

No	Authors	Title	Journal	Year	Vol	page_b	page_e	DOI
384	Abe, J; Arima-Osonoi, H; Iwase, H; Takata, S; Ohuchi, K; Kasai, S; Miyazaki, T; Morita, T; Shibayama, M.	A high-temperature high-pressure small-angle neutron scattering cell for studying hydrothermal reactions in supercritical water	J. Appl. Cryst.	2024				<a href="https://doi.org/10.1107/S1600576724000700">10.1107/ S1600576724000700</a>
383	Makita, R; Akimoto, A. M; Enomoto, T; Nishimoto, T; Li, X; Shibayama, M; Yoshida, R.	Humidity responsiveness of a poly(N-isopropylacrylamide) gel with a PEG/water mixed solvent	Polym. J.	2024				<a href="https://doi.org/10.1038/s41428-024-00900-1">10.1038/ s41428-024-00900-1</a>
382	Jia, D; Tsuji, Y; Shibayama, M; Muthukumar, M.	Topologically Frustrated Dynamical State of Polymers Trapped in Ideal Uniform Tetra-PEG Gels	Macromolecules	2023	56	9389	9397	<a href="https://doi.org/10.1021/acs.macromol.3c01745">10.1021/ acs.macromol.3c01745</a>
381	Shibata, M; YNakanishi, Y; Abe, J; Arima-Osonoi, H; Iwase, H; Shibayama, M; Motokawa, R; Kumada, T; Takata, S; Yamamoto, K; Takenaka, M; Miyazaki, T.	Structural changes of polystyrene particles in subcritical and supercritical water revealed by <i>in situ</i> small-angle neutron scattering	Polym. J.	2023	55	1165	1170	<a href="https://doi.org/10.1038/s41428-023-00817-1">10.1038/ s41428-023-00817-1</a>
380	Akutsu-Suyama, K; Ueda, M; Shibayama, M; Ishii, K; Nishi, N.	Effective Synthesis of Deuterated n-Octylamine and Its Analogues	EPJ Web of Conferences	2023	286	1004-1	1004-1	<a href="https://doi.org/10.1051/epjconf/202328601004">10.1051/epjconf/ 202328601004</a>
379	Watanabe, T; Minato, H; Sasaki, Y; Hiroshige, S; Suzuki, H; Matsuki, N; Sano, K; Wakiya, T; Nishizawa, Y; Uchihashi, T; Kureha, T; Shibayama, M; Takata, T; Suzuki, D.	Closed-loop recycling of microparticle-based polymers	Green Chemistry	2023	23	3418	3424	<a href="https://doi.org/10.1039/d3gc00090g">10.1039/d3gc00090g</a>
378	Ohira, M; Nakagawa, S; Sampei, R; Noritomi, T; Sakai, T; Shibayama, M; Li, X.	Effects of network junctions and defects on the crystallization of model poly(ethylene glycol) networks	Soft Matter	2023	19	1653	1663	<a href="https://doi.org/10.1039/d2sm01036d">10.1039/ d2sm01036d</a>
377	Tsutsumi-Arai, C; Akutsu-Suyama, K; Iwamiya, Y; Terada-Ito, C; Hiroi, Z; Shibayama, M; Satomura, K.	Antimicrobial surface processing of polymethyl methacrylate denture base resin using a novel silica-based coating technology	Clinical Oral Investigations	2023	27	1043	1053	<a href="https://doi.org/10.1007/s00784-022-04670-z">10.1007/ s00784-022-04670-z</a>
376	Tang, J.; Katashima, T.; Gupit, C. I.; Li, X.; Mitsukami, Y.; Yokoyama, Y.; Sakumichi, N.; Chung, U.-I.; Shibayama, M.; Sakai, T.	Non-swellability of polyelectrolyte gel in divalent salt solution due to aggregation formation	Polymer	2022	250	24894-1	124894-7	<a href="https://doi.org/10.1016/j.polymer.2022.124894">10.1016/ j.polymer.2022.124894</a>
375	Nogami, S; Kadota, K; Uchiyama, H; Arima-Osonoi, H; Shibayama, M; Tozuka, Y.	Evaluation of the rheological and rupture properties of gelatinbased hydrogels blended with polymers to determine their drug diffusion behavior	Polym. J.	2022	54	1477	1487	<a href="https://doi.org/10.1038/s41428-022-00681-5">10.1038/ s41428-022-00681-5</a>
374	Iwamiya, Y; Nishio-Hamane, D; Akutsu-Suyama, K; Arima-Osonoi, H; Shibayama, M; Hiroi, Z.	Photocatalytic Silica-Resin Coating for Environmental Protection of Paper as a Plastic Substitute	Ind. Eng. Chem. Res.	2022	61	6967	6972	<a href="https://doi.org/10.1021/acs.iecr.2c00784">10.1021/ acs.iecr.2c00784</a>
373	Tsutsumi-Arai, C; Iwamiya, Y; Hoshino, R; Terada-Ito, C; Sejima, S; Akutsu-Suyama, K; Shibayama, M; Hiroi, Z; Tokuyama-Toda, R; Iwamiya, R; Ijichi, K; Chiba, T; Satomura, K.	Surface Functionalization of Non-Woven Fabrics Using a Novel Silica-Resin Coating Technology: Antiviral Treatment of Non-Woven Fabric Filters in Surgical Masks	Int. J. Env. Res. Pub. Health	2022	19	3636(1)	3636(11)	<a href="https://doi.org/10.3390/ijerph19063639">10.3390/ ijerph19063639</a>

372	Kureha, T; Ohira, M; Takahashi, Y; Li, X; Gilbert, E. P.; Shibayama, M.	Nanoscale Structures of Poly(oligo ethylene glycol methyl ether methacrylate) Hydrogels Revealed by Small-Angle Neutron Scattering	Macromolecules	2022	55	1844	1854	10.1021/acs.macromol.1c02259
371	Ohira, M; Katashima, T; Naito, M; Aoki, D; Yoshikawa, Y; Iwase, H; Takata, S; Miyata, K; Chung, U; Sakai, T; Shibayama, M; Li, X.	Star-Polymer-DNA Gels Showing Highly Predictable and Tunable Mechanical Responses	Adv. Mater.,	2022	34	2108818(1)	2108818(9)	10.1002/adma.202108818
370	Izumi, A; Shudo, Y; Shibayama, M; Miyata, N; Miyazaki, T; Aoki, H.	In Situ Neutron Reflectometry Analysis of Interfacial Structure Formation between Phenolic Resin and Silica during Curing	Langmuir	2021	37	13867	13872	10.1021/acs.langmuir.1c02313
369	Nogami, S; Kadota, K; Uchiyama, H; Arima-Osonoi, H; Iwase, H; Tominaga, T; Yamada, T; Takata, S; Shibayama, M; Tozuka, Y.	Structural changes in pH-responsive gelatin/hydroxypropyl methylcellulose phthalate blends aimed at drug-release systems	Int. J. Biol. Macromol.	2021	190	989	998	10.1016/j.ijbiomac.2021.09.074
368	Tsuji, Y; Shibayama, M; Li, X.	Neutralization and Salt Effect on the Structure and Mechanical Properties of Polyacrylic acid gels under Equivolume Conditions	Gels	2021	7	69-1	69-19	10.3390/gels7020069
367	Nishizawa, Y; Minato, H; Inui, T; Saito, I; Kureha, T; Shibayama, M; Uchihashi, T; Suzuki, D.	Nanostructure and thermoresponsiveness of poly(N-isopropyl methacrylamide)-based hydrogel microspheres prepared via aqueous free radical precipitation polymerization	RSC Advances	2021	11	13130	13137	10.1039/d1ra01650d
366	Kozhunova, E; Rudyaka, V; Li, X; Shibayama, M; Peters, G. S; Vyshvannaya, O. V; Nasimova, I. R; Chertovich, A. V.	Microphase separation of stimuli-responsive interpenetrating network microgels investigated by scattering methods	J. Colloid Inter. Sci.	2021	597	297	305	10.1016/j.jcis.2021.03.178
365	Tang, J; Katashima, T; Li, X; Mitsukami, Y; Yokoyama, Y; Chung, U.-I.; Shibayama, M; Sakai, T.	Effect of Nonlinear Elasticity on the Swelling Behaviors of Highly Swollen Polyelectrolyte Gels	Gels	2021	7	25-1	25-14	10.3390/gels7010025
364	Iwamiya, Y; Kawai, M; Nishio-Hamane, D; Shibayama, M; Hiroi, Z.	Modern Alchemy: Making "Plastics" from Paper	Ind. Eng. Chem. Res.	2021	60	355	360	10.1021/acs.iecr.0c05173
363	Hiroshige, S; Minato, H; Nishizawa, Y; Sasaki, Y; Kureha, T; Shibayama, M; Uenishi, K; Takata, T; Suzuki, D.	Temperature-dependent Relationship between the Structure and Mechanical Strength of Volatile Organic Compound-free Latex Films Prepared from Poly(butyl acrylate-co-methyl methacrylate) Microspheres	Polym. J.	2021	53	345	353	10.1038/s41428-020-00406-6
362	Kureha, T; Hahashi, K; Li, X; Shibayama, M.	Mechanical properties of temperature-responsive gels containing ethylene glycol in their side chains	Soft Matter	2020	16	10946	10953	10.1039/D0SM01436B
361	Tang, J; Katashima, T; Li, X; Mitsukami, Y; Yokoyama, Y; Sakumichi, N; Chung, U; Shibayama, M; Sakai, T.	Swelling behaviors of hydrogels with alternating neutral/highly-charged sequences	Macromolecules	2020	53	8244	8254	10.1021/acs.macromol.0c01221
360	Tsuji, Y; Nakagawa, S; Gupit, C. I; Ohira, M; Shibayama, M; Li, X.	Selective Doping of Polymer Gels with Positive and Negative Spatial Defects by Tuning the Packing Conditions of Star Polymers in Pregel Solutions	Macromolecules	2020	53	7537	7545	10.1021/acs.macromol.0c01208
359	Hiroi, T; Hirosawa, K; Okazumi, Y; Pingali, S. V; Shibayama, M.	Mechanism of heat-induced gelation for ovalbumin under acidic condition and effect of peptides	Polym. J.	2020	52	1263	1272	10.1038/s41428-020-0382-1

358	Ohira, M; Tsuji, Y; Watanabe, N; Morishima, K; Gilbert, E. P; Li, X; Shibayama, M.	Quantitative structure analysis of near-ideal polymer network with deuterium label by small angle neutron scattering	Macromolecules	2020	53	4047	4054	10.1021/acs.macromol.9b02695
357	Kureha, T; Hiroshige, S; Suzuki, D; Sawada, J; Aoki, D; Takata, T; Shibayama, M.	Quantification of the Interdiffusion of Polymeric Microspheres in Water-borne Latex Films	Langmuir	2020	36	4855	4862	10.1021/acs.langmuir.0c00612
356	Izumi, A; Shudo, Y; Shibayama, M; Yoshida, T; Miyata, N; Miyazaki, T; Aoki, H.	Interfacial cross-link inhomogeneity of a phenolic resin on a silica surface as revealed by X-ray and neutron reflection measurements	Macromolecules	2020	53	4082	4089	10.1021/acs.macromol.0c00398
355	Susaki, E. A; Shimizu, C; Kuno, A; Tainaka, K; Li, X; Nishi, K; Morishima, K; Ono, H; Ode, K. L; Saeki, Y; Miyamichi, K; Isa, K; Yokoyama, C; Kitaura, H; Ikemura, M; Ushiku, T; Shimizu, Y; Saito, T; Saido, T. C; Fukayama, M; Onoe, H; Touhara, K; Isa, T; Kakita, A; Shibayama, M; Hiroki, R. Ueda, H. R.	Versatile whole-organ/body staining and imaging based on electrolyte-gel properties of biological tissues	Nat. Commun.	2020	11	1982-1	1982-22	10.1038/s41467-020-15906-5
354	Huang, X; Nakagawa, S; Li, X; Shibayama, M; Yoshie, N.	A Simple and Versatile Method for the Construction of Nearly Ideal Networks through Living Radical Polymerization combined with Thiol-Bromide Click Chemistry	Angewandte Chemie	2020	59	9646	9652	10.1002/anie.202001271
353	Okamoto, M; Mita, K; Uekusa, T; Takenaka, M; Shibayama, M.	Development of Elastic Recovering 4-methyl-1-pentene/ Propylene Copolymer	Polymer	2020	191	122269-1	122269-10	10.1016/j.polymer.2020.122269
352	Gupit, C. I; Li, X; Maekawa, R; Hasegawa, N; Iwase, H; Takata, S; Shibayama, M.	Nanostructures and Viscosities of Nafion Dispersions in Water/Ethanol from Dilute to Concentrated Regimes	Macromolecules	2020	53	1464	1473	10.1021/acs.macromol.9b02314
351	Li, X; Nakagawa, S; Tsuji, Y; Watanabe, N; Shibayama, M.	Polymer gel with a flexible and highly ordered three-dimensional network synthesized via bond percolation	Science Advances	2019	5	eaax8647		10.1126/sciadv.aax8647
350	Hashimoto, K; Hirasawa, M; Kokubo, H; Tamate, R; Xiang Li, X; Shibayama, M; Watanabe, M.	Transport and Mechanical Properties of ABA-type Triblock Copolymer Ion Gels Correlated with Their Microstructures	Macromolecules	2019	52	8430	8439	10.1021/acs.macromol.9b01907
349	Izumi, A; Kakara, T; Otsuki, M. W; Shudo, Y; Koganezawa, T; Shibayama, M.	In situ residual stress analysis in a phenolic resin and copper composite material during curing	Polymer	2019	182	121857(1)	121857(6)	10.1016/j.polymer.2019.121857
348	Tamate, R; Hashimoto, K; Xiang, L; Shibayama, M; Watanabe, M.	Effect of ionic liquid structure on viscoelastic behavior of hydrogen-bonded micellar ion gels	Polymer	2019	178	121694(1)	121694(8)	10.1016/j.polymer.2019.121694
347	Li, X; Noritomi, T; Sakai, T; Gilbert, E. P; Shibayama, M.	Dynamics of critical clusters synthesized by end-coupling of four-armed polyethylene glycols	Macromolecules	2019	52	5086	5094	10.1021/acs.macromol.9b01066
346	Kureha, T; Minato, H; Suzuki, D; Urayama, K; Shibayama, M.	Concentration Dependence of Dynamics for Microgel Suspension Investigated by Dynamic Light Scattering	Soft Matter (Back Cover)	2019	15	5390	5399	10.1039/C9SM01030K
345	Shibayama, M; Shudo, Y; Izumi, A.	Phenolic Resins —Recent Progress of Structure and Properties Investigations—	Macromol. Symp.	2019	385	1800156(1)	1800156(5)	10.1002/masy.201800156
344	Nishizawa, Y; Matsui, S; Urayama, K; Kureha, T; Shibayama, M; Uchihashi, T; Suzuki, D.	Non-Thermoresponsive Decanano-sized Domains in Thermoresponsive Hydrogel Microspheres Revealed by Temperature-Controlled High-Speed Atomic Force Microscopy	Angew. Chem. Int. Ed.	2019	58	8809	8813	10.1002/anie.201903483

