

S.Adachi, S.Nozawa, R.Tazaki, J.Takahashi, J.Itatani, M.Daimon, T.Mori, H.Sawa, H.Kawata, T.Sato, A.Tomita, M.Chollet, L.Guerin, E.Collet, H.Cailleau and S.Koshihara

Current Status of 50-Picosecond Resolved X-Ray Diffraction at Photon Factory Advanced Ring (PF-AR)
J. Phys.: Conf. Series, **21** (2005) 101.

S.Nozawa, S.Adachi, R.Tazaki, J.Takahashi, J.Itatani, M.Daimon, T.Mori, H.Sawa, H. Kawata and S.Koshihara
PF-AR NW14, A New Time-Resolved Diffraction/Scattering beamline
J. Phys.: Conf. Series, **21** (2005) 211.

S.Koshihara and S.Adachi
Photo-Induced Phase Transition in an Electron-Lattice Correlated System –Future Role of a Time-Resolved X-Ray Measurement for Materials Science–
J. Phys. Soc. Jpn., **75** (2006) 011005.

K.Ichyanagi, S.Adachi, S.Nozawa, Y.Hironaka, K.G.Nakamura, T.Sato, A.Tomita and S.Koshinara
Shock-Induced Lattice Deformation of CdS Single Crystal by Nanosecond Time-Resolved Laue Diffraction
Appl. Phys. Lett., **91** (2007) 231918.

S.Nozawa, S.Adachi, J.Takahashi, R.Tazaki, L.Guerin, M.Daimon, A.Tomita, T.Sato, M.Chollet, E.Collet, H.Cailleau, S.Yamamoto, K.Tsuchiya, T.Shioya, H.Sasaki, T.Mori, K.Ichyanagi, H.Sawa, H.Kawata and S.Koshihara
Developing 100 ps-Resolved X-Ray Structural Analysis Capabilities on Beamline NW14A at the Photon Factory Advanced Ring
J. Synchrotron Rad., **14** (2007) 313.

M.Gembicky, S.Adachi and P.Coppens
A kHz Heat-Load Shutter for White-Beam Experiments at Synchrotron Sources
J. Synchrotron Rad., **14** (2007) 295.

S.Adachi
Watching Photo-Induced Dynamics with Picosecond Time-Resolved X-Ray Diffraction
Acta Cryst. A, **64** (2008) C49.

T.Sato, S.Nozawa, K.Ichyanagi, A.Tomita, H.Ichikawa, M.Chollet, H.Fujii, S.Adachi and S.Koshihara
100 ps Time-Resolved X-Ray Absorption Fine Structure of Fe^{II}(1,10-Phenanthroline)₃
Acta Cryst. A, **64** (2008) C204.

A.Tomita, T.Sato, K.Ichyanagi, S.Nozawa, H.Ichikawa, M.Chollet, F.Kawai, S.-Y.Park, S.Koshihara and S.Adachi
Slow Ligand Migration Dynamics in Carbonmonoxy Myoglobin at Cryogenic Temperature
Acta Cryst. A, **64** (2008) C358.

E.Collet, M.Cointe, M.Lorenc and H.Cailleau
State of the Art and Opportunities in Probing Photoinduced Phase Transitions in Molecular Materials by Conventional and Picosecond X-Ray Diffraction
Zeitschrift fur Kristallographie, **223** (2008) 272.

T.Sato, S.Nozawa, K.Ichyanagi, A.Tomita, M.Chollet, H.Ichikawa, H.Fujii, S.Adachi and S.Koshihara
Capturing Molecular Structural Dynamics by 100 ps Time-Resolved X-Ray Absorption Spectroscopy
J. Synchrotron Rad., **16** (2009) 110.

A.Tomita, T.Sato, K.Ichyanagi, S.Nozawa, H.Ichikawa, M.Chollet, F.Kawai, S.-Y.Park, T.Tsuduk, T.Yamato, S.Koshihara and S.Adachi
Visualizing Breathing Motion of Internal Cavities in Concert with Ligand Migration in Myoglobin
Proc. Natl. Acad. Sci. USA, **106** (2009) 2612.

