Yuya Shinohara

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Professional Experience

01/2019–present	R & D Associate, Materials Science and Technology Division, Oak Ridge National Laboratory.
05/2017–01/2019	Research Scientist, Visiting Scholar, Department of Materials Science and Engineering, The University of Tennessee, Knoxville
04/2017–05/2017	Project Researcher, Institute for Photon Science and Technology, The University of Tokyo, Japan.
10/2016–present	Visiting Scientist, RIKEN SPring-8 Center, Japan.
04/2007–03/2017	Assistant Professor (Non-tenure track), Department of Advanced Materials Science, The University of Tokyo, Japan.
04/2006–03/2017	Visiting Research Fellow, JASRI, Japan.
04/2006–03/2007	DC2, Japan Society for the Promotion of Science.

Education

03/2011	Ph.D. (Materials Science), The University of Tokyo, Japan.
04/2005–03/2007	Ph.D. (Materials Science), Graduate School of Frontier Sciences, The University of Tokyo, Japan. Withdrawn because being promoted as an assistant professor.
04/2003–03/2005	M.S. (Materials Science), Graduate School of Frontier Sciences, The University of Tokyo, Japan.
04/1999–03/2003	B.Eng. (Applied Physics), School of Engineering, The University of Tokyo, Japan.

Professional Activities

- Member of SACLA (SPring-8 Angstrom Compact Free Electron Laser) Proposal Review Panel, 2021–present.
- Member of National Synchrotron Light Source II X-ray Scattering Proposal Review Panel, 2020–present.
- Chair of Organizing Committee on the Annual Meeting of Japanese Society of Synchrotron Radiation Research, Jan. 2015 & Jan. 2016.
- Chair of Events Committee of Japanese Society of Synchrotron Radiation Research, 2014–2016.
- Editorial committee of Japanese Society of Synchrotron Radiation Research, 2009–2011.
- Reviewer for: *Acta Crystallographica A, Journal of Applied Crystallography*, *The Journal of Physical Chemistry B, The Journal of Physical Chemistry C, Journal of Synchrotron Radiation, Macromolecules, Nature Communication* etc.

Achievements

Honors, Awards

- The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science, and Technology, Japan. Prize for Science and Technology, Development Category, April 2017.
- Horie Award, Advanced Softmaterial Beamline Consortium at SPring-8, March 2017.
- Research Award, Japanese Rubber Society, May 2016.
- Young Researcher Award, Japanese Society of Synchrotron Radiation Research, January 2013.

- Best Poster Award, Gordon Research Conference on X-ray Sciences, August 2011.
- Student Presentation Award, Japanese Society of Synchrotron Radiation Research, January 2007
- Student Poster Award, SAS2006, June 2006.
- Presentation Award for Young Researcher, The Society of Rubber Science and Technology, Japan, May 2005 & 2006.
- Master Thesis Prize, Department of Advanced Materials Science, The University of Tokyo, 2005.
- Student Presentation Award, Japanese Society of Synchrotron Radiation Research, January 2005.
- Bachelor Thesis Prize, Department of Applied Physics, The University of Tokyo, 2003.

Notable Research Outcomes other than research papers

- Development of high-performance tires (collaboration with Sumitomo Rubber Industries Ltd.): Based on the X-ray work, high-performance tires were developed. This work was presented at the 44th Tokyo Motor Show (Tokyo, Japan) in 2015 and received the "Tire Technology of the Year Award" by Tire Technology Expo (Hannover, Germany) in 2017.
- Development of a shampoo product (collaboration with Kao Ltd.): Based on the microbeam X-ray work, a new shampoo product "Segreta" was developed and put on sale in 2007.

Research Interest and Expertise

Neutron and X-ray scattering. Structure, dynamics, and mechanical properties of non-crystalline materials, e.g. nanocomposites, liquid, amorphous, and glass. Coherent X-rays. X-ray instrumentation. Application of X-ray scattering technique to industrial products, collaborated with private companies (Sumitomo Chemical Ltd, Sumitomo Rubber Industries, Ltd., Kao Ltd).

Publications in international reviewed journal

1. Chi-Huan Tung, Lijie Ding, Guan-Rong Huang, Yangyang Wang, Jan-Michael Y. Carrillo, Bobby G. Sumpter, Yuya Shinohara, Changwoo Do, and Wei-Ren Chen
   A Discretized Representation for Monte Carlo Simulation of Deformed Semiflexible Chains
   Submitted.

2. Guan-Rong Huang, Lionel Parcar, Ryan P. Murphy, Yangyang Wang, Jan-Michael Carrillo, Bobby G. Sumpter, Yuya Shinohara, Chi-Huan Tung, Changwoo Do, and Wei-Ren Chen
   Elongated particles in flow: Commentary on small angle scattering investigations
   Submitted.

3. Shubhojit Banerjee, Rajni Chahal, Alexander S. Ivanov, Santanu Roy, Vyacheslav S. Bryantsev, Yuya Shinohara, and Stephen T. Lam
   ***Ab initio* simulated Van Hove correlation function for time-resolved local dynamics in molten $MgCl_2$**
   Journal of Molecular Liquids **412**, 125821 (2024).

4. Chi-Huan Tung, M.-Z. Chen, Hsin-Lung Chen, Guan-Rong Huang, Lionel Porcar, M.-C. Chang, Jan-Michael Carrillo, Yangyang Wang, Bobby G. Sumpter, Yuya Shinohara, Changwoo Do, and Wei-Ren Chen
   Inferring effective electrostatic interaction of charge-stabilized colloids from scattering using deep learning
   Journal of Applied Crystallography **57** 1047–1058 (2024).

5. Yuya Shinohara, Takuya Iwashita, Masahiro Nakanishi, Wojciech Dmowski, Chae Woo Ryu, Douglas L. Abernathy, Daisuke Ishikawa, Alfred Q. R. Baron, and Takeshi Egami
   Real-space local self-motion of protonated and deuterated water
   Physical Review E **109**, 064608 (2024).

6. Chi-Huan Tung, Hsin-Lung Chen, Guan-Rong Huang, Lionel Porcar, Marianne Impéror, Jan-Michael Y. Carrillo, Yangyang Wang, Bobby G. Sumpter, Yuya Shinohara, Jon Taylor, Changwoo Do, and Wei-Ren Chen,
   Identifying Topological Defects in Lamellar Phases through Contour Analysis of Complex Wave Fields
   Macromolecules **57**, 6979-6989 (2024).

7. Chi-Huan Tung, Shou-Yi Chang, Sidney Yip, Yangyang Wang, Jan-Michael Carrillo, Bobby G. Sumpter, Yuya Shinohara, Changwoo Do, and Wei-Ren Chen
Viscoelastic Relaxation and Topological Fluctuations in Glass-Forming Liquids
The Journal of Chemical Physics **160**, 094506 (2024).

8. Chengyun Hua, Lucas Lindsay, Yuya Shinohara, and David Alan Tennant
Dynamics of nonequilibrium magnons in gapped Heisenberg antiferromagnets
Physical Review B **109**, 054307 (2024).

9. Yuya Shinohara, Takuya Iwashita, Masahiro Nakanishi, Naresh C. Osti, Maiko Kofu, Masami Nirei, Wojciech Dmowski, and Takeshi Egami
Proton diffusion in liquid 1,2,3-triazole studied by incoherent quasi-elastic neutron scattering
The Journal of Physical Chemistry B **128**, 1544–1549 (2024).

10. Guan-Rong Huang, Yangyang Wang, Yuya Shinohara, Lionel Porcar, Changwoo Do, William T. Heller, and Wei-Ren Chen
Unbiased Particle Conformation Extraction from Scattering Spectra using Orthonormal Basis Expansion
Journal of Applied Crystallography **57**, 140–150 (2024).

