form of Syndiotactic Polystyrene. Macromolecules, 2007, 40, 6291-6295. | 4.8 | 26 |
| 119 | Experimentally- and theoretically-evaluated ultimate 3-dimensional elastic constants of trans-1,4-polyisoprene Î± and Î² crystalline forms on the basis of the newly-refined crystal structure information. Polymer, 2012, 53, 3548-3558. | 3.8 | 26 |
| 120 | Phase-transition behavior of a crystalline polymer near the melting point: case studies of the ferroelectric phase transition of poly(vinylidene fluoride) and the Î²-to-Î± transition of trans-1,4-polyisoprene. Polymer Journal, 2013, 45, 1107-1114. | 2.7 | 26 |
| 121 | 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. Macromolecules, 2014, 47, 4738-4749. | 4.8 | 26 |
| 122 | Spatial Distribution of Chain Stems and Chain Folding Mode in Polyethylene Lamellae as Revealed by Coupled Information of DSC, FT-IR, SANS, and WANS. Polymer Journal, 1999, 31, 677-686. | 2.7 | 25 |
| 123 | Temperature dependence of crystal structure of uniaxially-oriented polyethylene analysed by an X-ray imaging plate system. Polymer, 1999, 40, 3469-3478. | 3.8 | 25 |
| 124 | Feature of Î³-Radiation Polymerization of Muconic Acid Derivatives in the Crystalline State. Macromolecules, 2000, 33, 7786-7792. | 4.8 | 25 |
| 125 | Confirmation of the crystal structure of poly(p-phenylene benzobisoxazole) by the X-ray structure analysis of model compounds and the energy calculation. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 1296-1311. | 2.1 | 25 |
| 126 | Details of the intermolecular interactions in poly(vinyl alcohol)-iodine complexes as studied by quantum chemical calculations. Polymer, 2016, 99, 566-579. | 3.8 | 25 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | 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). Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 444-453. | 2.1 | 24 |
| 128 | Electrical and mechanical properties of iodine-doped highly elongated ultrahigh molecular weight polyethylene films filled with multiwalled carbon nanotubes. Physical Review B, 2008, 77, . | 3.2 | 24 |
| 129 | Investigation of the role of benzimidazole-based model compounds on thermal stability and anhydrous proton conductivity of sulfonated poly(ether ether ketone). Solid State Ionics, 2009, 180, 738-745. | 2.7 | 24 |
| 130 | Crystalline Structure of Polyethylene Containing 1,2- or 1,3-Disubstituted Cyclopentane Units in the Main Chain. Macromolecules, 2002, 35, 9999-10003. | 4.8 | 23 |
| 131 | Structural Analysis of Polyoxymethylene Whisker Single Crystal by the Electron Diffraction Method. Macromolecules, 2004, 37, 826-830. | 4.8 | 23 |
| 132 | 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. Polymer Journal, 2007, 39, 1281-1289. | 2.7 | 23 |
| 133 | Isotope Effect on the Isothermal Crystallization Behavior of Isotactic Polypropylene Blends between the Deuterated and Hydrogenated Species. Macromolecules, 2009, 42, 1672-1678. | 4.8 | 23 |
| 134 | Friction-induced dynamic chemical changes of tricresyl phosphate as lubricant additive observed under boundary lubrication with 2D fast imaging FTIR-ATR spectrometer. Wear, 2010, 268, 911-916. | 3.1 | 23 |
| 135 | Crystal structure of cellulose-iodine complex. Polymer, 2019, 171, 140-148. | 3.8 | 23 |
| 136 | New interpretation of progression bands observed in infrared spectra of nylon-m/n. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 1294-1307. | 2.1 | 22 |
| 137 | Supramolecular Structure ofN,N-Bis(2-hydroxybenzyl)alkylamine:Â Flexible Molecular Assembly Framework for Host without Guest and Host with Guest. Journal of Physical Chemistry B, 2006, 110, 21365-21370. | 2.6 | 22 |
| 138 | A near-infrared study of thermally induced structural changes in polyethylene crystal. Polymer, 2006, 47, 2010-2017. | 3.8 | 22 |
