Publication List

[1] G. Knopp, M. Schmitt, A. Materny and W. Kiefer. *Femtosecond Time-Resolved Pump-Probe Spectroscopy of NaI in Rare-Gas Environment.* J. Phys. Chem. 101, 4852, (1997).

[2] M. Schmitt, G. Knopp, A. Materny and W. Kiefer. *Femtosecond Time-Resolved Coherent Anti-Stokes Raman Scattering for the Simultaneous Study of Ultrafast Ground and Excited State Dynamics: Iodine Vapour.* Chem. Phys. Lett. 270, 9, (1997).

[3] M. Schmitt, G. Knopp, A. Materny and W. Kiefer. *Femtosecond Time-Resolved Four-Wave Mixing Spectroscopy in Iodine Vapour.* Chem. Phys. Lett. 280, 339, (1997).

[4] H. Dietz, G. Knopp, A. Materny und V. Engel. *The perturbation of coherent wave-packet dynamics by atom / molecule collisions: the NaI + Ar system.* Chem. Phys. Lett., 275, 519, (1997).

[5] W. Kiefer, G. Knopp, A. Materny, R. Pausch, M. Schmitt and H. Schwoerer. *Femtosecond Spectroscopy on simple Molecular Systems: Pump-Probe and CARS Techniques.* Chinese J. Light Scat. , 9, 45, (1997).

[6] M. Schmitt, G. Knopp, A. Materny und W. Kiefer. *The Application of Femtosecond Time-Resolved Coherent Anti-Stokes Raman Scattering for the Investigation of Ground and Excited State Molecular Dynamics of Molecules in the Gas Phase.* J. Phys. Chem. A, 102, 4059, (1998).

[7] O. Rubner, M.Schmitt, G. Knopp, A. Materny, W. Kiefer und V. Engel. *Femtosecond Time-Resolved CARS Spectroscopy on Binary Gas Phase Mixtures a Theoretical and Experimental Study of the Benzene/Toluene System.* J. Phys. Chem. A, 102, 9734, (1998).

[8] W. Kiefer, T. Chen, V. Engel, M. Heid, G. Knopp, A. Materny, S Meyer, R. Pausch, M. Schmitt, and H. Schwoerer. *Femtosecond Pump-Probe and Four-Wave-Mixing Spectroscopies Applied to Simple Molecules.* Vibrational Spectroscopy, 19, 23, (1999).

[9] W. Kiefer, T. Chen, V. Engel, M. Heid, G. Knopp, A. Materny, S. Meyer, R. Pausch, M. Schmitt, and H. Schwoerer. *Determination of Wavepacket Dynamics by Femtosecond Time-Resolved Pump-Probe and Four-Wave Mixing Techniques.* J. Mol. Struct., 480, 33, (1999).

[10] T. Chen, H. Dietz, V. Engel, M.Heid, W.Kiefer, G.Knopp, A. Materny, S. Meyer, R. Pausch, M.Schmitt, H. Schwoerer and T. Siebert. *Femtosecond Spectroscopy on Simple Molecular Systems: Pump-Probe and Four-Wave Mixing Techniques.* SPIE 3733, 2, (1999).

[11] G. Flachenecker, P. Behrens, G. Knopp, M. Schmitt, T. Siebert, A. Vierheilig, G. Wirnsberger and A. Materny. *Femtosecond Time-Resolved Dynamics of Geminate and Nongeminate Recombination: Iodine Enclosed in Nanocavities of a Microporous SIO_2 Modification.* J. Phys. Chem. A, 103, 3854, (1999).

[12] G. Knopp, I. Pinkas and Y. Prior. *Two Dimensional Time Delayed Coherent Anti-Stokes Raman Spectroscopy of Ground State Vibrational Wavepacket Dynamics.* J. Raman. Spectrosc. , 31, 51, (2000).

[13] Y. Prior, I. Pinkas and G. Knopp. *CARS Monitoring of Ground State Vibrational Wavepackets Prepared by Time-Delayed Femtosecond Pulses.* Nonlin. Optics, 24, 233, (2000).

[14] I.Pinkas, G. Knopp and Y. Prior. *Preparation and monitoring of high ground state vibrational wavepackets by femtosecond coherent anti-Stokes Raman scattering.* J. Chem. Phys.,115, 236,(2001).

[15] J. Feader, I. Pinkas, G. Knopp, Y. Prior and D. J. Tannor. *Vibrational polarization beats in femto second CARS: A signature of dissociative pump - dump - pump wavepacket dynamics.* J.Chem. Phys., 115, 8440, (2001).

