

【2015 年】

- 1 R. Kajimoto, M. Nakamura, Y. Inamura, K. Kamazawa, K. Ikeuchi, K. Iida, M. Ishikado, K. Nakajima, M. Harada, M. Arai  
*Background Caused by Continuously Emitted High-Energy Neutrons at the Chopper Spectrometer 4SEASONS*  
*JPS Conf. Ser.*, **8**, 036001, (2015).  
<https://doi.org/10.7566/jpscp.8.036001>  
MLF : BL01
  
- 2 Shuichi Wakimoto, Kazuhiko Ikeuchi, Masatoshi Arai, Masaki Fujita, Ryoichi Kajimoto, Sho Kawamura, Masato Matsuura, Kenji Nakajima, Kazuyoshi Yamada  
*Neutron Scattering Study of Spin Fluctuations in La<sub>2-x</sub>Sr<sub>x</sub>CuO<sub>4</sub> by Four-Dimensional Mapping of Neutron Cross-Sections Using the 4SEASONS Chopper Spectrometer*  
*JPS Conference Proceedings*, **8**, 34013, (2015).  
<https://doi.org/10.7566/JPSCP.8.034013>  
MLF : BL01
  
- 3 M. Nakamura, Y. Kawakita, W. Kambara, K. Aoyama, R. Kajimoto, K. Nakajima, S. Ohira-Kawamura, K. Ikeuchi, T. Kikuchi, Y. Inamura, K. Iida, K. Kamazawa, M. Ishikado  
*Oscillating Radial Collimators for the Chopper Spectrometers at MLF in J-PARC*  
*JPS Conf. Ser.*, **8**, 036011, (2015).  
<https://doi.org/10.7566/jpscp.8.036011>  
MLF : BL01
  
- 4 K. Ikeuchi, M. Sato, S. Li, M. Toyoda, Y. Kobayashi, M. Itoh, P. Miao, S. Torii, Y. Ishikawa, T. Kamiyama  
*Detailed Study of the Phase Diagram of Fe-based Superconductor Ba(Fe<sub>1-x</sub>Cox)<sub>2</sub>As<sub>2</sub> by Super High-Resolution Neutron Diffraction Measurements*  
*INTERNATIONAL CONFERENCE ON STRONGLY CORRELATED ELECTRON SYSTEMS 2014 (SCES2014)*, **592**, 012071, (2015).  
<https://doi.org/10.1088/1742-6596/592/1/012071>  
MLF : BL08

- 5 Akiko Nakao, Hironori Nakao, Kenji Ohoyama, Shuki Torii, Junrong Zhang, Takashi Kamiyama, Youichi Murakami, Wataru Kobayashi, Ichiro Terasaki  
*Magnetic and Crystal Structures of the Room Temperature Ferrimagnet Sr<sub>3</sub>YCo<sub>4</sub>O<sub>10.5</sub>*  
*JPS Conf. Proc.*, **8**, 034010, (2015).  
<https://doi.org/10.7566/jpscp.8.034010>  
MLF : BL08
- 6 Koichi Kino, Masao Yonemura, Yoshiaki Kiyonagi, Yoshihisa Ishikawa, Joseph. Don. Parker, Toru Tanimori, Takashi Kamiyama  
*First Imaging Experiment of a Lithium Ion Battery by a Pulsed Neutron Beam at J-PARC/MLF/BL09*  
*Physics Procedia*, **69**, 612, (2015).  
<https://doi.org/10.1016/j.phpro.2015.07.087>  
MLF : BL09
- 7 Dai Yamazaki, Mikinori Nagano, Ryuji Maruyama, Hiroto Hayashida, Kazuhiko Soyama, Kazuya Yamamura  
*Neutron Focusing by a Kirkpatrick–Baez Type Super-Mirror*  
*Proceedings of the 2nd International Symposium on Science at J-PARC — Unlocking the Mysteries of Life, Matter and the Universe —*, (2015).  
<https://doi.org/10.7566/jpscp.8.051009>  
MLF : BL10, 中性子基盤
- 8 T. Hattori, A. Sano-Furukawa, H. Arima, K. Komatsu, A. Yamada, Y. Inamura, T. Nakatani, Y. Seto, T. Nagai, W. Utsumi, T. Iitaka, H. Kagi, Y. Katayama, T. Inoue, T. Otomo, K. Suzuya, T. Kamiyama, M. Arai, T. Yagi  
*Design and performance of high-pressure PLANET beamline at pulsed neutron source at J-PARC*  
*NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT*, **780**, 55, (2015).  
<https://doi.org/10.1016/j.nima.2015.01.059>  
MLF : BL11
- 9 H. Kira, H. Hayashida, H. Iwase, K. Ohishi, J. Suzuki, T. Oku, K. Sakai, K. Hiroi, S.

Takata, T., Ino, K., Ohoyama, M., Ohkawara, T., Shinohara, K., Kakurai, K., Aizawa, M., Arai  
*Demonstration study of small-angle polarized neutron scattering using polarized  
3He neutron spin filter*

*JPS Conf. Proc.*, **8**, 036008-1, (2015).

<https://doi.org/10.7566/JPSCP.8.036008>

MLF : BL15

- 10 H. Iwase, N. K. Kawano, K. Akutsu, T. Yoshimura  
*SANS and SAXS studies on the aggregates properties of a gemini-type amphiphilic  
dendrimer in solution*

*JPS Conf. Proc.*, **8**, 033012, (2015).

MLF : BL15

- 11 K. Akutsu, H. Iwase, Y. Nakatani, T. Yoshimura  
*Structural Study of a Gold Nanoparticle/Sugar-type Surfactant Complex by SANS,  
SAXS, TEM, and EXAFS Techniques*

*JPS Conf. Proc.*, **8**, 033011, (2015).

<https://doi.org/10.7566/JPSCP.8.033011>

MLF : BL15

他施設 : あいちシンクロトロン

- 12 S. Takata, J. Suzuki, T. Shinohara, T. Oku, T. Tominaga, K. Ohishi, H. Iwase, T.  
Nakatani, Y. Inamura, T. Ito, K. Suzuya, K. Aizawa, M. Arai, T. Otomo, M. Sugiyama  
*The design and q resolution of the small and wide angle neutron scattering  
instrument (TAIKAN) in J-PARC*

*JPS Conf. Proc.*, **8**, 036020-1, (2015).