| 139 | Influence of alternating sequential fraction on the melting and glass transition temperatures of ethyleneâ€“tetrafluoroethylene copolymer. Polymer, 2010, 51, 4831-4835. | 3.8 | 22 |
| 140 | Crystal Structure Analysis of Ethyleneâ^'Tetrafluoroethylene Alternating Copolymer. Macromolecules, 2011, 44, 1540-1548. | 4.8 | 22 |
| 141 | Polyethylenimine Containing Benzimidazole Branching: A Model System Providing a Balance of Hydrogen Bond Network or Chain Mobility Enhances Proton Conductivity. Journal of Physical Chemistry B, 2011, 115, 11359-11367. | 2.6 | 22 |
| 142 | Effect of OH Segmental Length on the Iodine Complex Formation of Ethyleneâ€“Vinyl Alcohol Random Copolymers. Macromolecules, 2015, 48, 8867-8876. | 4.8 | 22 |
| 143 | A preliminary X-ray study on ferroelectric phase transition of poly(vinylidene ruoride) crystal form I. Polymer Bulletin, 1983, 10, 464-469. | 3.3 | 21 |
| 144 | Lattice-dynamical prediction of the limiting Young's modulus of liquid crystalline arylate polymers: comparison with typical rigid-rod polymers. Polymer, 1991, 32, 454-463. | 3.8 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Effect of Solvent Molecules on Phase Transition Phenomena of Syndiotactic Polystyrene. Macromolecules, 2007, 40, 5366-5371. | 4.8 | 21 |
| 146 | Structural study of a series of ethyleneâ€“tetrafluoroethylene copolymers with various ethylene contents, Part 1: Structure at room temperature investigated for uniaxially-oriented samples by an organized combination of 2D-WAXD/SAXS and IR/Raman spectra. Polymer, 2008, 49, 561-569. | 3.8 | 21 |
| 147 | Separate Crystallization and Cocrystallization of Poly(<scp>L</scp>â€lactide) in the Presence of <scp>L</scp>â€lactideâ€based Copolymers With Low Crystallizability, Poly(<scp>L</scp>â€lactideâ€coâ€glycolide) and Poly(<scp>L</scp>â€lactideâ€coâ€<scp>D</scp>â€lactide). Macromolecular Chemistry and Physics, 2012, 213, 2099-2112. | 2.2 | 21 |
| 148 | Preparation of 4(5)-vinylimidazole-co-acrylic acid copolymer and thermal performances related to applicability as PEM fuel cells. Polymer Degradation and Stability, 2008, 93, 1389-1395. | 5.8 | 20 |
| 149 | Role of Solvent Molecules as a Trigger for the Crystal Phase Transition of Syndiotactic Polystyrene/Solvent Complex. Macromolecules, 2008, 41, 9814-9818. | 4.8 | 20 |
| 150 | Six types of spherulite morphologies with polymorphic crystals in poly(heptamethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (te | 3.8 | 20 |
| 151 | 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. Polymer Journal, 2001, 33, 344-355. | 2.7 | 19 |
| 152 | Vibrational Spectroscopic Study on the Molecular Deformation Mechanism of a Poly(trans-1,4-diethyl) Tj ETQq0 0 0 rgBT /Overlock 10 T | 4.8 | 19 |
| 153 | Influence of third monomer on the crystal phase transition behavior of ethyleneâ€“tetrafluoroethylene copolymer. Polymer, 2008, 49, 5497-5503. | 3.8 | 19 |
| 154 | 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. Journal of Physical Chemistry A, 2008, 112, 10348-10358. | 2.5 | 19 |
| 155 | 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. Polymer Journal, 2013, 45, 1019-1026. | 2.7 | 19 |
| 156 | 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. Journal of Physical Chemistry B, 2016, 120, 4689-4698. | 2.6 | 19 |
| 157 | Infrared Spectroscopy and X-ray Diffraction Characterization of Dimorphic Crystalline Structures of Polyethylenes with Halogens Placed at Equal Distance along the Backbone. Journal of Physical Chemistry B, 2017, 121, 10166-10179. | 2.6 | 19 |
| 158 | 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. Polymer Journal, 2019, 51, 131-141. | 2.7 | 19 |
| 159 | Stress-Induced Reversible Phase Transition of Poly(tetramethylene naphthalate). Macromolecules, 2003, 36, 359-367. | 4.8 | 18 |