11. Chi-Huan Tung, Yu-Jung Hsiao, Hsin-Lung Chen, Guan-Rong Huang, Lionel Porcar, Ming-Ching Chang, Jan-Michael Carrillo, Yangyang Wang, Bobby G. Sumpter, Yuya Shinohara, Jon Taylor, Changwoo Do, and Wei-Ren Chen
Unveiling mesoscopic structures in distorted lamellar phases through deep learning-based small angle neutron scattering analysis
Journal of Colloid and Interface Science **659**, 739–750 (2024).

12. Guan-Rong Huang, Chi-Huan Tung, Meng-Zhe Chen, Lionel Porcar, Yuya Shinohara, Christoph U. Wildgruber, Changwoo Do, and Wei-Ren Chen,
Desmearing Small-Angle Scattering Data by Central Moment Expansions
Journal of Applied Crystallography **56**, 1537–1543 (2023).

13. Guan-Rong Huang, Chi-Huan Tung, Lionel Porcar, Yangyang Wang, Yuya Shinohara, Changwoo Do, and Wei-Ren Chen,
A Model-free Approach for Profiling of Polydisperse Soft Matter Using Small Angle Scattering
Macromolecules **56**, 6436–6443 (2023).

14. Yuya Shinohara, Alexander S. Ivanov, Dmitry Maltsev, Garrett E. Granroth, Douglas L. Abernathy, Sheng Dai, and Takeshi Egami,
Real-Space Local Dynamics of Molten Inorganic Salts Using Van Hove Correlation Function
The Journal of Physical Chemistry Letters **13**, 5956–5962 (2022).

15. Chi-Huan Tung, Shou-Yi Chang. Hsin-Lung Chen, Yangyang Wang, Kunlun Hong, Jan Michael Carrilo, Bobby G. Sumpter, Yuya Shinohara, Changwoo Do, and Wei-Ren Chen,
Small angle scattering of deblock copolymers profiled by machine learning
The Journal of Chemical Physics, **156**, 131101 (2022).

16. Eva Zarkadoula, Yuya Shinohara, and Takeshi Egami,
X-ray free-electron laser heating of water at picosecond time scale
Physical Review Research **4**, 013022 (2022).

17. Guan-Rong Huang, Christopher N. Lam, Kunlun Hong, Yangyang Wang, Yuya Shinohara, Changwoo Do, and Wei-Ren Chen,
Ion Atmosphere of Wormlike Micelles Profiled by Contrast Variation Small-Angle Neutron Scattering
ACS Macro Letters **11** 66–71 (2022).

18. Ray A. Matsumoto, Matthew W. Thompson, Van Quan Vuong, Weiwei Zhang, Yuya Shinohara, Adri C.T. van Duin, Paul R. C. Kent, Stephan Irle, Takeshi Egami, and Peter T. Cummings,
Investigating the Accuracy of Water Models through the Van Hove Correlation Function
Journal of Chemical Theory and Computation **17**, 5992–6005 (2021).

19. James R. Torres, Victor R. Fanelli, Yuya Shinohara, Andrew F. May, Mariano Ruiz-Rodriguez, Michelle S. Everett, and Raphael P. Hermann,

Resonant ultrasound spectroscopy probe for in-situ neutron scattering measurements
Proceedings of Meetings on Acoustics **43**, 045001 (2021).

20. Yuya Shinohara, Taito Osaka, Ichiro Inoue, Takuya Iwashita, Wojciech Dmowski, Chae Woo Ryu, Yadu Sarathchandran, and Takeshi Egami,
Split-pulse x-ray photon correlation spectroscopy with seeded x-rays from x-ray laser to study atomic-level dynamics
Nature Communications **11**, 6213 (2020).

21. Yuya Shinohara, Wojciech Dmowski, Takuya Iwashita, Daisuke Ishikawa, Alfred Q. R. Baron, and Takeshi Egami,
Local self-motion of water through the Van Hove function
Physical Review E **102**, 032604 (2020).

22. Guan-Rong Huang, Chi-Huan Tung, Dongsook Chang, Christopher N. Lam, Changwoo Do, Yuya Shinohara, Shou-Yi Chang, Yangyang Wang, Kunlun Hong, and Wei-Ren Chen,
Determining Population Densities in Bimodal Polymeric Solutions using Contrast-Variation Small-Angle Neutron Scattering
The Journal of Chemical Physics **153**, 184902 (2020).

23. Takeshi Egami and Yuya Shinohara,
Correlated atomic dynamics in liquid seen in real space and time
The Journal of Chemical Physics **153**, 180902 (2020).

24. Yuya Shinohara, Ray Matsumoto, Matthew W. Thompson, Chae Woo Ryu, Wojciech Dmowski, Takuya Iwashita, Daisuke Ishikawa, Alfred Q. R. Baron, Peter T. Cummings, and Takeshi Egami,
Identifying water–anion correlated motion in aqueous solutions through Van Hove functions
The Journal of Physical Chemistry Letters **10**, 7119–7125 (2019).

25. Yuya Shinohara, Hiroyuki Kishimoto, Tomomi Masui, Shota Hattori, Naoko Yamamoto, and Yoshiyuki Amemiya,
Microscopic structural response of nanoparticles in styrene–butadiene rubber under cyclic uniaxial elongation
Polymer Journal **51** 161–171 (2019).

26. Yuya Shinohara, Wojciech Dmowski, Takuya Iwashita, Daisuke Ishikawa, Alfred Q. R. Baron, and Takeshi Egami,
Local correlated motions in aqueous solution of sodium chloride
Physical Review Materials **3** 065604 (2019).

27. Guan-Rong Huang, Yangyang Wang, Chagwoo Do, Yuya Shinohara, Takeshi Egami, Lionel Porcar, Yun Liu, and Wei-Ren Chen
Orientational distribution function of aligned elongated molecules and particulates determined from their scattering signature
ACS Macro Letters **8**, 1257–1262 (2019).

28. Guan-Rong Huang, Yangyang Wang, Chagwoo Do, Lionel Porcar, Yuya Shinohara, Takeshi Egami, and Wei-Ren Chen,
Determining gyration tensor of orienting macromolecules through their scattering signature
The Journal of Physical Chemistry Letters **10**, 3978–3984 (2019).

29. Takeshi Egami and Yuya Shinohara,
Dynamics of water in real space and time
Molecular Physics **117**, 3227–3231 (2019).

30. Yuya Shinohara, Wojciech Dmowski, Takuya Iwashita, Bin Wu, Daisuke Ishikawa, Alfred Q. R. Baron, and Takeshi Egami,
Viscosity and real space molecular motion of water: Observation with inelastic x-ray scattering
Physical Review E **98**, 022604 (2018).

31. Kazuya Matsui, H. Li, Yoshinobu Nozue, G. Rojas, M. Bell, Yuya Shinohara, Yoshiyuki Amemiya, and K. B. Wagener,

A study of ADMET polyethylene with 21-carbon branches on every 15th compared to every 19th carbon. What a difference 4 extra backbone methylene make
Journal of Polymer Science A **55**, 3090–3096, (2017).

32. Yuya Shinohara, Haruka Seike, Hiroyuki Kishimoto, Yusuke Tamenori, and Yoshiyuki Amemiya,
Distribution of sulfur in styrene-butadiene rubber studied with anomalous small-angle x-ray scattering at sulfur *K*-edge
Polymer **105**, 368–377 (2016).

33. Akinori Bando, Rumi Kasahara, Kentaro Kayashima, Yasuhiro Okumura, Kazuaki Kato, Yasuhiro Sakai, Hideaki Yokoyama, Yuya Shinohara, Yoshiyuki Amemiya, and Kohzo Ito,
Volume phase transitions of slide-ring gels
Polymers **8**, 217 (2016).

34. Yuya Shinohara, Naoko Yamamoto, Hiroyuki Kishimoto, and Yoshiyuki Amemiya,
X-ray irradiation induces local rearrangement of silica particles in swollen rubber
Journal of Synchrotron Radiation **22**, 119–123 (2015).