<https://doi.org/10.7566/JPSCP.8.036020>

MLF : BL15

- 13 Y. Nii, T. Nakajima, A. Kikkawa, Y. Yamasaki, K. Ohishi, J. Suzuki, Y. Taguchi, T.  
Arima, Y. Tokura, Y. Iwasa

*Uniaxial stress control of skyrmion phase*

*NATURE COMMUNICATIONS*, **6**, 8539, (2015).

<https://doi.org/10.1038/ncomms9539>

MLF : BL15

- 14 Y. Sakaguchi, H. Asaoka, Y. Uozumi, Y. Kawakita, T. Ito, M. Kubota, D. Yamazaki, K. Soyama, M. Ailavajhala, M. R. Latif, K. Wolf, M. Mitkova, M. W.A. Skoda  
*Dynamics of silver photo-diffusion into Ge-chalcogenide films: Time-resolved neutron reflectometry*  
*Journal of Physics: Conference Series*, **619**, (2015).  
<https://doi.org/10.1088/1742-6596/619/1/012046>  
MLF : BL17
- 15 Yoshifumi Sakaguchi, Hidehito Asaoka, Yuki Uozumi, Yukinobu Kawakita, Takayoshi Ito, Masato Kubota, Dai Yamazaki, Kazuhiko Soyama, Mahesh Ailavajhala, Kasandra Wolf, Maria Mitkova, Maximilian W. A. Skoda  
*Measurement of Transient Photo-Induced Changes in Thin Films at J-PARC — Time-Resolved Neutron Reflectivity Measurements of Silver Photo-Diffusion into Ge-Chalcogenide Films*  
*JPS Conf. Proc.*, **8**, 031023-1, (2015).  
<https://doi.org/10.7566/JPSCP.8.031023>  
MLF : BL17
- 16 K. Akutsu, M. Sahara, N. Miyata, T. Niizeki, S. Nagayama, Y. Hasegawa, A. Shimomura, M. Yoshii  
*Study of a Corrosion Resistant Coating Layer for Metal Magnetic Cores Using Neutron Reflectometry*  
*Proceedings of the 12th Annual Meeting of Particle Accelerator Society of Japan*, **71**, (2015).  
MLF : BL17
- 17 Takashi Ohhara, Ryoji Kiyonagi, Koji Kaneko, Itaru Tamura, Akiko Nakao, Takayasu Hanashima, Koji Munakata, Taketo Moyoshi, Tetsuo Kuroda, Kenichi Oikawa, Takuro Kawasaki, Yasuhiro Yamauchi, Seiko Ohira-Kawamura  
*Current Status of an Extreme Environment Single Crystal Neutron Diffractometer SENJU at J-PARC*  
*JPS Conf. Proc.*, **8**, 036018, (2015).  
<https://doi.org/10.7566/jpscp.8.036018>  
MLF : BL18
- 18 Ryoji Kiyonagi, Yasumitsu Matsuo, Takashi Ohhara, Takuro Kawasaki, Kenichi

Oikawa,Koji Kaneko,Itaru Tamura,Takayasu Hanashima,Koji Munakata,Akiko Nakao,Yukinobu Kawakita

*Phase Transition and Internal Crystal Structure of Superprotonic Conductor, Rb<sub>3-x</sub>K<sub>x</sub>H(SeO<sub>4</sub>)<sub>2</sub>*

*JPS Conf. Proc.*, **8**, 031012, (2015).

<https://doi.org/10.7566/jpscp.8.031012>

MLF : BL18

- 19 Kazuki Komatsu,Koji Munakata,Kazuyuki Matsubayashi,Yoshiya Uwatoko,Yoshihiko Yokoyama,Kazumasa Sugiyama,Masaaki Matsuda

*Zr-based bulk metallic glass as a cylinder material for high pressure apparatuses*

*HIGH PRESSURE RESEARCH*, **35**, 254, (2015).

<https://doi.org/10.1080/08957959.2015.1041939>

MLF : BL18, BL19

- 20 Yoshiaki Kobayashi,Shohei Kototani,Kazuki Ohishi,Masayuki Itoh,Akinori Hoshikawa,Toru Ishigaki,Masatoshi Sato

*Identification of Various Coexisting Phases in Superconducting and Non-superconducting Samples of RbxFe<sub>2-y</sub>Se<sub>2</sub>*

*JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN*, **84**, 044710-1, (2015).

<https://doi.org/10.7566/JPSJ.84.044710>

MLF : BL20

他施設 : TRIUMF

- 21 Tetsuya Yokoo,Kenji Ohoyama,Shinichi Itoh,Kazuaki Iwasa,Naokatsu

Kaneko,Junichi Suzuki,Manabu Ohkawara,Kazuya Aizawa,Seiji Tasaki,Takashi Ino,Kaoru Taketani,Shigeru Ishimoto,Masayasu Takeda,Takayuki Oku,Hiroshi Kira,Kouichi Hayashi,Hiroyuki Kimura,Taku J. Sato

*Polarized neutron spectrometer for inelastic experiments at J-PARC Status of POLANO Project*

*QENS/WINS 2014 - 11TH INTERNATIONAL CONFERENCE ON QUASIELASTIC NEUTRON SCATTERING AND 6TH INTERNATIONAL WORKSHOP ON INELASTIC NEUTRON SPECTROMETERS*, **83**, (2015).