| 160 | Structural study of a series of ethyleneâ€“tetrafluoroethylene copolymers with various ethylene contents, Part 2: Phase transition behavior investigated by temperature dependent measurements of X-ray fiber diagrams. Polymer, 2008, 49, 5072-5083. | 3.8 | 18 |
| 161 | Relationship between Morphological Change and Crystalline Phase Transitions of Polyethyleneâ^'Poly(ethylene oxide) Diblock Copolymers. 3. Dependence of Morphological Transition Phenomena on the PE/PEO Segmental Lengths and Its Possible Origins. Journal of Physical Chemistry B, 2009, 113, 8495-8504. | 2.6 | 18 |
| 162 | Supramolecular Structure ofN,N-Bis(2-hydroxy-benzyl)alkylamine: From Hydrogen Bond Assembly to Coordination Network in Guest Acceptance. Macromolecular Symposia, 2006, 242, 40-48. | 0.7 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | 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. Review of Scientific Instruments, 2008, 79, 123702. | 1.3 | 17 |
| 164 | Effect of chain-length of n-alkane on solvent-induced crystallization and solvent exchange phenomenon in syndiotactic polystyrene. Polymer, 2011, 52, 822-829. | 3.8 | 17 |
| 165 | Microscopically-viewed relationship between the chain conformation and ultimate Young's modulus of a series of arylate polyesters with long methylene segments. Polymer, 2014, 55, 1799-1808. | 3.8 | 17 |
| 166 | Molecular mobility of imidazoles in molten state as a key factor to enhance proton conductivity. Journal of Power Sources, 2014, 249, 185-192. | 7.8 | 17 |
| 167 | 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. Polymer, 1992, 33, 2929-2933. | 3.8 | 16 |
| 168 | Relationship between Packing Structure and Monomer Reactivity in the Photoinduced Solid-State Polymerizations of Muconic Diesters with Different Side Groups. Journal of Physical Chemistry B, 2001, 105, 4155-4165. | 2.6 | 16 |
| 169 | Crystal Structure of 20-Methyl-Nonatriacontane ((C19H39)2CHCH3) and Its Compatibility with Nonatriacontane (C39H80). Journal of Physical Chemistry B, 2004, 108, 5827-5835. | 2.6 | 16 |
| 170 | Polymorphism in Nylon-11: Characterization using HTWAXS and HTFTIR. Macromolecular Symposia, 2006, 242, 216-226. | 0.7 | 16 |
| 171 | Factors Governing the Three-Dimensional Hydrogen-Bond Network Structure of Poly(m-Phenylene) Tj ETQq1 1 0.784314 rgBT /Overlock<br>Packing Structure between a Complicated Three-Arm Model Compound and the Linear Model Compounds. Journal of Physical Chemistry B, 2006, 110, 20858-20864. | 2.6 | 16 |
| 172 | Title is missing!. Chinese Journal of Polymer Science (English Edition), 2007, 25, 73. | 3.8 | 16 |
| 173 | Cocrystallization phenomenon of polyoxymethylene blend samples between the deuterated and hydrogenated species. Polymer Journal, 2011, 43, 66-73. | 2.7 | 16 |
| 174 | Optical Birefringence Patterns and Corresponding Lamellar Alteration Induced by Solvent Vapor on Poly(<scp>l</scp>-lactic acid) Diluted with Poly(1,4-butylene adipate). Macromolecules, 2012, 45, 7313-7316. | 4.8 | 16 |
| 175 | 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. | 4.8 | 16 |
| 176 | Structural investigation of water-induced phase transitions of poly(ethylene imine). III. The thermal behavior of hydrates and the construction of a phase diagram. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 2937-2948. | 2.1 | 15 |
| 177 | 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. Polymer, 2007, 48, 7614-7622. | 3.8 | 15 |
| 178 | Structural Evolution Mechanism of Crystalline Polymers in the Isothermal Melt-Crystallization Process: A Proposition Based on Simultaneous WAXD/SAXS/FTIR Measurements. Polymers, 2019, 11, 1316. | 4.5 | 15 |
| 179 | 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. Polymer, 2014, 55, 1228-1248. | 3.8 | 14 |