343	Honda, K; Sazuka, Y; Iizuka, K; Matsui, S; Uchihashi, T; Kureha, K; Shibayama, M; Watanabe, T; Suzuki, D.	Hydrogel Microellipsoids that Form Robust String-like Assemblies at the Air/Water Interface	Angew. Chem. Int. Ed.	2019	58	7294	7298	10.1002/anie.201901611
342	Kajitani, T; Motokawa, K; Kosaka, A; Shoji, Y; Haruki, R; Hashizume, D; Hikima, T; Takata, M; Yazawa, K; Morishima, K; Shibayama, M; Fukushima, T.	Chiral crystal-like droplets displaying unidirectional rotational sliding	Nature Materials	2019	18	266	272	10.1038/s41563-018-0270-7
341	Wang, C; Hashimoto, K; Tamate, R; Kokubo, H; Morishima, K; Li, X; Shibayama, M; Lu, F; Nakanishi, T; Watanabe, M.	Viscoelastic change of block copolymer ion gels in a photo-switchable azobenzene ionic liquid triggered by light	Chem. Comm.	2019	55	1710	1713	10.1039/C8CC08203K
340	Izumi, A; Shudo, Y; Shibayama, M.	Network structure evolution of a hexamethylenetetramine-cured phenolic resin	Polym. J.	2019	51	155	160	10.1038/s41428-018-0133-8
339	Morishima, K; Nakamura, N; Masui, K; Tanaka, Y; Masunaga, H; Mori, S; Iwashita, T; Li, X; Shibayama, M.	Formation of Clusters in Whiskies during the Maturation Process	J. Food Sci. (Open Access)	2019	84	59	64	10.1111/1750-3841.14398
338	Iwase, H; Kawai, R; Morishima, K; Takata, S; Yoshimura, T; Shibayama, M.	Rheo-SANS study on relationship between micellar structures and rheological behavior of cationic gemini surfactants in solution	J. Colloid. Int. Sci.	2019	538	357	366	10.1016/j.jcis.2018.11.104
337	Shibayama, M; Li, X; Sakai, T.	Precision Polymer Network Science with Tetra-PEG Gels - A decade history and future -	Colloid Polym. Sci.	2019	297	1	12	10.1007/s00396-018-4423-7
336	Ohira, M; Li, X; Gupit, Kamata, H; C; Sakai, T; Shibayama, M.	Dynamics of thermoresponsive conetwork gels composed of poly(ethylene glycol) and poly(ethyl glycidyl ether-co-methyl glycidyl ether)	Polymer	2018	155	75	82	10.1016/j.polymer.2018.09.031
335	Hashimoto, K; Fujii, K; Nishi, K; Shibayama, M.	Ion Gel Network Formation in an Ionic Liquid Studied by Time-Resolved Small Angle Neutron Scattering	J. Phys. Chem. B,	2018	122	9419	9424	10.1021/acs.jpcb.8b08111
334	Kureha, T; Hayashi, K; Ohira, M; Li, X; Shibayama, M.	Dynamic Fluctuations of Thermoresponsive Poly(oligo-ethyleneglycol methyl ether methacrylate)-Based Hydrogels Investigated by Dynamic Light Scattering	Macromolecules	2018	51	8932	8939	10.1021/acs.macromol.8b02035
333	Tsuji, Y; Li, X; Shibayama, M.	Structure and Mechanical Properties of Model Polymer Networks Consisting of Tetra-arm and Linear Poly(ethylene glycol)s	Gels	2018	4	50(1)	50(12)	10.3390/gels4020050
332	Tamate, R; Hashimoto, K; Horii, T; Hirasawa, M; Li, X; Shibayama, M; Watanabe, M.	Self-Healing Micellar Ion Gels Based on Multiple Hydrogen Bonding	Adv. Mater.	2018	30	1802792-1	1802792-7	10.1002/adma.201802792
331	Ito, A; Yasuda, T; Yoshioka, T; Yoshida, A; Li, X; Hashimoto, K; Nagai, K; Shibayama, M; Watanabe, M.	Sulfonated Polyimide/Ionic Liquid Composite Membranes for CO <sub>2</sub> Separation: Transport Properties in Relation to Their Nanostructures	Macromolecules	2018	51	7112	7120	10.1021/acs.macromol.8b01135
330	Nakagawa, S; Li, X; Shibayama, M; Kamata, H; Sakai, T; Gilbert, E.	Insight into the microscopic structure of module-assembled thermoresponsive conetwork hydrogels	Macromolecules	2018	51	6645	6652	10.1021/acs.macromol.8b00868
329	Shudo, Y; Izumi, A; Hagita, K; Yamada, T; Shibata, K; Shibayama, M.	Diffusion Behavior of Methanol Molecules Confined in Cross-linked Phenolic Resins Studied using Neutron Scattering and Molecular Dynamics Simulations	Macromolecules	2018	51	6334	6343	10.1021/acs.macromol.8b00535
328	Morishima, K; Li, X; Oshima, K; Mitsukami, Y; Shibayama, M.	Small Angle Scattering Study of Tetra-Poly(acrylic acid) Gels	J. Chem. Phys.	2018	149	163301-1	163301-8	10.1063/1.5027665

327	Hagita, K; Syudo Y; Shibayama, M.	Two-dimensional scattering patterns and stress-strain relation of elongated clay nano composite gels: Molecular dynamics simulation analysis	Polymer	2018	154	62	79	10.1016/j.polymer.2018.08.047
326	Hashimoto, K; Fujii, K; Kusano, T; Hirosawa, K; Shibayama, M.	Small-angle X-ray scattering study on nano-scale structures controlled by water content in a binary water/ionic liquid system	Phys. Chem. Chem. Phys.	2018	20	18355	18360	10.1039/c8cp00440d
325	Izumi, A; Shudo, Y; Hagita, K; Shibayama, M.	Molecular Dynamics Simulations of Cross-Linked Phenolic Resins Using a United-Atom Model	Macromol. Theory Simul.	2018	27	1700103-1	1700103-8	10.1002/mats.201700103
324	Shibayama, M; Li, X; Sakai, T.	Gels: From Soft Matter to BioMatter	Ind. Eng. Chem. Res.	2018	57	1121	1128	10.1021/acs.iecr.7b04614
323	Watanabe, N; Li, X; Shibayama, M.	Probe Diffusion during Sol-Gel Transition of a Radical Polymerization System Using Isorefractive Dynamic Light Scattering	Macromolecules	2017	50	9726	9733	10.1021/acs.macromol.7b02202
322	Fujiyabu, T; Li, X; Shibayama, M; Chung, U; Sakai, T.	Permeation of Water through Hydrogels with Controlled Network Structure	Macromolecules	2017	50	9411	9416	10.1021/acs.macromol.7b01807
321	Nishi, K; Fujii, K; Chung, U; Shibayama, M; Sakai, T.	Experimental observation of two features unexpected from the classical theories of rubber elasticity	Phys. Rev. Lett.	2017	119	267801-1	267801-6	10.1103/PhysRevLett.119.267801
320	Matsuoka, J; Kusano, T; Kasama, U; Tominaga, E; Kobayashi, J; Fujii, W; Iwase, H; Shibayama, M; Nanbu, H.	Structure of microemulsion of polyglycerol polyricinoleate encapsulating vitamin E	Journal of Oleo Science	2017	66	1285	1291	10.5650/jos.ess17125
319	Hirosawa, K; Fujii, K; Hashimoto, K; Shibayama, M.	Solvated Structure of Cellulose in a Phosphonate-based Ionic Liquid	Macromolecules	2017	50	6509	6517	10.1021/acs.macromol.7b01138
318	Morishima, K; Ishiwari, F; Matsumura, S; Fukushima, T; Shibayama, M.	Mesoscopic structural aspects of Ca <sup>2+</sup> -triggered polymer chain folding of a tetraphenylethene-appended poly(acrylic acid) in relation to its aggregation-induced emission behavior	Macromolecules	2017	50	5940	5945	10.1021/acs.macromol.7b00883
317	Onoda, M; Ueki, T; Tamate, R; Shibayama, M; Yoshida, R.	Amoeba-like self-oscillating polymeric fluids with autonomous sol-gel transition	Nat. Commun.	2017	8	15862-1	15862-8	10.1038/ncomms15862
316	Tamate, R; Ueki, T; Shibayama, M; Yoshida, R.	Autonomous unimer-vesicle oscillation by totally synthetic diblock copolymers: Effect of block length and polymer concentration on spatio-temporal structures	Soft Matter (Front cover)	2017	13	4559	4568	10.1039/C7SM00563F
315	Tamate, R; Ueki, T; Shibayama, M; Yoshida, R.	Effect of Substrate Concentrations on the Aggregation Behavior and Dynamic Oscillatory Properties of the Self-Oscillating Block Copolymers	Phys. Chem. Chem. Phys.	2017	19	20627	20634	10.1039/C7CP03969G
314	Fujii, K; Ueki, T; Hashimoto, K; Kobayashi, Y; Kitazawa, Y; Hirosawa, K; Matsugami, M; Ohara, K; Watanabe, M; Shibayama, M.	Microscopic Structure of Solvated Poly(benzyl methacrylate) in an Imidazolium-Based Ionic Liquid: High-Energy X-ray Total Scattering and All-Atom MD Simulation Study	Macromolecules	2017	50	4780	4786	10.1021/acs.macromol.7b00840
313	Morishima, K; Sugawara, S; Yoshimura, T; Shibayama, M.	Structure and Rheology of Wormlike Micelles Formed by Fluorocarbon-Hydrocarbon-Type Hybrid Gemini Surfactant in Aqueous Solution	Langmuir	2017	33	6084	6091	10.1021/acs.langmuir.7b00902
312	Li, X; Hirosawa, K; Sakai, T; Gilbert, E.P; Shibayama, M.	SANS study on critical polymer clusters of tetra-functional polymers	Macromolecules	2017	50	3655	3661	10.1021/acs.macromol.7b00528
311	Nakagawa, S; Li, X; Kamata, H; Sakai, T; Gilbert, E.P; Shibayama, M.	Microscopic structure of the "nonswellable" thermoresponsive amphiphilic conetwork	Macromolecules	2017	50	3388	3395	10.1021/acs.macromol.7b00486

310	Horkay, F; Nishi, K; Shibayama, M.	Decisive Test of the Ideal Behavior of Tetra-PEG gels	J. Chem. Phys.	2017	146	164905-1	164905-8	10.1063/1.4982253
309	Shibayama, M.	Exploration of Ideal Polymer Networks	Macromol Sympo.	2017	372	7	13	10.1002/masy.201600122
308	Li, X; Watanabe, N; Sakai, T; Shibayama, M.	Probe diffusion of sol-gel transition in an isorefractive polymer solution	Macromolecules	2017	50	2916	2922	10.1021/acs.macromol.6b02573
307	Shudo, Y; Izumi, A; Hagita, K; Nakao, T; Shibayama, M.	Structure-mechanical property relationships in crosslinked phenolic resin investigated by molecular dynamics simulation	Polymer	2017	116	506	514	10.1016/j.polymer.2017.02.037
306	Hashimoto, K; Fujii, K; Ohara, K; Shibayama, M.	Effect of protonation on the solvation structure of solute N-butylamine in an aprotic ionic liquid	Phys. Chem. Chem. Phys.	2017	19	8194	8200	10.1039/c6cp08247e
305	Nishi, K; Shibayama, M.	2D pair distribution function analysis of anisotropic small-angle scattering patterns from elongated nano-composite hydrogels	Soft Matter (Front cover)	2017	13	3076	3083	10.1039/c6sm02350a
304	Hayashi, K; Okamoto, F; Hoshi, S; Katashima, T; Zujur, D.C; Li, X; Shibayama, M; Gilbert, E. P; Chung, U; Ohba, S; Oshika, T; Sakai, T.	Fast-forming hydrogel with ultralow polymeric content as an artificial vitreous body	Nat. Biomed. Eng.	2017	1	44(1)	44(7)	10.1038/s41551-017-0044
303	Hiroi, Y; Shibayama, M.	Measurement of Particle Size Distribution in Turbid Solutions by Dynamic Light Scattering Microscopy	J. Vis. Exp. <a href="http://www.jove.com/video/54885">http://www.jove.com/video/54885</a>	2016	119			10.3791/54885
302	Hirosawa, K.; Fujii, K; Ueki, T; Yuzo, K; Watanabe, M; Shibayama, M.	Pressure Response of a Thermo-responsive Polymer in an Ionic Liquid	Macromolecules	2016	49	8249	8253	10.1021/acs.macromol.6b01987
301	Shudo, Y; Izumi, A; Hagita,K; Nakao, T; Shibayama, M.	Large-Scale Molecular Dynamics Simulation of Crosslinked Phenolic Resins Using Pseudo-Reaction Model	Polymer	2016	103	261	276	10.1016/j.polymer.2016.09.069
300	Izumi, A; Shudo, Y; Nakao, T; Shibayama, M.	Cross-link inhomogeneity in phenolic resins at the initial stage of curing studied by $^1\text{H}$ -pulse NMR spectroscopy and complementary SAXS/WAXS and SANS/WANS with a solvent-swelling technique	Polymer	2016	103	152	162	10.1016/j.polymer.2016.09.067
299	Hiroi, T; Kondo, S; Sakai, T; Gilbert, E. P; Han, Y.-S; Kim, T.-H; Shibayama, M.,	Fabrication and Structural Characterization of Module-Assembled Amphiphilic Conetwork Gels	Macromolecules	2016	49	4940	4947	10.1021/acs.macromol.6b00842
298	Hirosawa, K; Fujita, K; Ueki, T; Kitazawa, Y; Littrell, K. C; Watanabe M; Shibayama, M.	SANS Study on Solvated Structure and Molecular Interactions of a Thermo-responsive Polymer in a Room Temperature Ionic Liquid	Phys. Chem. Chem. Phys.	2016	18	17881	17889	10.1039/c6cp02254e
297	Hiroi, T; Ata, S; Shibayama, M.	Transitions of Aggregation States for Concentrated Carbon Nanotube Dispersion	J. Phys. Chem. C	2016	120	5776	5782	10.1021/acs.jpcc.5b12464
296	Nishi, K; Shibayama, M.	Probe-SAXS on Hydrogels Under Elongation	Soft Matter (back cover)	2016	12	5334	5339	10.1039/C6SM00591H
295	Hiroi, T; Okazumi, Y; Littrell, K. C; Narita, Y; Tanaka, N; Shibayama, M.	Mechanism of Heat-induced Gelation for Ovalbumin and Its N-terminus Cleaved Form	Polymer	2016	93	152	158	10.1016/j.polymer.2016.04.036
294	Kusano, T; Akutsu, K; Iwase, H; Yoshimura, T; Shibayama, M.	Structural Study on Aggregation Behavior of Star-Type Trimeric Surfactants in the Presence of Organic Salts	Colloids & Surfaces A	2016	497	109	116	10.1016/j.colsurfa.2016.02.041
293	Hashimoto, K; Fujii, K; Nishi, K; Sakai, T; Shibayama, M.	Nearly Ideal Polymer Network Ion Gel Prepared in pH-Buffering Ionic Liquid	Macromolecules	2016	49	344	352	10.1021/acs.macromol.5b02360
292	Nishi, K; Noguchi, H; Sakai, T; Shibayama, M.	Rubber elasticity for percolation network consisting of Gaussian chains	J. Chem. Phys.	2015	143, 1	1	8	10.1063/1.4935395
291	Kondo, S; Hiroi, T; Han, Y.S; Kim, T.H; Shibayama, M; Chung, U; Sakai, T.	Reliable hydrogel with mechanical 'fuse link' in an aqueous environment	Adv. Mater.	2015	27	7407	7411	10.1002/adma.201503130
290	Onoda, M; Ueki, T; Shibayama, M; Yoshida, R.	Multiblock copolymers exhibiting spatio-temporal structure with autonomous viscosity oscillation	Scientific Reports	2015	5, 1579	1	9	10.1038/srep15792