[16] G. Ingold, A. Streun, B. Singh, R. Abela, P. Beaud, G. Knopp, L. Rivkin, V.Schlott, Th. Schmidt, H.Sigg, J.F. van der Veen, A. Wrulich, S. Khan. *Sub-Picosecond optical pulses at the SLS storage ring*. PAC, Chicago, (2001).

[17] G. Knopp, P. Beaud, P. Radi, M. Tulej, and T. Gerber. *Femtosecond Photodissociation of the Ethyl Radical C_2H_5.* Femtochemistry and Femtobiology: ultrafast dynamics in molecular science, world scientific, 116, (2002).

[18] G. Knopp, P. Beaud, P. Radi, M. Tulej, B. Bougie, D. Cannavo and T. Gerber. *Pressure-dependent N_2 Q-branch fs-CARS measurements.* J. Raman. Spectrosc. , 33, 861, (2002).

[19] P. Beaud and G. Knopp. *Scaling rotationally inelastic collisions with an effective angular momentum parameter.* Chem. Phys. Lett., 371,194, (2003).

[20] G. Knopp, P. Radi, M. Tulej, T.Gerber and P. Beaud. *Collision induced rotational energy transfer probed by time-resolved CARS.* J. Chem. Phys., 118, 8223, (2003).

[21] P.Beaud, T. Gerber, P. Radi, M. Tulej, and G. Knopp. *Rotational inelastic collisions between N_2 and rare gases: a verification of the angular momentum scaling law.* Chem. Phys. Lett., 373, 251,(2003).

[22] G. Knopp, K. Kirch, P. Beaud, K. Mishima, H. Spitzer, P. Radi, M. Tulej and T. Gerber. *Determination of the ortho/para deuterium concentration ratio with femtosecond CARS.* J. Raman. Spectrosc. , 34, 989-993, (2003).

[23] F. Atchinson, P. Beaud, T. Brys, M. Daum,P. Fierlinger, R. Henneck, T. Hofmann, K.Kirch, G. Kühne, G. Knopp, A. Pichlmaier, A. Serebov, H. Spitzer, J. Wambach, J. Wimmer, and A. Wokaun. *Ortho-para equilibrium in a liquid D2 neutron moderator under irradiation.* Phys. Rev. B. , 68, 094114, (2003).

[24] P.P. Radi, M. Tulej, G. Knopp, P. Beaud and T. Gerber. *Stimulated Emission Pumping by Two-Color Resonant Four-Wave Mixing: Rotational Characterization of Vibrationally Excited HCO(X2A').* J. Raman. Spectrosc. 34, 1037-1044, (2003).

[25] B. Lavorel, H. Tran, E. Hertz, O. Faucher, P. Joubert, M. Motzkus, T. Buckup, T. Lang, H. Skenderovi, G. Knopp, P. Beaud, H.M. Frey, *Femtosecond Raman time-resolved molecular spectroscopy*, C.R. Physique, 5, 215-229, (2004).

[26] G. Knopp, P. Beaud, P. Radi, M. Tulej and T. Gerber, *Collision induced rotational energy transfer. A new scaling law probed by fs Cars*, Femtochemistry and Femtobiology: ultrafast dynamics in molecular science, world scientific, 69-72, (2004).

[27] T. Chen, G. Knopp, M. Schmitt, and A. Materny, *Ultrafast nonlinear Raman spectroscopy for the investigation of elementary molecular dynamics*, Asian Chemistry Letters, 7, 177 (2004).

[28] G. Knopp, P. Beaud, P. Radi, M. Tulej, and T. Gerber, *Collision-induced line broadening and mixing probed by femtosecond CARS*, Asian Chemistry Letters, 7, 237 (2004).

[29] M. Tulej, G. Knopp, P. Beaud, T. Gerber and P. P. Radi, *Photo-Fragment Excitation Spectroscopy (PHOFEX) by DFWM and LIF: Propensities for $H_2CO \rightarrow HCO + H$ near the S_o Threshold*, J. Raman Spectrosc., 36, 109-115 (2005).

[30] R. Ganter, R.J. Bakker, R. Betemps, M. Dehler, T. Gerber, J. Gobrecht, C. Gough, M. Johnson, E. Kirk, G. Knopp, F. Le Pimpec, K. Li, M. Paraliev, M. Pedrozzi, L. Rivkin, H. Sehr, L. Schulz and A. Wrulich, *Nanoseconds field emitted current pulses from ZrC needles and field emitter arrays*, Journal of Vacuum Science and Technology B, 24(2), 974-978 (2006).

