

Hiroshi Jinnai

Professor

Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University

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Professional Preparation

1988 Kyoto University, Department of Polymer Chemistry, B.S.
1990 Kyoto University, Department of Polymer Chemistry, M.S.
1993 Kyoto University, Department of Polymer Chemistry, Ph.D.
1993 Kyoto University, Department of Polymer Chemistry, JSPS (Japan Society for the Promotion of Science) Research Fellowships for Young Scientists, Research Fellow

Appointments

2015 – present **Professor (tenured)**, Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, Japan
2011 – 2015 **Research Professor (non-tenured)**, Institute of Molecular Chemistry and Engineering (IMCE), Kyushu University, Japan
2011 – 2014 **Research Professor (non-tenured)**, I²CNER, Kyushu University, Japan
2011 – 2014 **Group Leader & Research Manager (non-tenured)**, ERATO Takahara Soft Interfaces Project, Japan Science and Technology Agency, Japan.
2009 – 2012 **Adjunct Professor (non-tenured)**, Tohoku University, Japan.
2002 – 2011 **Associate Professor (tenured)**, Kyoto Institute of Technology, Japan.
1998 – 2002 **Lecturer (tenured)**, Kyoto Institute of Technology, Kyoto, Japan.
1993 – 1998 **Group Leader (non-tenured)**, ERATO Hashimoto Polymer Phasing Project, Japan Science and Technology Corporation.
1993 **JSPS Research Fellow (non-tenured)**, Kyoto University.

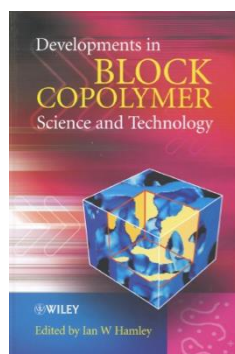
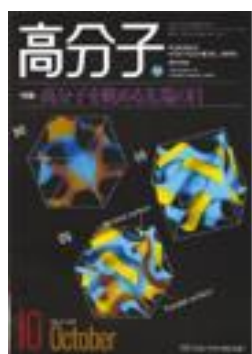
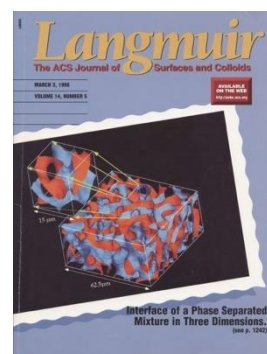
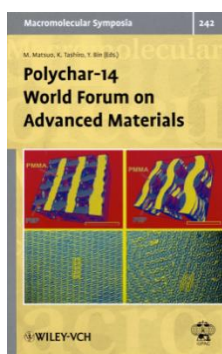
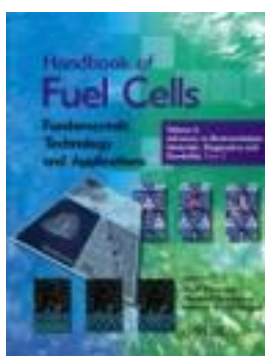
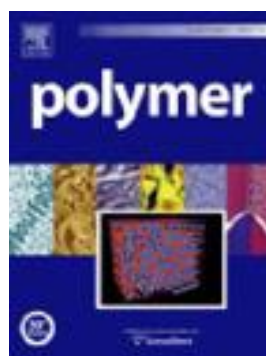
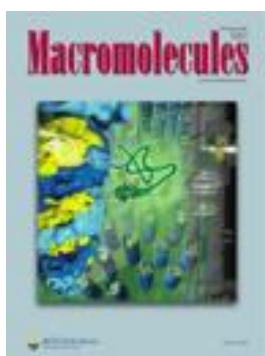
Extended Visits / Visiting Appointments

1988.11~1989.5 Guest Scientist, National Institute of Standards and Technology
1992.4~1993.4 Guest Scientist, National Institute of Standards and Technology

Honors (Journal Covers)

Research results featured on the covers of *Journal of Polymer Science* (2022), *Langmuir* (2022), *Macromolecules* (2021), *ACS Applied Nano Materials* (2021), *Langmuir* (2020), *Macromolecular Chemistry Physics* (2016), *Macromolecular Rapid Communications* (2015), *Particle & Particle Systems Characterization* (2015), *Advanced Energy Materials* (2014), *Soft Matter* back cover (2014), *Polymer Journal* (2013), *Journal of Polymer Science, Part B Polymer Physics* (2012), *Macromolecules* (2010), *Handbook of Fuel Cells* (2009), *Polymer* (2009), *Advanced Functional Materials* (2008), *Macromolecular Rapid Communications* (2006), *MICROSCOPY (in Japanese)* (2004), *Advanced Materials* (2002), *KOBUNSHI (in Japanese)* (2002), *Langmuir* (1998), etc.





Honors (Awards)

- 2006: SPSJ (The Society of Polymer Science, Japan) **Wiley Award** (2006)
- 2007: **Ernst-Ruska-Prize 2007** (International Award, The German Society for Electron Microscopy)¹
- 2007: **President Special Award** (Kyoto Institute of Technology)
- 2008: **Award for Persons of Merit in Industry-Academia-Government Collaboration in FY2008** (Minister of Education, Culture, Sports, Science and Technology Award)
- 2010: **2010 Bridgestone Soft Materials Frontier Award** (The Society of Rubber Industry, Japan)²
- 2011: **American Physical Society (APS) Fellow Award**
- 2012: The Japanese Society of Microscopy, **Setoh Prize (Society Award)**
- 2017: **The Award of the Society of Polymer Science, Japan**

Synergistic & Professional Activities

(1) Session organizer at the international meeting

- A session organizer “Design and Characterization of Surface and Interface in Polymers”, ACS March Meeting 2022 (March 2022, San Diego, USA)
- A session organizer “Self-Assembly of Block Copolymers: From Fundamentals to Applications (#293), PacifiChem 2022 (December 2022, Online)
- An International Advisory Committee member, The International Congress on 3D Materials Science (3DMS2021) (June 2021, Washington DC, USA) : This meeting was canceled due to the COVID-19.
- **The Conference Chair**, 32nd International Symposium on Polymer Analysis and Characterization (ISPAC 2019) (June 2019, Miyagi, Japan)
- An International Advisory Committee member, The International Congress on 3D Materials Science (3DMS2018) (June 2018, Helsingør (Elsinore), Denmark)
- An organize committee member, International Rubber Conference 2016 (IRC2016) (OCTOBER 2016, Fukuoka, Japan)
- A session organizer “New Perspective of Synthetic and Biological Soft Matter (#57), PacifiChem 2015 (December 2015, Hawaii, USA)
- A session organizer, the The first East-Asia Microscopy Conference (EAMC-1) (October 2013, Chongqing, China)
- A session organizer, the 3rd Asian Symposium on Advanced Materials: Chemistry & Physics of Functional Materials (ASAM-3) (September 2011, Fukuoka, Japan)
- A session organizer, the Frontier of Electron Microscopy for Materials Science

¹ I am the first Japanese ever to win the biannual Ernst-Ruska-Prize in 2007. This international award, named after Ernst Ruska, winner of the 1986 Nobel Prize for his invention of the transmission electron microscope, is given by the Deutschen Gesellschaft für Elektronenmikroskopie e.V. (German Society of Electron Microscopy). There are only 20 recipients since 1981 to 2007 (in 2009 this award is given again, so the total number of recipients so far is now 25).

² The 2010 Bridgestone Soft Materials Frontier Award started 2010, so I am the first recipient of this award.