35. Yuya Shinohara and Yoshiyuki Amemiya,
Effect of finite spatial coherent length on small-angle scattering
Journal of Applied Crystallography **48**, 1660–1664 (2015).

36. Masami Sano, Feng Shan, Mitsuo Hara, Shusaku Nagano, Yuya Shinohara, Yoshiyuki Amemiya, and Takahiro Seki,
Dynamic photoinduced realignment processes in photoresponsive block copolymer films: effects of the chain length and block copolymer architecture
Soft Matter **11**, 5918–5925 (2015).

37. Masami Sano, Mitsuo Hara, Shusaku Nagano, Yuya Shinohara, Yoshiyuki Amemiya, and Takahiro Seki,
New aspects for the hierarchical cooperative motions in photoalignment process of liquid crystalline block copolymer films
Macromolecules **48**, 2217–2223 (2015).

38. Kazuya Matsui, Nao Hosaka, Kenichiro Suzuki, Yuya Shinohara, and Yoshiyuki Amemiya,
Microscopic deformation behavior of hard elastic polypropylene during cold-stretching process in fabrication of microporous membrane as revealed by synchrotron x-ray scattering
Polymer, **70**, 215–221 (2015).

39. Kazuya Matsui, Akinori Bando, Takashi Sakurai, Yuya Shinohara, Toshiya Maruyama, Hiroyasu Masunaga, and Yoshiyuki Amemiya,
Macroscopically homogeneous deformation in injection molded polypropylene induced by annealing studied with microbeam x-ray scattering
Polymer, **70**, 315–325 (2015).

40. Ichiro Inoue, Kensuke Tono, Yasumasa Joti, Takashi Kameshima, Kanade Ogawa, Yuya Shinohara, Yoshiyuki Amemiya, and Makina Yabashi,
Characterizing transverse coherence of an ultra-intense focused X-ray free-electron laser by an extended young's experiment
IUCrJ **2**, 620–626 (2015).

41. Masami Sano, Shiyuko Nakamura, Mitsuo Hara, Shusaku Nagano, Yuya Shinohara, Yoshiyuki Amemiya, and Takahiro Seki,
Pathways toward photoinduced alignment switching in liquid crystalline block copolymer films
Macromolecules **47**, 7178–7186 (2014).

42. Atushi Noro, Yusuke Tomita, Yuya Shinohara, Yoshio Sageshima, Joseph J. Walish, Yushu Matsushita, and Edwin L. Thomas,
Photonic block copolymer films swollen with an ionic liquid
Macromolecules **47**, 4103–4109 (2014).

43. Hiroyuki Kishimoto, Yuya Shinohara, Yoshio Suzuki, Akihisa Takeuchi, Naoto Yagi, and Yoshiyuki Amemiya,
Pinhole-type two-dimensional ultra-small-angle x-ray scattering on the micrometer scale
Journal of Synchrotron Radiation **21**, 1–4 (2014).

44. Yuya Shinohara, Akira Watanabe, Hiroyuki Kishimoto, and Yoshiyuki Amemiya,
Combined measurement of x-ray photon correlation spectroscopy and diffracted x-ray tracking using pink beam x-rays
Journal of Synchrotron Radiation **20**, 801–804 (2013).

45. Yusuke Sanada, Isamu Akiba, Kazuo Sakurai, Kouichi Shiraishi, Masayuki Yokoyama, Efstratios Mylonas, Noboru Ohta, Naoto Yagi, Yuya Shinohara, and Yoshiyuki Amemiya,
Hydrophobic molecules infiltrating into the poly (ethylene glycol) domain of the core/shell interface of a polymeric micelle: evidence obtained with anomalous small-angle x-ray scattering
Journal of the American Chemical Society, **135**, 2574–2582 (2013).

46. Hiroki Ogawa, Hiroyasu Masunaga, Sono Sasaki, Shunji Goto, Takashi Tanaka, Takamitsu Seike, Sunao Takahashi, Kunikazu Takeshita, Nobuteru Nariyama, Haruhiko Ohashi Toru Ohata, Yukito Furukawa, Tomohiro Matsushita, Yasuhide Ishizawa, Naoto Yagi, Masaki Takata, Hideo Kitamura, Atsushi Takahara, Kazuo Sakurai, Kohji Tashiro, Toshiji Kanaya, Yoshiyuki Amemiya, Kazuyuki Horie, Mikihito Takenaka, Hiroshi Jinnai, Hiroshi Okuda, Isamu Akiba, Isao Takahashi, Katsuhiro Yamamoto, Masamichi Hikosaka, Shinichi Sakurai, Yuya Shinohara, Yasunori Sugihara, Akihiko Okada,
Experimental station for multiscale surface structural analyses of soft- material films at SPring-8 via a GISWAXS/GIXD/XR-integrated system
Polymer Journal **45**, 109–116 (2013).

47. Kazuya Matsui, Shuichiro Seno, Yoshinobu Nozue, Yuya Shinohara, Yoshiyuki Amemiya, E. Berda, G. Rojas, and K. Wagener,
Influence of branch incorporation into the lamella crystal on the crystallization behavior of polyethylene with precisely spaced branches
Macromolecules **46**, 4438–4446 (2013).

48. Hiroyuki Kishimoto, Yuya Shinohara, M. Naito, Akihisa Takeuchi, Kentaro Uesugi, Yoshio Suzuki, and Yoshiyuki Amemiya,
Visualization of nanoscale deformation in polymer composites with Zernike-type phase-contrast x-ray microscopy and the finite element method
Polymer Journal **45**, 64–69 (2013).

49. Keiichi Hirano, Yuto Ito, Yuya Shinohara, and Yoshiyuki Amemiya,
Characterization of an x-ray diamond phase plate by a polarization analyzer using multiple diffraction
Journal of Physics: Conference Series **425**, 052030 (2013).

50. Goshu Tamura, Yuya Shinohara, Atsushi Tamura, Yusuke Sanada, Motoi Oishi, Isamu Akiba, Yukio Nagasaki, Kazuo Sakurai, and Yoshiyuki Amemiya,
Dependence of the swelling behavior of a pH-responsive peg-modified nanogel on the cross-link density
Polymer Journal **44**, 240–244 (2012).

51. Yutaka Sumino, Hiroyuki Kitahata, Yuya Shinohara, Norifumi L. Yamada, and Hideki Seto,
Formation of a multiscale aggregate structure through spontaneous blebbing of an interface
Langmuir **28**, 3378–3384 (2012).

52. Yuya Shinohara, Kohsuke Yamazoe, Takashi Sakurai, Shuichi Kimata, Toshiya Murayama, and Yoshiyuki Amemiya,
Effect of structural inhomogeneity on mechanical behavior of injection molded polypropylene investigated with microbeam x-ray scattering
Macromolecules **45**, 1398–1407 (2012).

53. Yuya Shinohara, Hiroyuki Kishimoto, Taketo Maejima, Hisashi Nishikawa, Naoto Yagi, and Yoshiyuki Amemiya,
Observation of microscopic dynamics of carbon black in rubber during the vulcanization process
Soft Matter **8**, 3457–3462 (2012).

54. Yusuke Sanada, Isamu Akiba, Satoshi Hashida, Kazuo Sakurai, Kouichi Shiraishi, Masayuki Yokoyama, Naoto Yagi, Yuya Shinohara, and Yoshiyuki Amemiya,
Composition dependence of the micellar architecture made from poly (ethylene glycol)-block-poly (partially benzyl-esterified aspartic acid)
The Journal of Physical Chemistry B **116**, 8241–8250 (2012).

55. Yoshinobu Nozue, Shuichiro Seno, Tatsuhiro Nagamatsu, Satoru Hosoda, Yuya Shinohara, Yoshiyuki Amemiya, Eric B. Berda, G. Rojas, and Kenneth B. Wagener,
Cross nucleation in polyethylene with precisely spaced ethyl branches
ACS Macro Letters **1**, 772–775 (2012).

