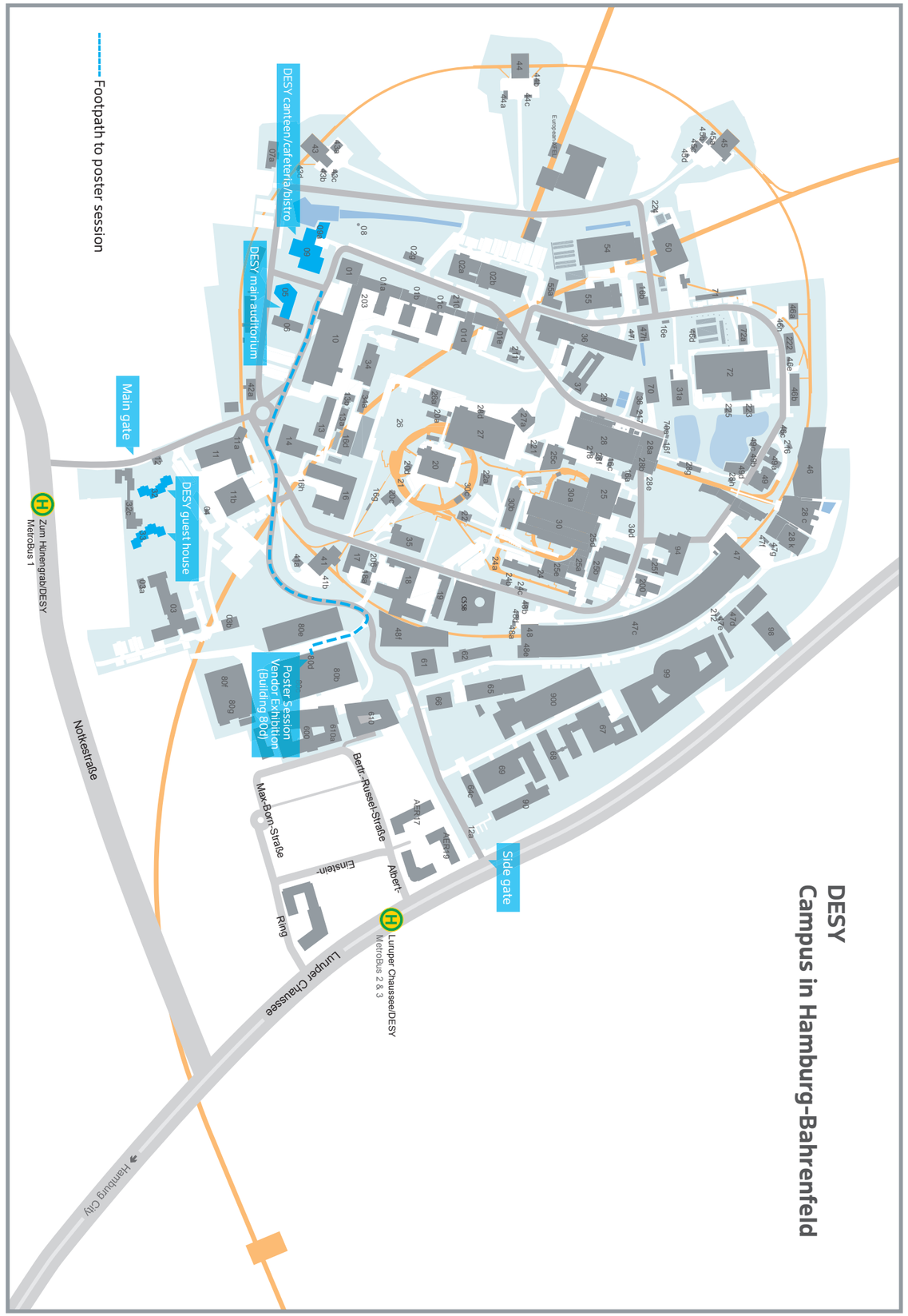
DESY Photon Science Users' Meeting 2023
European XFEL Users' Meeting 2023

Jointly organized Users' Meeting of
DESY Photon Science and European XFEL



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2. Pump–probe capabilities at SPB/SFX, European XFEL
   J. Koliyadu, R. Letrun, J. Liu, M. Jiang, M. Emons, T. Dietze, N. Reimers, R. Bean and T. Sato

3. Tracking the origin of the MnAs magneto-structural phase transitions in the time-domain using femtosecond X-ray diffraction
   F. Vidal, Y. Zheng, E. Ferrari, M. Eddrief, P. Atkinson, N. Casaretto, L. Lounis, L. Coelho, C. Laulh'e, H. Popescu, C. Spezzani, E. Allaria, A. Ciavardini, H. Wang, J. Ma, J. Zhao, M. Seaberg, R. Alonso-Mori, J. Glownia, M. Chollet, D. Khakhulin, F. Ardana Lamas, Y. Uemura, M. Biednov, F. A. Lima, P. Zalden, C. Milne and M. Sacchi

4. High Energy X-ray Emission spectrometer with Laue analyzer
   X. Huang, F. Lima and C. Milne

5. Numerical Simulation of SFX Sample Delivery Systems
   B. Šarler, S. Bajt, H. Chapman, B. Mavrič, K. Kovačič, K. Bakhat Rana, Z. Rek, G. Savšek, R. Zahoor and B. Zupan

6. Atomic structure of recombinant high potential iron sulfur protein in its reduced and oxidized states revealed by serial femtosecond crystallography
   F.H.M. Koua, J. Bielecki, M. Kloos, P. Vagovic, H. Han, J. Schulz and A. Mancuso

7. Mix-and-Inject Sample Delivery Systems for Time-resolved Serial Crystallography
   M. Vakili

8. Rapid structural transformations in Fe after sub-ps pulsed laser annealing
   R. Sobierajski, P. Zalden, K. Sokolowski-Tinten, A. Olczak, C. Bressler, M. Chojnacki, P. Dluzewski, P. Dziegielewski, A.R. Fernandez, K. Fronc, W. Gawelda, K. Georgarakis, A.L. Greer, J. Hastings, I. Jacyna, R. Kaminski, R.W.E. van de Kruijs, D. Khakhulin, D. Klinger, K. Kosyl, K. Kubicek, I. Milov, O. Liubchenko, K. Morawiec, N. Panagiotopoulos, M. Sikora, P. Sun, H. Yousef and J. Antonowicz

9. Two-dimensional energy and carrier diffusion in silicon upon X-ray irradiation
   V. Lipp and B. Ziaja

10. MS SPIDOC: Coherent Diffractive Imaging of proteins and viral capsids
    T. Kierspel, A. Kádek, J.C.K. Kung, T. Damjanović and C. Uetrecht

11. Ultrafast melting of optically excited thin polycrystalline palladium films
    J. Antonowicz, P. Zalden, K. Sokolowski-Tinten, A. Olczak, I. Milov, C. Bressler, M. Chojnacki, P. Dziegielewski, G. Evangelakis, A.R. Fernandez, K. Fronc, W. Gawelda, K. Georgarakis, A.L. Greer, I. Jacyna, R.W.E. van de Kruijsi, R. Kaminski, D. Khakhulin, D. Klinger, K. Kosyl, K. Kubicek, N. Panagiotopoulos, M. Sikora, P. Sun, H. Yousef and R. Sobierajski

12. X-ray diffractive imaging of UV-induced ultrafast dynamics in CF_2I_2
    N. Vadassery, S. Trippel and J. Küpper

13. Reference-enhanced Single Particle Imaging
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14. A brief overview of FEA/CFD simulations at European XFEL
F. Yang and D. La Civita

15. Hardware Acceleration for Data Processing at Synchrotrons and FELs
S.P. Ramakantha Setty, V. Rahmani, S. Nawaz, D. Pennicard and H. Graafsma

16. Cu Kα, K$\beta_{1,3}$, and K$\beta_{2,5}$ X-ray Emission Spectroscopic Study of Photoexcited [Cu(dmp)$_2$]$^+$ at FXE Instrument
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17. Towards Serial Femtosecond X-ray Photocrystallography of Molecular Materials at FXE instrument.
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18. Structural dynamics of shock-compressed water - Combined WAXS and Near-Field Holography at EuXFEL
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19. Pump-probe serial crystallography on perovskite quantum dots
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20. Conformation space sampling based on Monte Carlo method in XFEL experiment
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21. Data Reduction for X-ray Serial Crystallography using Machine Learning
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22. Deep learning image reconstruction approaches towards MHz X-ray microscopy
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24. First high energy and temporal resolution pump probe RIXS at the EuXFEL
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25. Structural dynamics of ferroelectric thin films
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26. Using fast jets as liquid sample delivery for femtosecond pump-probe experiments at the FXE instrument: A blessing and a curse of the MHz rates
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27. Probing broadband multi-THz coherent phonons in SrTiO3 and Si on a crystal truncation rod with femtosecond X-ray diffraction
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28. Probing protein diffusion with X-ray Photon Correlation Spectroscopy at European XFEL
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29. Modelling of ultrafast X-ray induced magnetization dynamics in magnetic systems
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30. THz SASE FEL at PITZ as a prototype of a tunable THz source for pump-probe experiments at the European XFEL
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31. Programmable DNA-Origami Molecular Scaffolds for Holographic Single-Particle Diffractive Imaging with XFEL Pulses
P.L. Xavier, N.C. Seeman and H.N. Chapman