289	Asai, M; Katashima, T; Sakai, T; Shibayama, M.	Supercoiling transformation of chemical gels	Soft Matter	2015	11	7101	7108	10.1039/c5sm01550b
288	Khairulina, K; Li, X; Nishi, K; Shibayama, M; Chung, U; Sakai, T.	Electrophoretic mobility of semi-flexible double-stranded DNA in defect-controlled polymer networks: mechanism investigation and role of structural parameters	J. Chem. Phys.	2015	142	234904		10.1063/1.4922367
287	Nishi, K; Tochioka, S; Hiroi, T; Yamada, T; Kokado, K; Tae-Hwan Kim, T-H; Gilbert, E. P; Sada, K; Shibayama, M.	Structural Analysis of Lipophilic Polyelectrolyte Solutions and Gels in Low-Polar Solvents	Macromolecules	2015	48	3613	3621	10.1021/acs.macromol.5b00753
286	Kusano, T; Hiroi, T; Amemiya, K; Ando, M; Takahashi, T; Shibayama, M.	Structure evolution of catalyst ink for fuel cell in drying process investigated by CV-SANS	Polym. J.	2015	47	546	555	10.1038/pj.2015.36
285	Hirosawa, K; Kenta Fujii, K; Hashimoto, K; Umebayashi, Y; Shibayama, M.	Microscopic Solvation Structure of Glucose in 1-Ethyl-3-methylimidazolium Methylphosphonate Ionic Liquid	J. Phys. Chem.	2015	119	6262	6270	10.1021/acs.jpcb.5b00724
284	Ueki, T; Onoda, M; Tamate, R; Shibayama, M; Yoshida, R.	Self-oscillating AB diblock copolymer developed by post modification strategy	Chaos	2015	25	064605		10.1063/1.4921687
283	Hashimoto, K; Fujii, K; Nishi, K; Sakai, T; Yoshimoto, N; Morita, M; Shibayama, M.	Gelation Mechanism of Tetra-Armed Poly(ethylene glycol) in Aprotic Ionic Liquid Containing Non-volatile Proton Source, Protic Ionic Liquid	J. Phys. Chem. B	2015	119	4795	4801	10.1021/acs.jpcb.5b00274
282	Ito, M; Ito, K; Shibayama, M; Sugiyama, K; Yokoyama, H.	Phase behavior of block copolymers in selective supercritical solvent	Macromolecules	2015	48	3590	3597	10.1021/acs.macromol.5b00162
281	Shudo, Y; Izumi, A; Takeuchi, T; Nakao, T; Shibayama, M.	Dynamic light scattering study on curing mechanisms of novolac-type phenolic resins	Polym. J.	2015	47	79	81	10.1038/pj.2015.15
280	Izumi, A; Nakao, T; Shibayama, M.	Gelation and cross-link inhomogeneity of phenolic resins studied by small- and wide-angle X-ray scattering and <sup>1</sup> H-pulse NMR spectroscopy	Polymer	2015	59	226	233	10.1016/j.polymer.2015.01.018
279	Shibayama, M; Nishi, K; Hiroi, T.	Gelation Kinetics and Polymer Network Dynamics of Homogeneous Tetra-PEG Gels	Macromol. Symp.	2015	348	9	13	10.1002/masy.201400164
278	Fujii, K; Makino, T; Hashimoto, K; Sakai, T; Kanakubo, M; Shibayama, M.	CO <sub>2</sub> Separation Using High-toughness Ion Gel with Tetraarmed polymer Network	Chem. Lett.	2015	44	17	19	10.1246/cl.140795
277	Kusano, T; Fujii, K; Hashimoto, K; Shibayama, M.	Water-in-Ionic Liquid Microemulsion Formation in Solvent Mixture of Aprotic and Protic Imidazolium-Based Ionic Liquids	Langmuir	2014	30	11890	11896	10.1021/la502856k
276	Tamate, R; Ueki, T; Shibayama, M; Yoshida, R.	Self-Oscillating Vesicles: Spontaneous Cyclic Structural Changes of Synthetic Diblock Copolymers	Angew. Chem. Int. Ed.,	2014	53	11248	11252	10.1002/anie.201406953
275	Nishi, K; Fujii, K; Katsumoto, Y; Sakai, T; Shibayama, M.	Kinetic Aspect on Gelation Mechanism of Tetra-PEG Hydrogel	Macromolecules,	2014	47	3274	3281	10.1021/ma500662j
274	Nishi, K; Asai, H; Fujii, K; Han, YS; Kim, T-H; Sakai, T; Shibayama, M.	Small-Angle Neutron Scattering Study on Defect-Controlled Polymer Networks	Macromolecules	2014	47	1801	1809	10.1021/ma402590n
273	Hiroi, T; Ohl, M; Sakai, T; Shibayama, M.	Multiscale Dynamics of Inhomogeneity-Free Polymer Gels	Macromolecules	2014	47	763	770	10.1021/ma402439v
272	Shibayama, M; Matsunaga, T; Kusano, T; Amemiya, K; Kobayashi, N; Yoshida, T.	SANS Studies on Catalyst Ink of Fuel Cell	J. Appl. Polym. Sci.	2014	131(3)	39842-1	39842-7	10.1002/app.39842
271	Asai, M; Katashima, T; Sakai, T; Chung, U; Shibayama, M.	Correlation between Local and Global Inhomogeneities of Chemical Gels	Macromolecules	2013	46	9772	9781	10.1021/ma400486h
270	Kusano, T; Fujii, K; Tabata, M; Shibayama, M.	Small-angle Neutron Scattering Study on Aggregation of 1-Alkyl-3-methylimidazolium-based Ionic Liquids in Aqueous Solution	J. Solution Chem.	2013	42	1888	1901	10.1007/s10953-013-0080-0

269	Nishi, K; Hiroi, T; Hashimoto, K.; Fujii, K.; Hang, Y.-S; Kim, T.-H; Katsumoto, Y.; Shibayama, M.	SANS and DLS Studies of the tacticity effects on the hydrophobicity and the phase separation of poly( <i>N</i> -isopropylacrylamide)	Macromolecules,	2013	46	6225	6232	10.1021/ma401349v
268	Hashimoto, K; Fujii, K; Shibayama, M.	Acid-base Property of Protic Ionic Liquid, 1-Alkylimidazolium Bis(trifluoromethanesulfonyl)amide Studied by Potentiometric Titration	J. Mol. Liquids	2013	188	143	147	10.1016/j.molliq.2013.08.023
267	Hiroi, T; Shibayama, M.	Dynamic Light Scattering Microscope: Accessing Opaque Samples with High Spatial Resolution	Opt. Lett.,	2013	21	20260	20267	10.1364/OE.21.020260
266	Fuji, K; Hashimoto, K; Sakai, T; Umebayashi, Y; Shibayama, M.	Bronsted Basicity of Solute Butylamine in an Aprotic Ionic Liquid Investigated by Potentiometric Titration	Chem. Lett.	2013	42	1250	1251	10.1246/cl.130537
265	Fujii, K; Shibayama, M; Yamaguchi, T; Yoshida, K; Yamaguchi, T; Seki, S; Uchiyama, H; Baron, A. Q; Umebayashi, Y.	Collective dynamics of room-temperature ionic liquids and their Li ion solutions studied by high-resolution inelastic X-ray scattering	J. Chem. Phys.	2013	138	151101-1	151101-4	10.1063/1.4802768
264	Asai, H; Fujii, K; Nishi, K; Sakai, T; Ohara, K; Umebayashi, Y; Shibayama, M.	Solvation Structure of Poly(ethylene glycol) in Ionic Liquids Studied by High-energy X-ray Diffraction and Molecular Dynamics Simulations	Macromolecules	2013	46	2369	2375	10.1021/ma400218e
263	Ueki, T; Shibayama, M; Yoshida, R.	Self-oscillating micelles	Chem. Commun.,	2013	49	6947	6949	10.1039/c3cc38432b
262	Matsugami, M; Fujii, K; Ueki, T; Umebayashi, Y; Watanabe, M; Shibayama, M.	Specific Solvation of Benzyl Methacrylate in 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide Ionic Liquid	Anal. Sci.	2013	29	311	314	10.2116/analsci.29.311
261	Izumi, A; Nakao, Y; Shibayama, M.	Gelation and cross-link inhomogeneity of phenolic resins studied by <sup>13</sup> C-NMR spectroscopy and small-angle X-ray scattering	Soft Matter	2013	9	4188	4197	10.1039/c3sm27438a
260	Asai, H; Fujii, K; Ueki, T; Sawamura, S; Nakamura, Y; Kitazawa, Y; Watanabe, M; Han, Y.-S; Kim, T.-H; Shibayama, M.	Structural Study on the UCST-type Phase Separation of Poly( <i>N</i> -isopropylacrylamide) in Ionic Liquid	Macromolecules	2013	46	1101	1106	10.1021/ma3020273
259	Asai, H; Nishi, K; Hiroi, T; Fujii, K; Sakai, T; Shibayama, M.	Gelation Process of Tetra-PEG Ion-gel Investigated by Time-Resolved Dynamic Light Scattering	Polymer	2013	54	1160	1166	10.1016/j.polymer.2012.12.053
258	Nishi, K; Chijiishi, M; Katsumoto, Y; Nakao, T; Fujii, K; Chung, U; Noguchi, H; Sakai, T; Shibayama, M.	Rubber Elasticity for Incomplete Polymer Networks	J. Chem. Phys.,	2012	137	224903-1	224903-7	10.1063/1.4769829
257	Kusano, T; Iwase, H; Yoshimura, T; Shibayama, M.	Structural and Rheological Studies on Growth of Salt-Free Wormlike Micelles Formed by Star-Type Trimeric Surfactants	Langmuir	2012	28	16798	16806	10.1021/la304275h
256	Yamaguchi, T; Mikawa, K; Koda, S; Fujii, F; Endo, H; Shibayama, M; Hamano, H; Umebayashi, Y.	Relationship between mesoscale dynamics and shear relaxation of ionic liquids with long alkyl chain	J. Chem. Phys.	2012	137	104511-1	104511-7	10.1063/1.4751547
255	Sugimura, A; Asai, M; Matsunaga, T; Akagi, Y; Noguchi, H; Shibayama, M.	Mechanical properties of polymer network of Tetra-PEG gel	Polym. J.	2012	45	300	306	10.1038/pj.2012.149
254	Nishida, T; Obayashi, A; Haraguchi, K; Shibayama, M.	Stress Relaxation and Hysteresis of Nanocomposite Gel Investigated by SAXS and SANS Measurement	Polymer	2012	53	4533	4538	10.1016/j.polymer.2012.07.038
253	Yoshimura, T; Kusano, T; Iwase, H; Shibayama, M; Ogawa, T; Kurata, H	Star-Shaped Trimeric Quaternary Ammonium Bromide Surfactants: Adsorption and Aggregation Properties	Langmuir	2012	28	9322	9331	10.1021/la301220y