| 180 | Constructing Ï€-Electron-Conjugated Diarylbutadiyne-Based Polydiacetylene under Molecular Framework Controlled by Hydrogen Bond and Side-Chain Substituent Position. Macromolecular Rapid Communications, 2016, 37, 685-690. | 3.9 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | 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. Macromolecules, 2021, 54, 2334-2352. | 4.8 | 14 |
| 182 | Mechanical properties and deformation mechanism of polyoxymethylene chain in the crystalline state. Polymer Engineering and Science, 1994, 34, 308-317. | 3.1 | 13 |
| 183 | Crystallization of poly(ethylene imine) amorphous sample in water vapor atmosphere. Polymer, 2003, 44, 1721-1724. | 3.8 | 12 |
| 184 | Amorphous phase and crystalline morphology in blend of two polymorphic polyesters: Poly(hexamethylene terephthalate) and poly(heptamethylene terephthalate). Polymer, 2009, 50, 6312-6322. | 3.8 | 12 |
| 185 | In Situ FTIR-ATR Observation of Phase Transition Behavior of n-Alkane Molecules Induced by Friction Motion on a Metal Interface. Journal of Physical Chemistry C, 2009, 113, 3287-3291. | 3.1 | 12 |
| 186 | Microscopic Fourier Transform Infrared Characterization on Two Types of Spherulite with Polymorphic Crystals in Poly(heptamethylene terephthalate). Macromolecular Rapid Communications, 2010, 31, 1343-1347. | 3.9 | 12 |
| 187 | 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. Macromolecules, 2010, 43, 402-408. | 4.8 | 12 |
| 188 | The effect of counter cation species on the formation of various crystal forms and their phase transition behavior of poly(vinyl alcohol)-iodine complex. Polymer, 2016, 89, 81-93. | 3.8 | 12 |
| 189 | Experimental Determination of the Geometrical Relation between Monomer and Polymer Species of 2,5-Distyrylpyrazine Single Crystal in the Topotactic Photoinduced Polymerization Reaction. Macromolecules, 2019, 52, 2189-2202. | 4.8 | 12 |
| 190 | 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. Polymer, 2021, 233, 124180. | 3.8 | 12 |
| 191 | Stress-induced crystalline phase transition in block copolymers of poly(tetramethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 34 segmental ratio.. Journal of Fiber Science and Technology, 1986, 42, T597-T605. | 0.0 | 12 |
| 192 | Factors Governing the 3-Dimensional Hydrogen-Bond Network Structure of Poly(m-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 312 of Aromatic Amide Compounds and Comparison with X-ray Analyzed Structures. Journal of Physical Chemistry B, 2002, 106, 12884-12895. | 2.6 | 11 |
| 193 | Factors Governing the Three-Dimensional Hydrogen-Bond Network Structure of Poly(m-phenylene) Tj ETQq1 1 0.784314 rgBT /Overlock Structure Prediction. Journal of Physical Chemistry B, 2003, 107, 8343-8350. | 2.6 | 11 |
| 194 | Influence of the monomer sequential distribution on the mechanical properties and temperature dependence of an ethyleneâ€“tetrafluoroethylene copolymer in association with the phaseâ€transition behavior. Journal of Applied Polymer Science, 2009, 114, 1710-1716. | 2.6 | 11 |
| 195 | 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. Kobunshi Ronbunshu, 2012, 69, 213-227. | 0.2 | 11 |
| 196 | Influence of the third monomer component on the temperature-dependent crystallite modulus and tie chain fraction evaluated for ethylene-tetrafluoroethylene copolymers. Polymer, 2012, 53, 740-746. | 3.8 | 11 |
| 197 | In-house simultaneous collection of small-angle X-ray scattering, wide-angle X-ray diffraction and Raman scattering data from polymeric materials. Journal of Applied Crystallography, 2014, 47, 922-930. | 4.5 | 11 |
| 198 | Isotope Effect on the Meltâ€“Isothermal Crystallization of Polyoxymethylene D/H Random Copolymers and D/H Blend Samples. Macromolecules, 2015, 48, 8070-8081. | 4.8 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Influence of Tacticity on the Crystal Structures of Hydrogenated Ring-Opened Poly(norbornene)s. Macromolecules, 2021, 54, 8122-8134. | 4.8 | 11 |