<https://doi.org/10.1051/epjconf/20158303018>

MLF : BL23

- 22 K.Moriyama,T.Nakatani  
*A Data Management Infrastructure for Neutron Scattering Experiments in J-PARC/MLF*  
*Proceedings of 15th International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPCS2015)*, 834, (2015).
- 23 T. Mizumoto,D. Tomono,A. Takada,T. Tanimori,S. Komura,H. Kubo,Y. Matsuoka,Y. Mizumura,K. Nakamura,S. Nakamura,M. Oda,J. D. Parker,T. Sawano,N. Bando,A. Nabetani  
*A performance study of an electron-tracking Compton camera with a compact system for environmental gamma-ray observation*  
*JOURNAL OF INSTRUMENTATION*, **10**, (2015).  
<https://doi.org/10.1088/1748-0221/10/06/C06003>
- 24 T. Tanimori,H. Kubo,A. Takada,S. Iwaki,S. Komura,S. Kurosawa,Y. Matsuoka,K. Miuchi,S. Miyamoto,T. Mizumoto,Y. Mizumura,K. Nakamura,S. Nakamura,M. Oda,J. D. Parker,T. Sawano,S. Sonoda,T. Takemura,D. Tomono,K. Ueno  
*AN ELECTRON-TRACKING COMPTON TELESCOPE FOR A SURVEY OF THE DEEP UNIVERSE BY MeV GAMMA-RAYS*  
*ASTROPHYSICAL JOURNAL*, **810**, (2015).  
<https://doi.org/10.1088/0004-637X/810/1/28>
- 25 K. Kino,M. Yonemura,Y. Ishikawa,T. Kamiyama  
*Application of the J-PARC neutron beam on the transmission measurement for a Li ion battery during charge and discharge*  
*JPS Conference Series*, **8**, 031021, (2015).  
<https://doi.org/10.7566/JPSCP.8.031021>
- 26 Y. Morino,Y. Nakatsugawa,M. Yosoi,M. Niiyama,M. Sumihama,T. Nakano,D. S. Ahn,J. K. Ahn,S. Ajimura,W. C. Chang,J. Y. Chen,S. Date,H. Fujimura,S. Fukui,K. Hicks,T. Hiraiwa,T. Hotta,S. H. Hwang,K. Imai,T. Ishikawa,Y. Kato,H. Kawai,M. J. Kim,H. Kohri,Y. Kon,P. J. Lin,K. Mase,Y. Maeda,M. Miyabe,N. Muramatsu,H. Noumi,Y. Ohashi,T. Ohta,M. Oka,J. D. Parker,C. Rangacharyulus,S. Y. Ryu,T. Saito,T. Sawada,H. Shimizu,E. A. Stokovsky,Y. Sugaya,K. Suzuki,K. Tanida,A. Tokiyasu,T. Tomioka,T. Tsunemi,M. Uchida,R. Yamamura,T. Yorita  
*Backward-angle photoproduction of omega and eta ' mesons from protons in the*

*photon energy range from 1.5 to 3.0 GeV*

*PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS*, **2015**, (2015).

<https://doi.org/10.1093/ptep/ptu167>

- 27 Fujii, K., Makino, T., Hashimoto, K., Sakai, T., Kanakubo, M., Shibayama, M.  
*Carbon Dioxide Separation Using a High-toughness Ion Gel with a Tetra-armed Polymer Network*  
*Chemistry Letters*, **44**, (2015).  
<https://doi.org/10.1246/cl.140795>
- 28 Shiro Entani, Liubov Yu Antipina, Pavel V. Avramov, Manabu Ohtomo, Yoshihiro Matsumoto, Norie Hirao, Iwao Shimoyama, Hiroshi Naramoto, Yuji Baba, Pavel B. Sorokin, Seiji Sakai  
*Contracted interlayer distance in graphene/sapphire heterostructure*  
*NANO RESEARCH*, **8**, 1535, (2015).  
<https://doi.org/10.1007/s12274-014-0640-7>
- 29 Kazuki Komatsu, Ayako Shinozaki, Shinichi Machida, Takuto Matsubayashi, Mao Watanabe, Hiroyuki Kagi, Asami Sano-Furukawa, Takanori Hattori  
*Crystal structure of magnesium dichloride decahydrate determined by X-ray and neutron diffraction under high pressure*  
*Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials*, **71**, 74, (2015).  
<https://doi.org/10.1107/S205252061500027X>
- 30 Akihiko Nakatsuka, Hiroshi Arima, Osamu Ohtaka, Keiko Fujiwara, Akira Yoshiasa, M. Weil  
*Crystal structure of  $\text{SrGeO}_3$  in the high-pressure perovskite-type phase*  
*Acta Crystallographica Section E: Structure Reports Online*, **71**, 502, (2015).  
<https://doi.org/10.1107/S2056989015007264>
- 31 D. Sulistyanintyas, M. Yonemura, Y. Ishikawa, A. Hoshikawa, T. Ishigaki, T. Kamiyama, Y. Ukyo, H. Arai, Y. Uchimoto, Z. Ogumi  
*Crystal-local structure analyses of cathode materials for LIB  $\text{LiCo}_{1-x}\text{Ni}_x\text{O}_2$  ( $0 \leq x \leq 1$ ) studied by neutron diffraction*

*JPS Conference Series*, **8**, 031017, (2015).

<https://doi.org/10.7566/JPSCP.8.031017>

- 32 Tomoaki Kubo, Takumi Kato, Yuji Higo, Ken ichi Funakoshi  
*Curious kinetic behavior in silica polymorphs solves seifertite puzzle in shocked meteorite*  
*Science Advances*, **1**, (2015).  
<https://doi.org/10.1126/sciadv.1500075>
- 33 Itsuki Saito, Tsukasa Miyazaki, Katsuhiko Yamamoto  
*Depth-Resolved Structure Analysis of Cylindrical Microdomain in Block Copolymer Thin Film by Grazing-Incidence Small-Angle X-ray Scattering Utilizing Low-Energy X-rays*  
*Macromolecules*, **48**, 8190, (2015).  
<https://doi.org/10.1021/acs.macromol.5b01883>
- 34 Kosuke Hiroi, Takenao Shinohara, Hirotohi Hayashida, Naohiro Wada, Kenichi Oikawa, Masahide Harada, Tetsuya Kai, Masatoshi Arai  
*Development of AC magnetic field imaging technique using polarized pulsed neutrons at J-PARC*  
*JPS Conf. Proc.*, **8**, 035001, (2015).
- 35 T. Oku, H. Hayashida, H. Kira, K. Sakai, K. Hiroi, T. Shinohara, Y. Sakaguchi, T. Ino, M. Ohkawara, K. Ohoyama, L.-J. Chang, M. Nakamura, J. Suzuki, H.M. Shimizu, K. Aizawa, M. Arai, Y. Endoh, K. Kakurai  
*Development of an in-situ spin-exchange optical pumping  $^3\text{He}$  neutron spin filter*  
*Proc. of the 21st Meeting of the International Collaboration on Advanced Neutron Sources, Sep. 29-Oct. 3, 2014, Mito*, 371, (2015).
- 36 Sakai, Kenji, Oku, Takayuki, Hayashida, Hirotohi, Kira, Hiroshi, Hiroi, Kosuke, Ino, Takashi, Oyama, Kenji, Okawara, Manabu, Kakurai, Kazuhisa, Shinohara, Takenao, Oikawa, Kenichi, Harada, Masahide, Aizawa, Kazuya, Arai, Masatoshi, Sakaguchi, Yoshifumi, Suzuki, Junichi  
*Development status of the NMR system for the polarized  $^3\text{He}$  Neutron Spin Filter (NSF) in the MLF at J-PARC*  
*JPS Conference Proceedings (Internet)*, **8**, 036015\_1, (2015).