(FEMMS2009) (September 2009, Nagasaki, Japan)

- A session organizer at the IUMRS-ICA2008 (December 2008, Nagoya, International Meeting)
- A session organizer, the ACS National Meeting in Boston, MA (Imaging Techniques for the Characterization of Polymers and Polymer-Derived Materials) (August 2007, Boston, USA)
- An organizing board, Synchrotron Radiation in Polymer Science III (July 2006, Hyogo, Japan)

(2) Session organizer at domestic meeting

- A chair of program committee, the 78th Annual Meeting of The Japanese Society of Microscopy (May 2022, Fukushima)
- An organizing committee member, the 69th Society of Polymer Science Japan (SPSJ) Annual Meeting (September 2020, online)
- A session organizer, the 64th Society of Polymer Science Japan (SPSJ) Annual Meeting (September 2015, Sendai)
- A session organizer, the 62nd Society of Polymer Science Japan (SPSJ) Annual Meeting (September 2013, Kanazawa)
- A program committee member, the 69th Annual Meeting of The Japanese Society of Microscopy (May 2013, Osaka)
- A session organizer, the 61st Society of Polymer Science Japan (SPSJ) Annual Meeting (September, 2012, Nagoya)
- A program committee member and a session organizer, the 66th Annual Meeting of The Japanese Society of Microscopy (May 2010, Nagoya)
- A session organizer, the 53rd Society of Polymer Science Japan (SPSJ) Annual Meeting (September 2004, Hokkaido)

(3) Social activity

(Scientific journals)

- **Editor, Polymer (Elsevier) (2016 ~ present)**
- **Executive Editorial Board, GIANT(Elsevier) (2020 ~ present)**
- **Editorial Board, International Journal of Polymer Analysis and Characterization (2019 ~ present)**
- **Editor, Journal of Electron Microscopy (Microscopy from 2013) (2011 ~ 2018)**
- General Editorial Board, Polymers (2009 ~ 2011)

(Scientific Community)

- A member of SIGMA XI (2022 ~ present)
- Governing Board Member, International Symposium on Polymer Analysis and Characterization (ISPAC) (2019~presnt)
- The international academic steering committee for the Center for Advanced Low-dimensional Materials in Donghua University (2016 ~ present)
- An executive board member, The Japanese Society of Microscopy (2019 ~ present)
- A member of American Physical Society (2011 ~ present)
- A member of American Chemical Society (2005~ present)
- A member of German Microscopy Society (2007 ~ present)

- A member of The Japanese Society of Microscopy (2004 ~ present)
- A member of the Society of Polymer Science Japan (1994 ~ present)

(others)

- **Reviewer** for the European Research Council (ERC) (Evaluation of proposals submitted to the ERC Consolidator Grant Call 2015)
- **Assessor** for the Australian Research Council
- **Reviewer** for the Romanian National Council for Scientific Research
- **Reviewer** for the Austrian Science Fund

Papers (all papers are reviewed) (*: Corresponding author)

Jinnai, Hiroshi

[Tohoku University, Sendai, Japan](#) 著者情報をすべて表示
 7005199668 <https://orcid.org/0000-0003-3400-1928>

[プロフィールを編集](#) [Set alert](#) [一致する可能性がある著者候補](#) [SciValにエクスポート](#)

指標の概要

318
Documents by author

8252
Citations by 5716 documents

49
h-index: [View h-graph](#)

文献数と被引用数のトレンド

[著者分析](#) [引用分析](#)

最も文献数が多いトピック 2016-2020

Polystyrene-Block-Poly(Methyl Methacrylate); Self-Assembly; Block Copolymers
11 documents

Electron Tomography; Correlative; Microscopy
2 documents

Ligands; Nonmarket Good; Self-Assembly
2 documents

[すべてのトピックを表示](#)

318 Documents Cited by 5716 Documents 2 Preprints 667 Co-Authors 24 Topics 0 Awarded Grants

Hiroshi Jinnai

Faculty - Tohoku University

Web of Science ResearcherID [?]

F-8456-2014

PUBLICATIONS

249

TOTAL TIMES CITED

7,748

H-INDEX

46 [?]

VERIFIED REVIEWS

5

VERIFIED EDITOR RECORDS

30

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H-Index & Metrics

Discipline name	H-index	Citations	Publications	World Ranking	National Ranking
Materials Science	59	10,062	259	3490	185

h-index: 49 (Scopus)
 h-index: 46 (Research ID)
 h-index: 54 (Google Scholar)
 h-index: 59 (Research.com)

1. Correlative light and electron microscopy of poly(L-lactic acid) spherulites for fast morphological measurements using a convolutional neural network, Y. Konyuba*, H. Marubayashi, T. Haruta, H. Jinnai, *Microscopy*, 71(2), 104-110 (2022).
2. Crack Propagation Behaviors in a Nanoparticle-filled Rubber studied by in situ Tensile Electron Microscopy, D. Watanabe, T. Miyata, T. Nagao, A. Kumagai, H. Jinnai*, *J. Polym. Sci. Part B*, 60, 1277-1284 (2022).
3. **(Invited review paper)** Electron microscopy for polymer structures, H. Jinnai*, *Microscopy*, 71(S1), i48-i64 (2022).
4. Structural Correlations of Nonlinear Optical Response in Polydiacetylene Nanotubes Hybridized with Gold Nanoparticles, W. Ito-Washiyama, T. Onodera*, M. Ageishi, R. Sato, B. Zhang, S. Kato, A. Masuhara, H. Kasai, H. Mamiya, H. Jinnai, Y. Takeda, H. Oikawa, *J. Phys. Chem. C*, 126, 2763-2771 (2022).
5. Direct visualization of interfacial regions between fillers and matrix in rubber composites observed by atomic force microscopy-based nanomechanics assisted by electron tomography, M. Ito, H. Liu, A. Kumagai, X. Liang, K. Nakajima*, H. Jinnai*, *Langmuir*, 38, 777-785 (2022).
6. Efficient Compressed Database of Equilibrated Configurations of Ring-Linear Polymer Blends for MD Simulations, K. Hagita*, T. Murashima, M. Ogino, M. Omiya, K. Ono, T. Deguchi, H. Jinnai, T. Kawakatsu, *Scientific Data*, 9, 40 (2022).
7. Demonstration of reinforcement in polymer composite with rings penetrating the diamond-lattice network, K. Hagita, T. Murashima, H. Jinnai, *Polymer*, 243, 124637 (2022).
8. Densely arrayed cage-shaped polymer topologies synthesized via cyclopolymerization of star-shaped macromonomers, Y. Mato, M. Sudo, H. Marubayashi, B. Ree, K. Tajima, T. Yamamoto, H. Jinnai, T. Isono, T. Satoh, *Macromolecules*, 54, 9079-9090 (2021).
9. Nano-diffraction Imaging of Polymer Crystals, S. Kanomi, H. Marubayashi, T. Miyata, K. Tsuda, H. Jinnai*, *Macromolecules*, 54, 6028-6037 (2021).
10. Cellulose nanofiber-reinforced rubber composites prepared by TEMPO-functionalization and elastic kneading, T. Noguchi*, K. Niihara, A. Kurashima, R. Iwamoto, T. Miura, A. Koyama, M. Endo, H. Marubayashi, A. Kumagai, H. Jinnai, A. Isogai*, *Compos. Sci. Technol.*, 210, 108815 (2021).
11. Nanoscale Stress Distribution in Silica Nanoparticle-filled Rubber as Observed by Transmission Electron Microscopy: Implications for Tire Application, T. Miyata,