32. Phase transition kinetics and surface morphology in femtosecond laser-heated metals
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33. The unique sensitivity of Cr Kα_1 emission line reveals early excited state landscape of the molecular ruby
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34. Online dynamic flat-field correction for MHz XFEL microscopy
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35. Multiple-core-hole resonance spectroscopy with ultraintense x-ray pulses
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36. Ultrafast X-Ray Pump X-Ray Probe Absorption Spectroscopy of Warm Dense Copper
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37. Photon shot-noise limited transient absorption soft X-ray spectroscopy at the European XFEL
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M. Turcato, B. Van Kuiken, H. Wende, A. Yaroslavtsev, J. Zhu, S. Molodtsov, Ch. David, M. Porro and A. Scherz

38. Selection and control of (bio-)nanoparticles with external fields
X. Cheng, L. V. Haas, J. Lübke, M. Amin, A.K. Samanta and J. Küpper

39. A diamond channel cut monochromator for intense MHz repetition rate operation at EuXFEL: first experimental results
K.R. Tasca, U. Bösenberg, F. Brausse, A. Madsen, J. Möller, I. Petrov, A. Rodriguez-Fernandez, R. Shayduk, H. Sinn, M. Vannoni, J. Wonhyuk, M. Youssef, P. Zalden, A. Zozulya and L. Samoylova

40. Single-particle Diffractive Imaging at the European XFEL: Instrumentation, Data Acquisition and Hit-finding
M. Stammer, C. Neuhaus, J. Alfken, M. Osterhoff, R. Bean, J. Bielecki, J. E, S. Rafie-Zinedine, R. de Wijn, R. Letrun, A. Mancuso, R. Jahn and T. Salditt

41. Scientific Data Management at European XFEL.
N. Alqudami, S. Aplin, D. Boukhelef, F. Dall'Antonia, I. Derevianko, U. Ensslin, M. Gasthuber, J. Hannappel, M. Karimi, T. Kluyver, L. Maia, J. Malka, M. Manetti, T. Mkrtchyan, K. Ohrenberg, C. Patzke, G. Previtali, P. Schmidt, K. Schwarz, E. Sobolev, J. Szuba, B. Vanganuru, C. Voss, K. Wrona and C. Youngman

42. Alpha-synuclein fiber diffraction at EuXFEL
M. Beltramini, L. Bubacco, M.G. Ortore, P. Mariani, S. Morante, N. Plotegher, M. Polentarutti, M. Sandre, F. Spinozzi, F. Stellato and I. Tessari

43. Spectral metrology for MHz multi-projection X-ray microscopy
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44. 3D structure determination via correlated x-ray scattering from disordered ensembles of particles
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45. Update status of beam conditioning optics and options for harder X-rays above 30 keV at the MID instrument of EuXFEL
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46. Hydrogen Metallisation in Warm Dense Matter condition
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47. High repetition rate velocity map imaging using the Timepix3 camera at the SQS instrument
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48. Investigation of protein dynamics in crowded environments at European XFEL with MHz XPCS
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49. Supramolecular dynamics investigated on hydrogen bonded pyrrole/indole-water clusters upon site-specific x-ray photoionization
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50. Micro- and Nanofocus Characterization by Ablative Imprints at SQS and HED Instruments
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Z. Konopková, Z. Kuglerová, N. Kujala, H. Lee, S. Makarov, M. Makita, T. Mazza, M. Meyer, L. Mikeš, B. Nagler, M. Nakatsutsumi, Y. Ovcharenko, S. Pikuz, T. Pikuz, T. R. Preston, A. Schropp, S. Usenko, P. Vagovič, V. Vozda, U. Zastrau and J. Chalupský

51. The Heisenberg RIXS instrument at SCS, European XFEL - ultrafast spectroscopy at the limit of energy and time resolution
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52. Coulomb Explosion Imaging of Ring Opening in Thiophenone
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53. Towards probing K-shell ionization of carbon under warm dense matter
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54. Status of FAST-XPD: Photon data base for the European XFEL
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55. Following laser-driven dynamics with atomic resolution and with attosecond x-ray pulses
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56. Nonlinear generation of wavelength tunable sub-10fs DUV pulses at MHz repetition rates
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57. Simulating X-ray scattering: from large crystals to single molecules
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58. Sample Environment and Characterization support at the European XFEL
J. Schulz and the SEC team

59. Instrumentation development for Multi-Projection X-ray imaging at EuXFEL
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61. Towards a new scientific data policy for European XFEL
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62. In situ X-ray diffraction of α-ϵ phase transition in iron under dynamic diamond anvil cell compression at EuXFEL
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63. Ultrafast Magnetization Dynamics of Nanoscale Domains in Ferrimagnetic DyCo Films with Perpendicular Magnetic Anisotropy Studied at European XFEL
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64. Investigating ultra-fast geminal recombination in aqueous octahedral metal-hexacyanides with the hRIXS instrument at SCS
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65. The results of the satellite workshop “High Rep Rate Fixed Target Delivery: Chip standardisation and workflow”
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66. Future Laser-based Terahertz Light Sources at European XFEL
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68. Towards the direct x-ray-excitation of the ultra-narrow nuclear resonance of ^{45}Sc
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69. Online Characterization of X-ray Pulses at the Attosecond Frontier
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70. Coherent Diffractive Imaging of Lipid and Synaptic Vesicles by Femtosecond XFEL pulses
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71. Determination of thermalized fraction of intense short-wavelength radiation absorbed in solids: from UV to x-ray lasers
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72. Efficient time-resolved Laue diffraction data analysis for small and medium-sized molecules using novel seed-skewness algorithm
P. Laski, D. Szarejko, R. Kaminski and K.N. Jarzembska

73. Numerical Simulation of SFX Sample Delivery Systems
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III.2 FLASH

74. How to increase the efficiency of differential pumping
M. Degenhardt, M. Braune, S. Aref, F. Jastrow, M. Brachmanski and K. Tiedtke

75. Site-selective probing of ultrafast non-adiabatic photochemistry in CS_2
F. Allum, I. Gabalski, J. Unwin, I. Seidu, M, Britton, M. Brouard, P.H. Bucksbaum, J. P. Cryan, N. Ekanayake, D. Garg, E. Gougoula, D. Heathcote, A.J. Howard, P. Hockett, D.M.P. Holland, C-S. Lam, J.W.L. Lee, J. McManus, J. Mikosch, D. Milesevic, R.S. Minns, S.P. Neville, C. Passow, C. Papadopolou, W.O. Razmus, A. Röder, D. Rolles, A. Rouzée, A. Rudenko, M. Schnell, A. Simao, A. Stolow, C. Vallance, T. Walmsley, J. Wang, B. Erk, M.B. Burt, M.S. Schuurman and R. Forbes

76. New insights into the laser-assisted photoelectric effect from solid state surfaces
L. Wenthaus, N. Kabachnik, M. Borgwardt, S. Palutke, D. Kutnyakhov, F. Pressacco, M. Scholz, D. Potorochin, N. Wind, S. Düsterer, G. Brenner, O. Gessner, S. Molodtsov, W. Eberhardt and F. Roth

77. Ultra-broadband miniature FTIR spectrometer for characterization of IR and THz sources
E. Zapolnova, E. Jung S.-G. Gang and R. Pan

78. Single-shot temporal characterization of XUV FEL@FLASH
M. Bidhendi, R. Ivanov, I. Bermudez, J. Rönsch-Schulenburg, M. Vogt, M. V. Yurkov and S. Düsterer

79. Femtosecond laser spectroscopy for Exploration of Space
N. Stojanovic, Y. Ha, J. Petrovic, M. Rabasovic, A.Krmpot and M. Gensch

80. Relaxation dynamics in Xenon dimers and trimers after XUV-photoionization at FLASH2
H. Lindenblatt, K. Schnorr, S. Augustin, S. Meister, F. Trost, P. Schoch, G. Schmid, Y. Liu, M. Braune, M. Kuhlmann, R. Treusch, C. Schröter, T. Pfeifer and R. Moshammer

81. Start to End Simulation Results for Seeded FEL from FLASH Beams
P. Niknejadi, D. Samoilenko, P. Amstutz, T. Lang, S. Ackermann, F. Pannek, G. Paraskaki, E. Ferrari, S. Schreiber and L. Schaper