| 200 | Structural changes in solventâ€induced crystallization of syndiotactic polystyrene viewed from the timeâ€resolved measurements of infrared/Raman spectra and Xâ€ray diffraction. Macromolecular Symposia, 1999, 141, 33-46. | 0.7 | 10 |
| 201 | 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. Polymer Journal, 2001, 33, 199-203. | 2.7 | 10 |
| 202 | Structural changes in isothermal crystallization processes of synthetic polymers studied by time-resolved measurements of synchrotron-sourced X-ray scatterings and vibrational spectra. Macromolecular Research, 2004, 12, 1-10. | 2.4 | 10 |
| 203 | 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. Macromolecular Symposia, 2006, 242, 262-267. | 0.7 | 10 |
| 204 | Structural Phase Transitions of Aliphatic Nylons Viewed from the Simultaneous Measurements of WAXD and SAXS. Macromolecular Symposia, 2006, 242, 250-256. | 0.7 | 10 |
| 205 | Molecular Functionalization of Cold-Plasma-Treated Bombyx mori Silk. Macromolecular Symposia, 2008, 264, 107-112. | 0.7 | 10 |
| 206 | Stress-induced crystalline phase transition in block copolymers of poly(tetramethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (te<br>Journal of Fiber Science and Technology, 1986, 42, T659-T664. | 0.0 | 10 |
| 207 | Detection of Sharp DSC Peak during the Phase Transition from the Low-Temperature Phase to the Cooled Phase of Vinylidene Fluorideâ"Trifluoroethylene Copolymers. Macromolecules, 1999, 32, 514-517. | 4.8 | 9 |
| 208 | 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. | 2.1 | 9 |
| 209 | Crystal Structures ofn-Alkanes with Branches of Different Size in the Middle. Journal of Physical Chemistry B, 2005, 109, 10668-10675. | 2.6 | 9 |
| 210 | Sulfur hexafluoride plasma surface modification of Gly-Ala and Ala-Gly as Bombyx mori silk model compounds: Mechanism investigations. Journal of Molecular Structure, 2010, 963, 130-136. | 3.6 | 9 |
| 211 | Crystal polymorphism and structure models of Poly(dimethylsiloxane). Polymer, 2018, 153, 507-520. | 3.8 | 9 |
| 212 | Microstructural Analyses of Biaxially Oriented Polylactide/Modified Thermoplastic Starch Film with Drastic Improvement in Toughness. Macromolecular Materials and Engineering, 2019, 304, 1900340. | 3.6 | 9 |
| 213 | Color and shape reversible, recoverable and repeatable mechanochromic shape memory polycaprolactone: a single material with dual functions. Polymer Chemistry, 2020, 11, 91-101. | 3.9 | 9 |
| 214 | First application of an X-ray imaging plate system for the accurate evaluation of the crystallite modulus of polymers. Macromolecular Rapid Communications, 1996, 17, 633-638. | 3.9 | 8 |
| 215 | Diffusion and aggregation of hydrogeneous and deuterated polyethylene chains at their interfacial boundary as studied by time- and space-resolved FTIR microscopic measurements. Polymer, 2001, 42, 8987-8998. | 3.8 | 8 |
| 216 | Thermally-Induced Phase Transitions in the Uniaxially-Oriented Î´ Form of Syndiotactic Polystyrene. Macromolecular Symposia, 2006, 242, 257-261. | 0.7 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | Influence of side branch on the elastic modulus of ethyleneâ€“tetrafluoroethylene terpolymers. Polymer, 2009, 50, 4612-4617. | 3.8 | 8 |
| 218 | 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. Kobunshi Ronbunshu, 2009, 66, 536-549. | 0.2 | 8 |
| 219 | Detailed analysis of temperature dependences of spherulite morphology and crystallite orientation of poly(vinylidene fluoride) via a combinatorial method. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 253-261. | 2.1 | 8 |
| 220 | Transformation of Coiled Î±-Helices intoCross-Î²-Sheets Superstructure. Biomacromolecules, 2017, 18, 3892-3903. | 5.4 | 8 |