- T. Nagao, D. Watanabe, A. Kumagai, K. Akutagawa, H. Morita, H. Jinnai*, *ACS Appl. Nano Mater.*, 4, 4452-4461 (2021).
12. Preparation of high-performance carbon nanotube/polyamide composite materials by elastic high-shear kneading and improvement of properties by induction heating treatment, T. Noguchi, K. Niihara, K. Kawamoto, M. Fukushi, H. Jinnai, K. Nakajima, M. Endo, *J. Appl. Polym. Sci.*, 138(22), e50512 (2021).
 13. Elucidation of oxygen reduction reaction and nanostructure of platinum-loaded graphene mesosponge for polymer electrolyte fuel cell electrocatalyst, A. Ohma, Y. Furuya, T. Mashio, M. Ito, K. Nomura, T. Nagao, H. Nishihara, H. Jinnai, T. Kyotani, *Electrochem. Acta*, 370, 137705 (2021).
 14. Ultra-Low Dielectric Properties of Porous Polyimide Thin Films Fabricated by Using the Two Kinds of Templates with Different Particle Sizes, Y. Kourakata, T. Onodera, H. Kasai, H. Jinnai, H. Oikawa*, *Polymer*, 212, 123115 (2021).
 15. Visualization of chemical bonding in a silica-filled rubber nanocomposite using STEM-EELS, Y. K. Sato*, Y. Kuwauchi, W. Miyoshi, H. Jinnai*, *Sci. Rep.*, 10, 21558 (2020).
 16. Networks with Controlled Chirality via Self-Assembly of Chiral Triblock Terpolymers, H.-F. Wang, P.-T. Chiu, C.-Y. Yang, Z.-H. Xie, Y.-C. Hung, J.-Y. Lee, J.-C. Tsai, I. Prasad, H. Jinnai, E. L. Thomas, R.-M. Ho*, *Sci. Adv.*, 6, eabc3644 (2020).
 17. Staining-Free Observation of Polymer Blend Thin-Film on Transmission Extreme Ultraviolet Microscopy, M. Toyoda*, S. Aizawa, S. Gondai, T. Kakudate, M. Ageishi, H. Jinnai, J. Chen, *Appl. Phys. Express*, 13, 082011 (2020).
 18. Strategy for Finely Aligned Gold Nanorod Arrays using Polymer Brushes as a Template, S. Nakamura, H. Mitomo*, Y. Sekizawa, T. Higuchi, Y. Matsuo, H. Jinnai, K. Ijro*, *Langmuir*, 36, 3590-3599 (2020).
 19. Degradation of a metal-polymer interface observed by element-specific focused ion beam-scanning electron microscopy, T. Kakubo, K. Shimizu, A. Kumagai, H. Matsumoto, M. Tsuchiya, N. Amino, H. Jinnai*, *Langmuir*, 36, 2816-2822 (2020).
 20. Cellulose nanofiber/elastomer composites with high tensile strength, modulus, toughness, and thermal stability prepared by high-shear kneading, T. Noguchi*, M. Endo, K. Niihara, H. Jinnai, A. Isogai*, *Compos. Sci. Technol.*, 188, 108005 (2020).
 21. Hierarchical structure of the triclinic a-phase crystal in nylon 6,12 mediated by two-dimensional confinement, Z. Lai, S. Zhang, N. Zheng, S. Yu, M. Ageishi, H. Jinnai and Y. Cao*, *J. Appl. Crystallogr.*, 53, 27-33 (2020).

22. An Inverse Modeling Approach for Predicting Filled Rubber Performance, J. Gao, M. Shakoor, H. Jinnai, H. Kadowaki, E. Seta, W.-K. Liu, *Comput. Methods Appl. Mech. Engrg.*, 357, 112567 (2019).
23. Visualization of the tensile fracture behaviors at adhesive interfaces between brass and sulfur-containing rubber studied by transmission electron microscopy, K. Shimizu, T. Miyata, T. Nagao, A. Kumagai, H. Jinnai*, *Polymer*, 181, 121789 (2019).
24. Self-Assembled Morphologies of Lamella-Forming Block Copolymers Confined in Conical Nanopores, Y. Kim, A. Kumagai, X. Hu, A.-C. Shi, B. Li, H. Jinnai*, K. Char*, *Macromolecules*, 52, 4803-4811 (2019).
25. Adding Symmetry: Cylindrically Confined Crystallization of Nylon-6, S. Yu, Z. Lai, H. Jinnai, X. Zeng, M. Ageishi, B. Lotz, S. Z. D. Cheng, N. Zheng, S. Zhang, X. Feng, Y. Cao*, *Macromolecules*, 52, 3298-3305 (2019).
26. Scattering Patterns and Stress-Strain Relations on Phase-separated ABA Block Copolymers under Uniaxial Elongating Simulations, K. Hagita*, K. Akutagawa, T. Tominaga, H. Jinnai, *Soft Matter*, 15, 926-936 (2019).
27. Cascade Self-Organization of Shish Kebabs in Fibers Spun from Polymer Solutions: Crystalline Fibrils Bridging Neighboring Kebabs Discovered by Transmission Electron Microtomography, H. Murase*, H. Jinnai*, T. Toriyama, T. Hashimoto*, *Macromolecules*, 52, 575-591 (2019).
28. Interfacial Morphologies and Associated Processes of Multicomponent Polymers, H. Jinnai*, *Polym. J.*, 50, 1121-1138 (2018).
29. Development of a three-dimensional tomography holder for in situ tensile deformation for soft materials, T. Higuchi, T. Gondo, H. Miyazaki, A. Kumagai, K. Akutagawa and H. Jinnai*, *Microscopy*, 67(5), 296-300 (2018).
30. Stabilizing the Ordered Bicontinuous Double Diamond Structure of Diblock Copolymer by Configurational Regularity, C.-H. Lin, T. Higuchi, H.-L. Chen*, J.-C. Tsai, H. Jinnai* and T. Hashimoto*, *Macromolecules*, 51, 4049-4058 (2018).
31. Anatomy of triply-periodic network assemblies: Characterizing skeletal and inter-domain surface geometry of block copolymer gyroids, I. Prasad, H. Jinnai, R.-M. Ho, E. L. Thomas and G. M. Grason*, *Soft Matter*, 14, 3612-3623 (2018).
32. Super-resolution for *asymmetric resolution* of FIB-SEM 3D imaging using AI with deep learning, K. Hagita*, T. Higuchi, H. Jinnai, *Sci. Rep.*, 8, 5877 (2018).
33. Enhancement of Oxygen Reduction Reaction Activity of Pd Core-Pt Shell Structured Catalyst on a Potential Cycling Accelerated Durability Test, N. Aoki*, H. Inoue, T. Okawa, Y. Ikehara, A. Shirai, H. Daimon, Y. Orikasa, Y. Uchimoto,

- H. Jinnai, S. Inamoto, Y. Otsuka and M. Inaba, *Electrocatalysis*, 9(2), 125-128 (2017).
34. Controlled Self-Assemblies of Polystyrene-*block*-polydimethylsiloxane Micelles in Cylindrical Confinement through a Micelle Solution Wetting Method and Rayleigh-Instability-Driven Transformation, H.-W. Ko, T. Higuchi, C.-W. Chang, M.-H. Cheng, K. Isono, M.-H. Chi, H. Jinnai* and J.-T. Chen*, *Soft Matter*, 13, 5428-5436 (2017).
35. Synthesis of ordered carbonaceous frameworks from organic crystals, H. Nishihara*, T. Hirota, K. Matsuura, M. Ohwada, N. Hoshino,^[SEP]T. Akutagawa, T. Higuchi, H. Jinnai, Y. Koseki, H. Kasai, Y. Matsuo, J. Maruyama, Y. Hayasaka, H. Konaka, Y. Yamada, S. Yamaguchi,^[SEP]K. Kamiya, T. Kamimura, H. Nobukuni and F. Tani, *Nature Communications*, 8, 109 (2017).
36. Three-dimensional visualization and characterization of polymeric self-assemblies by transmission electron microtomography, H. Jinnai*, T. Higuchi, X. Zhuge, A. Kumamoto, K. J. Batenburg and Y. Ikuhara, *Acc. Chem. Res.*, 50, 1293-1302 (2017).
37. Direct three-dimensional imaging of the fracture of fiber-reinforced plastic under uniaxial extension: Effect of adhesion between fibers and matrix, H. Saito, Y. Aoyanagi, T. Mihara, T. Tanaka, T. Higuchi, H. Morita* and H. Jinnai*, *Polymer*, 116, 556-564 (2017).
38. 高分子微粒子安定化液体の形成機構とその特性解析(Liquid marbles from Polymer Particles: Formation Mechanism, Physical Characterizations, and Applications), 松隈大輔, 渡邊宏臣, Hui Wu, 小河重三郎, 陣内浩司, 高原淳, *高分子論文集*, 74(1), 26-35 (2017).
39. Automated discrete electron tomography^[SEP]- Towards routine high-fidelity reconstruction of nanomaterials, X. Zhuge*, H. Jinnai, R. E. Dunin-Borkowski, V. Migunov, S. Bals, P. Cool, A.-J. Bons and K. J. Batenburg, *Ultramicroscopy*, 175, 87-96 (2017).
40. Observation of Constraint Surface Dynamics of Polystyrene Thin Films by Functionalization of a Silsesquioxane Cage, T. Hoshino, S. Nojima, M. Sato, T. Hirai, Y. Higaki, S. Fujinami, D. Murakami, S. Ogawa, H. Jinnai, A. Takahara, M. Takata, *Polymer*, 105, 487-499 (2016).
41. Evaluation of the Appropriate Size of the Finite Element Representative Volume for Filled Rubber Composite Analysis, H. Kadowaki*, G. Hashimoto, H. Okuda, H. Jinnai, E. Seta, T. Saguchi, *J. Jpn. Soc. Mech. Eng.*, 3(5), Paper No.16-00372 (2016).