82. Diagnostics and applications of THz radiation at FLASH1 after FLASH2020+
S. Gang, E. Zapolnova, M. Temme, E. Ploenjes and R. Pan

83. FLASH2020+: SLASH a novel high power seed laser for two-color EEHG XUV/VUV FEL seeding
T. Lang, M.M. Kazemi, J. Zheng, S. Hartwell, N. Hoang, E. Ferrari, E. Allaria, L. Schaper and I. Hartl

84. Ultrafast photoinduced dynamics at the interface of water and anatase TiO_2(101)
M. Wagstaffe, A. Dominguez-Castro, L. Wenthaus, S. Palutke, D. Kutnyakhov, M. Heber, F. Pressacco, S. Dziarzhytski, H. Gleissner, V. Kristin Gupta, H. Redlin, A. Dominguez, T. Frauenheim, A. Rubio, H. Noei and A. Stierle

85. Analysis of ablation imprints accelerated by machine learning
J. Chalupský, V. Vozda, J. Hering, J. Kybic, T. Burian, S. Dziarzhytski, V. Hájková, Š. Jelínek, L. Juha, K. Juráňová, B. Keitel, Z. Kuglerová, M. Kuhlmann, B. Petryshak, M. Ruiz-Lopez, L. Vyšín, T. Wodzinsk and E. Plönjes

86. ML methods for an improved evaluation of FEL diagnosic data
G. Goetzke, G. Hartmann, S. Düsterer, F. Möller and C. Behrens

87. Climbing the N-shell resonance ladder of xenon
S. Palutke, M. Martins, S. Klumpp, K. Baev, M. Richter, T. Wagner, M. Kuhlmann, M. Ruiz-Lopez, M. Meyer and K. Tiedtke

88. Double electron spectrometer setup for time-resolved photoelectron spectroscopy at FELs
L. Wenthaus, S. Paltuke, D. Kutnyakhov, H.D. Meyer, S. Gieschen and M. Martins

89. Direct observation of phonon-electron energy flow in laser-heated Nickel
V. Shokeen, X. Wang, A. Yaroslavtsev, D. Kutnyakhov, M. Heber, P. Maldonado, Peter M. Oppeneer, H.-J. Elmers, G. Schönhense, N. Wind, L. Wenthaus, F. Pressacco, Sanjoy K. Mahatha, K. Rossnagel and H.A. Dürr

90. Advanced Diagnostic Perspectives for FLASH 2020+
M. Ilchen, C. Behrens, I. Bermudez Macias, Y. Bican, M. Bidhendi, M. Braune, M. Degenhardt, S. Düsterer, G. Goetzke, R. Ivanov, F. Jastrow, V. Music, S. Palutke, C. Passow, S. Savio, W. Helml and K. Tiedtke

91. Investigation of the coherence properties of FEL radiation at FLASH2
R. Quenter, M. Dreimann, D. Eckermann, S. Roling, V. Kärcher, M. Wöstmann, T. Reiker, M. von Piechowski, P.G. Shine, F. Rosenthal, M. Kuhlmann, S. Toleikis, R. Treusch, E. Plönjes-Palm and H. Zacharias

92. Performance of the XUV and soft x-ray split-and-delay unit at FLASH2
M. Dreimann, F. Wahlert, D. Eckermann, F. Rosenthal, S. Roling, T. Reiker, M. Kuhlmann, S. Toleikis, M. Brachmanski, R. Treusch, E. Plönjes-Palm, B. Siemer and H. Zacharias

93. Ultrafast Photodynamics of N3 Dye on the Electron Collector TiO_2
J. Davies, Y. Zhang, H. Fielding and G. Thornton

94. Time–resolved energy–momentum microscopy using FEL and multispectral HHG radiation
N. Wind, M. Heber, D. Kutnyakhov, F. Pressacco and K. Rossnagel

95. A hard X-Ray Split-and-Delay Unit for the HED Instrument at the European XFEL
D. Eckermann, S. Roling, M. Rollnik, P. Gawlitza, K. Appel, L. Samoylova, H. Sinn, F. Siewert, T. Tschentscher, F. Wahlert and U. Zastrau und H. Zacharias

96. Time-resolved XPS study of charge carrier dynamics at the MnPc/C_{60} heterointerface
D. Potorochin, L. Wenthaus, S. Palutke, D. Kutnyakhov, F. Pressacco, M. Scholz, N. Wind, M. Fraund, G. Brenner, O. Gessner, S. Molodtsov, W. Eberhardt and F. Roth

III.3 Other/external/theory

97. Recent developments in nanostructured X-ray optics in three, two and 2.5 dimensions
A. Kubec, J. Erjawetz, C. David and F. Döring

98. snip – digital lab book from a users' perspective
M. Osterhoff, Sebastian Mohr and S. Köster

99. Dynamical diffraction echoes as streaking method to image ultrafast processes
A. Rodriguez-Fernandez

100. Helmholtz Imaging
P. Heuser, D. Schmidt, F. Isensee, K. Sander and S. Krause-Solberg

101. The DESY NanoLab
H. Noei, T.F. Keller, V. Vonk, R. Röhlsberger and A. Stierle

102. Structural insight into the binding mode of sisomicin derivatives and gentamicin C2b to the decoding center of the 30S ribosomal subunit
E. Destan and H. DeMirci

103. Aqueous Solvation of Iodide - Structural dynamics observed by time resolved X ray solution scattering
V. Markmann, J. Pan and K. Haldrup

104. Theoretical description of X-ray absorption by laser-driven electronic system
T. Bezriadina and D. Popova-Gorelova

105. Shock-frozen beams of biomolecules and nanoparticles for single particle imaging
A. D. Estillore, J. He, L. Worbs, S. Kiran Peraval, A.K. Samanta and J. Küpper

106. Theoretical description of time- and momentum resolved photoelectron spectroscopy probing excited-state dynamics in molecular systems at FELs
M. Reuner, K. Baumgärtner, M. Scholz and D. Popova-Gorelova

107. The Centre for Molecular Water Science - CMWS
C. Goy, S. Bari, F. Lehmkühler and M. Schnell

108. Controlling Fragmentation of the Acetylene Cation in the Vacuum-Ultraviolet via Transient Molecular Alignment
L. Varvarezos, J. Delgado-Guerrero, M. Di Fraia, T.J. Kelly, A. Palacios, C. Callegari, A.L. Cavalieri, R. Coffee, M. Danailov, P. Decleva, A. Demidovich, L. DiMauro, S. Düsterer, L. Giannessi, W. Helml, M. Ilchen, R. Kienberger, T. Mazza, M. Meyer, R. Moshammer, C. Pedersini, O. Plekan, K.C. Prince, A. Simoncig, A. Schletter, K. Ueda, M. Wurzer, M. Zangrando, F. Martín and J.T. Costello

109. Development of X-ray mirrors for PAL-XFEL using differential deposition
J. Kim

110. Effects of antimicrobial SPLUNC1 peptide derivatives on efficacy, toxicity, and membrane interations
T. Jakkampudi, Q. Lin, S. Mitra, A. Vijai, W. Qin, A. Kang, J. Chen, E. Ryan, R. Wang, Y. Gong, F. Heinrich, Y. Peter Di and S. Tristram-Nagle

111. X-ray optics for nanometer imaging
J.L. Dresselhaus, M. Prasciolu, H. Fleckenstein, N. Ivanov, M. Zakharova, H.N. Chapman and S. Bajt

112. NFFA European piolet (NEP)
J. Dwivedi, T.F. Keller and A. Stierle

113. Correlative spectro-microscopy to follow the oxidation of PtRh core-shell nanoparticles
J. Dwivedi, L. Bachmann, A. Jeromin, T. F Keller and A. Stierle

114. Time-Delay and Chirp Compensation of Soft X-ray Pulses in the Water Window
C. Braig, C. Seifert and A. Erko

115. An X-ray compound reflection zone plate at 8.3 keV
H. Löchel, S. Vadilonga, C. Braig, A. Firsov, A. Svintsov, M. Brzhezinskaya, M. Wojcik, A. Macrander, L. Assoufid and A. Erko

116. Time-resolved Pair Distribution Function Measurements Resolving Ultrafast Structural Dynamics in $CuIr_2S_4$
J. Griffiths, A. Flavia, S. Marks, L. Wu, P. Evans, S. Boutet, V. Esposito, A. Tadesse, J. Mitchell, D. Keen, M. Dean, S. Billinge, E. Bozin and I. Robinson