56. Shusaku Nagano, Yusuke Koizuka, Tomoya Murase, Masami Sano, Yuya Shinohara, Yoshiyuki Amemiya, and Takahiro Seki,
Synergy effect on morphology switching: Real-time observation of photo-orientation of microphase separation in a block copolymer
Angewandte Chemie International Edition, **51**, 5884–5888 (2012).

57. Ichiro Inoue, Yuya Shinohara, Akira Watanabe, and Yoshiyuki Amemiya,
Effect of shot noise on x-ray speckle visibility spectroscopy
Optics Express, **20**, 26878–26887 (2012).

58. Isamu Akiba, Atsuro Takechi, Megumi Sakou, Masashi Handa, Yuya Shinohara, Yoshiyuki Amemiya, Naoto Yagi, and Kazuo Sakurai,
Anomalous small-angle x-ray scattering study of structure of polymer micelles having bromines in hydrophobic core
Macromolecules, **45**, 6150–6157 (2012).

59. Yuya Shinohara, Hiroyuki Kishimoto, Taketo Maejima, Hisashi Nishikawa, Masakazu Takata, and Yoshiyuki Amemiya,
Observation of filler dynamics in rubber with x-ray photon correlation spectroscopy
IOP Conference Series: Materials Science and Engineering **24**, 012005. (2011).

60. Megumi Sakou, Atsuro Takechi, Masashi Handa, Yuya Shinohara, Yoshiyuki Amemiya, Hiroyasu Masunaga, Hiroki Ogawa, Naoto Yagi, Kazuo Sakurai, and Isamu Akiba,
Anomalous small-angle x-ray scattering study on aggregation of a block copolymer in a selective solvent
Journal of Physics: Conference Series **272**, 012022. (2011).

61. Hiroyasu Masunaga, Hiroki Ogawa, Takumi Takano, Sono Sasaki, Shunji Goto, Takashi Tanaka, Takamitsu Seike, Sunao Takahashi, Kunikazu Takeshita, Nobuteru Nariyama, Haruhiko Ohashi, Toru Ohata, Yukio Furukawa, Tomohiro Matsushita, Yasuhide Ishizawa, Naoto Yagi, Masaki Takata, Hideo Kitamura, Kazuo Sakurai, Kohji Tashiro, Atsushi Takahara, Yoshiyuki Amemiya, Kazuyuki Horie, Mikihito Takenaka, Toshiji Kanaya, Hiroshi Jinnai, Hiroshi Okuda, Isamu Akiba, Isao Takahashi, Katsuhiro Yamamoto, Masamichi Hikosaka, Shinichi Sakurai, Yuya Shinohara, Akihiko Okada, and Yasunori Sugihara,
Multipurpose soft-material SAXS/WAXS/GISAXS beamline at SPring-8
Polymer Journal, **43**, 471–477 (2011).

62. Noriyuki Igarashi, Yasushi Watanabe, Yuya Shinohara, Yoji Inoko, Go Matsuba, Hiroshi Okuda, Takeharu Mori, and Kenji Ito,
Upgrade of the small angle x-ray scattering beamlines at the photon factory
Journal of Physics: Conference Series **272**, 012026 (2011).

63. Masashi Handa, Yuya Shinohara, Hiroyuki Kishimoto, Yusuke Tamenori, Naoto Yagi, and Yoshiyuki Amemiya,
Improvement of SAXS measurement near the sulfur *K*-edge
Journal of Physics: Conference Series **272**, 012014 (2011).

64. Yuya Shinohara, Hiroyuki Kishimoto, Naoto Yagi, and Yoshiyuki Amemiya,
Microscopic observation of aging of silica particles in unvulcanized rubber
Macromolecules **43**, 9480–9487 (2010).

65. Yuya Shinohara, Ryo Imai, Hiroyuki Kishimoto, Naoto Yagi, and Yoshiyuki Amemiya,
Indirectly illuminated x-ray area detector for x-ray photon correlation spectroscopy
Journal of Synchrotron Radiation **17**, 737–742 (2010).

66. Yoshinobu Nozue, Yuya Shinohara, Yasuo Ogawa, Tadashi Takamizawa, Takashi Sakurai, Tatsuya Kasahara, Noboru Yamaguchi, Naoto Yagi, and Yoshiyuki Amemiya,
Deformation behavior of banded spherulite during drawing investigated by simultaneous microbeam SAXS–WAXS and POM measurement
Polymer **51**, 222–231 (2010).

67. Tatsuya Kikuzuki, Yuya Shinohara, Yoshinobu Nozue, Kazuki Ito, and Yoshiyuki Amemiya,
Determination of lamellar twisting manner in a banded spherulite with scanning microbeam x-ray scattering
Polymer **51**, 1632–1638 (2010).

68. Aoi Inomata, Yasuhiro Sakai, C. Zhao, C. Ruslim, Yuya Shinohara, Hideaki Yokoyama, Yoshiyuki Amemiya, and Kohzo Ito,
Crystallinity and cooperative motions of cyclic molecules in partially threaded solid-state polyrotaxanes
Macromolecules **43**, 4660–4666 (2010).

69. Masashi Handa, Yuya Shinohara, Hiroyuki Kishimoto, Yusuke Tamenori, and Yoshiyuki Amemiya,
Feasibility study on anomalous small-angle x-ray scattering near sulphur *K*-edge
Journal of Physics: Conference Series **247**, 012006 (2010).

70. Shinobu Nagase, Yoshio Kajiura, Akira Mamada, Hiroko Abe, Satoshi Shibuichi, Naoki Satoh, Takashi Itou, Yuya Shinohara, and Yoshiyuki Amemiya,
Changes in structure and geometric properties of human hair by aging
Journal of Cosmetic Science **60**, 637–648 (2009).

71. Yuya Shinohara, Tadashi Takamizawa, Satoru Ueno, Kiyotaka Sato, Isao Kobayashi, Mitsutoshi Nakajima, and Yoshiyuki Amemiya,
Microbeam x-ray diffraction analysis of interfacial heterogeneous nucleation of *n*-hexadecane inside oil-in-water emulsion droplets
Crystal Growth and Design **8**, 3123–3126 (2008).

72. Hiroyuki Kishimoto, Yuya Shinohara, Yoshiyuki Amemiya, Katsuaki Inoue, Yoshio Suzuki, Akihisa Takeuchi, Kentaro Uesugi, and Naoto Yagi,
Structural analysis of filler in rubber composite under stretch with time-resolved two- dimensional ultra-small-angle x-ray scattering
Rubber Chemistry and Technology **81**, 541–551 (2008).

73. Katsumi Hagita, Takashi Arai, Hiroyuki Kishimoto, Norimasa Umesaki, H. Suno, Yuya Shinohara, and Yoshiyuki Amemiya,
Structural changes of silica particles in elongated rubber by two-dimensional small-angle x-ray scattering and extended reverse Monte Carlo analysis
Rheologica Acta **47**, 537–541 (2008).

74. Yuya Shinohara, Hiroyuki Kishimoto, Taketo Maejima, Hisashi Nishikawa, Naoto Yagi, and Yoshiyuki Amemiya,
X-ray photon correlation spectroscopy of filler in rubber
Japanese Journal of Applied Physics **46**, L300 (2007).

75. Yuya Shinohara, Hiroyuki Kishimoto, Katsuaki Inoue, Yoshio Suzuki, Akihisa Takeuchi, Kentaro Uesugi, Naoto Yagi, Kiyoshige Muraoka, Tetsuo Mizoguchi, and Yoshiyuki Amemiya,
Characterization of two-dimensional ultra-small-angle x-ray scattering apparatus for application to rubber filled with spherical silica under elongation
Journal of Applied Crystallography **40**, s397–s401 (2007).