<https://doi.org/10.7566/JPSCP.8.036015>

- 37 Makoto Hashimoto, Elizabeth A. Nowadnick, Rui-Hua He, Inna M. Vishik, Brian Moritz, Yu He, Kiyohisa Tanaka, Robert G. Moore, Donghui Lu, Yoshiyuki Yoshida, Motoyuki Ishikado, Takao Sasagawa, Kazuhiro Fujita, Shigeyuki Ishida, Shinichi Uchida, Hiroshi Eisaki, Zahid Hussain, Thomas P. Devereaux, Zhi-Xun Shen  
*Direct spectroscopic evidence for phase competition between the pseudogap and superconductivity in Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub>+ $\delta$*   
*NATURE MATERIALS*, **14**, 37, (2015).  
<https://doi.org/10.1038/NMAT4116>
- 38 Kiseki Nakamura, Kentaro Miuchi, Toru Tanimori, Hidetoshi Kubo, Atsushi Takada, Joseph D. Parker, Tetsuya Mizumoto, Yoshitaka Mizumura, Hironobu Nishimura, Hiroyuki Sekiya, Atsushi Takeda, Tatsuya Sawano, Yoshihiro Matsuoka, Shotaro Komura, Yushiro Yamaguchi, Takashi Hashimoto  
*Direction-sensitive dark matter search with gaseous tracking detector NEWAGE-0.3b'*  
*PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS*, **2015**, (2015).  
<https://doi.org/10.1093/ptep/ptv041>
- 39 Tomohiro Ohuchi, Takaaki Kawazoe, Yuji Higo, K. I. Funakoshi, Akio Suzuki, Takumi Kikegawa, Tetsuo Irifune  
*Dislocation-accommodated grain boundary sliding as the major deformation mechanism of olivine in the Earth's upper mantle*  
*Science Advances*, **1**, (2015).  
<https://doi.org/10.1126/sciadv.1500360>
- 40 Yukihiro Kawamura, Fujio Izumi  
*Disordered Arrangements of Guest Molecules in CO Clathrate Hydrates*  
*Hamon*, **25**, 22, (2015).
- 41 Shudo, Y., Izumi, A., Takeuchi, T., Nakao, T., Shibayama, M.  
*Dynamic light scattering study of the curing mechanisms of novolac-type phenolic resins*  
*Polymer Journal*, **47**, (2015).

<https://doi.org/10.1038/pj.2015.15>

- 42 Fanni Juranyi, Martin Mansson, Jorge L. Gavilano, Mattia Mena, Ekaterina Pomjakushina, Marisa Medarde, Jun Sugiyama, Kazuya Kamazawa, Bertram Batlogg, Hans R. Ott, Tilo Seydel  
*Dynamics across the structural transitions at elevated temperatures in Na<sub>0.7</sub>CoO<sub>2</sub>*  
*QENS/WINS 2014 - 11TH INTERNATIONAL CONFERENCE ON QUASIELASTIC NEUTRON SCATTERING AND 6TH INTERNATIONAL WORKSHOP ON INELASTIC NEUTRON SPECTROMETERS*, **83**, (2015).  
<https://doi.org/10.1051/epjconf/20158302008>
- 43 N. Murai, T. Masui, M. Ishikado, S. Ishida, H. Eisaki, S. Uchida, S. Tajima  
*Electronic Raman scattering on out-of-plane disordered Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+δ</sub>: How the pseudogap affects the superconducting Raman response*  
*Physical Review B - Condensed Matter and Materials Physics*, **91**, (2015).  
<https://doi.org/10.1103/PhysRevB.91.214520>
- 44 Khairulina, K., Li, X., Nishi, K., Shibayama, M., Chung, U., Sakai, T.  
*Electrophoretic mobility of semi-flexible double-stranded DNA in defect-controlled polymer networks: Mechanism investigation and role of structural parameters*  
*Journal of Chemical Physics*, **142**, (2015).  
<https://doi.org/10.1063/1.4922367>
- 45 Y. Ishikawa, T. Sakuma, T. Hashimoto, Xianglian, O. Kamishima, S.A. Danilkin  
*Estimation of Phonon Dispersion Relations Using Correlation Effects Among Thermal Displacements of Atoms*  
*Atom Indonesia*, **41**, 1, (2015).  
<https://doi.org/10.17146/aij.2015.349>
- 46 Tsukasa Miyazaki, Yuuki Takeda, Akie Hoshiko, Keisuke Shimokita, Daisuke Ogomi  
*Evaluation of oriented amorphous regions in polymer films during uniaxial deformation; Structural characterization of a poly(vinyl alcohol) film during stretching in boric acid aqueous solutions*  
*Polymer Engineering and Science*, **55**, 513, (2015).  
<https://doi.org/10.1002/pen.23913>