117. Surface correlations of femtosecond laser excited Al-coated multilayers observed by grazing-incidence x-ray scattering
L. Randolph, M. Banjafar, T. Yabuuchi, C. Baehtz, E. Brambrink, M. Bussmann, N. P. Dover, S. Göde, G. Jakob, L. Huang, Y. Inubushi, J. Koga, A. Kon, M. Makita, N. Mamiko, M. Paulus, A. Pelka, T. R. Preston, C. Rödel, J.-P. Schwinkendorf, Y. Sentoku, K. Sueda, T. E. Cowan, M. Kläui, T. Kluge, C. Gutt and M. Nakatsutsumi

118. Fabrication of X-Ray Gratings by Grey-Tone Electron-Beam Lithography and Thermal Oxidation of Silicon
N. Samadi, V. Guzenko and C. David

119. Dependence of the damage threshold on the in-situ temperature in materials under X-ray irradiation
N. Medvedev, Z. Kuglerová, M. Makita, J. Chalupský and L. Juha

120. Robust Ptychographic X-ray Speckle Tracking with Multilayer Laue lenses
N. Ivanov, J.L. Dresselhaus, J. Carnis, M. Domaracky, H. Fleckenstein, C. Li, T. Li, M. Prasciolu, O. Yefanov, W. Zhang, S. Bajt and H.N. Chapman

121. Imaging Ultrafast Chemical Dynamics
S. Trippel, I. Vinklárek, D. Koulentianos, H. Bromberger, A. Samartsev, W. Jin, M.S. Robinson, M. Singh, N. Vadassery and J. Küpper

122. Slip competition and rotation suppression in tantalum and copper during dynamic uniaxial compression
P. G. Heighway and J. S. Wark

123. Damage of alkene polymers under FEL irradiation
N. Nikishev and N. Medvedev

124. Bragg Coherent Modulation Imaging for Highly Strained Nanocrystals
J. Zhao, I. Vartaniants and F. Zhang

125. X-ray photon correlation spectroscopy (XPCS) as a use case for DAPHE4NFDI
A. Tosson, S. Timmermann, N. Das Anthuparambil, M. Dargasz and C. Gutt

126. On the feasibility of Time-resolved Powder X-ray diffraction of Macromolecules with low-flux laboratory based ultrafast X-ray sources
K.P. Khakurel

127. Ultrafast non-thermal melting of ice - from transient crystalline plasma to anisotropic melting
I. Dawod, K. Patra, S. Cardoch, O. Grånäs, H.O. Jönsson, A.V. Martin, J. Binns, J.A. Sellberg, A.P. Mancuso, N. Timneanu and C. Caleman

128. Speeding up X-ray-matter molecular dynamics simulation tool XMDYN with tree algorithms
M. Stransky, Z. Jurek, R. Santra, A. P. Mancuso and B. Ziaja

129. HMC Hub Matter
Luigia Cristiano, Gerrit Günther, Markus Kubin, Oonagh Mannix, Özlem Özkan, Gabriel Preuß, Mojeeb Rahman Sedeqi, Vivien Serve and Pascal Walter

130. Exploring biomolecular properties in the gas phase by using advanced light sources
L. Pille, L. Schwob, B. Oostenrijk, J. Leroux, A. Nair and S. Bari

131. Using electrospray ionization and tandem mass spectrometry to study the structure and dynamics of biomolecules
A. Nair, L. Schwob, J. Leroux, L. Pille, B. Oostenrijk, A. Kotobi, C. Mahecha and S. Bari

132. The EuPRAXIA photon beams: ultra-bright light pulses for imaging and spectroscopy
F. Stellato on behalf of the EuPRAXIA collaboration

133. State Localization Perspective of Ionization Potential Depression
T. Gawne, P. Hollebon, G. Perez-Callejo, O. Humphries, J. Wark and S. Vinko

134. Using molecular dynamics to characterise the vaporisation of an x-ray heated metal near its critical temperature
D. Peake, P. Heighway and J. Wark

135. Under Pressure: High-Pressure Biology with MacCHESS at Cornell High Energy Synchrotron Source
J. Wierman, S. Meisburger, R. Gillilan, Q. Huang, Z. Wang and J. Ruff

136. XAS reference database under DAPHNE4NFDI
A. Gaur, S. Paripsa, F. Förste, D. Doronkin, W. Malzer, C. Schlesiger, J.-D. Grunwaldt, B. Kanngießer and D. Lützenkirchen-Hecht

137. Large scale sputter deposition at DESY - magnetic multilayers, targets, x-ray and laser optics
K. Schlage, A. Panchwanee, A. Siemens, M. Ramin Moayed, C. Adolff, L. Bocklage, J. Lütjens and R. Röhlsberger

138. Laser absorption and x-ray radiation in microstructured Ti targets heated by short-pulse relativistically intense laser pulses
X. Pan, S. Sander, M. Šmíd, L. Huang, T. Kluge, V. Bagnoud, E. Brambrink, J. Colgan, T. Ebert, D. Hartnagel, M. Hesse, J. Hornung, A. Kleinschmidt, P. Perez-Martin, A. Neukirch, K. Philipp, G. Schaumann, A. Tebartz, B. Zielbauer, M. Roth and K. Falk

139. Challenges in the production of next generation optical elements with e-beam lithography
A. Fernández Herrero, S. Rehbein, A. Teichert, C. Braig, G. Gwalt, T. Krist, A. Erko and F. Siewert

140. Accurate data quality evaluation for serial crystallography
M. Galchenkova and O. Yefanov

141. Smart chips scanning for serial crystallography
M. Galchenkova, J. Mayer, A.R. Mashhour, P.Y.A. Reinke, H.N. Chapman and O. Yefanov

142. Ultrafast solvation dynamics of aqueous Cl, Br and I with optical and X-ray pump-probe method
Z. Nurekeyev, M. Sekkal, K. Kubicek and C. Bressler

143. Serial Femtosecond Crystallography with Deep Learning
D. Pennicard, H. Graafsma, S. Pala, R. Setty, V. Rahmani and S. Nawaz

144. Theoretical modeling of XFEL irradiated matter: from molecules to bulk systems
Z. Jurek, S. Banerjee, B. Richard and R. Santra

145. Chemical effects on the dynamics of organic molecules irradiated with high intensity x-rays
S. Banerjee, Z. Jurek, M. Muhammad Abdullah and R. Santra

146. Structural Dynamics Of Molecules With X-ray Spectroscopy And Simulations
L. Inhester

147. Efficient, pulse-train-based generation of high-energy, multicycle THz pulses for THz-driven electron acceleration and manipulation.
N.H. Matlis, Z. Zhang, C. Rentschler, Ü. Demirbas, M. Youssef, M. Pergament and F.X. Kärtner

148. Low-temperature cryostats for scientific applications
G. Yakopov, A. Goikhman and M. Yakopov

149. Inert gas glove boxes for scientific applications in particular for Li-ion battery production
D. Melnikov, A. Goikhman, G. Yakopov and M. Yakopov

150. Critical Step in the HCl Oxidation Reaction over single-crystalline CeO_{2-x}(111): Oxygen-Induced Site Change of Surface Chlorine
V. Koller, A. Spriewald-Luciano, S.M. Gericke, A. Larsson, C. Sack, A.Preobrajenski, E. Lundgren and H. Over

151. Electronic states in Moiré superlattices of TMDCs
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152. Optical Sensing using Incoherent Diffractive Imaging
T. Wollweber and K. Ayyer

153. UV and Mid-IR Photo-induced Dissociation Dynamics of Solvated (Bio)Molecular Complexes
M. Singh, M.S. Robinson, H. Bromberger, J. Onvlee, S. Trippel and J. Küpper

154. Research opportunities in photon science at the ELI Beamlines user facility
M. Precek, B. Angelov, S. Espinoza, M. Kloz, M. Krikunova, E. Klimesova, M. Rebarz, A. Zymakova and J. Andreasson

155. Valley selectivity in soft x-ray spectroscopy of monolayer transition metal dichalcogenides: Femtosecond XAS as a novel probe of topological properties of 2-dimensional systems
A. Geondzhian, A. Rubio and M. Altarelli

156. Calculations of molecular excited states using neural networks
Á. Fernández-Corral, Y. Saleh, A. Yachmenev and J. Küpper

157. Bulk plasma temperature determination in high intensity laser solid interaction by time resolved optical shadowgraphy
L. Yang, L. Huang, S.Assenbaum, C. Bernert, I. Goethel, T. Kluge, M. Rehwald, X. Pan, U. Schramm, J. Vorberger, K. Zeil and T. E. Cowan

158. Microsecond time-resolved pink beam serial crystallography
S. Günther, A. Tolstikova, M. Galchenkova, O. Yevanov, P. Reinke, H. Chapman, R. Henning, M. Levantino and A. Meents

159. 3D structure determination with 3 MeV relativistic electrons
A. Rodrigues, V.Hennicke, M.Hachmann, W. Brehm, S. Thekku Veedu, J. Meyer, P. Reinke, L. Melo Costa, K. Bustos, M. Bartelmess, T. Pakendorf, H. Delsim Hashemi, K. Flöttmann and A. Meents