76. Yoshinobu Nozue, Yuya Shinohara, Yasuo Ogawa, Takashi Sakurai, H. Hori, Tatsuya Kasahara, Noboru Yamaguchi, Naoto Yagi, and Yoshiyuki Amemiya,
Deformation behavior of isotactic polypropylene spherulite during hot drawing investigated by

simultaneous microbeam SAXS-WAXS and POM measurement
Macromolecules **40**, 2036–2045 (2007).

77. Yoshinobu Nozue, Yuya Shinohara, and Yoshiyuki Amemiya,
Application of microbeam small-and wide-angle x-ray scattering to polymeric material characterization
Polymer Journal **39**, 1221 (2007).

78. Rei Kurita, Yuya Shinohara, Yoshiyuki Amemiya, and Hajime Tanaka,
Microscopic structural evolution during the liquid–liquid transition in triphenyl phosphite
Journal of Physics: Condensed Matter **19**, 152101 (2007).

79. Yuya Shinohara, Kentaro Kayashima, Yasuyuki Okumura, C. Zhao, Kohzo Ito, and Yoshiyuki Amemiya,
Small-angle x-ray scattering study of the pulley effect of slide-ring gels
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80. Yoshio Kajiura, Shunichi Watanabe, Takashi Itou, Koichi Nakamura, Atsuo Iida, Katsuaki Inoue, Naoto Yagi, Yuya Shinohara, and Yoshiyuki Amemiya,
Structural analysis of human hair single fibres by scanning microbeam SAXS
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81. Kenichi Hayashida, Atsushi Takano, Shigeo Arai, Yuya Shinohara, Yoshiyuki Amemiya, and Yushu Matsushita,
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82. Kenichi Hayashida, Wataru Kawashima, Atsushi Takano, Yuya Shinohara, Yoshiyuki Amemiya, Yoshinobu Nozue, and Yushu Matsushita,
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83. Katsumi Hagita, Haruo Okamoto, Takashi Arai, Hiroyuki Kishimoto, Norimasa Umesaki, Yuya Shinohara, Yoshiyuki Amemiya,
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84. Yuya Shinohara, Naohiko Kawasaki, Satoru Ueno, Isao Kobayashi, Mitsutoshi Nakajima, and Yoshiyuki Amemiya
Observation of the transient rotator phase of *n*-hexadecane in emulsified droplets with time-resolved two-dimensional small-and wide-angle x-ray scattering
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85. Yoshio Kajiura, Shunichi Watanabe, Takashi Itou, Atsuo Iida, Yuya Shinohara, and Yoshiyuki Amemiya,
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Journal of Applied Crystallography **38**, 420–425, (2005).

Books and Book Chapters

1. Yuya Shinohara, Hiroyuki Kishimoto, and Yoshiyuki Amemiya,
Why is tire black?
in *Hoshako-ga Tokiakasu Kyouino Nano Sekai*, eds. Japanese Society of Synchrotron Radiation, Kodansya Ltd., Tokyo (2011).
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2. Yoshiyuki Amemiya, Yuya Shinohara,
Spatiotemporal Structure of Soft Matter with Synchrotron Radiation
in *Synchrotron Hoshako Busshitsu Kagaku Saizensen*, eds. Isao Takahashi, Adthree Ltd., Tokyo (2010).
(in Japanese)

Publication in Other Academic Journals

1. Yuya Shinohara, Takuya Iwashita, and Takeshi Egami,
   Dynamic Structure of Liquid: Observation of Van Hove Correlation Function
   Butsuri **78**, 651–656 (2023).
   (in Japanese)

2. Yuya Shinohara,
   On the Japanese equivalent of "Tender X-ray"
   Journal of JSSRR **36**, 22–23 (2023).
   (in Japanese)

3. Yuya Shinohara, Taito Osaka, and Ichiro Inoue,
   X-ray laser illuminates the local motion of water molecules
   SPring-8/SACLA Research Frontiers 2021, 66–67 (2022).

4. Yuya Shinohara, Takuya Iwashita, and Takeshi Egami,
   Real-space analyses of local dynamics in liquid using X-ray scattering
   Journal of JSSRR **35**, 53–62 (2022).
   (in Japanese)

5. Hiroyuki Kishimoto and Yuya Shinohara,
   Development of High-Performance Vehicle Tires Using X-ray and Neutron Measurement
   Journal of the Society of Instrument and Control Engineers **60**, 182–186 (2021).
   (in Japanese)

6. Yuya Shinohara and Hiroyuki Kishimoto,
   Observation and Simulation of Fillers in Rubber for Vehicle Tires
   KOBUNSHI, **68**, 157-159 (2019).
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7. Yuya Shinohara and Shusaku Nagano,
   Evaluation of Orientation Structure by Grazing Incidence X-ray Scattering Measurement
   Journal of the Japanese Liquid Crystal Society **22**, 246–255 (2018).
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8. Yuya Shinohara
   Current status and future of X-ray photon correlation spectroscopy
   Journal of JSSRR **30**, 123–135 (2017).
   (in Japanese)

9. Yuya Shinohara
   Study of Rubbery Materials with X-ray Photon Correlation Spectroscopy
   Nippon Gomu Kyokaishi **90**, 190–194 (2017).
   (in Japanese)

10. Yuya Shinohara
    Time-Resolved Small-Angle X-ray Scattering for Soft Matter
    Journal of the Crystallographic Society of Japan **58**, 180–185 (2016).
    (in Japanese)

11. Yuya Shinohara
    Report of 7th JSSRR lecture series "Synchrotron Radiation for Beginners"
    Journal of JSSRR **28**, 263–264 (2015).
    (in Japanese)

12. Yuya Shinohara, Teruaki Yoshii, Hiroyuki Kishimoto, Kentaro Uesugi, and Yoshiyuki Amemiya,
    Micro Scale Distribution of Nanoparticles Studied with X-ray Near-Field Scattering
    KOBUNSHI RONBUNSHU **71**, 580–585 (2014).
    (in Japanese)

13. Yutaka Sumino, Hiroyuki Kitahata, Norifumi L. Yamada, Michihiro Nagao, Yuya Shinohara, and Hideki Seto,
Spontaneous Motion of the Oil-water Interface Induced by the Generation of Surfactant Aggregates
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(in Japanese)

14. Yuya Shinohara
Report of 6th JSSRR lecture series "Synchrotron Radiation for Beginners"
Journal of JSSRR **27**, 323–325 (2014).
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15. Yuya Shinohara, Takashi Sakurai and Yoshiyuki Amemiya,
Structural Inhomogeneity of Injection Molding Studied with Microbeam X-Ray Diffraction
Seikei-Kakou **25**, 506–511 (2013).
(in Japanese)

16. Yuya Shinohara, Hiroyuki Kishimoto, and Yoshiyuki Amemiya,
Dynamics of Vulcanized Rubber Filled with Silica Studied by X-ray Photon Correlation Spectroscopy
SPring-8/SACLA Research Report **1**, 109–111 (2013).
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17. Yuya Shinohara,
17th JSSRR Young Researcher Award "Observation of Nanoparticles' Dynamics in Rubber using X-ray Photon Correlation Spectroscopy
Journal of JSSRR **26**, 114–117 (2013).
(in Japanese)

18. Yusuke Sanada, Isamu Akiba, Satoshi Hashida, Kouichi Shiraishi, Masayuki Yokoyama, Naoto Yagi, Yuya Shinohara, Yoshiyuki Amemiya, and Kazuo Sakurai,
Characterization of Polymer Micelles by the Combination of SAXS and FFF-MALS
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(in Japanese)

19. Yuya Shinohara, Yoshiyuki Amemiya, and Hiroyuki Kishimoto,
Spatiotemporal Analysis of Filled Rubber using Synchrotron Radiation X-rays
Polyfile **49**, 16–19 (2012).
(in Japanese)

20. Yuya Shinohara
Study of dynamics using X-ray photon correlation spectroscopy
KOBUNSHI, **60**, 178–181 (2011).
(in Japanese)

21. Yuya Shinohara,
Report of X-ray Diffraction Limit Workshop Series Workshop 6 "Frontier Science with X-ray Correlation Spectroscopies using Continuous Sources"
Journal of JSSRR **24**, 278–279 (2011).
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22. Yuya Shinohara
Structural Study of Crystallization of n-Hexadecane in O/W Emulsion with X-ray Diffraction
Journal of the Japanese Association for Crystal Growth **37**, 25–33 (2010).
(in Japanese)

23. Takashi Sakurai and Yuya Shinohara,
Characterization of Polymers by Advanced Quantum Beam
Seikei-Kakou **20**, 419–422 (2008).
(in Japanese)

24. Yoshinobu Nozue, Yuya Shinohara, and Yoshiyuki Amemiya
Deformation Behavior of Isotactic Polypropylene Spherulite during Hot Drawing Investigated by

Simultaneous Microbeam SAXS-WAXS and POM Measurement
SPring-8 Research Frontier 2006, 147–148 (2007).