252	Iwase, H; Katagiri, M; Shibayama, M	<i>Optimization of the thickness of a ZnS/(LiF)-Li-6 scintillator for a high-resolution detector installed on a focusing small-angle neutron scattering spectrometer (SANS-U)</i>	J. Appl. Crystallogr.	2012	45	507	512	10.1107/S0021889812008928
251	Asai, H; Fujii, K; Ueki, T; Sakai, T; Chung, UI; Watanabe, M; Han, YS; Kim, TH; Shibayama, M	<i>Structural Analysis of High Performance Ion-Gel Comprising Tetra-PEG Network</i>	Macromolecules	2012	45	3902	3909	10.1021/ma300244u
250	Osaka, N; Shibayama, M.	<i>Pressure Effects on Cononsolvency Behavior of Poly(Nisopropylacrylamide) in Water/DMSO Mixed Solvents</i>	Macromolecules	2012	45	2171	2174	10.1021/ma2027116
249	Nishi, K; Fujii, K; Chijiishi, M; Katsumoto, Y; Chung, U; Sakai, T; Shibayama, M	<i>Kinetic Study for AB-Type Coupling Reaction of Tetra-Arm Polymers</i>	Macromolecules	2012	45	1031	1036	10.1021/ma202386k
248	Izumi, A; Nakao, T; Iwase, H; Shibayama, M	<i>Structural analysis of cured phenolic resins using complementary small-angle neutron and X-ray scattering and scanning electron microscopy</i>	Soft Matter	2012	8	8438	8445	10.1039/c2sm26072g
247	Shibayama, M	<i>Structure-mechanical property relationship of tough hydrogels</i>	Soft Matter	2012	8	8030	8038	10.1039/c2sm25325a
246	Kofu, M; Someya, T; Tatsumi, S; Ueno, K; Ueki, T; Watanabe, M; Matsunaga, T; Shibayama, M; Sakai, VG; Tyagi, M; Yamamuro, O	<i>Microscopic insights into ion gel dynamics using neutron spectroscopy</i>	Soft Matter	2012	8	3888	3897	10.1039/c2sm25348h
245	Kamata, H; Chung, U; Shibayama, M; Sakai, T	<i>Anomalous volume phase transition in a polymer gel with alternative hydrophilic-amphiphilic sequence</i>	Soft Matter	2012	8	2876	2879	10.1039/c2sm25168j
244	Izumi, A; Nakao, T; Shibayama, M	<i>Atomistic molecular dynamics study of cross-linked phenolic resins</i>	Soft Matter	2012	8	5283	5292	10.1039/c2sm25067e
243	Sakai, T; Kurakazu, M; Akagi, Y; Shibayama, M; Chung, U	<i>Effect of swelling and deswelling on the elasticity of polymer networks in the dilute to semi-dilute region</i>	Soft Matter	2012	8	2730	2736	10.1039/c2sm07043j
242	Fujii, K; Asai, H; Ueki, T; Sakai, T; Imaizumi, S; Chung, U; Watanabe, M; Shibayama, M	<i>High-performance ion gel with tetra-PEG network</i>	Soft Matter	2012	8	1756	1759	10.1039/c2sm07119c
241	Izumi, A; Nakao, T; Shibayama, M.	<i>Synthesis and Properties of a Deuterated Phenolic Resin</i>	J. Polym. Sci. Part A Polym. Chem.	2011	49	4941	4947	10.1002/pola.24948
240	Fujii, K; Kanzaki, R; Takamuku, T; Kameda, Y; Kohara, S; Kanakubo, M; Shibayama, M; Ishiguro, S; Umebayashi, Y	<i>Experimental evidences for molecular origin of low-Q peak in neutron/x-ray scattering of 1-alkyl-3-methylimidazolium bis(trifluoromethanesulfonyl) amide ionic liquids</i>	J. Chem. Phys.	2011	135	244502		10.1063/1.3672097
239	Asai, M; Shibayama, M; Koike, Y	<i>Common Origin of Dynamics Heterogeneity and Cooperatively Rearranging Region in Polymer Melts</i>	Macromolecules	2011	44	6615	6624	10.1021/ma201341d
238	Izumi, A; Takeuchi, T; Nakao, T; Shibayama, M.	<i>Dynamic light scattering and small-angle neutron scattering studies on phenolic resin solutions</i>	Polymer	2011	52	4355	4361	10.1016/j.polymer.2011.06.059
237	Nomoto, Y; Matsunaga, T; Sakai, T; Tosaka, M; Shibayama, M	<i>Structure and physical properties of dried Tetra-PEG gel</i>	Polymer	2011	52	4123	4128	10.1016/j.polymer.2011.06.053
236	Akagi, Y; Katashima, T; Katsumoto, Y; Fujii, K; Matsunaga, T; Chung, U; Shibayama, M; Sakai, T	<i>Examination of the Theories of Rubber Elasticity Using an Ideal Polymer Network</i>	Macromolecules	2011	44	5817	5821	10.1021/ma201088r
235	Iwase, H; Endo, H; Katagiri, M; Shibayama, M	<i>Modernization of the small-angle neutron scattering spectrometer SANS-U by upgrade to a focusing SANS spectrometer</i>	J. Appl. Crystallogr.	2011	44	558	568	10.1107/S0021889811007527

234	Li, X; Tsutsui, Y; Matsunaga, T; Shibayama, M; Chung, U; Sakai, T	Precise Control and Prediction of Hydrogel Degradation Behavior	Macromolecules	2011	44	3567	3571	10.1021/ma2004234
233	Kim, H-S; Lee, J-H; Shibayama, M; Choi, S-M; Kim, T-H; Okabe, S.	Phase Behavior of Hexa-peri-hexabenzocoronene Derivative in Organic Solvent	J. Phys. Chem. B	2011	115	7314	7320	10.1021/jp200882n
232	Fujii, K; Ueki, T; Niituma, K; Matsunaga, T; Watanabe, M; Shibayama, M	Structural aspects of the LCST phase behavior of poly(benzyl methacrylate) in room-temperature ionic liquid	Polymer	2011	52	1589	1595	10.1016/j.polymer.2011.01.037
231	Shrestha, RG; Shrestha, LK; Matsunaga, T; Shibayama, M; Aramaki, K	Lipophilic Tail Architecture and Molecular Structure of Neutralizing Agent for the Controlled Rheology of Viscoelastic Fluid in Amino Acid-Based Anionic Surfactant System	Langmuir	2011	27	2229	2236	10.1021/la1048248
230	Matsunaga, T; Asai, H; Akagi, Y; Sakai, T; Chung, U; Shibayama, M	SANS Studies on Tetra-PEG Gel under Uniaxial Deformation	Macromolecules	2011	44	1203	1210	10.1021/ma102658e
229	Takeda, M; Kusano, T; Matsunaga, T; Endo, H; Shibayama, M; Shikata, T	Rheo-SANS Studies on Shear-Thickening/Thinning in Aqueous Rodlike Micellar Solutions	Langmuir	2011	27	1731	1738	10.1021/la104647u
228	Endo, H; Mayumi, K; Osaka, N; Ito, K; Shibayama, M	The static structure of polyrotaxane in solution investigated by contrast variation small-angle neutron scattering	Polym. J.	2011	43	155	163	10.1038/pj.2010.124
227	Shibayama, M	Small-angle neutron scattering on polymer gels: phase behavior, inhomogeneities and deformation mechanisms	Polym. J.	2011	43	18	34	10.1038/pj.2010.110
226	Shibayama, M; Osaka, N.	Pressure- and Temperature-Induced Phase Separation Transition in Homopolymer, Block Copolymer, and Protein in Water	Macromol. Symp.	2010	291-29	115	121	10.1002/masy.201050514
225	Endo, H; Shibayama, M	Static partial scattering functions for linear and ring random copolymers	Polym. J.	2010	42	157	160	10.1038/pj.2009.325
224	Sakai, T; Akagi, Y; Matsunaga, T; Kurakazu, M; Chung, U; Shibayama, M	Highly Elastic and Deformable Hydrogel Formed from Tetra-arm Polymers	Macromol. Rapid Commun.	2010	31	1954	1959	10.1002/marc.201000286
223	Takeda, M; Matsunaga, T; Nishida, T; Endo, H; Takahashi, T; Shibayama, M	Rheo-SANS Studies on Shear Thickening in Clay-Poly(ethylene oxide) Mixed Solutions	Macromolecules	2010	43	7793	7799	10.1021/ma101319j
222	Matsunaga, T; Endo, H; Takeda, M; Shibayama, M	Microscopic Structure Analysis of Clay-Poly(ethylene oxide) Mixed Solution in a Flow Field by Contrast-Variation Small-Angle Neutron Scattering	Macromolecules	2010	43	5075	5082	10.1021/ma100476s
221	Kurakazu, M; Katashima, T; Chijiiishi, M; Nishi, K; Akagi, Y; Matsunaga, T; Shibayama, M; Chung, U; Sakai, T	Evaluation of Gelation Kinetics of Tetra-PEG Gel	Macromolecules	2010	43	3935	3940	10.1021/ma100176f
220	Kawada, H; Kume, T; Matsunaga, T; Iwai, H; Sano, T; Shibayama, M	Structure and Rheology of a Self-Standing Nanoemulsion	Langmuir	2010	26	2430	2437	10.1021/la902905b
219	Suzuki, T; Osaka, N; Endo, H; Shibayama, M; Ikeda, Y; Asai, H; Higashitani, N; Kokubo, Y; Kohjiya, S	Nonuniformity in Cross-Linked Natural Rubber as Revealed by Contrast-Variation Small-Angle Neutron Scattering	Macromolecules	2010	43	1556	1563	10.1021/ma9019416
218	Kundu, SK; Yoshida, M; Shibayama, M	Effect of Salt Content on the Rheological Properties of Hydrogel Based on Oligomeric Electrolyte	J. Phys. Chem. B	2010	114	1541	1547	10.1021/jp906312f
217	Akagi, Y; Matsunaga, T; Shibayama, M; Chung, U; Sakai, T	Evaluation of Topological Defects in Tetra-PEG Gels	Macromolecules	2010	43	488	493	10.1021/ma9019009

216	Yoshida, K; Yamaguchi, T; Osaka, N; Endo, H; Shibayama, M	A study of alcohol-induced gelation of beta-lactoglobulin with small-angle neutron scattering, neutron spin echo, and dynamic light scattering measurements	Phys. Chem. Chem. Phys.	2010	12	3260	3269	10.1039/b920187d
215	Osaka, N; Shibayama, M; Kikuchi, T; Yamamuro, O	Quasi-Elastic Neutron Scattering Study on Water and Polymer Dynamics in Thermo/Pressure Sensitive Polymer Solutions	J. Phys. Chem. B	2009	113	12870	12876	10.1021/jp902960b
214	Mayumi, K; Nagao, M; Endo, H; Osaka, N; Shibayama, M; Ito, K	Dynamics of polyrotaxane investigated by neutron spin echo	Physica B	2009	404	2600	2602	10.1016/j.physb.2009.06.035
213	Yamada, NL; Endo, H; Osaka, N; Kawabata, Y; Nagao, M; Takeda, T; Seto, H; Shibayama, M	Detector area expansion at iNSE neutron spin echo spectrometer	Physica B	2009	404	2607	2610	10.1016/j.physb.2009.06.033
212	Nishida, T; Endo, H; Osaka, N; Li, H; Haraguchi, K; Shibayama, M	Deformation mechanism of nanocomposite gels studied by contrast variation small-angle neutron scattering	Phys. Rev. E	2009	80	30801		10.1103/PhysRevE.80.030801
211	Osaka, N; Endo, H; Nishida, T; Suzuki, T; Li, H; Haraguchi, K; Shibayama, M.	Microphase separation in nanocomposite gels	Phys. Rev. E	2009	79	60801		10.1103/PhysRevE.79.060801
210	Matsunaga, T; Sakai, T; Akagi, Y; Chung, U; Shibayama, M	SANS and SLS Studies on Tetra-Arm PEG Gels in As-Prepared and Swollen States	Macromolecules	2009	42	6245	6252	10.1021/ma901013q
209	Mayumi, K; Endo, H; Osaka, N; Yokoyama, H; Nagao, M; Shibayama, M; Ito, K	Mechanically Interlocked Structure of Polyrotaxane Investigated by Contrast Variation Small-Angle Neutron Scattering	Macromolecules	2009	42	6327	6329	10.1021/ma9010318
208	Suzuki, T; Endo, H; Osaka, N; Shibayama, M	Dynamics and Microstructure Analysis of N-Isopropylacrylamide/Silica Hybrid Gels	Langmuir	2009	25	8824	8832	10.1021/la900736y
207	Shibayama, M; Matsunaga, T; Nagao, M	Evaluation of incoherent scattering intensity by transmission and sample thickness	J. Appl. Crystallogr.	2009	42	621	628	10.1107/S0021889809022456
206	Kundu, SK; Yagihara, S; Yoshida, M; Shibayama, M	Microwave Dielectric Study of an Oligomeric Electrolyte Gelator by Time Domain Reflectometry	J. Phys. Chem. B	2009	113	10112	10116	10.1021/jp901043h
205	Matsunaga, S; Matsunaga, T; Iwamoto, K; Yamada, T; Shibayama, M; Kawai, M; Kobayashi, T	Visualization of Phospholipid Particle Fusion Induced by Duramycin	Langmuir	2009	25	8200	8207	10.1021/la900616c
204	Suzuki, T; Shibayama, M; Hatano, K; Ishii, M	[NCO]/[OH] and acryl-polyol concentration dependence of the gelation process and the microstructure analysis of polyurethane resin by dynamic light scattering	Polymer	2009	50	2503	2509	10.1016/j.polymer.2009.03.035
203	Ikeda, Y; Higashitani, N; Hijikata, K; Kokubo, Y; Morita, Y; Shibayama, M; Osaka, N; Suzuki, T; Endo, H; Kohjiya, S	Vulcanization: New Focus on a Traditional Technology by Small-Angle Neutron Scattering	Macromolecules	2009	42	2741	2748	10.1021/ma802730z
202	Shibayama, M	Structural Investigation of Supertough Polymer Gels by Small-Angle Neutron Scattering Measurement	J. Phys. Soc. Jpn.	2009	78	41008		10.1143/JPSJ.78.041008
201	Matsunaga, T; Sakai, T; Akagi, Y; Chung, U; Shibayama, M	Structure Characterization of Tetra-PEG Gel by Small-Angle Neutron Scattering	Macromolecules	2009	42	1344	1351	10.1021/ma802280n
200	Sato, TJ; Yamamuro, O; Hirota, K; Shibayama, M; Yoshizawa, H; Itoh, S; Watanabe, S; Asami, T; Kindo, K; Uwatoko, Y; Kanaya, T; Higashi, N; Ueno, K	High-intensity and versatile chopper spectrometer project for J-PARC	Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.	2009	600	143	145	10.1016/j.nima.2008.11.109