42. Lateral growth of 1D core-crystalline micelles upon annealing in solution, G. Guerin, P. Rupar, G. Molev, I. Manners, H. Jinnai*, M. A. Winnik*, *Macromolecules*, 49, 7004–7014 (2016).
43. Direct Characterization of In-Plane Phase Separation in a Polystyrene Brush/Cyclohexane System, D. Murakami, Y. Norizoe, Y. Higaki, A. Takahara, H. Jinnai*, *Macromolecules*, 49, 4862-4866 (2016).
44. Swollen Structure and Electrostatic Interaction of Polyelectrolyte Brush in Aqueous Solution, D. Murakami, M. Kobayashi, Y. Higaki, H. Jinnai, A. Takahara*, *Polymer*, 98, 464-469 (2016).
45. Multipod Structures of Lamellae-Forming Diblock Copolymers^[SEP] in Three-Dimensional Confinement Spaces: Experimental Observation and Computer Simulation, T. Higuchi, M. Pinna, A. V. Zvelindovsky, H. Jinnai, H. Yabu*, *J. Polymer Sci. B Polymer Phys.*, 54, 1702-1709 (2016).
46. Controlled incorporation behavior of gold nanoparticles into ABC triblock terpolymer with double-helical morphology, T. Higuchi, H. Sugimori, H. Yabu and H. Jinnai*, *Polymer J.*, 48, 509-515 (2016).
47. Interface manipulated two-phase nanostructure in a triblock terpolymer with a short middle segment, R. Maeda, T. Higuchi, K. Okuhara, R. Kikuchi, A. Takahara, C. K. Ober, H. Jinnai*, and T. Hayakawa*, *Polymer J.*, 48, 533–538 (2016).
48. Direct observation of polyelectrolyte brushes under wet and dry conditions by atmospheric scanning electron microscopy, T. Higuchi, Y. Konyuba, H. Nishiyama, M. Suga, A. Takahara, H. Jinnai*, *Microscopy*, 65(2), 139-144 (2016).
49. Yolk/Shell Assembly of Gold Nanoparticles by Size Segregation in Solution, J. Wei, K. Niikura*, T. Higuchi, T. Kimura, H. Mitomo, H. Jinnai*, Y. Joti, Y. Bessho, Y. Nishino*, Y. Matsuo, K. Ijiro, *J. Am. Chem. Soc.*, 138, 3274-3277 (2016).
50. Silver Nanoparticle Arrays Prepared by In Situ Automatic Reduction of Silver Ions in Mussel- Inspired Block Copolymer Films, Y. Saito, T. Higuchi, H. Jinnai, M. Hara, S. Nagano, Y. Matsuo, H. Yabu*, *Macromol. Chem. Phys.*, 217, 726-734 (2016).
51. Highly Robust Crystalsome via Directed Polymer Crystallization at Curved Liquid/Liquid Interface, W. Wang, H. Qi, T. Zhou, S. Mei, L. Han, T. Higuchi, H. Jinnai, C. Li*, *Nature Communications*, 7, 10599 (2016).
52. How does CO₂ influence the phase behaviour of block copolymers synthesised by dispersion polymerisation?, J. Jennings, S. P. Bassett, D. Hermida-Merino, G.

- Portale, W. Bras, L. Knight, J. Titman, T. Higuchi, H. Jinnai, S. M. Howdle*, *Polymer Chemistry*, 7, 905-916 (2016).
53. Salt Dependence of the Chain Stiffness and Excluded-Volume Strength for the Polymethacrylate-Type Sulfopropylbetaine in Aqueous NaCl Solutions, M. Kikuchi, Y. Terayama, T. Ishikawa, T. Hoshino, M. Kobayashi, N. Ohta, H. Jinnai, A. Takahara*, *Macromolecules*, 48, 7194-7204 (2015).
54. Frozen non-equilibrium structure for anisotropically deformed natural rubber with nanomatrix structure observed by 3D FIB-SEM and TEMT techniques, L. Fukuhara, K. Kosugi, Y. Yamamoto, H. Jinnai, H. Nishioka, H. Ishii, M. Fukuda, S. Kawahara*, *Colloid Polymer Sci.*, 293(9), 2555-2563 (2015).
55. Mixing of immiscible polymers using nanoporous coordination templates, T. Uemura*, T. Kaseda, Y. Sasaki, M. Inukai, T. Toriyama, A. Takahara, H. Jinnai, S. Kitagawa*, *Nature Communications*, 6, 7473 (2015).
56. A Structural Analysis of Microphase Separated Interface in an ABC-Type Triblock Terpolymer by Combining Methods of Synchrotron-Radiation Grazing Incidence Small-angle X-ray Scattering and Electron Microtomography, R. Ishige, T. Higuchi, X. Jiang, K. Mita, H. Ogawa, H. Yokoyama, A. Takahara, H. Jinnai*, *Macromolecules*, 48, 2697-2705 (2015).
57. One-step Nanopatterning of Conjugated Polymers by Electron-Beam-Assisted Electropolymerization, T. Higuchi, H. Nishiyama, M. Suga, H. Watanabe, A. Takahara, H. Jinnai*, *Microscopy*, 64(3), 205-212 (2015).
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17. "Sponge-like" Structures in Polymer Blends: Visualization, Physico-Mathematical Analysis, and Universality, T. Hashimoto*, H. Jinnai, Y. Nishikawa, T. Koga, *Macromol. Symp.*, 190, 9-22 (2002). [Impact Factor: 0.913, Citation: 8]
18. Transmission electron microtomography of complex and nonequilibrium polymer nanostructures, R. J. Spontak*, H. Jinnai, D. A. Agard, *ABSTRACT OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY*, 224, 243-PMSE (2002). [Citation: 0]
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23. THE EFFECT OF SHEAR-FLOW ON THE DEMIXING PROCESS OF POLYMER BLENDS, K. Matsuzaka, H. Jinnai, T. Hashimoto*, *ABSTRACT OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY*, 208, 65-PMSE (1994). [Citation: 0]
24. SANS STUDIES OF EARLY STAGE SPINODAL DECOMPOSITION, T. Hashimoto, H. Jinnai, H. Hasegawa, C. C. Han, *ORDERING IN MACROMOLECULAR SYSTEMS (1st*

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Patents

1. Kobayashi, S., Sato, D., Jinnai, H. and Inoue, T. (2011): Thermoplastic resin composition, production method thereof, and molded article. USP7,960,473, EP2,017,306.
2. Kishimoto, H., Nakamae, H., Kotani, M., Dohi, H., Jinnai, H. and Kaneko, T. (2010): Mesh and method of observing rubber slice technical field. USP7,675,043.
3. Gou, Y., Miyauchi, K., Inoue, T., Takahara, A. and Jinnai, H. (2009): ADHESIVE COMPOSITION, BONDED MEMBER MADE WITH ADHESIVE COMPOSITION, SUPPORT MEMBER FOR SEMICONDUCTOR MOUNTING, SEMICONDUCTOR DEVICE, AND PROCESSES FOR PRODUCING THESE, WO2009/005130.
4. Jinnai, H., Takemoto, H., Takahashi, K., Hiraishi, M. and Nishida, Y. (2004): Light scattering sheet, light scattering composite sheet, and liquid crystal display. USP6,723,392.