160. A comparative study on the photodissociation of gas-phase peptides in the VUV and soft X-ray regimes with a special focus on the influence of the methionine residue
S. Dörner, L. Schwob, K. Schubert, K. Atak, M. Girod, L. MacAleese, C. L. Pieterse, M. Timm, C. Bülow, V. Zamudio-Bayer, J. T. Lau, T. Schlathölter, S. Techert and S. Bari

161. Full-field x-ray fluorescence spectromicroscopy
P. Meyer, J. Soltau and T. Salditt

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162. GINIX II – biomedical x-ray tomography for PETRA IV
M. Osterhoff, B. Hartmann, P. Luley, M. Sprung and T. Salditt

163. Crystal harvesting and HT ligand screening experiments P11 user lab: increasing your odds using the Crystal Shifter
S.D. Chatziefthymiou, H. Taberman, G. Pompidor, A. Gruzinova, J. Song and J. Hakanpää

164. Effects of X-ray dose and dose rate on structure and dynamics of egg white protein gels
S. Timmermann, N. Das, A. Girelli, N. Begam, M. Kowalski, S. Retzbach, M. Senft, M. Akhundzadeh, H. Poggemann, M. Moron, A. Hiremath, D. Gutmüller, M. Dargasz, Ö. Öztürk, M. Paulus, F. Westermeier, M. Sprung, A. Ragulskaya, F. Zhang, F. Schreiber and C. Gutt

165. Visualizing Exsolved Nanoparticles by Anomalous X-ray Scattering Methods
P. Inangha and S. Mascotto

166. Time-resolved GIWAXS investigations of slot-die coated quantum dot thin-film materials
M. Reus, L.K. Reb, A. Krifa, D. Kosbahn, Q.A. Akkerman, A. Biewald, M. Schwartzkopf, A. Chumakov, S.V. Roth, J. Feldmann, A. Hartschuh and P. Müller-Buschbaum

167. LVP station at P61B: In situ high-pressure studies using synchrotron white-beam
R. Farla, S. Bhat, S. Ma, C. Lathe, K. Spektor, A. Neri, L. Man, A. Chanyshev, S. Sonntag, T. Katsura, U. Haeussermann and H. Kohlmann

168. Upgrading the High-Energy Beamline P21.1 at PETRA III
K. Köhler, A. Dippel, M. von Zimmermann, A. Mirone and B. Winkler

169. MyoSAX - Exploring muscle function in disease and health
A. Hessel

170. Temperature-induced morphology changes at the organic-metal interface: effects on the structure, electronic and thermoelectric performance
B. Sochor, Y. Bulut, M. Betker, A.L. Oechsle, S. Schraad, C.R. Everett, C. Harder, T.-Y. Huang, A. Le Brun, T. Laarmann, P. Müller-Buschbaum and S.V. Roth

171. Current Status and Capabilities of the Extreme Conditions Beamline P02.2 at PETRA III
H.P. Liermann, K. Glazyrin, N. Giordano, T. Fedotenko, M. Wendt, S. Wenz, I. Schwark, J.-T. Roehr and A. Ehnes

172. Planing for the Extreme Conditions Time Resolved XRD & Imaging Microscope (ExTReM) at PETRA IV
H.P. Liermann and K. Glazyrin

173. Aberreation-corrected multilayer Laue lenses
F. Seiboth, A. Kubec, A. Schropp, S. Niese, P. Gawlitza, J. Garrevoet, V. Galbierz, S. Achilles, S. Patjens, M. E. Stuckelberger, C. David and C.G. Schroer

174. Development of CoRDIA: a Detector for next-generation X-ray Sources
A. Marras

175. Toward efficient real-time computation of autocorrelation functions for X-ray photon correlation spectroscopy using FPGAs
S. Frücht, C. Gutt, T. Kenter, R. Lammert, C. Plessl, M. Sprung, H.-G. Steinrück, A. Rehman Tareen and F. Westermeier

176. Probing redox and structural dynamics of V species in V-W-TiO_2 catalysts by operando X-ray emission spectroscopy
D. Doronkin, L. Zheng, F. Benzi, M. Casapu and J.-D. Grunwaldt

177. Iron as an energy source for a climate-neutral circular economy
L. Braun, V. Marchuk, D. Doronkin and J.-D. Grunwaldt

178. Construction of a fast non-linear X-ray shutter system
M. Kowalski, M. Sprung, M. Paulus, D. Weschke, M. Ziolkowski, S. Timmermann and C. Gutt

179. Tunable mesoporous and optoelectronics properties of zinc titanate films using sol-gel technique
Y. Li, N. Li, S. Yin, C. Harder, Y. Bulut, A. Vagias, S.V. Roth and P. Müller-Buschbaum

180. Self-organized structures in/on In/CuPcFx metal-organic interface.
O.V. Molodtsova, D.V. Potorochin, A.N. Chaika and V.Yu. Aristov

181. Layer-by-layer sequential production of graphene on an epitaxial SiC(001) layer grown on a Si(001) substrate
V. Aristov, A. Chaika, D. Potorochin and O. Molodtsova

182. Cochleate structures for drug delivery investigated by SAXS
P. Garidel and S. Funari

183. Development of a photoelectron spectrometer for Hard X-ray photon diagnostics at the European XFEL
J. Laksman, F. Dietrich, J. Liu, T. Maltezopoulos, M. Planas, W. Freund, S. Francoual and J. Grünert

184. X-ray emission setup at P01 to study the electronic structure of iron-bearing compounds *in situ* at high pressure and high temperature
N. Thiering, C. Albers, R. Sakrowski, J. Kaa, G. Scholz, J. Savelkouls, W. Morgenroth, M. Sundermann, H. Gretarsson, M. Wilke, M. Tolan and C. Sternemann

185. Giant Supramolecules Meet Synchrotron Radiation
A. Virovets, E. Peresypkina and M. Scheer

186. The High-Troughput Macromolecular Crystallography Beamline P11 at PETRA III
H. Taberman, C. Borges, S. Chatziefthymiou, E. Crosas, A. Gruzinov, B. Kistner, G. Pompidor, J. Song and J. Hakanpää

187. High Energy X-Ray Diffraction for Physics and Chemistry at beamlines P07 and P21.1 at PETRA III, DESY
I. Gjerlevsen Nielsen, O. Ivashko, P. Glaevecke, O. Gutowski, A.-C. Dippel and M. von Zimmermann

188. PERCIVAL: First users experiments
J. Correa, M. Mehrjoo, R. Battistelli, F. Lehmkühler, A. Marras, C. B. Wunderer, T. Hirono, V. Felk, F. Krivan, S. Lange, I. Shevyakov, V. Vardanyan, M. Zimmer, M. Hoesch, K. Bagschik, N. Guerrini, B. Marsh, I. Sedgwick, G. Cautero, L. Stebel, D. Giuressi, R.H. Menk, A. Greer, T. Nicholls, W. Nichols, U. Pedersen, P. Shikhaliev, N. Tartoni, H.J. Hyun, S.H. Kim, S.Y. Park, K.S. Kim, F. Orsini, F.J. Iguaz, F. Büttner, B. Pfau, E. Plönjes, K. Kharitonov, M. Ruiz-Lopez, R. Pan, S. Gang, B. Keitel and H. Graafsma

189. EASI-STRESS: Standardisation of Industrial Residual Stress Measurements
M. Thiry, D. Canelo-Yubero, E. Maawad, P. Staron, N. Schell, G. Abreu Faria, M. Sanchez-Poncela, J. M. Martinez and N. Zangenberg

190. The hydrothermal autoclave at beamline P65 - recent developments and research examples related to ore deposit formation
M. Borchert, M. Kokh, P. Valsera Moreno, M. Wilke, R. Al Abed, Ch. Schmidt, A. Loges, D. Testemale, W. Morgenroth and S. Klemme

191. In-situ investigation during gold HiPIMS deposition onto polymers
Y. Bulut, B. Sochor, J. Drewes, K. Reck, S. Liang, T. Guan, T. Strunskus, F. Faupel, P. Müller-Buschbaum and S.V. Roth

192. P66 beamline for VUV time- resolved spectroscopy
A. Kotlov, Y. Smortsova, O. Chukova, A. Kataev and I. Schostak

193. Small molecule crystallography beamline, P24
L. Noohinejad and M. Tolkiehn

194. Acoustic emissions detection of micro-cracks under high pressure and high temperature in a deformation large-volume apparatus
S. Ma, J. Gasc, S. Sonntag and R. Farla

195. X-RAYS meet NEUTRONS meet IONS meet ELECTRONS meet LASERS meet MAGNETS: COMBINED ACCESS TO MULTIPLE FACILITIES THROUGH EU PROJECT REMADEARI
M. Stuckelberger, C. Ossig, S. Facsko and B. Schramm