199	Inomoto, N; Osaka, N; Suzuki, T; Hasegawa, U; Ozawa, Y; Endo, H; Akiyoshi, K; Shibayama, M	<i>Interaction of nanogel with cyclodextrin or protein: Study by dynamic light scattering and small-angle neutron scattering</i>	Polymer	2009	50	541	546	10.1016/j.polymer.2008.11.001
198	Kundu, SK; Osaka, N; Matsunaga, T; Yoshida, M; Shibayama, M	<i>Structural Characterization of Ionic Gelator Studied by Dynamic Light Scattering and Small-Angle Neutron Scattering</i>	J. Phys. Chem. B	2008	112	16469	16477	10.1021/jp807992t
197	Suzuki, T; Karino, T; Ikkai, F; Shibayama, M	<i>pH Dependence of Macroscopic Swelling and Microscopic Structures for Thermo/pH-Sensitive Gels with Different Charge Distributions</i>	Macromolecules	2008	41	9882	9889	10.1021/ma801042q
196	Kundu, SK; Matsunaga, T; Yoshida, M; Shibayama, M	<i>Rheological study on rapid recovery of hydrogel based on oligomeric electrolyte</i>	J. Phys. Chem. B	2008	112	11537	11541	10.1021/jp803774r
195	Mayumi, K; Osaka, N; Endo, H; Yokoyama, H; Sakai, Y; Shibayama, M; Ito, K	<i>Concentration-induced conformational change in linear polymer threaded into cyclic molecules</i>	Macromolecules	2008	41	6480	6485	10.1021/ma801021g
194	Sakai, T; Matsunaga, T; Yamamoto, Y; Ito, C; Yoshida, R; Suzuki, S; Sasaki, N; Shibayama, M; Chung, UI	<i>Design and fabrication of a high-strength hydrogel with ideally homogeneous network structure from tetrahedron-like macromonomers</i>	Macromolecules	2008	41	5379	5384	10.1021/ma800476x
193	Endo, H; Miyazaki, S; Haraguchi, K; Shibayama, M	<i>Structure of nanocomposite hydrogel investigated by means of contrast variation small-angle neutron scattering</i>	Macromolecules	2008	41	5406	5411	10.1021/ma800390p
192	Osaka, N; Takata, SI; Suzukia, T; Endo, H; Shibayama, M	<i>Comparison of heat- and pressure-induced gelation of beta-lactoglobulin aqueous solutions studied by small-angle neutron and dynamic light scattering</i>	Polymer	2008	49	2957	2963	10.1016/j.polymer.2008.04.055
191	Suzuki, T; Endo, H; Shibayama, M	<i>Analysis of surface structure and hydrogen/deuterium exchange of colloidal silica suspension by contrast-variation small-angle neutron scattering</i>	Langmuir	2008	24	4537	4543	10.1021/la7039515
190	Abad, L; Okabe, S; Shibayama, M; Kudo, H; Saiki, S; Aranilla, C; Relleve, L; de la Rosa, A.	<i>Comparative studies on the conformational change and aggregation behavior of irradiated carrageenans and agar by dynamic light scattering</i>	Int. J. Bio. Macromol.	2008	42	55	61	
189	Sadakane, K; Seto, H; Endo, H; Shibayama, M	<i>A periodic structure in a mixture of D2O/3-methylpyridine/NaBPh4 induced by solvation effect</i>	J. Phys. Soc. Jpn.	2007	76	113602		10.1143/JPSJ.76.113602
188	Shibayama, M; Kawada, H; Kume, T; Matsunaga, T; Iwai, H; Sano, T; Osaka, N; Miyazaki, S; Okabe, S; Endo, H	<i>In situ small-angle neutron scattering and rheological measurements of shear-induced gelation</i>	J. Chem. Phys.	2007	127	144507		10.1063/1.2790900
187	Osaka, N; Miyazaki, S; Okabe, S; Endo, H; Sasai, A; Seno, K; Aoshima, S; Shibayama, M	<i>Pressure-induced reentrant micellization of amphiphilic block copolymers in dilute aqueous solutions</i>	J. Chem. Phys.	2007	127	94905		10.1063/1.2766942
186	Matsunaga, T; Shibayama, M	<i>Gel point determination of gelatin hydrogels by dynamic light scattering and rheological measurements</i>	Phys. Rev. E	2007	76	30401		10.1103/PhysRevE.76.030401
185	Miyazaki, S; Endo, H; Karino, T; Haraguchi, K; Shibayama, M	<i>Gelation mechanism of poly(N-isopropylacrylamide)-clay nanocomposite gels</i>	Macromolecules	2007	40	4287	4295	10.1021/ma070104v
184	Shibayama, M; Miyazaki, S; Endo, H; Karino, T; Haraguchi, K.	<i>Deformation Studies on Polymer-Clay Nanocomposite Gels</i>	Macromol. Sympo.	2007	256	131	136	

183	Kimata, S; Sakurai, T; Nozue, Y; Kasahara, T; Yamaguchi, N; Karino, T; Shibayama, M; Kornfield, JA	Molecular basis of the shish-kebab morphology in polymer crystallization	Science	2007	316	1014	1017	10.1126/science.1140132
182	Ikkai, F; Shibayama, M	Gel-size dependence of temperature-induced microphase separation in weakly-charged polymer gels	Polymer	2007	48	2387	2394	10.1016/j.polymer.2007.02.049
181	Ueki, T; Karino, T; Kobayashi, Y; Shibayama, M; Watanabe, M	Difference in lower critical solution temperature behavior between random copolymers and a homopolymer having solvatophilic and solvophobic structures in an ionic liquid	J. Phys. Chem. B	2007	111	4750	4754	10.1021/jp0670900
180	Suzuki, T; Ikkai, F; Shibayama, M	Structure and dynamics of N-isopropylacrylamide/acrylic acid copolymer gels prepared by cross-linker-free UV-induced polymerization	Macromolecules	2007	40	2509	2514	10.1021/ma062448b
179	Shibayama, M; Karino, T; Domon, Y; Ito, K	Complementary use of small-angle neutron scattering and dynamic light scattering studies for structure analysis and dynamics of polymer gels	J. Appl. Crystallogr.	2007	40	S43	S47	10.1107/S0021889806054707
178	Okabe, S; Karino, T; Nagao, M; Watanabe, S; Shibayama, M	Current status of the 32m small-angle neutron scattering instrument, SANS-U	Nucl. Instrum. Methods Phys. Res. Sect. A-Accel. Spectrom. Dect. Assoc. Equip.	2007	572	853	858	10.1016/j.nima.2006.12.002
177	Ikkai, F; Suzuki, T; Karino, T; Shibayama, M	Microstructure of N-isopropylacrylamide-acrylic acid copolymer gels having different spatial configurations of weakly charged groups	Macromolecules	2007	40	1140	1146	10.1021/ma062216c
176	Karino, T; Ikeda, Y; Yasuda, Y; Kohjiya, S; Shibayama, M	Nonuniformity in natural rubber as revealed by small-angle neutron scattering, small-angle X-ray scattering, and atomic force microscopy	Biomacromolecules	2007	8	693	699	10.1021/bm060983d
175	Nozue, Y; Sakurai, T; Hozumi, H; Kasahara, T; Yamaguchi, N; Shibayama, M; Matsushita, Y	Investigation of miscibility between iPP and propylene-butene random copolymer by small-angle neutron scattering	Macromolecules	2007	40	273	277	10.1021/ma061240n
174	Karino, T; Okumura, Y; Zhao, CM; Kidowaki, M; Kataoka, T; Ito, K; Shibayama, M	Sol-gel transition of hydrophobically modified polyrotaxane	Macromolecules	2006	39	9435	9440	10.1021/ma062203z
173	Shibayama, M	Universality and specificity of polymer gels viewed by scattering methods	Bull. Chem. Soc. Jpn.	2006	79	1799	1819	10.1246/bcsj.79.1799
172	Nagao, M; Seto, H; Shibayama, M; Takeda, T	Pressure effect on semi-microscopic structures in a nonionic microemulsion	Physica B	2006	385	783	786	10.1016/j.physb.2006.06.083
171	Karino, T; Shibayama, M; Okumura, Y; Ito, K	SANS study on pulley effect of slide-ring gel	Physica B	2006	385	807	809	10.1016/j.physb.2006.06.095
170	Okabe, S; Fuse, C; Sugihara, S; Aoshima, S; Shibayama, M	Structural transition in block and gradient copolymer aqueous solutions	Physica B	2006	385	756	758	10.1016/j.physb.2006.06.055
169	Osaka, N; Okabe, S; Karino, T; Hirabaru, Y; Aoshima, S; Shibayama, M	SANS study of hydrophobic effects on pressure-induced micro- and macrophase separations of block copolymers	Physica B	2006	385	749	751	10.1016/j.physb.2006.06.051
168	Karino, T; Shibayama, M; Ito, K	Slide-ring gel: Topological gel with freely movable cross-links	Physica B	2006	385	692	696	10.1016/j.physb.2006.05.293
167	Miyazaki, S; Karino, T; Endo, H; Haraguchi, K; Shibayama, M	Clay concentration dependence of microstructure in deformed poly(N-isopropylacrylamide)-clay nanocomposite gels	Macromolecules	2006	39	8112	8120	10.1021/ma0616880
166	Okabe, S; Seno, K; Kanaoka, S; Aoshima, S; Shibayama, M	Small-angle neutron scattering study on block and gradient copolymer aqueous solutions	Polymer	2006	47	7572	7579	10.1016/j.polymer.2006.08.045
165	Shibayama, M; Karino, T; Okabe, S	Distribution analyses of multi-modal dynamic light scattering data	Polymer	2006	47	6446	6456	10.1016/j.polymer.2006.06.060

164	Osaka, N; Okabe, S; Karino, T; Hirabaru, Y; Aoshima, S; Shibayama, M	Micro- and macrophase separations of hydrophobically solvated block copolymer aqueous solutions induced by pressure and temperature	Macromolecules	2006	39	5875	5884	10.1021/ma060723o
163	Abad, L; Okabe, S; Koizumi, S; Shibayama, M	Small-angle neutron scattering study on irradiated kappa carrageenan	Physica B	2006	381	103	108	10.1016/j.physb.2005.12.267
162	Okabe, S; Seno, K; Kanaoka, S; Aoshima, S; Shibayama, M	Micellization study on block and gradient copolymer aqueous solutions by DLS and SANS	Macromolecules	2006	39	1592	1597	10.1021/ma052334k
161	Osaka, N; Shibayama, M	Pressure-induced phase transitions of hydrophobically solvated block-copolymer solutions	Phys. Rev. Lett.	2006	96	48303		10.1103/PhysRevLett.96.048303
160	Shibayama, M	Small-angle neutron scattering on polymer gels	Kobunshi Ronbunshu	2006	63	345	359	10.1295/koron.63.345
159	Shibayama, M; Karino, T; Miyazaki, S; Okabe, S; Takehisa, T; Haraguchi, K	Small-angle neutron scattering study on uniaxially stretched poly(N-isopropylacrylamide)-clay nanocomposite gels	Macromolecules	2005	38	10772	10781	10.1021/ma051979h
158	Okabe, S; Hanabusa, K; Shibayama, M	Gelation mechanism and microstructure of organogels formed with various types of gelators	J. Polym. Sci. Pt. B-Polym. Phys.	2005	43	3567	3574	10.1002/polb.20620
157	Okabe, S; Nagao, M; Karino, T; Watanabe, S; Adachi, T; Shimizu, H; Shibayama, M	Upgrade of the 32 m small-angle neutron scattering instrument SANS-U	J. Appl. Crystallogr.	2005	38	1035	1037	10.1107/S0021889805029201
156	Nagao, M; Okabe, S; Shibayama, M	Small-angle neutron-scattering study on a structure of microemulsion mixed with polymer networks	J. Chem. Phys.	2005	123	144909		10.1063/1.2013211
155	Shibayama, M; Nagao, M; Okabe, S; Karino, T	Evaluation of incoherent neutron scattering from softmatter	J. Phys. Soc. Jpn.	2005	74	2728	2736	10.1143/JPSJ.74.2728
154	Abad, L.V.; Nasimovaa, I.R.; Aranilla, C.T.; Shibayama, M.	Light scattering studies of irradiated <i>k</i> - and <i>i</i> -carrageenan	Rad. Phys. Chem.	2005	73	29	37	
153	Zhao, CM; Domon, Y; Okumura, Y; Okabe, S; Shibayama, M; Ito, K	Sliding mode of cyclodextrin in polyrotaxane and slide-ring gel	J. Phys.-Condes. Matter	2005	17	S2841	S2846	10.1088/0953-8984/17/31/009
152	Kunugi, S; Kameyama, K; Tada, T; Tanaka, N; Shibayama, M; Akashi, M	Differences in pressure and temperature transitions of proteins and polymer gels	Brazilian J. Med. Biol. Res.	2005	38	1233	1238	
151	Nagao, M; Seto, H; Ihara, D; Shibayama, M; Takeda, T	Pressure-induced hexagonal phase in a ternary microemulsion system composed of a nonionic surfactant, water, and oil	J. Chem. Phys.	2005	123	54705		10.1063/1.1993559
150	Karino, T; Okumura, Y; Zhao, CM; Kataoka, T; Ito, K; Shibayama, M	SANS studies on deformation mechanism of slide-ring gel	Macromolecules	2005	38	6161	6167	10.1021/ma050624v
149	Ikkai, F; Shibayama, M	Inhomogeneity control in polymer gels	J. Polym. Sci. Pt. B-Polym. Phys.	2005	43	617	628	10.1002/polb.20358
148	Shibayama, M; Ozeki, S; Norisuye, T	Real-time dynamic light scattering on gelation and vitrification	Polymer	2005	46	2381	2388	10.1016/j.polymer.2005.01.018
147	Norisuye, T; Morinaga, T; Tran-Cong-Miyata, Q; Goto, A; Fukuda, T; Shibayama, M	Comparison of the gelation dynamics for polystyrenes prepared by conventional and living radical polymerizations: a time-resolved dynamic light scattering study	Polymer	2005	46	1982	1994	10.1016/j.polymer.2004.12.043
146	Dastidar, P; Okabe, S; Nakano, K; Iida, K; Miyata, M; Tohnai, N; Shibayama, M	Facile syntheses of a class of supramolecular gelator following a combinatorial library approach: Dynamic light scattering and small-angle neutron scattering studies	Chem. Mat.	2005	17	741	748	10.1021/cm048210o
145	Shibayama, M; Suda, J; Karino, T; Okabe, S; Takehisa, T; Haraguchi, K	Structure and dynamics of poly(N-isopropylacrylamide)-clay nanocomposite gel	Macromolecules	2004	37	9606	9612	10.1021/ma048464v