- 47 Izumi, A., Nakao, T., Shibayama, M.  
*Gelation and cross-link inhomogeneity of phenolic resins studied by small- and wide-angle X-ray scattering and H-1-pulse NMR spectroscopy*  
*Polymer*, **59**, (2015).  
<https://doi.org/10.1016/j.polymer.2015.01.018>
- 48 Shibayama, M., Nishi, K., Hiroi, T.  
*Gelation Kinetics and Polymer Network Dynamics of Homogeneous Tetra-PEG Gels*  
*Macromolecular Symposia*, **348**, (2015).  
<https://doi.org/10.1002/masy.201400164>
- 49 Hashimoto, K., Fujii, K., Nishi, K., Sakai, T., Yoshimoto, N., Morita, M., Shibayama, M.  
*Gelation Mechanism of Tetra-armed Poly(ethylene glycol) in Aprotic Ionic Liquid Containing Nonvolatile Proton Source, Protic Ionic Liquid*  
*Journal of Physical Chemistry B*, **119**, (2015).  
<https://doi.org/10.1021/acs.jpcc.5b00274>
- 50 Takashi Ino, Yasushi Arimoto, Hiroshi Kira, Hiroto Hayashida, Yoshifumi Sakaguchi, Manabu Ohkawara, Kenji Ohoyama, Kenji Sakai, Kosuke Hiroi, Takayuki Oku, Kazuhisa Kakurai  
*Improvement of <sup>3</sup>He nuclear polarization for neutron scattering*  
*JPS Conf. Proc.*, **8**, 035005, (2015).
- 51 Tomohiro Ohuchi, Yu Nishihara, Yusuke Seto, Takaaki Kawazoe, Masayuki Nishi, Genta Maruyama, Mika Hashimoto, Yuji Higo, Ken ichi Funakoshi, Akio Suzuki, Takumi Kikegawa, Tetsuo Irifune  
*In situ observation of crystallographic preferred orientation of deforming olivine at high pressure and high temperature*  
*Physics of the Earth and Planetary Interiors*, **243**, 1, (2015).  
<https://doi.org/10.1016/j.pepi.2015.04.004>
- 52 Anna Dymshits, Igor Sharygin, Konstantin Litasov, Anton Shatskiy, Pavel Gavryushkin, Eiji Ohtani, Akio Suzuki, Kenichi Funakoshi  
*In situ observation of the pyroxene-majorite transition in Na<sub>2</sub>MgSi<sub>5</sub>O<sub>12</sub> using synchrotron radiation and Raman spectroscopy of Na-majorite*  
*American Mineralogist*, **100**, 378, (2015).

<https://doi.org/10.2138/am-2015-4801>

- 53 桐山幸治,柴野純一  
*J-PARC 中性子実験のためのアルミニウム製薄肉円筒の強度評価*  
*CROSS T&T*, **49**, 65, (2015).
- 54 Jun Sugiyama,Hiroshi Nozaki,Izumi Umegaki,Kazuhiko Mukai,Kazutoshi Miwa,Susumu Shiraki,Taro Hitosugi,Andreas Suter,Thomas Prokscha,Zaher Salman,James S. Lord,Martin Mansson  
*Li-ion diffusion in Li4Ti5O12 and LiTi2O4 battery materials detected by muon spin spectroscopy*  
*PHYSICAL REVIEW B*, **92**, (2015).  
<https://doi.org/10.1103/PhysRevB.92.014417>
- 55 Hiroshi Arima,Toru Kawamata,Kazumasa Sugiyama  
*Local structure around Ge in lithium germanate glasses analyzed by AXS and EXAFS techniques*  
*JOURNAL OF MINERALOGICAL AND PETROLOGICAL SCIENCES*, **110**, 60, (2015).  
<https://doi.org/10.2465/jmps.141022f>  
他施設 : KEK 物構研 PF
- 56 Kazuhiko Mukai,Jun Sugiyama  
*Magnetic anomalies and itinerant character of electrochemically Li-inserted Li[Li1/3Ti5/3]O4*  
*PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, **17**, 22652, (2015).  
<https://doi.org/10.1039/c5cp02999f>
- 57 Jun Sugiyama,Hiroshi Nozaki,Masashi Harada,Yuki Higuchi,Hiroya Sakurai,Eduardo J. Ansaldo,Jess H. Brewer,Lukas Keller,Vladimir Pomjakushin,Martin Mansson  
*Magnetic ground state of novel zigzag chain compounds, NaCr2O4 and Ca1-xNaxCr2O4, determined with muons and neutrons*  
*20TH INTERNATIONAL CONFERENCE ON MAGNETISM, ICM 2015*, **75**, 868, (2015).  
<https://doi.org/10.1016/j.phpro.2015.12.112>
- 58 Jun Sugiyama,Hiroshi Nozaki,Masashi Harada,Izumi Umegaki,Yuki

Higuchi, Kazutoshi Miwa, Masaki Imai, Chishiro Michioka, Kazuyoshi Yoshimura, Eduardo J. Ansaldo, Jess H. Brewer, Daniel Andreica, Christopher Baines, Martin Mansson  
*Magnetic phases in Sr<sub>1-x</sub>Ca<sub>x</sub>Co<sub>2</sub>P<sub>2</sub> studied by  $\mu$ +SR*  
*20TH INTERNATIONAL CONFERENCE ON MAGNETISM, ICM 2015*, **75**, 426, (2015).

<https://doi.org/10.1016/j.phpro.2015.12.052>

59 Yuki Sakai, Ryota Tanakadate, Masanori Matoba, Ikuya Yamada, Norimasa Nishiyama, Tetsuo Irifune, Kenichi Funakoshi, Takehiro Kunimoto, Yuji Higo, Yoichi Kamihara  
*Magnetic properties of shandite-phase Co<sub>3-x</sub>Fe<sub>x</sub>Sn<sub>2</sub>S<sub>2</sub> ( $x = 0-1.0$ ) obtained with high pressure synthesis*  
*Journal of the Physical Society of Japan*, **84**, 044705, (2015).

<https://doi.org/10.7566/JPSJ.84.044705>

60 Hirose, K., Fujii, K., Hashimoto, K., Umebayashi, Y., Shibayama, M.  
*Microscopic Solvation Structure of Glucose in 1-Ethyl-3-methylimidazolium Methylphosphonate Ionic Liquid*  
*Journal of Physical Chemistry B*, **119**, (2015).