196. Evaluation and Recommendations for Electronic Laboratory Notebooks empowering FAIR Data Management
P. Jordt, W. Lohstroh and B. Murphy

197. Visualization of Strain Distribution in Gold|FeCoSiB coated ZnO Microstructures utilizing Bragg CDI
P. Jordt and R. Rysov and N. Wolff and S. Hrkac and S. Shree and D. Wang and R. Harder and C. Kübel and R. Adelung and O. Shpyrko and O. Magnussen and L. Kienle and B. Murphy

198. Mass Spectrometry Platform as Sample Delivery System for Gas-phase Protein SAXS Experiments
J.C.K. Kung, T. Damjanović, E. De Santis, E.G. Marklund, C. Coleman, T. Kierspel and C. Uetrecht

199. Lattice thermal expansion of as-grown GaAs nanowires due to optical excitation measured by X-ray pump-probe experiment
T. Anjum, F. Marín Largo, A. Al Hassan, R. Prasad Giri, L. Petersdorf, V. Salehi, M. Rössle, B. Murphy, O. Brandt, L. Geelhaar and U. Pietsch

200. Stability of the Fe_3O_4 $(\sqrt{2}\times\sqrt{2})$R45° surface in 0.1M NaOH probed by High-Energy Surface Diffraction
J. Bunge, D. Grumelli, O. Fehrs, T. Fuchs, L. Jacobse, J. Stettner, A. Stierle and O. Magnussen

201. A versatile chemical vapor synthesis reactor for in situ X-ray absorption spectroscopy and X-ray scattering
S. Joshi, M. A. Schroer, A. Levish, M. Stepponat and M. Winterer

202. Raytracing for Beamline Alignment
J. Seltmann, K. Bagschik, M. Hoesch, M. Huang and F. Scholz

203. Active layer aging for the fabricating durable perovskite solar cells with improved reproducibility
Y. Zou and P. Müller-Buschbaum

204. In-situ observation of growth mechanisms during printing of 2D perovskite film
K. Sun, R. Guo, L. F. Huber, M. A. Reus, J. Zhou, M. Schwartzkopf, S.V. Roth and P. Müller-Buschbaum

205. Investigation of Lipid Nanoparticles for Therapeutic Compound Delivery Using Small-Angle X-ray Scattering
B. Angelov, M. Drechsler and A. Angelova

206. PETRA III: P03/MiNaXS - current status and future plans
J. Rubeck, M. Schwartzkopf, A. Chumakov, B. Sochor, A. Davydok, C. Krywka, S. Roth and J. Neumann

207. Multi-beam X-ray ptychography using coded probes
M. Lyubomirskiy, F. Wittwer, M. Kahnt, F. Koch, A. Kubec, K.V. Falch, J. Garrevoet, M. Seyrich, C. David and C.G. Schroer

208. P25: Beamline for Applied Bio-Medical Imaging, Powder Diffraction and Innovation
K. Spiers, N. Thielen, C. Qiu, B. Struth, M. Etter, A. Schoekel, A. Burkhardt, G. Falkenberg and H.-C. Wille

209. A grazing incidence diffraction setup for Langmuir trough experiments at the high-resolution diffraction beamline P08 at PETRA III
C. Shen, R. Kirchhof and F. Bertram

210. PETRA III: Advanced Applications of Synchrotron Radiation
O.H. Seeck, H.-C. Wille and C. Schroer

211. The Powder Diffraction and Total Scattering Beamline P02.1 at PETRA III, DESY
V. Baran, H. Jeppesen, A.S.J. M'endez, A. Schökel, T. Schoof, M. Wendt, S. Wenz and M. Etter

212. Timepix4 readout for experiments at synchrotrons and FELs
J. Correa, A. Ignatenko, D. Pennicard, S. Lange, S. Fridman, S. Smoljanin and H. Graafsma

213. Three-dimensional virtual histology of human heart-forming organoids based on phase-contrast x-ray tomography
K. Komorowski, J. Reichmann, L. Drakhlis, J. Frost, R. Zweigerdt and T. Salditt

214. The high resolution diffraction beamline P08
F. Bertram, R. Kirchhof, C. Shen, A.B. Dey, B. Bharatiya and J. Zhang

215. Phase relations in NH_3-defective NH_3-H_2O mixtures at high pressure
A. Mondal, R. J. Husband, H.-P. Liermann and C. Sanchez-Valle

216. Structure of Water and Ice Under Confinement in Periodic Mesoporous Organosilicas (PMOs)
N. Giesselmann, S. Schwake, P. Lenz, T. Simon, W. Jo, C. Koehn, N. Striker, M. Froeba and F. Lehmkühler

217. 3d virtual histology reveals pathological alterations of cerebellar granule cells in multiple sclerosis
J. Frost, B. Schmitzer, M. Töpperwien, M. Eckermann, J. Franz, C. Stadelmann and T. Salditt

218. Combined X-ray Emission Spectroscopy and Raman Spectroscopy of supercooled water
C. Goy, F. Trinter, R. Bauer, M. Caresana, Y. Chang, M. Harder, S. C. Hoevelmann, A. Kalinin, S. Lalithambika, Y. Zhong and R. Grisenti

219. Photoinduced disulfide bond cleavage and recombination in a copper-sulfur complex studied with Cu and S K-edge pump-probe X-ray absorption spectroscopy
M. Naumova, A. Tayal, J. Ortmeyer, B. Grimm-Lebsanft, S. Buchenau, A. Kalinko, S. Canton, G. Smolentsev and T. Huthwelker

220. Investigation of the Hot Deformation Behavior in VDM® Alloy 780 by In-situ High-energy X-ray Diffraction
M. Fritton, F. Kümmel, A. Kirchmayer, A. Stark, M. Hafez Haghighat, B. Gehrmann, S. Neumeier and R. Gilles

221. Photo-induced structural changes in phospholipid monolayers and vesicles containing azobenzene-glycoconjugates
S. Hövelmann, J. Warias, K. Hansen, J. Kuhn, S. Reinheimer, E. Dieball, R. Giri, L. Petersdorf, N. Hayen, A. Sartori, P. Jordt, C. Shen, F. Reise, T. Lindhorst, O. Magnussen and B. Murphy

222. Pump probe investigations of structural dynamics at the liquid-vapour interface of salt solutions
L. Petersdorf, S. Hövelmann, R. Giri, N. Hayen, K. Hansen, P. Jordt, A. Sartori, M. Greve, F. Bertram, O. Magnussen and B. Murphy

223. SAXS/WAXS imaging at the SAXSMAT beamline: status and future perspectives
A.L.C. Conceicao, S. Pfeffer and S. Haas

224. Adsorption of spike amino acids, asparagine and cysteine, on the surface of model catalyst TiO_2
M. Blanco Garcia, M. Kohantorabi, M. Wagstaffe, M. Tehrani, S. Dolling, A. Stierle and H. Noei

225. Biological SAXS on the P12 beamline and covid-related application
D. Soloviov, A. Gruzinov, M. Schroer, M. Graewert, C. Jeffries, D. Franke, D. Svergun and C. Blanchet

226. Coherence Applications Beamline P10
F. Westermeier, N. Das A, V. Kartik, Z. Ren, W. Roseker, R. Rysov, D. Weschke, H. Xu and M. Sprung

227. XAS reference database under DAPHNE4NFDI
S. Paripsa, D. Lützenkirchen-Hecht, F. Förste, W. Malzer, C. Schlesiger, B. Kanngießer, A. Gaur, D. Doronkin, K. Kornetzky and J.-D. Grunwaldt

228. The SAXSMAT beamline P62: Small Angle X-ray Scattering Beamline for Materials Research
S. Haas, X. Sun, A. Conceicao and S. Pfeffer

229. Shape reconstruction of PtPd nanocatalysts investigated by Bragg CDI during methane oxidation
B. Wang, T.F. Keller, J. Schobe, S. Bernart, L. Bachmann, J. Dwived, A.D. Pandey, K.H. Ngoi, G. Hinsley, D. Lapkin, R. Ryzhov, M. Sprung, A. Stierle and I. Vartaniants

230. Dynamics and Timescales of Higher Order Correlations in Supercooled Colloidal Systems
N. Striker, I. Lokteva, M. Dartsch, F. Dallari, C. Goy, F. Westermeier, V. Markmann, S. C. Hövelmann, G. Grübel and F. Lehmkühler

231. pydidas: A software package to improve the user experience for diffraction data analysis
M. Storm, P. Staron and C. Krywka

232. WaveGate: fast and versatilex-ray chopper for sychrotron beams
D. Schmidt and P. Gaal

233. Stability of biobased coatings on textiles
L. Pluntke, C. Harder, S. Chen, I. Ribca, N. Kölpin, M. Oberthür, P. Müller-Buschbaum, M. Johansson and S.V. Roth