K.Ichyanagi, T.Sato, S.Nozawa, K.H.Kim, J.H.Lee, J.Choi, A.Tomita, H.Ichikawa, S.Adachi, H.Ihee and S.Koshihara
100 ps Time-Resolved Solution Scattering Utilizing a Wide-Bandwidth X-Ray Beam from Multilayer Optics
J. Synchrotron Rad., **16** (2009) 391.

A.Tomita, S.Adachi and S.Koshihara
Watching "Deep Breathing Motion" of the Hydrophobic Cavities in a Protein Molecule
Protein, Nucleic Acid and Enzyme, **54** (2009) 1395. (*in Japanese*).

T.Sato, S.Nozawa, S.Adachi, K.Ichyanagi, A.Tomita and S.Koshihara
Development of 100ps Time-Resolved XAS Set-Up and Observation of Spin Crossover Dynamics in the Solution
J. Cryst. Soc. Jpn., **51** (2009) 258. (*in Japanese*).

T.Sato, S.Nozawa, K.Ichyanagi, A.Tomita, M.Chollet, H.Ichikawa, H.Fujii, S.Adachi and S.Koshihara
100-Picosecond Time-Resolved X-Ray Absorption Fine Structure of Fe^{II}(1,10-phenanthroline)₃
J. Phys.: Conf. Ser., **148** (2009) 012035.

A.Tomita, S.Koshihara, S.Adachi, J.Itatani, K.Onda, S.Ogihara, Y.Nakano and H.Yamochi
The Future of Photo-Induced Phase Transition (PIPT) -How Fast and Slow It Can Be Changed? -
J. Phys.: Conf. Ser., **148** (2009) 012066.

M.Yamamoto, N.Hayakawa, M.Murakami and T.Kouyama
Crystal Structures of Different Substates of Bacteriorhodopsin's M Intermediate at Various pH Levels
J. Mol. Biol., **393** (2009) 559.

