Scientific Publications X-Ray Optics Group past 10 years

Last updated: December 2016

2016:

1. J. Szlachetko, J. Hoszowska, J.-Cl. Dousse, M. Nachtegaal, W. Błachucki, Y. Kayser, J. Sà, M. Messerschmidt, S. Boutet, G.J. Williams, C. David, G. Smolentsev, J.A. van Bokhoven, B.D. Patterson, T.J. Penfold, G. Knopp, M. Pajek, R. Abela, C.J. Milne
   Establishing nonlinearity thresholds with ultraintense X-ray pulses
   Scientific Reports **6** (2016) p. 33292

2. C.-S. Lee, Y.-Y. Lee, K.S.L. Chong, L. Wang, C. Dais, F. Clube, H.H. Solak, I. Mohacsi, C. David and R. Bischofberger
   High-resolution, high-aspect-ratio iridium-nickel composite nanoimprint molds
   Journal of Vacuum Science and Technology B **34** (2016) p. 061804-5

3. Y. Kayser, C. David, U. Flechsig, J. Krempasky, V. Schlott and R. Abela
   X-ray grating interferometer for in-situ and at-wavelength wavefront metrology
   Journal of Synchrotron Radiation **24** (2016) p. 1-13 https://doi.org/10.1107/S1600577516017562

4. L. Ahad, I. Vartiainen, T. Setälä, A.T. Friberg, C. David, M. Makita, and J. Turunen
   On spectral and temporal coherence of X-ray free-electron laser beams
   Optics Express **24** (2016) p. 13081-13090

5. P. Roedig, R. Duman, J. Sanchez-Weatherby, I. Vartiainen, A. Burkhardt, M. Warmer, C. David, A. Wagner, and A. Meents
   Room-temperature macromolecular crystallography using a micro-patterned silicon chip with minimal background scattering
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6. J. Vila-Comamala, J. Bosgra, D.S. Eastwood, U. Wagner, A.J. Bodey, M. Garcia-Fernandez, C. David, C. Rau,
   Transmission x-ray microscopy at Diamond-Manchester I13 Imaging Branchline
   AIP Conference Proceedings **1696** (2016) p. 020036-4

7. Y. Kayser, S. Rutishauser, T. Katayama, T. Kameshima, H. Ohashi, U. Flechsig, M. Yabashi, and C. David
   Shot-to-shot diagnostic of the longitudinal photon source position at the SPring-8 Angstrom Compact Free Electron Laser by means of X-ray grating interferometry,
   Optics Letters **41** (2016) p. 733-736

8. I. Vartiainen, I. Mohacsi, K. Stachnik, M. Guizar-Sicairos, C. David, and A. Meents
   Zernike X-ray Ptychography
   Optics Letters **41** (2016) p. 721-724

9. T. Katayama, S. Owada, T. Togashi, K. Ogawa, P. Karvinen, I. Vartiainen, A. Eronen, C. David, T. Sato, K. Nakajima, Y. Joti, H. Yumoto, H. Ohashi, and M. Yabashi
   A Beam Branching Method for Advanced Single-shot Characterization of Hard X-ray Free-electron Lasers
   Structural Dynamics **3** (2016) p. 034301-14

10. I. Mohacsi, I. Vartiainen, M. Guizar-Sicairos, P. Karvinen, V.A. Guzenko, E. Müller, C.M. Kewish, A. Somogyi and C. David
    Fabrication and characterization of high efficiency double-sided blazed X-ray optics
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11. K. Gajos, V.A. Guzenko, M. Dubner, J. Haberko, A. Budkowski, and C. Padeste
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12. S. Pfirrmann, A. Voigt, A. Kolander, G. Grützner, O. Lohse, I. Harder, and V.A. Guzenko
    Towards a novel positive tone resist mr-PosEBR for high resolution electron-beam lithography
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13. R. Kirchner, V.A. Guzenko, I. Vartiainen, N. Chidambaram, and H. Schift
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    Microelectronic Engineering **153** (2016) p. 71-76

14. S. Pfirrmann, R. Kirchner, O. Lohse, V.A. Guzenko, A. Voigt, I. Harder, A. Kolander, H. Schift, and G. Grützner
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18. K. Stachnik, I. Mohacsi, I.Vartiainen, N. Stuebe, J. Meyer, M. Warmer, C. David, and A. Meents
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20. I. Vartiainen, C. Holzner, I. Mohacsi, P. Karvinen, A. Diaz, and C. David
Artifact characterization and reduction in scanning X-ray Zernike phase contrast microscopy
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25. S. d'Hollosy, M. Jung, A. Baumgartner, V.A. Guzenko, M.H. Madsen, J. Nygard, C. Schönenberger
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