14 other “Japanese patents” (listing available upon request)

Invited Talks (International Conferences)

1. “Atomic-resolution electron microscopy study on a soft/hard nano-composite interface for adhesiveness”, Hiroshi Jinnai, The Material Research Meeting 2021 (Dec 13, 2021)
2. “Nano-diffraction Imaging of Polymer Crystals”, Shusuke Kanomi, Hironori Marubayashi, Tomohiro Miyata, Kenji Tsuda and Hiroshi Jinnai, The 5th Symposium for The Core Research Cluster for Materials Science and Spintronics (October 25-28, 2021)
3. “Nanoscale Stress Distribution in Silica Nanoparticle-filled Rubber as Observed by Transmission Electron Microscopy”, Hiroshi Jinnai, WebSymposium on Functional Polymeric Materials (May 3-4, 2021, Online)
4. “Visualization of chemical bonding in a silica-filled rubber nanocomposite using STEM-EELS”, Hiroshi Jinnai, The 38th International Conference of Microscopy Society of Thailand (MST38) (March 23-26, 2021, Online meeting)
5. "Static and dynamical 3D characterizations of the organic-inorganic interface in nano-composite materials using electron microscopy", Hiroshi Jinnai, 12th Asia-Pacific Microscopy Conference (APMC-2020) (February 3-7, 2020, Hyderabad International Convention Centre, Hyderabad, India)
6. "Dynamical characterizations of organic-inorganic interface in nano-composite materials using advanced electron microscopy", Hiroshi Jinnai, the 9th International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2019) (November 19-23, 2019, Donghua University, Shanghai, China)
7. “Dynamical Characterization of Organic-Inorganic Interface in a Nano-Composite Using Electron Microscopy”, Hiroshi Jinnai, The 11th Anniversary of Federation of Asian Polymer Societies (FAPS) (October 27-30, 2019, the Howard Civil Service International House, Taipei, Taiwan)
8. “Recent Developments in Electron Tomography and FIB/SEM Serial Sectioning for 3D Morphological Analysis in Polymer Composites”, Hiroshi Jinnai, The 82nd Annual Meeting of the Meteoritical Society “Workshop on Minerals, Organics, and Water in 3D View” (July 7, 2019, Hokkaido University, Japan)
9. “Development of 3D Tomography Holder for Tensile Deformation for Soft Materials”, Hiroshi Jinnai, 10th International Conference on Materials for Advanced Technologies (June 26, 2019, Marina Bay Sands, Singapore)
10. “Dynamical characterizations of organic-inorganic interface in nano-composite materials using advanced electron microscopy”, Hiroshi Jinnai, European Polymer Congress 2019 (June 13, 2019, Creta Maris Convention Centre, Greece)
11. “Direct visualization of organic-inorganic interface by atomic force microscopy and electron tomography”, Hiroshi Jinnai, Microscopy characterisation of organic-inorganic interfaces 2019 (March 7, 2019, Harnack House, Berlin, Germany)
12. “Recent developments of morphological characterization in nano-composite materials by electron microscopy”, Hiroshi Jinnai, American Physical Society March Meeting 2019 (March 4, 2019, Boston Convention and Exhibition Center, USA)
13. “Electron microscopy for morphological studies in soft materials”, Hiroshi Jinnai, Nanyang

- Technological University for attending the FACTS Opening workshop (January 11, 2019, Singapore)
14. “Nano-Scale Visualization of a Rubber Composites under Uniaxial Deformation by Electron Microscopy”, Hiroshi Jinnai, MRS-J 2018 F-9: Design and Characterization of Tough Polymer (December 20, 2018, Kitakyushu Convention and Visitors Association, Kokura, Japan)
 15. “Morphological and Dynamical Characterizations of Rubber Composites Observed by Advanced Microscopy Techniques”, Hiroshi Jinnai, The International Conference on Polymer Science and Engineering (PSD2018) (December 15, 2018, Yifu Conference Center, Beijing University of Chemical Technology, Beijing, China)
 16. “Direct Visualization of "Bound Rubber" in Rubber Nano-Composites”, Hiroshi Jinnai, 2018 International Symposium for Soft Matter Science and Technology (November 5, 2018, Sichuan University, Chengdu, China)
 17. “Helical microphase-separated structures of an ABC-type block copolymer studied by electron tomography”, Hiroshi Jinnai, Reimund Stadler Symposium (October 15, 2018, Max Plunk Institute for Polymer Research, Mainz, Germany)
 18. “Direct Visualization of "Bound Rubber" in Rubber Nano-Composites”, by Hiroshi Jinnai, The International Symposium on Polymer Science and Engineering (October 13, 2018, Pekin University, Beijing, China)
 19. **(Keynote Lecture)** “Development of 3D tomography holder for tensile deformation of soft materials” by Hiroshi Jinnai, Materials Science Engineering (MSE) 2018 (September 26 - 28, 2018, Technical University of Darmstadt, Darmstadt, Germany)
 20. “Direct visualization of Interphase region between fillers and matrix in rubber composites observed by electron tomography with mechanical mapping”, by Hiroshi Jinnai, Division of Polymeric Materials and Engineering, Session: Multifunctional Nanocomposites & Surface Damage Phenomena in Polymers, 256th ACS National Meeting (August 21, 2018, T HE WESTIN BOSTON WATERFRONT, Boston, USA)
 21. “Nano-scale visualization of deformation and fracture phenomena in soft materials”, by Hiroshi Jinnai, Division of Polymeric Materials and Engineering, Session: Tough & Toughened Polymers, 256th ACS National Meeting (August 19, 2018, T HE WESTIN BOSTON WATERFRONT, Boston, USA)
 22. “Direct morphological observations of nano-composites under tensile deformation”, by Hiroshi Jinnai, The 13th International Symposium on Polymer Physics (PP'2018) (June 11 - 15, 2018, Xi'an Qujiang International Convention Center, Xi'an, China)
 23. “3D imaging of polymeric nanostructures by electron microscopy - towards large volume dynamical 3D imaging -”, by Hiroshi Jinnai, The 35th International Conference of the Microscopy Society of Thailand (MST35) (January 31 – February 2, 2018, Imperial Mae Ping Hotel, Chiang Mai, Thailand)
 24. “In situ nano-scale observations of polymeric materials under extension by electron microscopy” by Hiroshi Jinnai, Japan-Taiwan Bilateral Symposium – Polymeric Materials for Future Vehicles - (November 20-21, 2017, National Cheng Kung University, Tainan, Taiwan)
 25. “Some challenges for 3D imaging of polymeric nanostructures by electron microscopy” by Hiroshi Jinnai, International Symposium on Polymer and Condensed Matter Physics (November

09-11, 2017, Shenzhen, China)

