

Selected publications containing data collected with DECTRIS detectors

1.1. XRF in laboratory spectrometers

- Sato, K. *et al.* (2017) "Polychromatic simultaneous WDXRF for chemical state analysis using laboratory X-ray source" *X-Ray Spectrom.* **46**, 330-335.
<https://doi.org/10.1002/xrs.2797>

1.2. XAS in laboratory spectrometers

- Németh, Z. *et al.* (2016) "Laboratory von Hámos X-ray spectroscopy for routine sample characterization" *Rev.Sci. Instrum.* **87**, 103105.
<https://doi.org/10.1063/1.4964098>
- Baynoczi, E., Nemeth, Z., Vanko, G. (2017) "Simultaneous Speciation, Structure, and Equilibrium Constant Determination in the Ni²⁺-EDTA-CN⁻ Ternary System via High-Resolution Laboratory X-ray Absorption Fine Structure Spectroscopy and Theoretical Calculations" (2017) *Inorg. Chem.* **56 (22)**, 14220-14226
<https://pubs.acs.org/doi/10.1021/acs.inorgchem.7b02311>

1.3. XRF-CT at synchrotron sources

- Sasaya, T. *et al.* (2017) "Multi-pinhole fluorescent x-ray computed tomography for molecular imaging" *Scientific Reports* **7(1)**, 5742.
<https://www.nature.com/articles/s41598-017-05179-2>

1.4. EAXFS at synchrotron sources

- Lützenkirchen-Hecht, D. *et al.* (2016) "XAFS data acquisition with 2D-detectors: Transmission mode XAFS and grazing incidence EXAFS spectroscopy" *J. Phys.* **712**, 012017.
<http://iopscience.iop.org/article/10.1088/1742-6596/712/1/012017>
- Tanida, H. *et al.* (2011) "In situ two-dimensional imaging quick-scanning XAFS with pixel array detector" *J. Synch. Rad.* **18**, 919-922.
<https://doi.org/10.1107/S0909049511031232>

- Uehara, N. *et al.* (2014) "In situ back-side illumination fluorescence XAFS (BI-FXAFS) studies on platinum nanoparticles deposited on a HOPG surface as a model fuel cell: a new approach to the Pt-HOPG electrode/ electrolyte interface" *Phys.Chem.Chem.Phys.* **16**, 13748
<https://doi.org/10.1039/c4cp00265b>
- Rees, J.A. *et al.* (2016) "Experimental and theoretical correlations between vanadium K-edge X-ray absorption and K β emission spectra" *J. Biol. Inorg. Chem.* **21**, 793–805
<https://doi.org/10.1007/s00775-016-1358-7>
- Tanida, H. *et al.* (2013) "RISING beamline (BL28XU) for rechargeable battery analysis" *J. Synch. Rad.* **21**, 268-272.
<https://doi.org/10.1107/S1600577513025733>
- Tanida, H. *et al.* (2011) "In situ two-dimensional imaging quick-scanning XAFS with pixel array detector" *J. Synch. Rad.* **18**, 919-922.
<https://doi.org/10.1107/S0909049511031232>

1.5. XPCS at synchrotron sources

- Westmeier, F. *et al.* (2013) 2X-ray photon correlation spectroscopy using the Mythen 1D detector" *Journal of Physics: Conference Series* **425**, 202005
<https://doi.org/10.1088/1742-6596/425/20/202005>
- Johnson, I. *et al.* (2012). Capturing dynamics with Eiger, a fast-framing X-ray detector. *J. Synch. Rad* **19(6)**, 1001–1005. <https://doi.org/10.1107/S0909049512035972>
- Zinn, T. *et al.* (2018) Ultra-small-angle X-ray photon correlationspectroscopy using the Eiger. *J. Synch. Rad.* **25**, 1753-1759. <https://doi.org/10.1107/S1600577518013899>

1.6. XRF at synchrotron sources

- Kleimenov, E. *et al.* (2009) "High-resolution hard-X-ray fluorescence spectrometer" *Journal of Physics: Conference Series* **190**, 012035
<https://doi.org/10.1088/1742-6596/190/1/012035>

1.7. Plasma Spectroscopy

- Delgado-Aparicio, L. F., Wallace, J., Yamazaki, H., Vanmeter, P., Reusch, L., Nornberg, M., ... Ono, M. (2018). Simulation, design, and first test of a multi-energy soft x-ray (SXR) pinhole camera in the Madison Symmetric Torus (MST). *Review of Scientific Instruments*, 89, 10G116.
<https://doi.org/10.1063/1.5038798>
- Reinke, M. L., Podpaly, Y. A., Bitter, M., Hutchinson, I. H., Rice, J. E., Delgado-Aparicio, L., ... Wolfe, S. M. (2012). X-ray imaging crystal spectroscopy for use in plasma transport research. *Review of Scientific Instruments*, 83(11).
<https://doi.org/10.1063/1.4758281>
- Lu, B., Wang, F., Shi, Y., Bitter, M., Hill, K. W., Lee, S. G., ... Wan, B. (2012). Upgrades of the high resolution imaging x-ray crystal spectrometers on experimental advanced superconducting tokamak. *Review of Scientific Instruments*, 83(10), 2–5.
<https://doi.org/10.1063/1.4738652>
- Varshney, S. K., Barnsley, R., O'Mullane, M. G., & Jakhar, S. (2012). Bragg x-ray survey spectrometer for ITER. *Review of Scientific Instruments*, 83(10).
<https://doi.org/10.1063/1.4738747>
- Lyu, B., Chen, J., Hu, R. J., Wang, F. D., Li, Y. Y., Fu, J., ... Wan, B. N. (2016). Measurement of helium-like and hydrogen-like argon spectra using double-crystal X-ray spectrometers on EAST. *Review of Scientific Instruments*, 87(11), 11E326.
<https://doi.org/10.1063/1.4960504>

- Wang, F., Chen, J., Hu, R., Lyu, B., Colledani, G., Fu, J., ... Wan, B. (2016). Upgrades of poloidal and tangential x-ray imaging crystal spectrometers for temperature and rotation measurements on EAST. *Review of Scientific Instruments*, 87(11), 1-5
<https://doi.org/10.1063/1.4963150>

1.8. Various

- Takamatsu, D., Nakatsutsumi, T., Mori, S., Orikasa, Y., Mogi, M., Yamashige, H., ... Ogumi, Z. (2011). Nanoscale observation of the electronic and local structures of LiCoO₂ thin film electrode by depth-resolved X-ray absorption spectroscopy. *Journal of Physical Chemistry Letters*, 2(20), 2511–2514.
<https://doi.org/10.1021/jz2011226>
- Matsushita, T., Takahashi, T., Shirasawa, T., Arakawa, E., Toyokawa, H., & Tajiri, H. (2011). Quick measurement of crystal truncation rod profiles in simultaneous multi-wavelength dispersive mode. *Journal of Applied Physics*, 110(10), 1–8.
<https://doi.org/10.1063/1.3661656>
- Micelli, A. *et al.* (2008) "Application of Pixel array detectors at X-ray synchrotrons" *JNIST* **4**, P03024
<https://doi.org/10.1088/1748-0221/4/03/P03024>