| 221 | Fiber Structure, Tensile Behavior and Antibacterial Activity of Polylactide/Poly(butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Science - Physics, 2020, 59, 440-456. | 1.0 | 8 |
| 222 | Vibrational spectroscopic study on the photo-induced solid-state reactions of a series of muconate diesters with various side groups. Polymer, 2001, 42, 6747-6757. | 3.8 | 7 |
| 223 | Modern interpretation on the high-stretching of natural rubber attained by the classic â€˜rackingâ€™ method. Polymer, 2003, 44, 283-288. | 3.8 | 7 |
| 224 | 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. | 0.4 | 7 |
| 225 | Mono-Substituted Phenol-Based Benzoxazines. , 2011, , 111-126. | | 7 |
| 226 | 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. Chemical Engineering Science, 2015, 137, 404-411. | 3.8 | 7 |
| 227 | Crystal structures and phase transition behavior of Poly(nonamethylene terephthalamide) and its model compounds. Polymer, 2017, 116, 378-394. | 3.8 | 7 |
| 228 | Structure Analysis and Derivation of Deformed Electron Density Distribution of Polydiacetylene Giant Single Crystal by the Combination of X-ray and Neutron Diffraction Data. Macromolecules, 2018, 51, 3911-3922. | 4.8 | 7 |
| 229 | Study of phase transition and ultimate mechanical properties of orthorhombic polyoxymethylene based on the refined crystal structure. Polymer, 2018, 153, 474-484. | 3.8 | 7 |
| 230 | pH-induced conformational changes in histamine in the solid state. RSC Advances, 2019, 9, 19375-19389. | 3.6 | 7 |
| 231 | Metropolis Monte Carlo Simulation of Two-Dimensional Small-Angle X-ray Scattering Patterns of Oriented Polymer Materials. Macromolecules, 2020, 53, 276-287. | 4.8 | 7 |
| 232 | Crystallization behavior, structure, morphology, and thermal properties of crystalline and amorphous stereo diblock copolymers, poly(l-lactide)-b-poly(dl-lactide). Polymer Chemistry, 2020, 11, 5711-5724. | 3.9 | 7 |
| 233 | Crystalline Iodine Complexes of Amorphous Poly(vinyl acetate) as Studied by X-ray Diffraction, Vibrational Spectroscopy, and Computer Simulation. Macromolecules, 2020, 53, 4395-4406. | 4.8 | 7 |
| 234 | Structural Evolution Process in Solvent-Induced Crystallization Phenomenon of Syndiotactic Polystyrene. Macromolecular Symposia, 2005, 222, 115-120. | 0.7 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Structural Study of Phase Transition Behavior of Uniaxially-Oriented Ethylene-Tetrafluoroethylene Alternating Copolymer. Macromolecular Symposia, 2006, 242, 268-273. | 0.7 | 6 |
| 236 | 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. Journal of Physics: Conference Series, 2009, 184, 012012. | 0.4 | 6 |
| 237 | Accurate Structure Analyses of Polymer Crystals on the Basis of Wide-Angle X-ray and Neutron Diffractions. Kobunshi Ronbunshu, 2014, 71, 508-526. | 0.2 | 6 |
| 238 | Isotope effect on the structural evolution process in the isothermal crystallization phenomenon of polyoxymethylene. Polymer, 2016, 90, 76-88. | 3.8 | 6 |
| 239 | 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. | 0.4 | 6 |
| 240 | Synchrotron microbeam X-ray scattering study of the crystallite orientation in the spherulites of isotactic poly(butene-1) crystallized isothermally at different temperatures. Polymer Journal, 2019, 51, 143-153. | 2.7 | 6 |
| 241 | Investigation of structural changes related to temperature: An understanding of H-bond based proton transfer in 4(5)-vinylimidazole and acrylic acid copolymer membrane. Solid State Ionics, 2009, 180, 132-140. | 2.7 | 5 |
| 242 | Mesomorphic phase in oriented poly(pentamethylene 2,6-naphthalate). Polymer, 2010, 51, 998-1001. | 3.8 | 5 |
| 243 | Systematic Study of Aggregation Structure and Thermal Behavior of a Series of Unique H-Shape Alkane Molecules. Journal of Physical Chemistry B, 2011, 115, 9537-9546. | 2.6 | 5 |