234. Real-time data processing for serial X-ray crystallography
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235. Cellulose-based recyclable efficient solar cells by ultrasonic spray process
S. Xiong, C. Harder, B. Sochor, P. Müller-Buschbaum and S.V. Roth

236. Machine Learning for the Automated Selection and Reconstruction of Multi-Modal Nanotomography Data of Bone-Implant Interfaces
B. Schacht, B. Zeller-Plumhoff, I. Greving and S. Frintrop

237. Exploring non-equilibrium processes in a heated egg yolk using coherent X-rays
N. Das Anthuparambil, A. Girelli, S. Timmermann, M. Kowalski, M. Akhundzadeh, S. Retzbach, M. D. Senft, M. Dargasz, D. Gutmüller, A. Hiremath, M. Moron, Ö. Öztürk, H.-Friederike Poggemann, A. Ragulskaya, N. Begam, A. Tosson, M. Paulus, F. Westermeier, F. Zhang, F. Schreiber, M. Sprung and C. Gutt

238. Layer by Layer Spray - Coating of Cellulose Nanofibrils and Lignin
S. Chen, C. Harder, I. Ribca, L. Pluntke, M. Oberthuer, M. Johansson, J. Navarro and S V. Roth

239. Bragg coherent X-ray diffraction imaging at P10 beamline
Z. Ren, H. Xu, R. Rysov, V. Kartik, D. Weschke, F. Westermeier and M. Sprung

240. next-generation Percival Mechanics
S. Rah, J. Correa, A. Marras, C.B. Wunderer, V.Vardanyan, F. Krivana, V. Felk, S. Lange, F. Okrent, I. Shevyakov, M. Hoesch, K. Bagschik, M. Zimmer, N. Guerrini, B. Marsh, I. Sedgwick, G. Cautero, D. Giuressi, R.H. Menk,h, G. Pinaroli, L. Stebel, A. Greer, T. Nicholls, U. Pedersen, N. Tartoni, H.J. Hyun, K.S. Kim, F. Orsini, A. Dawiec, F. Buettner, B. Pfau, R. Battistelli and H. Graafsma

241. Dose rate-dependent X-ray induced dynamics in dense antibody-protein solutions immunoglobulin G
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242. Studying magnetism with x-ray standing waves - new experimental results
M. Kamiński, P. Pokhriyal, H. Schulz-Ritter, L. Bouchenoire, S. Francoual and M. Tolkiehn

243. The Swedish Materials Science Beamline (SMS) at PETRA III: In-line branch (P21.2)
U. Lienert, S. Gutschmidt, T. Baecker, Zoltan Hegedues and Malte Blankenburg

244. New developments in the software MagStREXS
P. J. Bereciartua, S. Francoual, W. Xie, C. Plueckthun and J. Rodríguez-Carvajal

245. Neodymium acetate as a contrast agent for x-ray phase-contrast tomography
J. Reichmann, T. Ruhwedel, W. Möbius and T. Salditt

246. sXRD study of copper-zinc-alumina (CZA) model systems under methanol synthesis conditions
E. Beck, V. Vonk, H. Noei and A. Stierle

247. Novel magnetic cellulose nanocomposite coating as a potentially flexible electronic material
A. Chumakov, K. Gordeyeva, C.J. Brett, D. Menzel, A.V. Riazanova, D. Soederberg and S.V. Roth

248. Effect of strain rate on slip activation in a Mg-Al alloy by in-situ 3DXRD
G. Zhu, A. Shabalin, U. Lienert and L. Wang

249. High pressure and low temperature single crystal diffraction capabilities at the Resonant Scattering and Diffraction beamline P09, DESY
C. Plückthun, J. Sears, P.J. Bereciartua, J. Bergtholdt, A. Ehnes, J. Geck, K Glazyrin, M. Kusch, H.-P. Liermann, L. Veiga and S. Francoual

250. Implementation of an environmental cell for in situ nanotomography of biological specimen at the imaging beamline P05
M. Nopens, I. Greving, S. Flenner, J. Lüdtke, M. Altgen, S. Heldner, H. Köhm, J. Beruda and A. Krause

251. Nanobeam Scanning 3D X-ray Diffraction Microscopy of a CdTe Solar Cell
A. Shukla, H. Stieglitz, J. Wright, H.F. Poulsen, A. Henningson, M. Stuckelberger, L. Besley, C. Baur, C. Krywka, A. Davydok and J. W. Andreasen

252. In situ X-ray diffraction and imaging beamline P23
D. Novikov, A. Khadiev and M. Nentwich

253. HIKa - Hierarchical Imaging Karlsruhe at Desy
C. Sato Baraldi Dias, M. Czyzycki, D. Novikov and T. Baumbach

254. Insights into physico-chemical properties of Pt/Rh gauze catalysts during industrial ammonia oxidation using hard X-ray microscopy
S. Das, M. Stuckelberger, J. Pottbacker, S. Jakobtorweihen, R. Horn and T. L. Sheppard

255. Bimetallic exsolution of Ni-Fe nanoparticles from perovskite oxides: an insight on mechanistic aspects through in-situ XANES and synchrotron XRD for tailoring catalytic selectivity
F. Colombo, A. Tsiotsias, B. Rudolph, B. Ehrhardt, M. Goula and S. Mascotto

256. Structure and Stability of Methane and Methane Hydrates at Planetary Conditions
K. Mohrbach, A. Mondal, R. Husband, H.-P. Liermann and C. Sanchez-Valle

257. Combined phase contrast imaging and diffraction at extreme conditions
E. Ehrenreich-Petersen, E.F. O'Bannon, J. Hagemann, D.T. Sneed, D.J. Campbell, B. Massani, T. Engler, R. Husband, K. Glazyrin, T. Fedotenko, M. Wendt, S. Wenz, R.S. McWilliams, H.-P. Liermann and Zs. Jenei

258. Sub-micrometer focusing setup for high-pressure crystallography at the Extreme Conditions beamline at PETRA III
K. Glazyrin, S. Khandarkhaeva, T. Fedotenko, W. Dong, D. Laniel, F. Seiboth, A. Schropp, J. Garrevoet, D. Brückner, G. Falkenberg, A. Kubec, C. David, M. Wendt, S. Wenz, L. Dubrovinsky, N. Dubrovinskaia and H.-P. Liermann

259. Determination of structural parameters of mesocrystals formed by polymer-functionalized Au octahedral nanocrystals using AXCCA
S. Singh, D. Lapkin, F. Kirner, S. Sturm, T. Wiek, T. Gemming, A. Lubk, D. Assalauova, A. Ignatenko, A. Khadiev, D. Novikov, E.V. Sturm and I.A. Vartanyants

260. In-operando studies of piezoelectric HfO2 on III-V semiconductor nanostructured devices
S. Singh, Z. Ren, N. Zaiats, I. Vartaniants and A. Mikkelsen

261. Toward high energy resolution in soft X-ray resonant inelastic X-ray scattering using standard photoemission setups
J.O. Schunck, J. Buck, M. Kalläne, S.R. Kruse, R.Y. Engel, S. Marotzke, M. Scholz, S.K. Mahatha, M.-J. Huang, H.M. Rønnow, G. Dakovski, M. Hoesch, K. Rossnagel and M. Beye

262. Structural Investigation of Exsolved Nanoparticles from Thin Films by X-Ray Scattering
E. Fezai, J. K. Kim, M. Schawrtzkopf, W. C. Jung and S. Mascotto

263. Unveiling temperature-induced changes in the protein-protein interactions of cryoprotected Lysozyme solutions
M. Filianina, M. Bin, M. Reiser, S. Berkowicz, H. Li, S. Timmermann, K. Amann-Winkel, C. Gutt and F. Perakis

264. P61A: Materials science experiments with a high energy white beam at PETRA III
G. Abreu Faria, P. Staron and M. Müller

265. Precipitation kinetics in Al alloy 7050 studied by SAXS, WAXS, and numerical modeling
S. Henninger, J. Herrnring, P. Staron, B. Klusemann and M. Müller

266. Development of X-ray compound refractive lenses for synchrotron beamlines
H. van der Velde, D. Spinov, M. Lyubomirskiy, F. Seiboth, C.G. Schroer, W.T.E. van den Beld, M.D. Ackermann and I.A. Makhotkin

267. Revealing Packing Behavior of 3D Binary Mesocrystals through Angular X-ray Cross-Correlation Analysis (AXCCA)
K.H. Ngoi, D. Lapkin, F. Kirner, G. Hinsley, S. Sturm, L. Saric, V. Vuksan, S. Singh, R. Rysov, M. Sprung, S. Park, E. Sturm and I. Vartaniants