26. “Nano-scale structural observations of unstained polymeric materials by transmission electron microscopy” by Hiroshi Jinnai, Japan-Taiwan Bilateral Polymer Symposium 2017 (September 6-7, 2017, Yamagata University, Yonezawa, Japan)
27. “Nano-scale structural observations of unstained polymeric materials by transmission electron microscopy”, by Hiroshi Jinnai, the International Conference on Frontiers in Materials Processing, Applications, Research and Technology (FiMPART) 2017 (July 9-12, 2017, Bordeaux, France)
28. “Challenges for 3D imaging of polymeric nanostructures by electron microscopy -towards large volume dynamical 3D imaging -”, by Hiroshi Jinnai, 30th International Symposium on Polymer Analysis and Characterization (June 11-14, 2017, Johannes Kepler University, Linz, Austria)
29. “Structure-property relationship of polymeric materials studied by electron tomography”, by Hiroshi Jinnai, 9th International Conference on Materials Science and Technology (MSAT-9) (December 14-15, 2016, Sweissotel Le Concorde, Bangkok, Thailand)
30. “Challenges for nano-scale imaging of soft materials by electron microscopy”, by Hiroshi Jinnai, International symposium on Electrocatalysis: A key of sustainable society (ECAT2016) (September 11-14, 2016, Shonan Village Center, Kanagawa, Japan)
31. “Challenges for nano-scale imaging of polymeric nanostructures by electron microscopy”, by Hiroshi Jinnai, International Conference on POLYMER SCIENCE & ENGINEERING 2016 (August 22-24, 2016, Hilton New Orleans Airport, New Orleans, USA)
32. “Direct Characterization of In-Plane Phase Separation in a Polymer Brush in Solvent” by D. Murakami, Y. Norizoe, Y. Higaki, A. Takahara and Hiroshi Jinnai, 29th International Symposium on Polymer Analysis and Characterization (ISPAC-2016) (June 12-15, 2016, Nanyang Executive Center, Singapore)
33. “Electron Microscopy of Soft Materials” by Hiroshi Jinnai, 29th International Symposium on Polymer Analysis and Characterization (ISPAC-2016) (June 12-15, 2016, Nanyang Executive Center, Singapore)
34. “Challenges for nano-scale imaging of soft materials by electron microscopy” by Hiroshi Jinnai and Takeshi Higuchi, Pacifichem2015 “New Perspectives of Synthetic and Biological Soft Matter (#57)” (December 15-20, 2015, Hawaii Convention Center, Waikiki, USA)
35. “Dynamical aspects and nano - fabrication of polymeric materials studied by electron microscopy” by Hiroshi Jinnai, International Workshop on Advanced and In-situ Microscopies of Functional Nanomaterials and Devices (IAMNano 2015) (July 8-10, 2015, Hotel Empire Riverside, Hamburg, Germany)
36. “ “Defects” of polymer nanostructures characterized by electron tomography” by Hiroshi Jinnai, 2015 TAC Meeting, Agenda: “Characterization of defects in high performance heterogeneous materials” (May 20-21, 2015, ITRI (Industrial Technology Research Institute of Taiwan), Chung-Hsing Campus, Taiwan)
37. “Dynamical aspects and nano - fabrication of polymeric materials studied by electron microscopy” by Hiroshi Jinnai, International Workshop on Nanofluid and their Application (May 13, 2015, Sakura Hall, Tohoku University)

38. “Polymer nanostructures observed by electron microscopy”, by Hiroshi Jinnai, 8th International Conference on Materials Science and Technology Tailand-Japan Polymer Initiative (December 15-16, 2014, Swissotel Le Concorde Bangkok, Tailand)
39. “Characterization and fabrication of polymeric nano-structures by advanced environmental electron microscopy”, by Hiroshi Jinnai, AsiaNano 2014 (October 26 - 29, 2014, Ramada Plaza Jeju Hotel, Jeju, Korea)
40. “Electron tomography on soft materials: 3D observation and structural analysis on polymer nano-structures”, by Hiroshi Jinnai, 1st ExxonMobil Scattering/Tomography Symposium - Quantitative Interpretation of Scattering and Tomography Images - (October 14 - 17, 2014, Woodlands, Texas, USA)
41. “Control and fabrication of polymer nano-structures studied by electron microscopy”, by Hiroshi Jinnai, 18th International Microscopy Congress (IMC2014) (September 7 - 12, 2014, Prague, Czech Republic)
42. **(Plenary Lecture)** “Control and Fabrication of Polymer Nanostructures”, by Hiroshi Jinnai, The IUMRS-ICA 2014 (International Union of Materials Research Societies, International Conference in Asia) (August 24 - 30, 2014, Fukuoka University, Fukuoka, Japan)
43. “Polymer nano-structures fabricated and observed by electron microscopy”, by Hiroshi Jinnai, The 11th International Symposium of Polymer Physics (PP'2014) (June 8 - 12, 2014, Nanjing, Jiangsu province, China)
44. “Polymer nanostructures studied by electron microscopy”, by Hiroshi Jinnai, The 2014 EMN (Energy Materials Nanotechnology) Spring Meeting (February 27 - March 2, 2014, Las Vegas, NV, USA)
45. “Morphologies and Fabrication of a Conjugated Polymer on Surfaces Studied by Electron Microscopy”, by Hiroshi Jinnai, The 13th Pacific Polymer Conference (November 17-22, 2013, Grand Hi-Lai Hotel Arena Branch, Kaohsiung, Taiwan)
46. “Three dimensional structure characterization of composite material - from nano to meso -”, by Hiroshi Jinnai, 2012 EFFoST Annual Meeting (November 20-23, 2012, Le Corum, Montpellier, France)
47. “Multi-scale three-dimensional imaging in polymeric materials”, by Hiroshi Jinnai, ISAEM-2012 The 5th International Symposium on Designing, Processing and Properties of Advanced Engineering Materials (November 5-8, 2012, Toyohashi, Japan)
48. “Self-Assemblies in an ABC Triblock Terpolymer”, by Hiroshi Jinnai, 2012 Japan-Taiwan Bilateral Polymer Symposium (2012 JTBPS): Toward Green and Life Innovation Based on Advanced Macromolecular Sciences (September 5-7, 2012, Kitakyushu, Japan)
49. “Exploring nano-structured materials with transmission electron tomography”, by Hiroshi Jinnai, **The 2012 Polymer Physics Gordon Research Conference** (July 22-27, 2012, Mount Holyoke College, Massachusetts, USA)
50. “Block copolymer self-assemblies and their orientation control studied by electron microradiography”, by Hiroshi Jinnai, The International Union of Pure and Applied Chemistry (IUPAC) World Polymer Congress (June 24-29, 2012, Virginia Tech in Blacksburg, Virginia, USA)

51. “Electron tomography of micron-thick specimens for hierarchical meso-structured materials”, by Hiroshi Jinnai, The International Union of Pure and Applied Chemistry (IUPAC) World Polymer Congress (June 24-29, 2012, Virginia Tech in Blacksburg, Virginia, USA)
52. “Exploring structured materials with tomography”, by Hiroshi Jinnai, International Symposium on Polymer Physics 2012 (June 4-8, 2012, Chengdu, China)
53. “Electron Tomography on Polymeric Self-Assembling Structures”, by Hiroshi Jinnai, The 2011 MRS Fall Meeting (November 28 - December 2, 2011, Hynes Convention Center, Boston, Massachusetts, USA)
54. “Polymer Nanostructures based on Block Copolymer Self-assemblies”, by Hiroshi Jinnai, The 12th Pacific Polymer Conference (November 13 - 17, 2011, Jeju Island, Korea)
55. “Three-dimensional morphologies of multi-component block copolymers”, by Hiroshi Jinnai, Bayreuth Polymer Symposium 2011 (September 11 - 13, 2011, Bayreuth, Germany)
56. “Self-assemblies of Multi-component Block Copolymers Studied by Transmission Electron Tomography”, by Hiroshi Jinnai, Microscopy Conference 2011 (August 28 - September 2, 2011, Kiel, Germany)
57. “Three-Dimensional Structural Studies on Nano-Composite Materials”, by Hiroshi Jinnai, KICK-OFF SYMPOSIUM “Establishment of Carbon -Cycle-System with Natural Rubber” Project (August 2 - 5, 2011, Hanoi, Vietnam)
58. “Block Copolymer Self-Assemblies Studied by Transmission Electron Tomography”, by Hiroshi Jinnai, 94th Canadian Chemistry Conference and Exhibition (CSC2011) (June 5 - 9, 2011, Montreal, Canada)
59. “Transmission electron microtomography for better understanding of complicated block copolymer self-assemblies” by Hiroshi Jinnai, The 8th Greek Polymer Society Symposium on Polymer Science and Technology honoring Professor Nikos Hadjichristidis (October 24-29, 2010, Hersonissos, Crete, at the Crete Maris Hotel, Greece)
60. “Self-assembly in an ABC-type Triblock Terpolymer” by Hiroshi Jinnai, 10th International Symposium on Advanced Organic Photonics (ISAOP-10) and 1st International Symposium on Super-hybrid Materials (ISSM-1) (September 30 – October 2, 2010, TAGEN Labs, Katahira Campus, Tohoku Univ., Sendai, Japan)
61. “Recent Development of Electron Tomography for Polymeric Nano- and Meso-Structures” by Hiroshi Jinnai, International Microscopy Congress 17 (IMC17) (September 19-24, 2010, Rio de Janeiro, Brazil)
62. “Epitaxial Phase Transitions in Block Copolymer Nano-Structures” by Hiroshi Jinnai, International Conference on Nanoscopic Colloid and Surface Science (NCSS2010); 35th Anniversary of Division of Colloid and Interface Chemistry, The Chemical Society of Japan (September 19-22, 2010, Makuhari Messe, Chiba, Japan)
63. “Self-assembling nano-structure of a block copolymer studied by transmission electron tomography” by Hiroshi Jinnai, American Chemical Society (ACS) Fall Meeting, Symposium Title: Nano-Scaled Phenomena in Polymeric Systems (August 22-26, 2010, Boston, USA)
64. “Self-assembly in an ABC-type Triblock Terpolymer”, by Hiroshi Jinnai, Taiwan-Japan Bilateral Symposium on Surface/Interface Science and Nanosoft Materials (symposium title is