| 244 | 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. Polymer Journal, 2013, 45, 545-554. | 2.7 | 5 |
| 245 | Density functional molecular dynamics simulations investigation ofÂproton transfer and inter-molecular reorientation under external electrostatic field perturbation: Case studies for water and imidazole systems. Journal of Power Sources, 2013, 229, 141-148. | 7.8 | 4 |
| 246 | Influence of the third monomer component on the X-ray-analyzed crystal structure of ethyleneâ€“tetrafluoroethylene copolymer. European Polymer Journal, 2013, 49, 1532-1540. | 5.4 | 4 |
| 247 | A Study on Crystallization Behavior for Poly (Lactic Acid) in Addition of Cardo Materials. Zairyo/Journal of the Society of Materials Science, Japan, 2015, 64, 1-6. | 0.2 | 4 |
| 248 | 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. Macromolecules, 2017, 50, 2803-2813. | 4.8 | 4 |
| 249 | Microscopically-viewed structural changes in solvent-induced phase transitions of synthetic polymers. Macromolecular Symposia, 2003, 203, 13-26. | 0.7 | 3 |
| 250 | Crystal Structures of n-Alkane with Three Functional Groups in the Middle and at Both Ends. Journal of Physical Chemistry A, 2009, 113, 2632-2639. | 2.5 | 3 |
| 251 | 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. Journal of Physics: Conference Series, 2009, 184, 012015. | 0.4 | 3 |
| 252 | 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. Journal of Physics: Conference Series, 2009, 184, 012003. | 0.4 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | Contrast Enhancement of Wavelength-Selective Detection of Mid-Infrared Using Localized Atmospheric-Pressure Plasma Treatment. Japanese Journal of Applied Physics, 2010, 49, 04DL18. | 1.5 | 3 |
| 254 | Supramolecular Chemistry of Benzoxazines. , 2011, , 331-354. | | 3 |
| 255 | Enhanced Contrast of Wavelength-Selective Mid-Infrared Detectors Stable against Incident Angle and Temperature Changes. Japanese Journal of Applied Physics, 2011, 50, 037201. | 1.5 | 3 |
| 256 | Shifting from Hydrogen Bond Network to Ï€â€“Ï€ Stacking: A Key Mechanism for Reversible Thermochromic Sulfonated Poly(Ether Ether Ketone). Macromolecular Rapid Communications, 2014, 35, 1397-1401. | 3.9 | 3 |
| 257 | Self-assembled aromatic polyamide nanofibers with trifluoromethyl groups via precipitation polymerization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 447, 148-154. | 4.7 | 3 |
| 258 | 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 |
| 259 | Molecular assembly of highly symmetric molecules under a hydrogen bond framework controlled by alkyl building blocks: a simple approach to fine-tune nanoscale structures. Soft Matter, 2016, 12, 486-491. | 2.7 | 3 |
| 260 | Effect of Methoxy Side Groups on the Crystal Structures of a Series of Syndiotactic Polymethoxystyrenes as Studied by the X-ray Diffraction Data Analysis. Macromolecules, 2021, 54, 1881-1893. | 4.8 | 3 |
| 261 | Heterogeneous Stress Distribution and Hierarchical Structure in the Highly Oriented Nylon 6 Strings Annealed at Various Temperatures to Evaluate the True Crystallite Modulus. Macromolecules, 2021, 54, 6449-6465. | 4.8 | 3 |
| 262 | Development of a new software for the Xâ€ray structural analysis of polymer crystals by utilizing the Xâ€ray imaging plate system. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 1677-1700. | 2.1 | 3 |
| 263 | Structural evolution process ofisotacticpolypropylene in the isothermal crystallization from the melt. Journal of Physics: Conference Series, 2009, 184, 012001. | 0.4 | 2 |
| 264 | Phenomenological study of the isotope effect on the equilibrium melting point of polymer crystal. Polymer, 2015, 80, 138-145. | 3.8 | 2 |