- S.Koshihara, S.Adachi, S.Nozawa, K.Ichiyanagi, T.Sato, A.Tomita, H.Ichikawa, R.Ryoko, M.Collet, L.Guerin, H.Kawata and M.Daimon
Progress of the Research on the Photo-Induced Cooperative Phenomena Based on the Dynamical Structural Science
kotai butsurei, **44** (2009) 13. (*in Japanese*).
- H.Ichikawa, S.Nozawa, T.Sato, A.Tomita, K.Ichiyanagi, M.Chollet, L.Guerin, S.Adachi, K.Miyano and S.Koshihara
100 ps Time-Resolved X-Ray Diffraction Study on $\text{Nd}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$ Thin Film
J. Phys.: Conf. Ser., **148** (2009) 012020.
- S.Adachi, S.Nozawa, K.Ichiyanagi, H.Ichikawa, M.Chollet, L.Guerin, R.Tazaki, T.Sato, A.Tomita, H.Sawa, T.Arima, H.Kawata and S.Koshihara
Pulsed Synchrotron X-Ray as a Tool for Proving Molecular Movies at 100-Picosecond Temporal and Sub-Nanometer Spatial Resolution
J. Phys.: Conf. Ser., **148** (2009) 012044.
- P.Coppens, M.Pitak, M.Gembicky, M.Messerschmidt, S.Scheins, J.Benedict, S.Adachi, T.Sato, S.Nozawa, K.Ichiyanagi, M.Chollet and S.Koshihara
The RATIO Method for Time-Resolved Laue Crystallography
J. Synchrotron Rad., **16** (2009) 226.
- S.Koshihara
Controlling Ferroelectric Transition by Light
Chem. Chem. Industry, **62** (2009) 882. (*in Japanese*).
- S.Adachi, J.Kim and H.Ihee
Synchrotron-Based Time-Resolved X-Ray Solution Scattering (Liquidography)
INTECH, (2010) 787.
- H.Ihee, M.Wulff, J.Kim and S.Adachi
Ultrafast X-Ray Scattering: Structural Dynamics from Diatomic to Protein Molecules
Int. Rev. Phys. Chem., **29** (2010) 453.
- A.Tomita, U.Kreutzer, S.Adachi, S.Koshihara and T.Jue
'It's Hollow': The Function of Pores within Myoglobin
J. Exp. Biol., **213** (2010) 2748.
- S.Nozawa, T.Sato, M.Chollet, K.Ichiyanagi, A.Tomita, H.Fujii, S.Adachi and S.Koshihara
Direct Probing of Spin State Dynamics Coupled with Electronic and Structural Modifications by Picosecond Time-Resolved XAFS
J. Am. Chem. Soc., **132** (2010) 61.
- S.Nozawa, T.Sato, S.Adachi and S.Koshihara
Detecting Ultrafast Switching of Molecular Magnetism and Structural Change by Pulsed Synchrotron X-Ray
Miraizairyō, **10** (2010) 6. (*in Japanese*).
- L.Guerin, J.Hebert, M.B.Cointe, S.Adachi, S.Koshihara, H.Cailleau and E.Collet
Capturing One-Dimensional Precursors of a Photoinduced Transformation in a Material
Phys. Rev. Lett., **105** (2010) 246101.
- A.Tomita, T.Sato, S.Nozawa, S.Koshihara and S.Adachi
Tracking Ligand-Migration Pathways of Carbonmonoxy Myoglobin in Crystals at Cryogenic Temperatures
Acta Cryst. A, **66** (2010) 220.
- H.Ichikawa, S.Nozawa, T.Sato, A.Tomita, K.Ichiyanagi, M.Chollet, L.Guerin, N.Dean, A.Cavalleri, S.Adachi, T.Arima, H.Sawa, Y.Ogimoto, M.Nakamura, R.Tamaki, K.Miyano and S.Koshihara
Transient Photoinduced 'Hidden' Phase in a Manganite
Nature Materials, **10** (2011) 101.
- S.Nozawa and S.Koshihara
Dynamical Analysis of Transient Molecular Magnetism and Structural Change by Time-Resolved X-Ray Absorption Fine Structure
Kogaku, **40** (2011) 222. (*in Japanese*).
- K.Ichiyanagi, H.Sekiguchi, S.Nozawa, T.Sato, S.Adachi and Y.C.Sasaki
Laser-Induced Picosecond Lattice Oscillations in Submicron Gold Crystals
Phys. Rev. B, **84** (2011) 024110.
- M.Hoshino, T.Sato, A.Tomita, S.Nozawa, S.Adachi and S.Koshihara
Time-Resolved Structure Analysis of Photo-Induced Molecular Dynamics in TTF-CA
Acta Crystallogr. A, **67** (2011) C520.
- S.Nozawa, T.Sato, A.Tomita, M.Hoshino, H.Tokoro, S.Ohkoshi, S.Adachi and S.Koshihara
Dynamic Investigation of Photoinduced Phase Transition in Prussian Blue Analogs by Picosecond Time-Resolved XAFS
Acta Crystallogr. A, **67** (2011) C109.
- T.Sato, S.Nozawa, A.Tomita, M.Hoshino, S.Koshihara, M.Iwamura and S.Adachi
Observation of the Photo-Excited State of $[\text{Co}^{\text{III}}(\text{en})_3]^{3+}$ by Picosecond Time-Resolved XAFS
Acta Crystallographica Section A, **A67** (2011) C521.
- L.Guerin, E.Collet, J.Hebert, M.Buron-Le Cointe, S.Adachi, S.Koshihara and H.Cailleau
Evidence of One-Dimensional Precursors in the Photoinduced Transformation in TTF-CA
Acta Crystallogr. A, **67** (2011) C522.
- M.Murakami and T.Kouyama
Crystallographic Analysis of the Primary Photochemical Reaction of Squid Rhodopsin
J. Mol. Biol., **413** (2011) 615.