144	Nasimova, I; Karino, T; Okabe, S; Nagao, M; Shibayama, M	Small-angle neutron scattering investigation of pressure influence on the structure of weakly charged poly( <i>N</i> -isopropylacrylamide) solutions and gels	Macromolecules	2004	37	8721	8729	10.1021/ma049058e
143	Nasimova, I; Karino, T; Okabe, S; Nagao, M; Shibayama, M	Effect of ionization on the temperature- and pressure-induced phase transitions of poly( <i>N</i> -isopropylacrylamide) gels	J. Chem. Phys.	2004	121	9708	9715	10.1063/1.1804491
142	Fuse, C; Okabe, S; Sugihara, S; Aoshima, S; Shibayama, M	Water-induced self-assembling of solvent-sensitive block copolymer	Macromolecules	2004	37	7791	7798	10.1021/ma0495442
141	Aoshima, S; Sugihara, S; Shibayama, M; Kanaoka, S	Synthesis and self-association of stimuli-responsive diblock copolymers by living cationic polymerization	Macromol. Symp.	2004	215	151	163	10.1002/masy.200451113
140	Karino, T; Okumura, Y; Ito, K; Shibayama, M.	SANS Studies on Spatial Inhomogeneities of Slide-Ring Gels	Macromolecules	2004	37	6177	6182	
139	Na, YH; Kurokawa, T; Katsuyama, Y; Tsukeshiba, H; Gong, JP; Osada, Y; Okabe, S; Karino, T; Shibayama, M	Structural characteristics of double network gels with extremely high mechanical strength	Macromolecules	2004	37	5370	5374	10.1021/ma049506i
138	Okabe, S; Ando, K; Hanabusa, K; Shibayama, M	Dynamic light scattering and small-angle neutron scattering studies on organogels formed with a gelator	J. Polym. Sci. Pt. B-Polym. Phys.	2004	42	1841	1848	10.1002/polb.20067
137	Shibayama, M; Isono, K; Okabe, S; Karino, T; Nagao, M	SANS study on pressure-induced phase separation of poly( <i>N</i> -isopropylacrylamide) aqueous solutions and gels	Macromolecules	2004	37	2909	2918	10.1021/ma0359685
136	Norisuye, T; Tran-Cong-Miyata, Q; Shibayama, M	Dynamic inhomogeneities in polymer gels investigated by dynamic light scattering	Macromolecules	2004	37	2944	2953	10.1021/ma035246d
135	Abad, LV; Nasimova, IR; Relleve, LS; Aranilla, CT; De la Rosa, AM; Shibayama, M	Dynamic light scattering studies of irradiated kappa carrageenan	Int. J. Biol. Macromol.	2004	34	81	88	10.1016/j.ijbiomac.2004.03.012
134	Sugihara, S; Hashimoto, K; Okabe, S; Shibayama, M; Kanaoka, S; Aoshima, S	Stimuli-responsive diblock copolymers by living cationic polymerization: Precision synthesis and highly sensitive physical gelation	Macromolecules	2004	37	336	343	10.1021/ma035037t
133	Wang, ZY; Muraoka, Y; Nagao, M; Shibayama, M; Kobayashi, M; Nozawa, T	Determination of the B820 subunit size of a bacterial core light-harvesting complex by small-angle neutron scattering	Biochemistry	2003	42	11555	11560	10.1021/bi034436d
132	NORISUE, T; KIDA, Y; MASUI, N; Q, TRAN-CONG, MIYATA; MAEKAWA, Y; YOSHIDA, M; SHIBAYAMA, M	Studies on Two Types of Built-in Inhomogeneities for Polymer Gels: Frozen Segmental Concentration Fluctuations and Spatial Distribution of Cross-Links.	Macromolecules	2003	36	6202	6212	10.1021/ma030067h
131	Nagao, M; Seto, H; Shibayama, M; Yamada, NL	Small-angle neutron scattering study of droplet density dependence of the water-in-oil droplet structure in a ternary microemulsion	J. Appl. Crystallogr.	2003	36	602	606	10.1107/S0021889803006174
130	Ikkai, F; Masui, N; Karino, T; Naito, S; Kurita, K; Shibayama, M	Swelling behavior and microstructure of poly(12-acryloyloxydodecanoic acid-co-acrylic acid) gels in the ethanol/water system	Langmuir	2003	19	2568	2574	10.1021/la026605l
129	Okabe, S; Sugihara, S; Aoshima, S; Shibayama, M	Heat-induced self-assembling of thermosensitive block copolymer. Rheology and dynamic light scattering study	Macromolecules	2003	36	4099	4106	10.1021/ma030066p
128	Takata, S; Shibayama, M; Sasabe, R; Kawaguchi, H	Preparation and structure characterization of hairy nanoparticles consisting of hydrophobic core and thermosensitive hairs	Polymer	2003	44	495	501	10.1016/S0032-3861(02)00768-1

127	Torikai, N; Furusaka, M; Matsuoka, H; Matsushita, Y; Shibayama, M; Takahara, A; Takeda, M; Tasaki, S; Yamaoka, H	Instrumental design and performance of a new pulsed-neutron reflectometer (ARISA) at KENS for studying free surfaces	<i>Appl. Phys. A-Mater. Sci. Process.</i>	2002	74	S264	S266	10.1007/s003390101095
126	Shibayama, M; Okabe, S; Nagao, M; Sugihara, S; Aoshima, S; Harada, T; Matsuoka, H	Quantitative analysis of "polymer-Balls" in aqueous solutions by small-angle neutron scattering	<i>Macromol. Res.</i>	2002	10	311	317	
125	Okabe, S; Sugihara, S; Aoshima, S; Shibayama, M	Heat-induced self-assembling of thermosensitive block copolymer. 1. Small-angle neutron scattering study	<i>Macromolecules</i>	2002	35	8139	8146	10.1021/ma020480+
124	Norisuye, T; Masui, N; Kida, Y; Ikuta, D; Kokufuta, E; Ito, S; Panyukov, S; Shibayama, M	Small angle neutron scattering studies on structural inhomogeneities in polymer gels: irradiation cross-linked gels vs chemically cross-linked gels	<i>Polymer</i>	2002	43	5289	5297	10.1016/S0032-3861(02)00343-9
123	Masui, N; Ikkai, F; Karino, T; Naito, S; Kunugi, S; Kurita, K; Shibayama, M	Small-angle neutron scattering study on selective solvation of poly(12-acryloyloxydodecanoic acid-co-acrylic acid) gels in mixed solvents	<i>Langmuir</i>	2002	18	5092	5098	10.1021/la011853n
122	Takata, S; Norisuye, T; Shibayama, M	Small-angle neutron-scattering study on preparation temperature dependence of thermosensitive gels	<i>Macromolecules</i>	2002	35	4779	4784	10.1021/ma0201126
121	Takata, S; Suzuki, K; Norisuye, T; Shibayama, M	Dependence of shrinking kinetics of poly( <i>N</i> -isopropylacrylamide) gels on preparation temperature	<i>Polymer</i>	2002	43	3101	3107	10.1016/S0032-3861(02)00089-7
120	Shibayama, M; Norisuye, T	Gel formation analyses by dynamic light scattering	<i>Bull. Chem. Soc. Jpn.</i>	2002	75	641	659	10.1246/bcsj.75.641
119	Tsujimoto, M; Shibayama, M	Dynamic light scattering study on reentrant sol-gel transition of poly(vinyl alcohol)-Congo Red complex in aqueous media	<i>Macromolecules</i>	2002	35	1342	1347	10.1021/ma011175b
118	Okamoto, M; Norisuye, T; Shibayama, M	Time-resolved dynamic light scattering study on gelation and gel-melting processes of gelatin gels	<i>Macromolecules</i>	2001	34	8496	8502	10.1021/ma010734b
117	Motonaga, T; Shibayama, M	Studies on pH and temperature dependence of the dynamics and heterogeneities in poly( <i>N</i> -isopropylacrylamide- <i>co</i> -sodium acrylate) gels	<i>Polymer</i>	2001	42	8925	8934	10.1016/S0032-3861(01)00380-9
116	Shibayama, M; Okamoto, M	Dynamic light scattering study on gelatin aqueous solutions and gels	<i>J. Chem. Phys.</i>	2001	115	4285	4291	10.1063/1.1391257
115	Shibayama, M; NORISUYE, T; IKKAI, F	SANS Studies on Frozen Inhomogeneities and Local Structure in Polymer Gels.	<i>J. Phys. Soc. Jpn.</i>	2001	70	306	310	
114	Sato, Y; Nakanishi, K; Hirao, K; Jinnai, H; Shibayama, M; Melnichenko, YB; Wignall, GD	Formation of ordered macropores and templated nanopores in silica sol-gel system incorporated with EO-PO-EO triblock copolymer	<i>Colloid Surf. A-Physicochem. Eng. Asp.</i>	2001	187	117	122	10.1016/S0927-7757(01)00626-4
113	Annaka, M; Shibayama, M; Ikkai, F; Sugiyama, M; Hara, K; Nakahira, T; Tanaka, T	Multiple-phase behavior and its microscopic implication for 4-acrylamidosalicylic acid gel	<i>J. Chem. Phys.</i>	2001	114	6906	6912	10.1063/1.1357201
112	Kawauchi, T; Isshiki, M; Takeda, M; Shibayama, M	Dynamic light scattering studies on poly(vinyl chloride) clusters and aggregates in tetrahydrofuran	<i>Polymer</i>	2001	42	3875	3881	10.1016/S0032-3861(00)00755-2
111	Nakamoto, C; Motonaga, T; Shibayama, M	Preparation pressure dependence of structure inhomogeneities and dynamic fluctuations in poly( <i>N</i> -isopropylacrylamide) gels	<i>Macromolecules</i>	2001	34	911	917	10.1021/ma001372v
110	Shibayama, M; Tsujimoto, M; Ikkai, F	Static inhomogeneities in physical gels: Comparison of temperature-induced and concentration-induced sol-gel transition	<i>Macromolecules</i>	2000	33	7868	7876	10.1021/ma000563v
109	Takata, S; Norisuye, T; Tanaka, N; Shibayama, M	Heat-induced gelation of beta-lactoglobulin. 1. Time-resolved dynamic light scattering	<i>Macromolecules</i>	2000	33	5470	5475	10.1021/ma0003295

108	Takeda, M; Norisuye, T; Shibayama, M	Critical dynamics of cross-linked polymer chains near the gelation threshold	Macromolecules	2000	33	2909	2915	10.1021/ma9921044
107	Norisuye, T; Inoue, M; Shibayama, M; Tamaki, R; Chujo, Y	Time-resolved dynamic light scattering study on the dynamics of silica gels during gelation process	Macromolecules	2000	33	900	905	10.1021/ma991496b
106	Shibayama, M; Shirotani, Y; Shiwa, Y	Static inhomogeneities and dynamics of swollen and reactor-batch polymer gels	J. Chem. Phys.	2000	112	442	449	10.1063/1.480631
105	Suetoh, Y; Shibayama, M	Effects of non-uniform solvation on thermal response in poly( <i>N</i> -isopropylacrylamide) gels	Polymer	2000	41	505	510	10.1016/S0032-3861(99)00175-5
104	Ikkai, F; Shibayama, M	Static inhomogeneities in thermoreversible physical gels	Phys. Rev. Lett.	1999	82	4946	4949	10.1103/PhysRevLett.82.4946
103	Shibayama, M; Nagai, K	Shrinking kinetics of poly( <i>N</i> -isopropylacrylamide) gels <i>T</i> -jumped across their volume phase transition temperatures	Macromolecules	1999	32	7461	7468	10.1021/ma990719v
102	Shibayama, M; Isaka, Y; Shiwa, Y	Dynamics of probe particles in polymer solutions and gels	Macromolecules	1999	32	7086	7092	10.1021/ma990414g
101	Takata, S; Norisuye, T; Shibayama, M	Preparation temperature dependence and effects of hydrolysis on static inhomogeneities of poly(acrylamide) gels	Macromolecules	1999	32	3989	3993	10.1021/ma990188a
100	Shiwa, Y; Shibayama, M	Anisotropic scattering profiles of charged gels in a deformed state	Phys. Rev. E	1999	59	5891	5894	10.1103/PhysRevE.59.5891
99	Tanaka, N; Nakagawa, K; Nagayama, H; Hosoya, K; Ikegami, T; Itaya, A; Shibayama, M	Effects of electrokinetic chromatography conditions on the structure and properties of polyallylamine-supported pseudo-stationary phase A study by dynamic light scattering	J. Chromatogr. A	1999	836	295	303	10.1016/S0021-9673(99)00039-4
98	Norisuye, T; Shibayama, M; Tamaki, R; Chujo, Y	Time-resolved dynamic light scattering studies on gelation process of organic-inorganic polymer hybrids	Macromolecules	1999	32	1528	1533	10.1021/ma981306h
97	Ikkai, F; Iritani, O; Shibayama, M; Han, CC	Effect of degree of cross-linking on spatial inhomogeneity in charged gels. 3. Ionization effect	Macromolecules	1998	31	8526	8530	10.1021/ma980962e
96	Ikkai, F; Shibayama, M	Static inhomogeneities in thermoreversible gels	KOBUNSHI RONBUNSHU	1998	55	632	636	
95	Norisuye, T; Takeda, M; Shibayama, M	Cluster-size distribution of cross-linked polymer chains across the gelation threshold	Macromolecules	1998	31	5316	5322	10.1021/ma9801826
94	Hirose, H; Shibayama, M	Kinetics of volume phase transition in poly( <i>N</i> -isopropylacrylamide-co-acrylic acid) gels	Macromolecules	1998	31	5336	5342	10.1021/ma980405s
93	Shibayama, M; Takahashi, H; Nomura, S; Imai, M	Isothermal crystallisation of end-linked poly(tetrahydrofuran) networks. 3. Small-angle neutron scattering	Polymer	1998	39	3759	3766	10.1016/S0032-3861(97)10145-8
92	Norisuye, T; Shibayama, M; Nomura, S	Time-resolved light scattering study on the gelation process of poly( <i>N</i> -isopropyl acrylamide)	Polymer	1998	39	2769	2775	10.1016/S0032-3861(97)00596-X
91	Ikkai, F; Shibayama, M; Han, CC	Effect of degree of cross-linking on spatial inhomogeneity in charged gels. 2. Small-angle neutron scattering study	Macromolecules	1998	31	3275	3281	10.1021/ma971468y
90	Shibayama, M; Kawakubo, K; Ikkai, F; Imai, M	Small-angle neutron scattering study on charged gels in deformed state	Macromolecules	1998	31	2586	2592	10.1021/ma971411b
89	Shibayama, M; Kawakubo, K; Norisuye, T	Comparison of the experimental and theoretical structure factors of temperature sensitive polymer gels	Macromolecules	1998	31	1608	1614	10.1021/ma971641q
88	Shibayama, M; Takata, S; Norisuye, T	Static inhomogeneities and dynamic fluctuations of temperature sensitive polymer gels	Physica A	1998	249	245	252	10.1016/S0378-4371(97)00472-X
87	Ikkai, F; Shibayama, M	Static inhomogeneities in thermoreversible gels	Kobunshi Ronbunshu	1998	55	632	636	
86	Shibayama, M	Spatial inhomogeneity and dynamic fluctuations of polymer gels	Macromol. Chem. Phys.	1998	199	1	30	10.1002/(SICI)1521-3935(19980101)199:1<1::AID-MACP1>3.0.CO;2-M
85	Shibayama, M; Shirotani, Y; Hirose, H; Nomura, S	Simple scaling rules on swollen and shrunken polymer gels	Macromolecules	1997	30	7307	7312	10.1021/ma970443w