<https://doi.org/10.1021/acs.jpcc.5b00724>

61 Onoda, M., Ueki, T., Shibayama, M., Yoshida, R.  
*Multiblock copolymers exhibiting spatio-temporal structure with autonomous viscosity oscillation*  
*Scientific Reports*, **5**, (2015).

<https://doi.org/10.1038/srep15792>

62 Anton Shatskiy, Pavel N. Gavryushkin, Konstantin D. Litasov, Olga N. Koroleva, Igor N. Kupriyanov, Yuri M. Borzdov, Igor S. Sharygin, Kenichi Funakoshi, Yuri N. Palyanov, Eiji Ohtani  
*Na-Ca carbonates synthesized under upper-mantle conditions: Raman spectroscopic and X-ray diffraction studies*  
*European Journal of Mineralogy*, **27**, 175, (2015).

<https://doi.org/10.1127/ejm/2015/0027-2426>

- 63 Daisuke Shimizu,Shinya Tsukada,Masato Matsuura,Jun'ya Sakamoto,Seiji Kojima,Kazumichi Namikawa,Jun'ichiro Mizuki,Kenji Ohwada  
*Negative correlation between electrical response and domain size in a Ti-composition-gradient  $Pb[(Mg_{1/3}Nb_{2/3})(1-x)Ti_x]O_3$  crystal near the morphotropic phase boundary*  
*PHYSICAL REVIEW B*, **92**, 174121, (2015).  
<https://doi.org/10.1103/PhysRevB.92.174121>  
他施設 : Spring-8
- 64 Horkay, F.,Shibayama, M.  
*Networks and Biopolymer Assemblies*  
*Macromolecular Symposia*, **358**, 9, (2015).  
<https://doi.org/10.1002/masy.201570044>
- 65 Takehito Nakano,Masato Matsuura,Atsufumi Hanazawa,Yasuo Nozue  
*Neutron diffraction study of antiferromagnetic potassium nanoclusters incorporated into sodalite*  
*JPS Conference Proceedings*, **8**, 034011, (2015).  
<https://doi.org/10.7566/JPSCP.8.034011>  
他施設 : JRR-3
- 66 T. Mizumoto,Y. Matsuoka,Y. Mizumura,T. Tanimori,H. Kubo,A. Takada,S. Iwaki,T. Sawano,K. Nakamura,S. Komura,S. Nakamura,T. Kishimoto,M. Oda,S. Miyamoto,T. Takemura,J. D. Parker,D. Tomono,S. Sonoda,K. Miuchi,S. Kurosawa  
*New readout and data-acquisition system in an electron-tracking Compton camera for MeV gamma-ray astronomy (SMILE-II)*  
*NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT*, **800**, 40, (2015).  
<https://doi.org/10.1016/j.nima.2015.08.004>
- 67 Kiseki Nakamura,Kentaro Miuchi,Toru Tanimori,Hidetoshi Kubo,Hironobu Nishimura,Joseph D. Parker,Atsushi Takada,Tetsuya Mizumoto,Tatsuya Sawano,Yoshihiro Matsuoka,Shotaro Komura,Yushiro Yamaguchi,Shota Nakaura,Hiroyuki Sekiya,Atsushi Takeda  
*NEWAGE - Direction-sensitive Dark Matter Search Experiment*

*Physics Procedia*, **61**, 737, (2015).

<https://doi.org/10.1016/j.phpro.2014.12.091>

- 68 Y. Matsuoka, T. Tanimori, H. Kubo, A. Takada, J. D. Parker, T. Mizumoto, Y. Mizumura, S. Iwaki, T. Sawano, S. Komura, T. Kishimoto, M. Oda, T. Takemura, S. Miyamoto, S. Sonoda, D. Tomono, K. Miuchi, S. Kabuki, S. Kurosawa  
*Performance of a new Electron-Tracking Compton Camera under intense radiations from a water target irradiated with a proton beam*  
*JOURNAL OF INSTRUMENTATION*, **10**, (2015).  
<https://doi.org/10.1088/1748-0221/10/01/C01053>

- 69 Ito, M. M. M., Ito, K., Shibayama, M., Sugiyama, K., Yokoyama, H.  
*Phase Behavior of Block Copolymers in Selective Supercritical Solvent*  
*Macromolecules*, **48**, (2015).  
<https://doi.org/10.1021/acs.macromol.5b00162>

- 70 D. Phelan, E. E. Rodriguez, J. Gao, Y. Bing, Z-G Ye, Q. Huang, Jinsheng Wen, Guangyong Xu, C. Stock, M. Matsuura, P. M. Gehring  
*Phase diagram of the relaxor ferroelectric  $(1-x)\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_{-3}+x\text{PbTiO}_3$  revisited: a neutron powder diffraction study of the relaxor skin effect*  
*PHASE TRANSITIONS*, **88**, 283, (2015).  
<https://doi.org/10.1080/01411594.2014.989226>

他施設 : JRR-3

- 71 Fukuda, Tatsuo, Baron, A. Q. R., Uchiyama, Hiroshi, Nakamura, Hiroki, Ishikado, Motoyuki, Machida, Masahiko, Shamoto, Shinichi  
*Precise measurement of acoustic phonons in  $\text{PrFeAsO}_{1-y}$*   
*SPring-8/SACLA Riyo Kenkyu Seikashu (Research Report) (Internet)*, **3**, 290, (2015).  
<https://doi.org/10.18957/rr.3.2.290>

- 72 Ferenc Horkay, Mitsuhiro Shibayama  
*Preface*  
*Macromolecular Symposia*, **358**, (2015).  
<https://doi.org/10.1002/masy.201570047>