268. Resolving the 3D Structure of Au Colloidal Mesocrystals by Coherent X-ray Diffractive Imaging
G. Hinsley, R. Rysov, F. Kirner, D. Lapkin, S. Singh, D. Assalauova, M. Sprung, S. Sturm, E. Sturm and I. Vartaniants

269. X-ray microscopy - an illumination correction
T. Engler, J. Hagemann, M. Trabs and C.G. Schroer

270. Spatial electronic structure of 2H-Hf_2S
C.-H. Min, A. Nierhauve, M. Kalläne, J. Buck and K. Rossnagel

271. Muscle Ankyrin Repeat Protein 1 (MARP1) alters sarcomere protein structures in mammalian skeletal muscle via titin association
M.N. Kuehn, W. Ma, S.W. Han, J. Fleming, O. Mayans, T. Irving, W.A. Linke and A.L. Hessel

272. Towards reconstructing conformational dynamics from protein crystal diffuse scattering
P. Mazumder and K. Ayyer

273. Quantitative Phase-Contrast Imaging at the Micro CT Beamlines P05 and P07
M. Riedel, F. Beckmann, J. U. Hammel, J. Moosmann, F. Wilde, M. Busse and J. Herzen

274. Quantitative, size dependent characterization of mRNA nanoparticles by in line coupling of asymmetrical flow field-flow fractionation with small angle x-ray scattering
C. Wilhelmy, M.A. Graewert, R. Drexel, F. Meier, B. Kolb, C. Blanchet, T. Nawroth, T. Bacic, J. Schumacher, D. Svergun, T. Klein, H. Haas and P. Langguth

275. Phase retrieval in X-ray holographic imaging: beyond the homogeneous object approximation
J. Lucht, S. Huhn, L.M. Lohse and T. Salditt

276. New instrumentation at the chemical crystallography beamline P24
M. Tolkiehn, P. Pokhriyal, L. Noohinejad, H. Schulz-Ritter and C. Paulmann

277. High spatial resolution X-ray diffraction for highly absorbing samples at P06, PETRA III
P. Chakrabarti, A. Wildeis, M. Hartmann, R. Brandt, M. Stückelberger, G. Fevola, C. Ossig, R. Döhrmann, V. Galbierz, K.V. Falch, J. Garrevoet, G. Falkenberg and P. Modregger

278. Data analysis workflow for high-energy grain-resolved 3D x-ray diffraction
A. Shabalin, G. Zhu, J. Hektor, J. Gustafson, B. Neding and U. Lienert

279. Coherent X-ray Scattering Reveals Nanoscale Fluctuations in Hydrated Proteins
M. Bin, M. Reiser, M. Filianina, S. Berkowicz, S. Das, S. Timmermann, W. Roseker, R. Bauer, J. Öström, A. Karina, K. Amann-Winkel, M. Ladd Parada, F. Westermeier, M. Sprung, J. Möller, F. Lehmkühler, C. Gutt and F. Perakis

280. Recent Developments in X-Ray Nanotomography at P05
S. Wirtensohn, S. Flenner, I. Greving and J. Herzen

281. Real-Time Processing Deep Learning Pipeline for Peak Localization and Indexing of GIWAXS Data
V. Starostin, V. Munteanu, L. Pithan, F. Bertram, D. Gavran, A. Gerlach, A. Hinderhofer and F. Schreiber

282. Object initialization for improved ptychography
F. Wittwer, D. Brückner and P. Modregger

283. Correlative imaging of biodegradable Mg-based alloys using in situ SRnanoCT and electron microscopy techniques
Jan Reimers, Huu Ch'anh Trinh, Marta Lipinska-Chwalek, Regine Willumeit-Römer, Joachim Mayer, Imke Greving and Berit Zeller-Plumhoff

284. Advanced methods for phase retrieval in Phase-Contrast tomography.
D. Hailu, T. Jentscht, V. Kulvait and J. Moosmann

285. *In Operando* Soft X-Ray Photoemission Spectroscopy of TMDC Devices
A. Nierhauve, M. Kalläne, J. Buck, T. Zimmermann, Z. Geng, C. Sharma, R. Venturini, C. Zhang, F. Schwierz, M. Ziegler and K. Rossnagel

286. Structural and dynamic analysis of Human Insulin by X-Ray Photon Correlation Spectroscopy
N. Das Anthuparambil, M. Kowalski, M. Dargasz, O. Koutit, C. Gutt and S. Timmermann

287. Nuclear forward scattering in a mono-modal x-ray waveguide
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288. Phase-Contrast Tomography of Organoids
J. Alfken, M.P. Zafeiriou and T. Salditt

289. Time-resolved structural changes in hybrid perovskites under illumination
I. Zaluzhnyy, L. Pithan, A. Hinderhofer, R. Rysov, F. Paulus and F. Schreiber

290. Pulsed laser deposition setups development for thin films in situ growth & investigations
P. Prokopovich, A. Dolgoborodov, E. Fatyanov and A. Goikhman

291. X-ray lens transfocators. Precision refractive optics focusing devices
A. Dolgoborodov, P. Prokopovich, E. Fatyanov and A. Goikhman

292. Coherent correlation imaging for resolving fluctuating states of matter
C. Klose, F. Büttner, W. Hu, C. Mazzoli, K. Litzius, R. Battistelli, I. Lemesh, J.M. Bartell, M. Huang, C.M. Günther, M. Schneider, A. Barbour, S.B. Wilkins, G.S.D. Beach, S. Eisebitt and B. Pfau

293. Towards fast 2d x-ray photon correlation spectroscopy of magnetic domains with the PERCIVAL detector
C. Klose, M. Schneider, B. Pfau, S. Eisebitt, D. Ksenzov, S. Timmermann, C. Gutt, C. Wunderer, T. Hirono, A. Marras, J. Correa, M.-J. Huang, M. Hoesch, K. Bagschick, F. Lehmkühler, R. Gruber, K. Raab, M. Kläui, A. Yaroslavtsev and H. Dürr

294. Neurodegenerative diseases in the aging population: 3D x-ray phase contrast images analysis of epiphyseal calcification
O. Junemann, M. Fratini, I. Bukreeva and A. Cedola

295. Three-dimensional image segmentation of human olfactory bulb structures using deep learning approach
I. Bukreeva, O. Junemann, A. Cedola and M. Ftratini

296. Development of a wavefront analysis platform for online beam characterization at next-generation synchrotron beamlines.
A. Sharma, F. Seiboth and C. Schroer

297. Developing real time coherence analysis platform at next-generation synchrotron beamlines
A. Sharma, F. Seiboth and C. Schroer

298. Simulation of Tomography Experiments with Phasecontrast X-ray at PETRA III
T. Jentschke, F. Otte, J. Moosmann, T. Farago and M. Müller

299. Depth resolved magnetic structure investigation of thin magnetic films using nuclear resonant scattering
A. Panchwanee, K. Schlage, L. Bocklage, S. Velten, A.I. Chumakov, O. Leupold, S. Sadashivaiah, I. Sergeev and R. Röhlsberger

300. Phase Retrieval from 2-Dimensional Nuclear Resonant Scattering spectra
A. Negi, L. Bocklage, L.M. Lohse, S. Sadashivaiah, O. Leupold, I. Sergeev, G. Meier, C, Brandt and R. Röhlsberger

301. Room temperature in-situ synchrotron creep of Fe-based shape memory alloy
M.J. Oza, C. Leinenbach, A. Stark, P.B. Vila and M. Shahverdi

302. Instrumentation for time-resolved synchrotron X-ray diffraction studies of adsorption-induced switching in crystalline nanoporous solids
V. Bon, A. Khadiev and D. Novikov

303. Spatiotemporal design of Metal-Organic Frameworks by tuning of the crystal size and the composition of the metal node
V. Bon, H. Miura, N. Busov, A. Khadiev, D. Novikov and S. Kaskel

304. Investigating the influence of applied loads on degrading Mg-10Gd
B. Hindenlang, F. Wieland, D. Tolnai, F. Wilde and R. Willumeit-Römer

305. New highly luminescent lanthanide metal-organic frameworks based on 2,4,6-tri-(phenylene-4-phosphonic acid)-s-triazine (H6PPT) ligand
K. Papathanasiou, F. Steinke, E.E.S. Teotonio, H. Terraschke and N. Stock

306. Unraveling the Spatial Distribution of Catalytic Non-Cubic Au Phases in a Bipyramidal Microcrystallite by X-ray Diffraction Microscopy
C. Sow, A. Sarma, A. Schropp, D. Dzhigaev, T.F. Keller, C.G. Schroer, M.K. Sanyal and G.U. Kulkarni

307. New luminescent hybrid organic-inorganic Lanthanide based Dipicolinato materials
P.L. Djonwouo, J. Ströh, G. Doungmo, E. Teotonio, W. Bensch, C. Näther and H. Terraschke

308. Resolving x-ray wave mixing processes
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