84	Shibayama, M; Ikkai, F; Shiwa, Y; Rabin, Y	<i>Effect of degree of cross-linking on spatial inhomogeneity in charged gels .1. Theoretical predictions and light scattering study</i>	J. Chem. Phys.	1997	107	5227	5235	10.1063/1.474886
83	Shibayama, M; Nakagawa, T; Suetoh, Y; Nomura, S	<i>Preparation temperature dependence of the dissociation enthalpy of hydrophobic binding in N-isopropylacrylamide gels</i>	Sen-i Gakkaishi	1997	53	327	332	
82	Ikkai, F; Shibayama, M	<i>Anomalous cross-link density dependence of scattering from charged gels</i>	Phys. Rev. E	1997	56	R51	R54	10.1103/PhysRevE.56.R51
81	Ikkai, F; Shibayama, M; Kashihara, H; Nomura, S	<i>SAXS and dynamic viscoelastic studies on segmented polyurethaneurea solutions</i>	Polymer	1997	38	769	774	10.1016/S0032-3861(96)00578-2
80	Shibayama, M; Norisuye, T; Nomura, S	<i>Cross-link density dependence of spatial inhomogeneities and dynamic fluctuations of poly(N-isopropylacrylamide) gels</i>	Macromolecules	1996	29	8746	8750	10.1021/ma9609994
79	Shibayama, M; Suetoh, Y; Nomura, S	<i>Structure relaxation of hydrophobically aggregated poly(N-isopropylacrylamide) in water</i>	Macromolecules	1996	29	6966	6968	10.1021/ma960866i
78	Shibayama, M; Fujikawa, Y; Nomura, S	<i>Dynamic light scattering study of poly(N-isopropylacrylamide-co-acrylic acid) gels</i>	Macromolecules	1996	29	6535	6540	10.1021/ma960320w
77	Shibayama, M; Ikkai, F; Inamoto, S; Nomura, S; Han, CC	<i>pH and salt concentration dependence of the microstructure of poly(N-isopropylacrylamide-co-acrylic acid) gels</i>	J. Chem. Phys.	1996	105	4358	4366	10.1063/1.472252
76	Shibayama, M; Uesaka, M; Shiwa, Y	<i>Swelling/shrinking kinetics of chemically cross-linked poly(vinyl alcohol) gels in the presence of borate ions</i>	J. Chem. Phys.	1996	105	4350	4357	10.1063/1.472251
75	Ikkai, F; Shibayama, M	<i>Microstructure and swelling behavior of ion-exchange resin</i>	J. Polym. Sci. Pt. B-Polym. Phys.	1996	34	1637	1645	10.1002/(SICI)1099-0488(19960715)34:9<1637::AID-POLB13>3.0.CO;2-8
74	Oura, J; Shibayama, M; Sakurai, S; Nomura, S; Iwamoto, T	<i>Mechanical properties and structure of nylon 6 aromatic polyamide blend film</i>	Kobunshi Ronbunshu	1996	53	453	460	
73	Shibayama, M	<i>Microscopic inhomogeneities in weakly-charged temperature sensitive polymer gels and solutions</i>	Macromol. Symp.	1996	106	337	343	10.1002/masy.19961060131
72	Shibayama, M; Mizutani, S; Nomura, S	<i>Thermal properties of copolymer gels containing N-isopropylacrylamide</i>	Macromolecules	1996	29	2019	2024	10.1021/ma951390q
71	Ikkai, F; Shibayama, M; Nomura, S; Han, CC	<i>Complexation of poly(vinyl alcohol)-Congo red aqueous solutions .3. Dynamic light scattering study</i>	J. Polym. Sci. Pt. B-Polym. Phys.	1996	34	939	945	10.1002/(SICI)1099-0488(19960415)34:5<939::AID-POLB12>3.0.CO;2-C
70	Shibayama, M; Uesaka, M; Inamoto, S; Mihara, H; Nomura, S	<i>Analogy between swelling of gels and intrinsic viscosity of polymer solutions for ion-complexed poly(vinyl alcohol) in aqueous medium</i>	Macromolecules	1996	29	885	891	10.1021/ma951194j
69	Hashimoto, M; Shibayama, M; Takahashi, H; Nomura, S	<i>Crosslinking density and temperature dependence of crystallization kinetics of polymer networks</i>	Kobunshi Ronbunshu	1996	53	722	728	
68	CHO, S; KAMATA,M; HAYAMI,A; SHIBAYAMA, M; NOMURA, S	<i>Regenerated Cellulose Fibers Spun from Organic Solvent</i>	Sen-i Gakkaishi	1995	51	422	431	
67	Takahashi, H; Shibayama, M; Fujisawa, H; Nomura, S	<i>Equilibrium swelling and small-angle neutron-scattering study on end-linked poly(tetrahydrofuran) networks</i>	Macromolecules	1995	28	8824	8828	10.1021/ma00130a015
66	SHIBAYAMA, M; UENOYAMA, K; OURA, JI; NOMURA, S	<i>MISCIBILITY AND CRYSTALLINITY CONTROL OF NYLON-6 AND POLY(M-XYLENE ADIPAMIDE) BLENDS</i>	Polymer	1995	36	4811	4816	10.1016/0032-3861(95)99297-8
65	SHIBAYAMA, M; TAKAHASHI, H; NOMURA, S	<i>SMALL-ANGLE NEUTRON-SCATTERING STUDY ON END-LINKED POLY(TETRAHYDROFURAN) NETWORKS</i>	Macromolecules	1995	28	6860	6864	10.1021/ma00124a022

64	SHIBAYAMA, M; IKKAI, F; NOMURA, S	MICROSCOPIC STRUCTURE AND VISCOSITY BEHAVIORS OF ION-COMPLEXED POLYMER GELS	Macromol. Symp.	1995	93	277	281	
63	TAKAHASHI, H; SHIBAYAMA, M; HASHIMOTO, M; NOMURA, S	ISOTHERMAL CRYSTALLIZATION OF END- LINKED POLY(TETRAHYDROFURAN) NETWORKS .2. MOLECULAR- WEIGHT DEPENDENCE	Macromolecules	1995	28	5547	5543	10.1021/ ma00120a019
62	TAKAGISHI,M; SHIBAYAMA,M; NOMURA,S	Structure and Properties of Poly(ethylene-ran-vinyl alcohol) Films Crosslinked With Borate Ions.	Sen-i Gakkaishi	1995	51	43	50	
61	SHIBAYAMA, M; TANAKA, T	SMALL-ANGLE NEUTRON- SCATTERING STUDY ON WEAKLY CHARGED POLY(N- ISOPROPYL ACRYLAMIDE-CO- ACRYLIC ACID) COPOLYMER SOLUTIONS	J. Chem. Phys.	1995	102	9392	9400	10.1063/1.468807
60	SHIBAYAMA, M; IKKAI, F; NOMURA, S	COMPLEXATION OF POLY(VINYL ALCOHOL) CONGO RED AQUEOUS- SOLUTIONS .2. SANS AND SAXS STUDIES ON SOL-GEL TRANSITION	Macromolecules	1994	27	6383	6388	10.1021/ ma00100a023
59	SHIBAYAMA, M; TAKEUCHI, T; NOMURA, S	SWELLING SHRINKING AND DYNAMIC LIGHT- SCATTERING-STUDIES ON CHEMICALLY CROSS-LINKED POLY(VINYL ALCOHOL) GELS IN THE PRESENCE OF BORATE IONS	Macromolecules	1994	27	5350	5358	10.1021/ ma00097a014
58	SHIBAYAMA, M; MORIWAKI, R; IKKAI, F; NOMURA, S	VISCOSITY BEHAVIOR OF WEAKLY CHARGED POLYMER ION COMPLEXES COMPRISING POLY(VINYL ALCOHOL) AND CONGO RED	Polymer	1994	35	5716	5721	10.1016/ S0032-3861(05)8004 6-1
57	SHIBAYAMA, M; MORIMOTO, M; NOMURA, S	PHASE-SEPARATION INDUCED MECHANICAL TRANSITION OF POLY(N- ISOPROPYLACRYLAMIDE) WATER ISOCHORE GELS	Macromolecules	1994	27	5060	5066	10.1021/ ma00096a031
56	SHIBAYAMA, M; TAKAHASHI, H; YAMAGUCHI, H; SAKURAI, S; NOMURA, S	ISOTHERMAL CRYSTALLIZATION OF END- LINKED POLY(TETRAHYDROFURAN) NETWORKS	Polymer	1994	35	2944	2951	10.1016/0032-3861( 94)90404-9
55	SHIBAYAMA, M; IKKAI, F; MORIWAKI, R; NOMURA, S	COMPLEXATION OF POLY(VINYL ALCOHOL) CONGO RED AQUEOUS- SOLUTIONS .1. VISCOSITY BEHAVIOR AND GELATION MECHANISM	Macromolecules	1994	27	1738	1743	10.1021/ ma00085a011
54	SAKURAI, S; NOKUWA, S; MORIMOTO, M; SHIBAYAMA, M; NOMURA, S	CHANGES IN STRUCTURE AND PROPERTIES DUE TO MECHANICAL FATIGUE FOR POLYURETHANES CONTAINING POLY(DIMETHYL SILOXANE)	Polymer	1994	35	532	539	10.1016/0032-3861( 94)90507-X
53	SHIBAYAMA, M; IZUTANI, A; ISHIKAWA, A; TANAKA, K; NOMURA, S	PEELING OF LAMINATED FILMS COMPRISING HIGH- DENSITY POLYETHYLENE AND POLYPROPYLENE LOW- DENSITY POLYETHYLENE BLENDs	Polymer	1994	35	271	280	10.1016/0032-3861( 94)90690-4
52	SHIBAYAMA, M; TANAKA, T; HAN, CC	SMALL-ANGLE NEUTRON- SCATTERING STUDY ON POLY(N-ISOPROPYL- ACRYLAMIDE-CO-ACRYLIC ACID) COPOLYMER SOLUTIONS	J. Phys. IV	1993	3	25	28	10.1051/jp4:1993805
51	KOHJIYA,S; TAMATO,T; MIYAKE,M; SHIBAYAMA,M	Analysis of the Experimental Results of the Effect of Solvent Evaporation Rate By Random Phase Approximation.	J. Soc. Rubber Ind. Jpn	1993	66	483	487	
50	OKUMURA,H; SHIBAYAMA,M; KOSHIZAKI,H; SAKURAI,S; NOMURA,S	ESCA Study on Depth Profiling of Cellulose/Poly(vinyl alcohol) Blend Films	Sen-i Gakkaishi	1993	49	466	473	

49	SAKURAI, S; SAKAMOTO, J; SHIBAYAMA, M; NOMURA, S	EFFECTS OF MICRODOMAIN STRUCTURES ON THE MOLECULAR-ORIENTATION OF POLY(STYRENE-BLOCK-BUTADIENE-BLOCK-STYRENE) TRIBLOCK COPOLYMER	<i>Macromolecules</i>	1993	26	3351	3356	10.1021/ ma00065a018
48	TRANCONG, Q; IMURA, M; SOEN, T; SHIBAYAMA, M	CONTROLLING MORPHOLOGY OF POLYSTYRENE POLY(VINYL METHYL-ETHER) BLENDS UNDERGOING SPINODAL DECOMPOSITION PROCESS BY PHOTO-CROSS-LINKS	<i>Polym. Eng. Sci.</i>	1993	33	772	780	10.1002/ pen.760331208
47	SHIBAYAMA, M; ADACHI, M; IKKAI, F; KUROKAWA, H; SAKURAI, S; NOMURA, S	GELATION OF POLY(VINYL ALCOHOL) VANADATE AQUEOUS-SOLUTIONS	<i>Macromolecules</i>	1993	26	623	627	10.1021/ ma00056a011
46	SAKURAI, S; MOMII, T; TAIE, K; SHIBAYAMA, M; NOMURA, S; HASHIMOTO, T	MORPHOLOGY TRANSITION FROM CYLINDRICAL TO LAMELLAR MICRODOMAINS OF BLOCK COPOLYMERS	<i>Macromolecules</i>	1993	26	485	491	10.1021/ ma00055a013
45	SHIBAYAMA, M; TANAKA, T	VOLUME PHASE-TRANSITION AND RELATED PHENOMENA OF POLYMER GELS	<i>Adv. Polym. Sci.</i>	1993	109	1	62	10.1007/3-540-5679 1-7_1
44	TAKAHASHI, H; SAKURAI, S; NAKAYAMA, M; INUI, Y; SHIBAYAMA, M; HASHIMOTO, T; NOMURA, S	STRUCTURE AND PROPERTIES OF END-CROSS-LINKED POLY(TETRAHYDROFURAN) NETWORKS	<i>Kobunshi Ronbunshu</i>	1992	49	907	914	
43	SHIBAYAMA, M; TANAKA, T; HAN, CC	SMALL-ANGLE NEUTRON-SCATTERING STUDY ON WEAKLY CHARGED TEMPERATURE SENSITIVE POLYMER GELS	<i>J. Chem. Phys.</i>	1992	97	6842	6854	10.1063/1.463637
42	SHIBAYAMA, M; TANAKA, T; HAN, CC	SMALL-ANGLE NEUTRON-SCATTERING STUDY ON POLY(N-ISOPROPYL ACRYLAMIDE) GELS NEAR THEIR VOLUME-PHASE TRANSITION-TEMPERATURE	<i>J. Chem. Phys.</i>	1992	97	6829	6841	10.1063/1.463636
41	ZHANG, YQ; TANAKA, T; SHIBAYAMA, M	SUPER-ABSORBENCY AND PHASE-TRANSITION OF GELS IN PHYSIOLOGICAL SALT-SOLUTIONS	<i>Nature</i>	1992	360	142	144	10.1038/360142a0
40	KUROKAWA, H; SHIBAYAMA, M; ISHIMARU, T; NOMURA, S; WU, WI	PHASE-BEHAVIOR AND SOL-GEL TRANSITION OF POLY(VINYL ALCOHOL) BORATE COMPLEX IN AQUEOUS-SOLUTION	<i>Polymer</i>	1992	33	2182	2188	10.1016/0032-3861(92)90886-2
39	TRANCONG, Q; MEISYO, K; ISHIDA, Y; YANO, O; SOEN, T; SHIBAYAMA, M	EFFECTS OF CRITICAL CONCENTRATION FLUCTUATIONS ON THE PHOTOCYCLIZATION OF A BICHROMOPHORIC MOLECULE IN THE ONE-PHASE REGION OF POLYSTYRENE POLY(VINYL METHYL-ETHER) BLENDS	<i>Macromolecules</i>	1992	25	2330	2335	10.1021/ ma00035a008
38	SANO,M; SHIBAYAMA,M; SAKURAI,S; KUROKAWA,H; NOMURA,S	Structure and Properties of Borate Crosslinked Poly(vinyl alcohol) Gel films	<i>Sen-I Gakkaishi</i>	1992	48	74	83	
37	TAKAHASHI, H; SAKURAI, S; NAKAYAMA, M; INUI, Y; SHIBAYAMA, M; HASHIMOTO, T; NOMURA, S	STRUCTURE AND PROPERTIES OF END-CROSS-LINKED POLY(TETRAHYDROFURAN) NETWORKS	<i>Kobunshi Ronbunshu</i>	1992	49	907	914	
36	SHIBAYAMA, M; KUROKAWA, H; NOMURA, S; MUTHUKUMAR, M; STEIN, RS; ROY, S	SMALL-ANGLE NEUTRON-SCATTERING FROM POLY(VINYL ALCOHOL)-BORATE GELS	<i>Polymer</i>	1992	33	2883	2890	10.1016/0032-3861(92)90072-5