- 73 M. Arai, M. Futakawa, H. Takada, K. Haga, S. Meigo, Y. Miyake, M. Harada, K. Nakajima, R. Kajimoto, M. Nakamura, K. Suzuya, K. Shibata, J. Suzuki, S. Takata, T. Nakatani, Y. Inamura, T. Nakamura, T. Oku, K. Aizawa, K. Soyama, Y. Kawakita  
*Present status of the Material and Life Science Experimental Facility of J-PARC*  
*JPS Conf. Proc.*, **8**, 036021/1, (2015).
- 74 K. Moriyama, T. Nakatani  
*Present Status of the MLF Experimental Database*  
*MLF ANNUAL REPORT 2014*, 121, (2015).
- 75 Pingguang Xu, Stefanus Harjo, Takayoshi Ito, Yukio Morii, Wu Gong, Hiroshi Suzuki, Koichi Akita, Tetsuya Suzuki, Yo Tomota, Luca Lutterotti  
*Progress in Bulk Texture Measurement Using Neutron Diffraction*  
*JPS Conference Proceedings*, **8**, 031022, (2015).  
<https://doi.org/10.7566/JPSCP.8.031022>
- 76 Minoru Mitsumi, Kazunari Ezaki, Yuuki Komatsu, Koshiro Toriumi, Tatsuya Miyatou, Motohiro Mizuno, Nobuaki Azuma, Yuji Miyazaki, Motohiro Nakano, Yasutaka Kitagawa, Takayasu Hanashima, Ryoji Kiyonagi, Takashi Ohhara, Kazuhiro Nakasuji  
*Proton Order-Disorder Phenomena in a Hydrogen-Bonded Rhodium-eta(5)-Semiquinone Complex: A Possible Dielectric Response Mechanism*  
*CHEMISTRY-A EUROPEAN JOURNAL*, **21**, 9682, (2015).  
<https://doi.org/10.1002/chem.201500796>
- 77 Yuhua Su, Satoshi Morooka, Masato Ohnuma, Junichi Suzuki, Yo Tomota  
*Quantitative Analysis of Cementite Spheroidization in Pearlite by Small-Angle Neutron Scattering*  
*METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE*, **46A**, 1731, (2015).  
<https://doi.org/10.1007/s11661-014-2737-8>
- 78 Kondo, S., Hiroi, T., Han, Y. S., Kim, T. H., Shibayama, M., Chung, U. I., Sakai, T.  
*Reliable Hydrogel with Mechanical "Fuse Link" in an Aqueous Environment*  
*Advanced Materials*, **27**, (2015).  
<https://doi.org/10.1002/adma.201503130>



- 79 Nishi, K.,Noguchi, H.,Sakai, T.,Shibayama, M.  
*Rubber elasticity for percolation network consisting of Gaussian chains*  
*Journal of Chemical Physics*, **143**, 184905, (2015).  
<https://doi.org/10.1063/1.4935395>
- 80 Saori Toyozumi,Hideaki Kitazawa,Yukihiko Kawamura,Hiroaki Mamiya,Noriki Terada,Ryo Tamura,Andreas Doenni,Kengo Morita,Akira Tamaki  
*Sample dependence of giant magnetocaloric effect in a cluster-glass system Ho5Pd2*  
*JOURNAL OF APPLIED PHYSICS*, **117**, 17D101, (2015).  
<https://doi.org/10.1063/1.4906296>
- 81 Ueki, T.,Onoda, M.,Tamate, R.,Shibayama, M.,Yoshida, R.  
*Self-oscillating AB diblock copolymer developed by post modification strategy*  
*Chaos*, **25**, 064605, (2015).  
<https://doi.org/10.1063/1.4921687>
- 82 Yoichi Ikeda, Daichi Ueta, Hideki Yoshizawa, Akiko Nakao, Koji Munakata, Takashi Ohhara  
*Single-crystal neutron diffraction study of the heavy-electron superconductor CeNiGe3*  
*Journal of the Physical Society of Japan*, **84**, (2015).  
<https://doi.org/10.7566/JPSJ.84.123701>
- 83 Kazuya Kamazawa, Motoyuki Ishikado, Seiko Ohira-Kawamura, Kazuhisa Kakurai, Kenji Nakajima, Yukinobu Kawakita, Kazuyoshi Yamada, Masatoshi Arai, Masatoshi Sato  
*Spin Fluctuation in a Geometrically Frustrated Pyrochlore System of YBaFe4O7*  
*Journal of the Physical Society of Japan*, **84**, 104711, (2015).  
<https://doi.org/10.7566/JPSJ.84.104711>
- 84 J. Yang, A. Samarakoon, S. Dissanayake, H. Ueda, I. Klich, K. Iida, D. Pajerowski, N. P. Butch, Q. Huang, J. R. D. Copley, S.-H. Lee  
*Spin jam induced by quantum fluctuations in a frustrated magnet*  
*Proc. Nat. Acad. Sci.*, **112**, 11519, (2015).

<https://doi.org/10.1073/pnas.1503126112>

他施設：NIST

- 85 S. Shamoto, K. Matsuoka, R. Kajimoto, M. Ishikado, Y. Yamakawa, T. Watashige, S. Kasahara, M. Nakamura, H. Kontani, T. Shibauchi, Y. Matsuda  
*Spin nematic susceptibility studied by inelastic neutron scattering in FeSe*  
(2015).
- 86 Jun Sugiyama, Hiroshi Nozaki, Izumi Umegaki, Eduardo J. Ansaldo, Jess H. Brewer, Hiroya Sakurai, Masahiko Isobe, Hidenori Takagi  
*Static magnetic order in A-site ordered perovskite, LaCu<sub>3</sub>Cr<sub>4</sub>O<sub>12</sub>, probed with muon spin spectroscopy*  
*20TH INTERNATIONAL CONFERENCE ON MAGNETISM, ICM 2015*, **75**, 435,  
(2015).  
<https://doi.org/10.1016/j.phpro.2015.12.053>
- 87 Nishi, K., Tochioka, S., Hiroi, T., Yamada, T., Kokado, K., Kim, T. H., Gilbert, E. P., Sada, K., Shibayama, M.  
*Structural Analysis of Lipophilic Polyelectrolyte Solutions and Gels in Low-Polar Solvents*  
*Macromolecules*, **48**, (2015).  
<https://doi.org/10.1021/acs.macromol.5b00753>
- 88 Tetsuro Ueno, Kotaro Saito, Nobuhito Inami, Takayuki Kojima, Masaki Mizuguchi, Noboru Miyata, Kazuhiro Akutsu, Masayasu Takeda, Koki Takanashi, Kanta Ono  
*Structural and Magnetic Depth Profile Analysis of L10 FeNi Film by Polarized Neutron Reflectometry*  
*JPS Conference Proceedings*, **8**, 034008, (2015).  
<https://doi.org/10.7566/JPSCP.8.034008>
- 89 Kusano, T., Hiroi, T., Amemiya, K., Ando, M., Takahashi, T., Shibayama, M.  
*Structural evolution of a catalyst ink for fuel cells during the drying process investigated by CV-SANS*  
*Polymer Journal*, **47**, (2015).  
<https://doi.org/10.1038/pj.2015.36>