25. Yuya Shinohara,
Soft Matter in Reciprocal Space
KOBUNSHI **56**, 1008 (2007).
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26. Yoshinobu Nozue, Yuya Shinohara, Yoshiyuki Amemiya,
Application of Microbeam Small-Angle X-ray Scattering to Soft Material
Ceramics Japan: Bulletin of the Ceramic Society of Japan **41**, 1009–1013 (2006).
(in Japanese)

27. Yoshiyuki Amemiya and Yuya Shinohara,
Principle of Small-Angle X-ray Scattering and a Perspective
Journal of JSSRR **19**, 338–348 (2006).
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28. Yosho Kajiura, Takashi Itoh, Yuya Shinohara, and Yoshiyuki Amemiya
Structural analysis of curly human hair fibers by scanning micro-beam SAXS
Journal of JSSRR **19**, 371–377 (2006).
(in Japanese)

29. Yuya Shinohara, Satoru Ueno, and Yoshiyuki Amemiya,
Observation of alkane crystallization in emulsion droplets by SAXS–WAXS
Journal of JSSRR **19**, 394–401 (2006).
(in Japanese)

30. Yoshio Kajiura, Takashi Itoh, Yuya Shinohara, Yoshiyuki Amemiya
Microstructural Analysis of Wook Fiber using microbeam X-ray small-angle scattering
Polymer Applications **54**, 339–343 (2005).
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31. Yuya Shinohara, Hiroyuki Kishimoto, and Yoshiyuki Amemiya
Real-time observation of filler aggregate structure using two-dimensional ultra-small-angle X-ray scattering
SPring-8 Research Frontier 2004, 88–89 (2005).

Book translation

1. Yuya Shinohara, Tetsuro Shirasawa, Wataru Yashiro,
Elements of Modern X-ray Physics
(eds.) Y. Amemiya, T. Takahashi, and A. Momose, Kodansha Ltd. (2012).
Original English version (2nd ed.) authored by J. Als-Nielsen and D. McMorrow, published by John Wiley & Sons Ltd. (2011).

Invited Talks at Scientific Meetings

1. Yuya Shinohara,
Real-space Time-domain Analysis of Liquid Dynamics using Inelastic X-ray Scattering
IXS2022, virtual August 2022.

2. Yuya Shinohara,
Atomic-level dynamics of aqueous salt solution
The International Chemical Congress of Pacific Basin Societies 2021, virtual meeting, Dec. 16-21, 2021.

3. Yuya Shinohara,
Real-space analyses of liquid dynamics using high energy-resolution inelastic X-ray scattering
Workshop on meV-Resolved Inelastic X-ray Scattering, online, Sep. 6-9, 2021.

4. Yuya Shinohara,
   Use of Coherent X-rays for Observing Materials' Dynamics: Prospects and Issues
   NSRRC User's Meeting at NSRRC, Hsinchu, Taiwan, Sept. 2017

5. Yuya Shinohara,
   Observation of Filler Dynamics in Styrene–Butadiene Rubber
   PP'2016 at Guiyang, China, June 11-14, 2016.

6. Yuya Shinohara,
   Effect of Spatial Coherence on Small-angle Scattering
   The 7th Japan-Taiwan Joint Meeting on Neutron and X-ray Scattering at Osaka, Japan, March 10-13, 2016.

7. Yuya Shinohara,
   Anomalous Small-Angle X-ray Scattering of Rubber at Sulfur *K*-edge
   AsCA2015 at Kolkata, India. December 2015.

8. Yuya Shinohara,
   Local Rearrangement of Silica Particles in Swollen Rubber induced by X-ray Irradiation
   Synchrotron Radiation in Polymer Science International Conference (SRPS6) at Madrid, Spain, September 7-10, 2015.

9. Yuya Shinohara,
   Structure and Dynamics of Silica Aggregates in Uniaxially Stretched Rubber
   International Workshop on Structure and Dynamics of Nanocomposite, at Montpelier, France, June 2015.

10. Yuya Shinohara,
    Application of X-ray Photon Correlation Spectroscopy to Nanoparticles in Rubber
    NSRRC User's Meeting at NSRRC, Hsinchu, Taiwan, September 2014

11. Yuya Shinohara, Akira Watanabe, Hiroyuki Kishimoto, Yoshiyuki Amemiya,
    Observation of translational and rotational motion of nanocrystals using quasi-monochromatic coherent X-rays (in Japanese)
    62nd Symposium on Macromolecules, at Kanazawa, Japan, September 2013

12. Y. Shinohara et al.
    Observation of Translational and Rotational Motion of Nanocrystals with Coherent X-rays
    Light and Particle Beams in Materials Science 2013, at Tsukuba, Japan, August 2013.

13. Y. Shinohara,
    Dynamics of silica nanoparticles in styrene-butadiene rubber
    5th Japan-Taiwan Joint Meeting on Neutron and X-ray Scattering, at Tokai, Japan, Feb. 2013

14. Y. Shinohara,
    Dynamics of Nanoparticles in Rubber Observed with Coherent X-rays
    SAS2012, at Sydney, Australia, November 2012.

15. Yuya Shinohara and Yoshiyuki Amemiya,
    Hierarchical Structure and Dynamics of Soft Mater studied with Advanced Small-Angle X-ray Scattering using Synchrotron Radiation (in Japanese)
    61st Symposium on Macromolecules, at Nagoya, Japan, September 2012

16. Y. Shinohara, I. Inoue, A. Watanabe, H. Kishimoto, and Y. Amemiya,
    Observation of Dynamics of Nanoparticles with X-ray Photon Correlation Spectroscopy
    Coherence 2012 International Workshop on Phase Retrieval and Coherent Scattering, June 2012 at Fukuoka, Japan.

17. Y. Shinohara,
    X-ray Photon Correlation Spectroscopy of Rubber Filled with Nanoparticles
    JAEA Symposium on Synchrotron Radiation Research 2012, at Hyogo, Japan, March 2012.

18. Y. Shinohara,
    X-ray Photon Correlation Spectroscopy of Rubber
    Gordon Research Conference (X-ray Science), August 2011 @ Waterville, USA.

19. Y. Shinohara,
Hierarchical Dynamics of Soft Matters and Prospects of Japanese Future Light Sources
XDL2011 Workshop at Cornell Univ., Ithaca, NY, USA., June 2011.

20. Y. Shinohara,
Dynamics of Nano-composite revealed by X-ray Photon Correlation Spectroscopy
IMSS Symposium at Tsukuba, Japan, December 2010

21. Y. Shinohara,
Structure and Dynamics of Nano-composites revealed by X-ray Scattering and XPCS
JST ERATO and CREST Joint Symposium at Hyogo, Japan, September 2010.