| 265 | Effect of Crystal Status Transformation on the Thermal Shrinkage Characteristics and Extensional Characteristics of Acetaldehyde Solvent-Induced Crystalization PET Film. Transactions of the Materials Research Society of Japan, 2017, 42, 107-111. | 0.2 | 2 |
| 266 | 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. Journal of Physics: Conference Series, 2018, 1095, 012029. | 0.4 | 2 |
| 267 | Crystal Structure Analysis by Wide-Angle X-ray Diffraction Method. , 2022, , 1-285. | | 2 |
| 268 | Microscopically Viewed Structural Characteristics of Polyethylene Blends between Deuterated and Hydrogenated Species: Cocrystallization and Phase Separation. , 0, , 97-120. | | 1 |
| 269 | 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. Journal of Physics: Conference Series, 2009, 184, 012014. | 0.4 | 1 |
| 270 | Synthesis and Cyclizationâ€Induced Charge Transfer of Rectangular Bisterthiophenesiloxanes. Chemistry - A European Journal, 2019, 25, 13701-13704. | 3.3 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 271 | A Role of Taut Tie Chains in the Heterogeneous Stress Distribution and Mechanical Deformation Behavior of Synthetic and Natural Fibers. Journal of Fiber Science and Technology, 2021, 77, 88-117. | 0.4 | 1 |
| 272 | Experimental confirmation of proton conductivity predicted from intermolecular hydrogen-bonding in spatially-confined novel histamine derivatives. Journal of Solid State Chemistry, 2021, 299, 122182. | 2.9 | 1 |
| 273 | Enhanced Contrast of Wavelength-Selective Mid-Infrared Detectors Stable against Incident Angle and Temperature Changes. Japanese Journal of Applied Physics, 2011, 50, 037201. | 1.5 | 1 |
| 274 | Enhanced contrast of wavelength selective Mid-IR detector stable against temperature change. , 2010, , . | | 0 |
| 275 | Static and Dynamic Structure Analyses of Polymer Crystals. Nihon Kessho Gakkaishi, 2011, 53, 387-395. | 0.0 | 0 |
| 276 | Macromol. Chem. Phys. 20/2012. Macromolecular Chemistry and Physics, 2012, 213, 2204-2204. | 2.2 | 0 |
| 277 | Nanostructures and dielectric properties of PVDF-based polymer films with high energy density and low energy losses. Materials Research Society Symposia Proceedings, 2015, 1740, 13. | 0.1 | 0 |
| 278 | DFT Study of Proton Transfer in Methyl Urocanate and Butyl Urocanate. Macromolecular Symposia, 2015, 354, 99-103. | 0.7 | 0 |
| 279 | Progress in Structure Analysis Techniques of Fibers. , 2016, , 21-47. | | 0 |
| 280 | Forcibly Spinning Using Bombyx Mori Silkworm Anesthetized by the Water Narcosis Treatment. Journal of Natural Fibers, 2021, 18, 419-429. | 3.1 | 0 |
| 281 | Basic Concepts for Achieving the Structure and Properties of Limiting States of Polymer Materials. Journal of Fiber Science and Technology, 2005, 61, P.173-P.177. | 0.0 | 0 |
| 282 | Recent Progress in Static and Dynamic Structural Analysis of Crystalline Polymers Studied from a Microscopic Point of View. , 2013, , 1-28. | | 0 |
| 283 | Physical characteristics of the electrospun nanofiber consisting of the blends of conductive polymer and aromatic polymer. Journal of Textile Engineering, 2013, 59, 25-35. | 0.2 | 0 |
| 284 | Structural Information Necessary for the Development of Ultimate Functions and the Relationship between Structure and Properties of Polymers. Seikei-Kakou, 2014, 26, 258-263. | 0.0 | 0 |
| 285 | Important Factors Necessary for Further Improvement of Elastic Modulus and Strength of Thermoplastics. Seikei-Kakou, 2019, 31, 216-221. | 0.0 | 0 |
| 286 | Crystal structures and phase transition of tetrafluoroethylene-vinyl alcohol alternating copolymer. Polymer, 2021, 237, 124354. | 3.8 | 0 |
| 287 | New Evolution in Crystal Structure Analysis of Synthetic Polymers on the Basis of Concerted Analysis of X-ray and Neutron Diffraction Data. Nihon Kessho Gakkaishi, 2021, 63, 273-279. | 0.0 | 0 |
| 288 | Phase Transition Behavior of Polymer Crystals. , 2022, , 769-812. | | 0 |