tentative) (July 1-2, 2010, Hokkaido University, Sapporo, Japan)

65. “Self-assembly in an ABC-type Triblock Terpolymer studied by Transmission Electron Microtomography”, by Hiroshi Jinnai, The 3rd International Symposium on Polymer Morphology & Microscopy (PMM2010) (June 13-16, 2010, at Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China)
66. “Self-assembly in an ABC-type Triblock Terpolymer”, by Hiroshi Jinnai, 9th International Symposium of Polymer Physics (PP’2010) (June 6-10, 2010, at Ji-nan, Shandong province, China)
67. “Recent development of electron tomography for polymeric nano- and meso-structures”, by Hiroshi Jinnai, International Symposium on Polymer Analysis and Characterization (ISPAC) 2010 (May 31st – June 2nd, Pohang, Korea)
68. “Electron tomography of soft polymeric materials”, by Hiroshi Jinnai, the SofTEAM workshop (March 8-9, 2010, Berkeley CA, USA)
69. “Electron tomography for thick polymeric samples of the order of micrometer”, by Hiroshi Jinnai, 10-th International Symposium on Biomimetic Materials Processing (BMMP-10) (January 26-29, 2010, Nagoya, Japan)
70. “3D Elemental Mapping of Soft Materials using Transmission Electron Microtomography” by Hiroshi Jinnai, 7th International Symposium on Atomic Level Characterizations for New Materials and Devices ’09 (ALC’09) (December 6-11, 2009, The Westin Maui Resort & Spa, Maui, Hawaii, USA)
71. “Self-assembled polymer nano-structures” by Hiroshi Jinnai, Supergreen 2009 international symposium in supercritical fluid (October 15-17, 2009, Sendai, Japan)
72. “Helical structures formed from an amorphous, achiral ABC triblock terpolymer” by Hiroshi Jinnai, Hidekazu Sugimori, Takeshi Kaneko, Kazuyuki Matsunaga, Clarissa Abetz and Volker Abetz, International Symposium on Nano Structured Polymeric Materials: Synthesis, Characterization, and Application (October 7-9, 2009, Kwangu, Korea)
73. “Microphase-separated structure in a cylinder-forming block copolymer thin film studied by neutron reflectivity aided by transmission electron microtomography” by Ken-ichi Niihara, Ukyo Matsuwaki, Naoya Torikai, Hironori Atarashi, Keiji Tanaka and Hiroshi Jinnai, Structure of Nanophase Materials (SAS) in 2009 ACA (American Crystallographic Association) Meeting (July 25-29, 2009, Toronto, Canada)
74. “Quantitative electron tomography and its application to polymer nanostructures” by Hiroshi Jinnai, Focus Session: Grazing Incidence Scattering and New Imaging Techniques in 2009 APS (American Physical Society) March Meeting (March 16-20, 2009, Pittsburgh, Pennsylvania, USA)
75. “Electron Tomography and its Applications to Self-Assembling Polymeric Nanostructures” by Hiroshi Jinnai, WPI-AIMR (World Premier International Research Center Advanced Institute for Materials Research) Annual Workshop 2009 (March 1-6, Miyagi Zao Royal Hotel, Japan)
76. “Electron Tomography on Soft Materials: A self-assembly in a block copolymer”, by Hiroshi Jinnai, Sohei Motoki, Yoshitaka Aoyama, Takeshi Kaneko, Yoshihiro Ohkura, APCET (Asia-Pacific Congress on Electron Tomography) (January 31-February 4, 2009, Brisbane, Australia)

77. “Electron Tomography on Soft Materials: A self-assembly in a block copolymer”, by Hiroshi Jinnai, Takeshi Kaneko, Kazuyuki Matsunaga, Clarissa Abetz, Volker Abetz, Sohei Motoki, Yoshitaka Aoyama, Yoshihiro Ohkura, 9-th International Symposium on Biomimetic Materials Processing (BMMP-9) (January 20-23, 2009, Nagoya, Japan)
78. “Direct Three-Dimensional Visualization and Morphological Analysis of Fuel Cell Electrodes by Transmission Electron Micro-Tomography”, by Hiroshi Jinnai, Pacific Rim Meeting on Electrochemical and Solid-State Science (PRiME 2008) (October 12-17, 2008, Honolulu, Hawaii, USA)
79. “Quantitative Electron Tomography on Polymer Systems and its Applications to Block Copolymers”, by Hiroshi Jinnai, Dutch Polymer Institute Microscopy Symposium (September 8 2008, Eindhoven, Netherland)
80. “Self-assembled block copolymer structures studied by transmission electron microtomography”, by Hiroshi Jinnai, Takeshi Kaneko, Clarissa Abetz and Volker Abetz, European Microscopy Congress 2008 (EMC2008) (September 1-5, 2008, Aachen, Germany)
81. “Self-Assembling Nano-Structures in Multi-components Block Copolymers”, by Hiroshi Jinnai, Taiwan-Japan Bilateral Symposium on Surface/Interface Science and nanosoft Materials (August 8-10, 2008, Taroko Grand Formosa Hotel, Taiwan)
82. “A Block Copolymer Superstructures Studied by Transmission Electron Microtomography”, by Hiroshi Jinnai, International Symposium on Polymer Physics (PP'2008) (June 8-12, 2008, Xiamen, China)
83. “Non-Equilibrium Processes and Three-Dimensional Morphologies in Soft Matter Systems”, by Hiroshi Jinnai, International Symposium on Non-Equilibrium Soft Matter (June 2-5, 2008, Kyoto, Japan)
84. “Self-Assembling Nano-Structures in Multi-Components Block Copolymers”, by Hiroshi Jinnai, International Symposium on Engineering Micro-/Nano-Materials based on Self-Assembling and Self-Organization (ISEM2008) (March 3-5, 2008, Tokyo, Japan)
85. “Self-assembled morphologies in multi-component block copolymers”, by Hiroshi Jinnai, 8-th International Symposium on Biomimetic Materials Processing (BMMP-8) (January 21-24, 2008, Nagoya, Japan)
86. “Self-assembling Structures of Block Copolymers Studied by Electron Tomography”, by Hiroshi Jinnai, The Second International Symposium on Polymer Materials Science (December 10-11, 2007, Gaithersburg, MA, USA)
87. “Electron tomography on polymer nano-structures”, by Hiroshi Jinnai, 7th Sino-Japanese Seminar on Polymer Nanotechnology (November 26-29, 2007, Shanghai, China)
88. “Self-assembling block copolymer morphologies studied by transmission electron microtomography” by Hiroshi Jinnai, China-Netherlands bilateral symposium on electron microscopy of polymer systems (November 14~16, 2007, Beijing, China)
89. “Three-Dimensional Imaging and Structural Analyses for Polymer Related Materials” by Hiroshi Jinnai, 20th International Symposium on Polymer Analysis and Characterization (ISPAC-2007) (October 1~3, 2007, Crete, Greece)
90. “Transmission Electron Microtomography in Polymer Systems” by Hiroshi Jinnai, the