22. Y. Shinohara, H. Kishimoto, and Y. Amemiya,
Study of nano-particles in rubber with time-resolved ultra-small-angle X-ray scattering and X-ray photon correlation spectroscopy
IUCr2008 at Osaka, Japan, August 2008.

23. Y. Shinohara, H. Kishimoto, and Y. Amemiya
Study of Rubber filled with Silica by 2D-USAXS and XPCS
AsCA06/CrSJ at Tsukuba, Japan, November 2006.

Invited Seminars and Lectures

1. Y. Shinohara, T. Osaka, I. Inoue, T. Iwashita, W. Dmowski, C. W. Ryu, Y. Sarathchandran, T. Egami,
X-ray Photon Correlation Spectroscopy using Split-and-Delay and Self-seeded XFEL
36th Annual Meeting of JSSRR, Shiga, Japan, January 7, 2023, oral (remote).

2. Y. Shinohara,
X-ray Photon Correlation Spectroscopy / X-ray Speckle Visibility Spectroscopy
SACLA User Symposium, virtual, March 10, 2021.

3. Y. Shinohara,
Real-space Local Correlated Motion in Liquids studied by using Inelastic Scattering
NSLS-II Friday Lunchtime Seminar at NSLS-II NY, USA, January 17, 2020.

4. Y. Shinohara,
Viscosity and real space motion of water: Observation through Van Hove Function
Oak Ridge National Laboratory, TN, USA. March 14, 2018.

5. Yuya Shinohara,
How does the Japanese Synchrotron Radiation Society look from abroad? (in Japanese)
31st Annual Meeting of JSSRR, Tsukuba, Japan, January 9, 2018.

6. Y. Shinohara,
Principle and Application of Synchrotron Radiation X-rays
University of Tokyo, Japan, April 13, 2017.

7. Y. Shinohara,
Nuclear Resonant Quasielastic Scattering for Spatiotemporal Structure of Soft Matter (in Japanese)
Tokyo, Japan, February 24, 2017.

8. Y. Shinohara,
Structural Analysis of Amorphous using Coherent X-rays (in Japanese)
Tokyo, Japan, February 16, 2017.

9. Y. Shinohara,
Analysis of Filled Rubber for Vehicle Tires using Synchrotron Radiation X-ray Scattering (in Japanese)
Sentan Kasokuki Suishin Kyogikai, Tokyo, Japan, January 19, 2017.

10. Y. Shinohara,
XPCS Measurement and Data Analysis (in Japanese)
SPring-8, Japan, January 7, 2017.

11. Y. Shinohara,
Small-Angle X-ray Scattering using Coherent X-rays (in Japanese)
Tsukuba, Japan, March 30, 2016.

12. Y. Shinohara,
Advanced Measurement of X-ray Scattering using Synchrotron Radiation (in Japanese)
26th Scattering Conference, Tokyo, Japan, November 21, 2014.

13. Y. Shinohara,
Evaluation of Dispersion and Structure in Soft Mater using Synchrotron Radiation (in Japanese)
Tokyo, Japan, November 20, 2014.

14. Y. Shinohara,
Application of Synchrotron Radiation X-ray Scattering to Polymeric Materials (in Japanese)
Chiba, Japan, September 2014.

15. Y. Shinohara,
X-ray Scattering Study of Rubber Filled with Nanoparticles: USAXS & XPCS
Oak Ridge National Laboratory, TN, USA, May 2013.

16. Y. Shinohara,
Observation of structure and dynamics of nanoparticles in tire rubber using small-angle X-ray scattering (in Japanese)
Industrial Users Society of SPring-8, Kobe, Japan, April 2013.

17. Y. Shinohara
Analysis of filled rubber using X-ray Scattering (in Japanese)
Kyushu Synchrotron Light Research Center, Saga, Japan, March 2013.

18. Y. Shinohara
Analysis of Dynamics in Amorphous using Coherent X-rays (in Japanese)
University of Tokyo, Japan, August 2012.

19. Y. Shinohara
Spatiotemporal Structural Analysis using Coherent X-rays (in Japanese)
University of Tokyo, Japan, June 2012.

20. Y. Shinohara,
Spatiotemporal Structural Analysis of Filled Rubber using Synchrotron Radiation X-rays (in Japanese)
Tokyo Institute of Technology, Japan, March 2012.

21. Y. Shinohara,
GI-SAXS with Coherent X-ray (in Japanese)
Photon Factory, KEK, Japan, September 2011.

22. Y. Shinohara,
Perspective on Advanced Small-Angle X-ray Scattering at a new BL at PF (in Japanese)
Photon Factory, KEK, Japan, September 2011.

23. Y. Shinohara,
Analysis of Structure and Dynamics of Rubber using X-ray Scattering (in Japanese)
Akasaka, Tokyo, Japan, December 2010.

24. Y. Shinohara,
Analysis of Nanoscale Dynamics using X-ray Photon Correlation Spectroscopy (in Japanese)
Nagoya University, Japan, July 26, 2010.

25. Y. Shinohara,
Small-Angle X-ray Scattering and its Application to Soft Matters
SESAME-JSPS- Sabanci School, at Antalya, Turkey, March 2010.

26. Y. Shinohara,
Superresolution in X-ray Polarization Imaging (in Japanese)
University of Tokyo, January 15, 2010.

27. Y. Shinohara,
Application of Nanobeam in Small-Angle X-ray Scattering (in Japanese)
Osaka University, Japan, August 2009.

28. Y. Shinohara
Spatiotemporal Structure of Soft Matter and ERL (in Japanese)
Photon Factory, KEK, Japan, July 2009.

29. Y. Shinohara
Anisotropic Small-Angle X-ray Scattering in Filled Rubber and Slide-ring Gel (in Japanese)
SPring-8 Workshop, Tokyo, Japan, January 2009.

30. Y. Shinohara
Small-angle X-ray Scattering of Colloidal System and Soft Matter (in Japanese)
Healthcare Workshop, Osaka, Japan, December 19, 2008.

31. Y. Shinohara
Analysis of Dynamics using Time-resolved Small-Angle X-ray Scattering (in Japanese)
KEK, Japan, September 2008.

32. Y. Shinohara,
Recent Progress in Small-Angle X-ray Scattering using Synchrotron Radiation X-ray (in Japanese)
University of Tokyo, Japan, June 2008.

33. Y. Shinohara,
Structural Study of Soft Matter using Small-Angle X-ray Scattering (in Japanese)
Chiba, Japan, March 2008.

34. Y. Shinohara,
Microbeam Small-Angle X-ray Scattering Study of Soft Materials (in Japanese)
Hokkaido University, Hokkaido, Japan, February 2008.

35. Y. Shinohara
Application of X-ray Photon Correlation Spectroscopy on Soft Matter (in Japanese)
KEK, Japan, January 2008.

36. Y. Shinohara,
Application of Small-Angle X-ray Scattering to Nanocomposites (in Japanese)
Ritsumeikan University, Japan, January 2008.

Other Talks at Scientific Meetings

1. Y. Shinohara, A. Ivanov, G. Granroth, D. Abernathy, T. Egami,
Van Hove correlation function of magnesium chloride molten salt
ACNS 2022, Boulder, CO, USA, June 7, 2022, oral.

2. Y. Shinohara, R. Matsumoto, M. W. Thompson, W. Dmowski, C.W. Ryu, D. Ishikawa, A.Q.R. Baron, P.T. Cummings, and T. Egami,
Real-space Dynamics in Aqueous Slat Solution
APS March Meeting, Chicago, IL, March 2022, oral (remote).

3. Y. Shinohara, W. Dmowski, T. Iwashita, D. Ishikawa, A.Q.R. Baron, and T. Egami,
Local self-motion of water through the Van Hove function
APS March Meeting, virtual, March, 2021, oral.