35	KOJIYA, S; IKEDA, Y; YAMASHITA, S; SHIBAYAMA, M; KOTANI, T; NOMURA, S	INFRARED DICHROISM STUDY OF SEGMENTED POLYURETHANEUREA WITH TRIBLOCK POLYETHER SOFT SEGMENTS	Polym. J.	1991	23	991	998	10.1295/ polymj.23.991
34	SHIBAYAMA, M; SUETSUGI, M; SAKURAI, S; YAMAMOTO, T; NOMURA, S	STRUCTURE CHARACTERIZATION OF POLYURETHANES CONTAINING POLY(DIMETHYLSILOXANE)	Macromolecules	1991	24	6254	6262	10.1021/ ma00023a031
33	YAMAMOTO, T; SHIBAYAMA, M; NOMURA, S	STRUCTURE AND PROPERTIES OF FATIGUED SEGMENTED POLY(URETHANEUREA)S .4. DYNAMIC INFRARED DICHROISM	Polym. J.	1991	23	311	320	10.1295/ polymj.23.311
32	SHIBAYAMA, M; KATOH, K; IWAMOTO, T; TAKAHASHI, D; NOMURA, S	STRUCTURE OF HIGH TRANSPARENT POLYPROPYLENE FILM	Polym. J.	1991	23	837	846	10.1295/ polymj.23.837
31	SHIBAYAMA, M; YAMAMOTO, T; XIAO, CF; SAKURAI, S; HAYAMI, A; NOMURA, S	BULK AND SURFACE CHARACTERIZATION OF CELLULOSE POLY(VINYL ALCOHOL) BLENDS BY FOURIER-TRANSFORM INFRARED-SPECTROSCOPY	Polymer	1991	32	1010	1016	10.1016/0032-3861(91)90586-8
30	SHIBAYAMA, M; IMAMURA, KI; KATOH, K; NOMURA, S	TRANSPARENCY OF RECYCLED POLYPROPYLENE FILM	J. Appl. Polym. Sci.	1991	42	1451	1458	10.1002/ app.1991.070420530
29	HAYASAKI, T; SHIBAYAMA, M; SAKURAI, S; NOMURA, S; FUJIWARA, H	Structure and Molecular Orientation of High Strength Poly(vinyl alcohol) Fibers Prepared by Crosslinking/Wet Spinning	Sen-I Gakkaishi	1991	47	75	80	
28	WU, WL; SHIBAYAMA, M; ROY, S; KUROKAWA, H; COYNE, LD; NOMURA, S; STEIN, RS	PHYSICAL GELS OF AQUEOUS POLY(VINYL ALCOHOL) SOLUTIONS - A SMALL-ANGLE NEUTRON-SCATTERING STUDY	Macromolecules	1990	23	2245	2251	10.1021/ ma00210a020
27	SHIBAYAMA, M; KUROKAWA, H; NOMURA, S; ROY, S; STEIN, RS; WU, WL	SMALL-ANGLE NEUTRON-SCATTERING STUDIES ON CHAIN ASYMMETRY OF COEXTRUDED POLY(VINYL ALCOHOL) FILM	Macromolecules	1990	23	1438	1443	10.1021/ ma00207a032
26	SHIBAYAMA, M; INOUE, M; YAMAMOTO, T; NOMURA, S	STRUCTURE AND ORIENTATIONAL BEHAVIOR OF POLYURETHANE CONTAINING POLYDIMETHYLSILOXANE	Polymer	1990	31	749	757	10.1016/0032-3861(90)90299-E
25	SHIBAYAMA, M; HAYASAKI, T; J.H.CH EM; S, NOMURA; FUJIWARA, H	Structure and Properties of High Strength Poly(vinyl Alcohol) Fibers Prepared by Cross-linking/Wet Spinning. I. Mechanical and Thermal Properties.	Sen-I Gakkaishi	1990	46	53	58	
24	SHIBAYAMA, M; NOMURA, S; HASHIMOTO, T; THOMAS, EL	ASYMPTOTIC-BEHAVIOR AND LORENTZ FACTOR FOR SMALL-ANGLE ELASTIC-SCATTERING PROFILES FROM PREFERENTIALLY ORIENTED ASYMMETRIC BODIES	J. Appl. Phys.	1989	66	4188	4197	10.1063/1.344005
23	YAMAMOTO, T; SHIBAYAMA, M; NOMURA, S	STRUCTURE AND PROPERTIES OF FATIGUED SEGMENTED POLY(URETHANEUREA)S .3. QUANTITATIVE-ANALYSES OF HYDROGEN-BOND	Polym. J.	1989	21	895	903	10.1295/ polymj.21.895
22	FUJIWARA, H; SHIBAYAMA, M; CHEN, JH; NOMURA, S	PREPARATION OF HIGH-STRENGTH POLYVINYL-ALCOHOL FIBERS BY CROSSLINKING WET SPINNING	J. Appl. Polym. Sci.	1989	37	1403	1414	10.1002/ app.1989.070370522
21	SHIBAYAMA, M; YOSHIZAWA, H; KUROKAWA, H; FUJIWARA, H; NOMURA, S	SOL-GEL TRANSITION OF POLYVINYL-ALCOHOL) BORATE COMPLEX	Polymer	1988	29	2066	2071	10.1016/0032-3861(88)90182-6

20	SHIBAYAMA, M; SATO, M; KIMURA, Y; FUJIWARA, H; NOMURA, S	B-11 NMR-STUDY ON THE REACTION OF POLYVINYL-ALCOHOL) WITH BORIC-ACID	Polymer	1988	29	336	340	10.1016/0032-3861(88)90343-6
19	SHIBAYAMA, M; OHKI, Y; KOTANI, T; NOMURA, S	STRUCTURE AND PROPERTIES OF FATIGUED SEGMENTED POLY(URETHANEUREA)S .2. STRUCTURAL-ANALYSES OF FATIGUE MECHANISM	Polym. J.	1987	19	1067	1080	10.1295/polymj.19.1067
18	SHIBAYAMA, M; KAWAUCHI, T; KOTANI, T; NOMURA, S; MATSUDA, T	STRUCTURE AND PROPERTIES OF FATIGUED SEGMENTED POLY(URETHANEUREA)S .1. SEGMENT ORIENTATION MECHANISM DUE TO FATIGUE	Polym. J.	1986	18	719	733	
17	YANG, H; SHIBAYAMA, M; STEIN, RS; SHIMIZU, N; HASHIMOTO, T	DEUTERATION EFFECTS ON THE MISCELLIBILITY AND PHASE-SEPARATION KINETICS OF POLYMER BLENDS	Macromolecules	1986	19	1667	1674	10.1021/ma00160a032
16	HASHIMOTO, T; KOWSAKA, K; SHIBAYAMA, M; KAWAI, H	TIME-RESOLVED SMALL-ANGLE X-RAY-SCATTERING STUDIES ON THE KINETICS OF THE ORDER-DISORDER TRANSITION OF BLOCK POLYMERS .2. CONCENTRATION AND TEMPERATURE-DEPENDENCE	Macromolecules	1986	19	754	762	10.1021/ma00157a045
15	HASHIMOTO, T; KOWSAKA, K; SHIBAYAMA, M; KAWAI, H	TIME-RESOLVED SMALL-ANGLE X-RAY-SCATTERING STUDIES ON THE KINETICS OF THE ORDER-DISORDER TRANSITION OF BLOCK POLYMERS .1. Experimental Technique	Macromolecules	1986	19	750	754	10.1021/ma00157a044
14	SHIBAYAMA, M; HASHIMOTO, T	SMALL-ANGLE X-RAY-SCATTERING ANALYSES OF LAMELLAR MICRODOMAINS BASED ON A MODEL OF ONE-DIMENSIONAL PARACRYSTAL WITH UNIAXIAL ORIENTATION	Macromolecules	1986	19	740	749	10.1021/ma00157a043
13	SHIBAYAMA, M; YANG, HJ; STEIN, RS; HAN, CC	STUDY OF MISCELLIBILITY AND CRITICAL PHENOMENA OF DEUTERATED POLYSTYRENE AND HYDROGENATED POLYVINYLMETHYL-ETHER) BY SMALL-ANGLE NEUTRON-SCATTERING	Macromolecules	1985	18	2179	2187	10.1021/ma00153a020
12	HASHIMOTO, T; SHIBAYAMA, M; KAWAI, H; MEIER, DJ	CONFINED-CHAIN STATISTICS OF BLOCK POLYMERS AND ESTIMATION OF OPTICAL ANISOTROPY AND DOMAIN SIZE	Macromolecules	1985	18	1855	1864	10.1021/ma00152a012
11	YANG, H; SHIBAYAMA, M; STEIN, RS; HAN, CC	NEUTRON CLOUD POINTS AND CONCENTRATION FLUCTUATIONS OF POLYMER BLENDS	Polym. Bull.	1984	12	7	13	10.1007/BF00258265
10	SHIBAYAMA, M; HASHIMOTO, T; HASEGAWA, H; KAWAI, H	ORDERED STRUCTURE IN BLOCK POLYMER-SOLUTIONS .3. CONCENTRATION-DEPENDENCE OF MICRODOMAINS IN NON-SELECTIVE SOLVENTS	Macromolecules	1983	16	1427	1433	10.1021/ma00243a005
9	SHIBAYAMA, M; HASHIMOTO, T; KAWAI, H	ORDERED STRUCTURE IN BLOCK POLYMER-SOLUTIONS .5. EQUILIBRIUM AND NON-EQUILIBRIUM ASPECTS OF MICRODOMAIN FORMATION	Macromolecules	1983	16	1434	1443	10.1021/ma00243a006
8	HASHIMOTO, T; SHIBAYAMA, M; KAWAI, H	ORDERED STRUCTURE IN BLOCK POLYMER-SOLUTIONS .4. SCALING RULES ON SIZE OF FLUCTUATIONS WITH BLOCK MOLECULAR-WEIGHT, CONCENTRATION, AND TEMPERATURE IN SEGREGATION AND HOMOGENEOUS REGIMES	Macromolecules	1983	16	1093	1101	10.1021/ma00241a010
7	HASHIMOTO, T; SHIBAYAMA, M; KAWAI, H; WATANABE, H; KOTAKA, T	ORDERED STRUCTURE IN BLOCK POLYMER-SOLUTIONS .2. ITS EFFECT ON RHEOLOGICAL BEHAVIOR	Macromolecules	1983	16	361	371	10.1021/ma00237a005

6	SHIBAYAMA, M; HASHIMOTO, T; KAWAI, H	ORDERED STRUCTURE IN BLOCK POLYMER-SOLUTIONS .1. SELECTIVE SOLVENTS	<i>Macromolecules</i>	1983	16	16	28	10.1021/ ma00235a005
5	SHIBAYAMA, M; HASEGAWA, H; HASHIMOTO, T; KAWAI, H	MICRODOMAIN STRUCTURE OF AN ABC-TYPE TRIBLOCK POLYMER OF POLYSTYRENE POLY[(4- VINYLBENZYL)DIMETHYLAMIN E] POLYISOPRENE CAST FROM SOLUTIONS	<i>Macromolecules</i>	1982	15	274	280	10.1021/ ma00230a015
4	WATANABE, H; KOTAKA, T; HASHIMOTO, T; SHIBAYAMA, M; KAWAI, H	RHEOLOGICAL AND MORPHOLOGICAL BEHAVIOR OF STYRENE-BUTADIENE DIBLOCK CO-POLYMER SOLUTIONS IN SELECTIVE SOLVENTS	<i>J. Rheol.</i>	1982	26	153	179	10.1122/1.549662
3	HASHIMOTO, T; SUEHIRO, S; SHIBAYAMA, M; SAIJO, K; KAWAI, H	AN APPARATUS FOR HIGH- SPEED MEASUREMENTS OF SMALL-ANGLE X-RAY- SCATTERING PROFILES WITH A LINEAR POSITION- SENSITIVE DETECTOR	<i>Polym. J.</i>	1981	13	501	516	10.1295/ polymj.13.501
2	HASHIMOTO, T; SHIBAYAMA, M; KAWAI, H	DOMAIN-BOUNDARY STRUCTURE OF STYRENE- ISOPRENE BLOCK CO- POLYMER FILMS CAST FROM SOLUTION .4. MOLECULAR- WEIGHT DEPENDENCE OF LAMELLAR MICRODOMAINS	<i>Macromolecules</i>	1980	13	1237	1247	10.1021/ ma60077a040
1	HASHIMOTO, T; NAKAMURA, N; SHIBAYAMA, M; IZUMI, A; KAWAI, H	MICRODOMAIN SIZE OF STYRENE-ISOPRENE BLOCK CO-POLYMERS AND UNPERTURBED CHAIN DIMENSION OF POLYISOPRENE HAVING HIGH 1,2-LINKAGES AND 3,4- LINKAGES	<i>J. Macromol. Sci. Phys.</i>	1980	B17	389	406	10.1080/0022234800 8212820