- 90 Hiroshi ARIMA, Toru KAWAMATA, Yoshihiko YOKOYAMA, Kazumasa SUGIYAMA, Toshiya OTOMO  
*Structural Study of Fe<sub>80</sub>B<sub>20</sub> Amorphous Alloy by Anomalous X-ray Scattering Coupled with Neutron Diffraction*  
*JPS Conf. Proc.*, **8**, 031019, (2015).  
<https://doi.org/10.7566/JPSCP.8.031019>  
他施設 : KEK 物構研 PF
- 91 Shigeki Arai, Yasushi Yonezawa, Nobuo Okazaki, Fumiko Matsumoto, Chie Shibazaki, Rumi Shimizu, Mitsugu Yamada, Motoyasu Adachi, Taro Tamada, Masahide Kawamoto, Hiroko Tokunaga, Matsujiro Ishibashi, Michael Blaber, Masao Tokunaga, Ryota Kuroki  
*Structure of a highly acidic beta-lactamase from the moderate halophile Chromohalobacter sp 560 and the discovery of a Cs<sup>+</sup>-selective binding site*  
*ACTA CRYSTALLOGRAPHICA SECTION D-STRUCTURAL BIOLOGY*, **71**, 541, (2015).  
<https://doi.org/10.1107/S1399004714027734>
- 92 Asai, M., Katashima, T., Sakai, T., Shibayama, M.  
*Supercoiling transformation of chemical gels*  
*Soft Matter*, **11**, (2015).  
<https://doi.org/10.1039/c5sm01550b>
- 93 Tsukasa Miyazaki, Keisuke Shimokita, Hiroki Ogawa, Katsuhiko Yamamoto  
*System for in situ observation of three-dimensional structural changes in polymer films during uniaxial deformation*  
*Journal of Applied Crystallography*, **48**, 1016, (2015).  
<https://doi.org/10.1107/S1600576715008031>
- 94 Akihiko Nakatsuka, Shoichi Kuribayashi, Noriaki Nakayama, Hiroshi Fukui, Hiroshi Arima, Akira Yoneda, Akira Yoshiasa  
*Temperature dependence of crystal structure of CaGeO<sub>3</sub> high-pressure perovskite phase and experimental determination of its Debye temperatures studied by low- and high-temperature single-crystal X-ray diffraction*  
*AMERICAN MINERALOGIST*, **100**, 1190, (2015).

<https://doi.org/10.2138/am-2015-4945>

- 95 H. A. Fujii, Y. Sugimoto, T. Watanabe, T. Kusagaya  
*Tethered actuator for vibration control of space structures*  
*ACTA ASTRONAUTICA*, **117**, 55, (2015).  
<https://doi.org/10.1016/j.actaastro.2015.07.029>
- 96 Takeshi Nakatani, Yasuhiro Inamura, Takayoshi Ito, Toshiya Otomo  
*The Control Software Framework of the Web Base*  
*JPS Conference Proceedings*, **8**, 036013, (2015).  
<https://doi.org/10.7566/JPSCP.8.036013>
- 97 S. Takata, J. Suzuki, T. Shinohara, T. Oku, T. Tominaga, K. Ohishi, H. Iwase, T. Nakatani, Y. Inamura, T. Ito, K. Suzuya, K. Aizawa, M. Arai, T. Otomo, M. Sugiyama  
*The Design and  $q$  Resolution of the Small and Wide Angle Neutron Scattering Instrument*  
*JPS Conf. Proc.*, **8**, 036020, (2015).
- 98 Y. Ishikawa, S. A. Danilkin, M. Avdeev, T. Kamiyama, T. Sakuma  
*Thermal expansion properties of Ag<sub>2</sub>O crystal structure by powder neutron diffraction*  
*JPS Conference Series*, **8**, 031016, (2015).  
<https://doi.org/10.7566/JPSCP.8.031016>
- 99 Yohei Noda, Takayuki Kumada, Daisuke Yamaguchi, Shin-ichi Shamoto  
*Thermosetting polymer for dynamic nuclear polarization: Solidification of an epoxy resin mixture including TEMPO*  
*NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT*, **776**, 8, (2015).  
<https://doi.org/10.1016/j.nima.2014.11.114>
- 100 Sanghyun Lee, Yoshihisa Ishikawa, Ping Miao, Shuki Torri, Takashi Kamiyama  
*Time of flight neutron diffraction on NiO*  
*JPS Conference Series*, **8**, 034007, (2015).  
<https://doi.org/10.7566/JPSCP.8.034007>

101 Jun Sugiyama, Izumi Umegaki, Daniel Andreica, Christopher Baines, Alex Amato, Marie Guignard, Claude Delmas, Martin Mansson  
*Unveiled magnetic transition in Na battery material:  $\mu$ +SR study of  $P2-Na_{0.5}VO_2$*   
*RSC ADVANCES*, **5**, 18531, (2015).  
<https://doi.org/10.1039/c5ra00400d>

102 Jun Sugiyama, Hiroshi Nozaki, Izumi Umegaki, Masashi Harada, Yuki Higuchi, Kazutoshi Miwa, Eduardo J. Ansaldo, Jess H. Brewer, Masaki Imai, Chishiro Michioka, Kazuyoshi Yoshimura, Martin Mansson  
*Variation of magnetic ground state of  $Sr_{1-x}Ca_xCo_2P_2$  determined with  $\mu$ (+) SR*  
*PHYSICAL REVIEW B*, **91**, (2015).  
<https://doi.org/10.1103/PhysRevB.91.144423>