4. Y. Shinohara, W.-R. Chen, T. Egami, G.-R. Huang, C. Do, Y. Liu, and L. Porcar,
Identifying the Conformational Characteristics of Sheared Wormlike Micelles from Anisotropic

Scattering Profiles
MRS Fall Meeting, Boston, MA, USA, December 4, 2019. Oral.

5. Y. Shinohara, W. Dmowski, T. Iwashita, D. Ishikawa, A.Q.R. Baron, T. Egami,
Emergence of local slow dynamics of water molecules induced by sodium chloride
APS March Meeting, Boston, MA, USA, March 2019. Oral.

6. Y. Shinohara,
Real-space molecular motion of water observed with inelastic X-ray and neutron scattering
2018 SRPS, Korea, September 6, 2018, oral.

7. Y. Shinohara, W. Dmowski, T. Iwashita, B. Wu, D. Ishikawa, A.Q.R Baron, T. Egami,
Molecular Motion of Water in Real Space and Time observed with Inelastic X-ray Scattering
APS March Meeting, Los Angeles, CA, USA, March 2018, oral.

8. Y. Shinohara, Y. Amemiya, H. Kishimoto, and T. Masui
Spatiotemporal Structural Analysis of Filled Rubber using X-ray Scattering (in Japanese)
21st JSSRR Annual Meeting, Kobe, Japan, January 9, 2017, oral.

9. Y. Shinohara and Y. Amemiya,
Effect of coherence on ultra-small-angle X-ray scattering
90th ACS Colloid & Surface Science Symposium, Boston, MA, USA, June 8, 2016, oral.

10. Y. Shinohara and Y. Amemiya,
Effect of Coherence on USAXS (in Japanese)
20th JSSRR Annual Meeting, Chiba, Japan, January 10, 2016, oral.

11. Y. Shinohara,
Time-resolved SAXS for Structural Study of Soft Maters (in Japanese)
Annual Meeting of the Crystallographic Society of Japan, Osaka, Japan, October 2015, oral.

12. Y. Shnohara and Y. Amemiya,
Does a low-q upturn in ultra-small-angle X-ray scattering reflect material's structure?
SAS2015, Berlin, Germany, September 12, 2015, oral.

13. Y. Shinohara, T. Yoshii, Y. Matsuki, and Y. Amemiya,
Effect of Multiple Scattering on Small-Angle X-ray Scattering and X-ray Photon Correlation Spectroscopy
SAS2015, Berlin, Germany, September 2015, poster.

14. Y. Shinohara, T. Yoshii, and Y. Amemiya
Effect of Multiple Scattering on X-ray Photon Correlation Spectroscopy (in Japanese)
64th SPSJ Annual Meeting, Japan, May 2015, oral.

15. Y. Shinohara, N. Yamamoto, H. Kishimoto, and Y. Amemiya,
Observation of Silica Dynamics in Swollen Rubber using X-ray Photon Correlation Spectroscopy (in Japanese)
19th JSSRR Annual Meeting, Shiga, Japan, January 11, 2015, oral.

16. Y. Shinohara, N. Yamamoto, H. Kishimoto, Y. Amemiya,
Observation of Nanoparticle Dynamics in Swollen Rubber using X-ray Photon Correlation Spectroscopy (in Japanese)
63rd Symposium on Macromolecules, at Nagasaki, Japan, September 2014, oral.

17. Y. Shinohara, H. Kishimoto, and Y. Amemiya,
Spatio-temporal Structure of Filler Nanoparticles in Styrene-Butadiene Rubber
88th ACS Colloid & Surface Science Symposium, Philadelphia, PA, USA, June 24, 2014, oral.

18. Y. Shinohara, A. Watanabe, H. Kishimoto, and Y. Amemiya,
Translational and Rotational Motion of Nanocrystals in Rubber
APS March Meeting, Denver, CO, USA, March 8, 2014, oral.

19. Y. Shinohara,
Anomalous Small-Angle X-ray Scattering of Vulcanized Rubber at Sulfur K-edge (in Japanese)
27th JSSRR Annual Meeting, Nagoya, Japan, January 2014, oral.

20. Y. Shinohara, H. Kishimoto, N. Matsumoto, Y. Amemiya,
Effect of Multiple Scattering on Small-Angle X-ray Scattering (in Japanese)
27th JSSRR Annual Meeting, Nagoya, Japan, January 2014, oral.

21. Y. Shinohara, A. Watanabe, H. Kishimoto, Y. Amemiya,
Observation of translational and rotational motion of nanocrystals using coherent X-rays (in Japanese)
Annual Meeting of the Crystallographic Society of Japan, Kumamoto, Japan, October 2013, oral.

22. Y. Shinohara, A. Watanabe, H. Kishimoto, Y. Amemiya,
Observation of translational and rotational motion of nanocrystals using quasi-monochromatic coherent X-rays (in Japanese)
62nd Symposium on Macromolecules, at Kanazawa, Japan, September 2013, oral.

23. Y. Shinohara, A. Watanabe, H. Kishimoto, and Y. Amemiya,
Combined Measurement of Translational-Rotational Motion of Nanocrystals with Coherent X-rays
SAS2012 at Sydney, Australia, November 2012, poster.

24. Y. Shinohara, H. Kishimoto, Y. Amemiya,
Observation of Dynamics in Filled Rubber using Coherent X-rays (in Japanese)
Annual Meeting of the Crystallographic Society of Japan, Sendai, Japan, October 2012, oral.

25. Y. Shinohara, A. Watanabe, H. Kishimoto, I. Inoue, and Y. Amemiya,
Simultaneous Measurement of Translational and Rotational Motion of Nanocrystals using Coherent X-rays (in Japanese)
61st Symposium on Macromolecules, at Nagoya, Japan, September 2012, oral.

26. Y. Shinohara,
X-ray Photon Correlation Spectroscopy of Filler Rubber
SRPS5 at San Francisco, USA, March 2012, oral.

27. Y. Shinohara,
Dynamics of nanoparticles during vulcanization process studied by X-ray Photon Correlation Spectroscopy (in Japanese)
25th JSSRR Annual Meeting, Saga, Japan, January 2012, oral.

28. Y. Shinohara,
Dynamics during Vulcanization Process using X-ray Photon Correlation Spectroscopy (in Japanese)
60th SPSJ Annual Meeting, Osaka, Japan, May 2011, oral.

29. Y. Shinohara, H. Kishimoto, N. Yagi, and Y. Amemiya,
Aging Behavior of Nanocomposite studied by X-ray Photon Correlation Spectroscopy (in Japanese)
24th JSSRR Annual Meeting, Tsukuba, Japan, January 2011, oral.

30. Y. Shinohara, H. Kishimoto, N. Yagi, and Y. Amemiya,
Observation of Aging in Filled Rubber with X-ray Photon Correlation Spectroscopy
59th Symposium on Macromolecules, Hokkaido, Japan, September 2010, oral.

31. Y. Shinohara, H. Kishimoto, T. Maejima, M. Takata, H. Nishikawa, and Y. Amemiya,
Study on Dynamics of Nanoparticles in Rubber using X-ray Photon Correlation Spectroscopy
SAS2009 at Oxford, United Kingdom, September 2009, poster.

32. Y. Shinohara, H. Kishimoto, N. Yagi, and Y. Amemiya,
Observation of Nanoparticle Dynamics with X-ray Photon Correlation Spectroscopy
57th Symposium on Macromolecules, Hokkaido, Japan, September 2008, oral.

33. Y. Shinohara, S. Ueno, K. Sato, and Y. Amemiya,
Heterogeneous Nucleation at Interface in Emulsion using Microbeam Small- and Wide-Angle X-ray Scattering (in Japanese)
21st JSSRR Annual Meeting, Ritsumeikan University, Japan, January 2008, oral.

34. Y. Shinohara, H. Kishimoto, T. Maejima, H. Nishikawa, and Y. Amemiya,
Observation of Carbon Black Dynamics in Rubber using X-ray Photon Correlation Spectroscopy (in Japanese)
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