International Symposium on Polymer Analysis and Characterization (ISPAC2007) Optional Short Course (September 30, 2007, Crete, Greece)

91. “Geometrical Aspects of Polymer Morphologies Studied by Electron Tomography” by Hiroshi Jinnai, 11th Frontiers of Electron Microscopy in Materials Science Conference (FEMMS2007) (September 27-28, 2007, Sonoma, CA, USA)
92. “Recent Development of Transmission Electron Microtomography for Quantitative Nano-scale Structural Analysis”, by Hiroshi Jinnai, the International Symposium on Polymer Analysis and Characterization (ICXOM2007) (September 16-21, 2007, Kyoto, Japan)
93. (**Ernst Ruska Distinguished Lecture**) “Quantitative Electron Tomography: Beyond the 3D Imaging”, by Hiroshi Jinnai, the Microscopy Conference 2007 (MC2007) (September 2-7 2007, Saarland University, Saarbrücken, Germany)
94. “Transmission Electron Microtomography for Quantitative Structural Analysis” by Hiroshi Jinnai, Microscopy & Microanalysis 2007 Meeting (M&M 2007) (August 5-9 2007, Broward County Convention Center, Ft. Lauderdale, Florida, USA)
95. “Direct three-dimensional visualization and morphological analysis of fuel cell electrodes by transmission electron microtomography” by Hiroshi Jinnai, **the Gordon Research Conference Fuel Cell** (July 22-27, 2007, Bryant University, Smithfield, RI, USA)
96. (**Plenary Lecture**) “Three-Dimensional TEM Observation and Structural Analysis in Rubber/Filler Systems” by Hiroshi Jinnai, the American Chemical Society Rubber Division 171st Technical Meeting (April 30-May 2, 2007, Akron, OH, USA)
97. “Microphase-Separated Structures of a Cylinder-Forming Block Copolymer in Thin Films” by Hidekazu Sugimori, Ukyo Matsuwaki, Hiroshi Jinnai, “Mini Symposium on Development and Characterization of New Functional NanoMaterials based on Block Copolymers” in Annual Meeting of the Korean Polymer Society (April 12-13, 2007, Jeju Island, Korea)
98. “Three-dimensional visualization and analysis of polymer nano-structures”, by Hiroshi Jinnai, 7-th International Symposium on Biomimetic Materials Processing (BMMP-7) (January 23-25, 2007, Nagoya, Japan)
99. “Recent development of transmission electron microtomography and its applications to polymer science”, by Hiroshi Jinnai, 2007 Annual Polymer Symposium of Taiwan (January 19-20, 2007, Taipei, Taiwan)
100. “Three-Dimensional Structural Analysis of Nano-composite Materials by Transmission Electron Microtomography”, by Hiroshi Jinnai, The 16th International Microscopy Congress (IMC16) (September 3-8, 2006, The Sapporo Congress Center, Sapporo, Japan)
101. “Three-Dimensional Visualization and Analysis of Polymeric Nanostructures”, by Hiroshi Jinnai, World Polymer Congress - Macro 2006 (July 16-21, 2006, Windsor Barra Hotel, Rio de Janeiro, Brazil)
102. “Three-Dimensional Visualization and Analysis of Polymeric Nanostructure - Effect of Confinement on Microphase-Separated Structures in Cylinder-Forming Block Copolymer Thin Film”, by Hiroshi Jinnai, 7th International Symposium of Polymer Physics (PP2006) (June 1-5, 2006, Suzho, Jiangsu province, China)
103. “3D Characterization of Polymer Nanostructure by Transmission Electron Microscopy”, by

- Hiroshi Jinnai, at 14th POLYCHAR World Forum on Advanced Materials (April 17-27, 2006, Nara, Japan)
104. “3D Characterization of Polymer Nanostructure by Transmission Electron Microtomography”, by Hiroshi Jinnai, The 21th Century COE Program, 6th International Symposium on “Global Renaissance by Green Energy Revolution” (January 26-27, 2006, Nagaoka University of Technology, Nagaoka, Niigata)
 105. “Three-dimensional characterization of block copolymer nanostructures by transmission electron microtomography”, by Hiroshi Jinnai, PACIFICHEM2005 “Precise Characterization of Complex Polymers and Their Hierarchical Structures” (December 15-20, 2005, Honolulu, Hawaii)
 106. “Grain Boundary Morphologies of Block Copolymers Studied by Transmission Electron Microtomography”, by Hiroshi Jinnai, Singapore International Chemical Conference IV (SICC-4) (December 8-10, 2005, Singapore)
 107. “Three-dimensional structural analysis of multi-component nano-fillers in rubbery matrix studied by transmission electron microtomography”, by Hiroshi Jinnai, The International Rubber Conference 2005 YOKOHAMA (IRC 2005) (October 24-28, 2005, Pacifico Yokohama, Yokohama, Japan) 注：優秀演題（15件選定）として、記者会見において、その概要が報道各社に事前に説明された。
 108. “Grain Boundary Morphologies of Block Copolymer Nanostructures Studied by Transmission Electron Microtomography”, by Hiroshi Jinnai, "Defects in Polymer Nanostructures" for the 230th Fall ACS meeting (August 28- September 1, 2005, Washington D.C., USA)
 109. “Three-dimensional structural analysis on phase-separated morphologies”, by Hiroshi Jinnai, The 8th SPSJ International Polymer Conference (IPC 2005) (July 26-29, 2005, Fukuoka International Congress Center, Fukuoka, Japan)
 110. “Determination of three-dimensional spatial arrangement of metal particles in bicontinuous polymer matrix by transmission electron microtomography”, by Hiroshi Jinnai, Yukihiro Nishikawa, Takeshi Kaneko, Hirokazu Hasegawa, Toshio Nishi, 5-th International Symposium on Biomimetic Materials Processing (BMMP-5) (January 26-28, 2003, Nagoya, Japan)
 111. “Three Dimensional Imaging with Electron Energy Loss Spectroscopy”, by Hiroshi Jinnai, Hideo Nishioka, Yukihiro Nishikawa, Takeshi Kaneko, Ken-ichi Nihara, Hiromitsu Furukawa, Miyoko Shimizu, Hirokazu Hasegawa, and Toshio Nishi, 8th Asia-Pacific Conference on Electron Microscopy (June 7-11, 2004, Kanazawa, Japan)
 112. “Direct Observation of Three-Dimensional Morphologies in Polymer Nano-Structures”, by Hiroshi Jinnai, Yukihiro Nishikawa, Takeshi Kaneko, Ken-ichi Nihara, Toshio Nishi, The 11th International Symposium on Advanced Materials (March 9, 2004, Tokyo, Japan)
 113. “Development of Bicontinuous Organic-Inorganic Hybrid Materials”, by Hiroshi Jinnai, Kazuki Hamano, Ikuo Taniguchi, Takashi Kato, Hirokazu Hasegawa, Third International Symposium on Biomimetic Materials Processing (BMMP-3) (January 27-29, 2003, Nagoya, Japan)
 114. “Morphological Similarity Between a Trabecular Bone Micro-Architecture and a Phase-Separated Structure in a Polymer Mixture” by Hiroshi Jinnai, Masako Ito, Richard J. Spontak,

Second International Symposium on Biomimetic Materials Processing (BMMP-2), (January 15-17, 2002, Nagoya, Japan)

115. “Curvature Measurements of Interface in Bicontinuous Phase-Separated Structures of a Polymer Blend” by Hiroshi Jinnai, Yukihiro Nishikawa, Tsuyoshi Koga, and Takeji Hashimoto, INTERFACIAL ASPECTS OF MULTICOMPONENT POLYMER MATERIALS, 212th American Chemical Society (ACS) National Meeting (August 25-30, 1996, Orlando, Florida, USA)

160 Invited talks inside Japan