[31] D. Cannavo, G. Knopp, P. Radi, P. Beaud, M. Tulej, P. Bodek, T. Gerber, and A. Wokaun, *Neutral molecular ZnX (X=O,OH,N) compounds in a molecular beam*, Journal of Molecular Structure, 782, 67-72 (2006).

[32] M. Tulej, M. Meisinger, G.Knopp, A.M. Walser, P. Beaud, T. Gerber and P.P.Radi, *Degenerate and two-color resonant four-wave mixing applied to the rotational characterization of high- lying vibrational states of formaldehyde $(A,^1A_2)^+$*, Journal of Raman Spectroscopy, 37, 376-383 (2006).

[33] M. Tulej, M. Meisinger, G.Knopp, A.M. Walser, P. Beaud, T. Gerber and P.P.Radi, *Comparitive study of degenerate four-wave mixing and cavity ringdown signal intensities of formaldehyde in a molecular beam*, Journal of Raman Spectroscopy, 37, 680-688 (2006).

[34] A.M. Walser, P. Beaud, P. Radi, M. Tulej, T. Gerber and G.Knopp, *Time resolved investigation of the ν_1 ro- vibrational Raman band of H_2CO with fs CARS*, J. Raman Spectrosc., 38, 147-153 (2007).

[35] G. Knopp, A. M. Walser, P. P. Radi, P. Beaud, M. Tulej, T. Gerber, *Investigation of Coriolis Perturbations on the ro-vibrational ν_1 Band of H_2CO with fs-CARS*, Ultrafast Phenomena XV, Springer Series in Chemical Physics, 88, 567-569, (2007) .

[36] M. Tulej, M. Meisinger, G. Knopp, A.M. Walser, T. Gerber, P.P. Radi *Multiplex spectroscopy of stable and transient species in a molecular beam*, Journal of Raman Spectrosc. 38, 1022-1031, (2007).

[37] A.M. Walser, M. Meisinger, P. P. Radi, T. Gerber and G. Knopp, *Resonant UV- fs-TCFWM spectroscopy on formaldehyde*, Physical Chemistry Chemical Physics,11, 8456-8466, (2009).

[38] Bornhauser P, Knopp G, Gerber T, and P.P. Radi, *Deperturbation study of the D^3P_g, v '=4 state of C_2 by applying degenerate and two-color resonant four-wave mixing* , Journal of Molecular Spectroscopy, 262, 69-74, (2010).

[39] Tulej M, Knopp G, Gerber T, and P.P. Radi, *Degenerate and two-color resonant four-wave mixing of C_2^- in a molecular beam environment*, Journal of Raman Spectrosc. , 41, 853 – 858, (2010).

[40] G. Knopp, P.P. Radi, Y. Sych and T.Gerber, *Dissection of dispersed Off-Resonant Fs – DFWM of O_2,* Journal of Raman Spectrosc., 42(10),1848-1853(2011).

[41] G. Knopp, P.P. Radi, T.Gerber, *Dispersed fs-FWM for Investigations of Low Frequency Vibrations of Transient Species in Combustion.* Chimia 65(5), 339-341, (2011).

[42] Bornhauser P., Sych Y., Knopp G., Gerber T., Radi P. P., *Shedding light on a dark state: The energetically lowest quintet state of C_2.* Journal of Chemical Physics 134(4), (2011).

[43] Y. Liu, Th. Gerber, P. Radi, Y. Sych, P. Maksyutenko and G. Knopp *Investigation of ultrafast dynamics in electronically excited alkylbenzenes.* Proc. XVIII Int. Conf. on Ultrafast Phenomena, Lausanne, Switzerland, July 9-13 (2012).

[44] Gerber Thomas, Liu Yuzhu, Knopp Gregor, Hemberger Patrick, Bodi Andras, Radi Peter, Sych Yaroslav, *Charged particle velocity map image reconstruction with one-dimensional projections of spherical functions*, Review of Scientific Instruments 84, 033101 (2013).

[45] Yuzhu Liu, Thomas Gerber, Yaroslav Sych, Peter Radi, and Gregor Knopp, *Real-time observation of ultrafast internal conversion in ethylbenzene by femtosecond time-resolved photoelectron imaging*, Optics Express, Vol. 21, Issue 14, pp. 16639-16647 (2013).

[46] P. Bornhauser, Y. Sych, G. Knopp, T. Gerber, P.P. Radi, *Re-visiting the observation of the v = 4 vibronic sequence of the C_2 Swan system.* Chem. Phys. Lett., PII, S0009-2614(13)00478-8, (2013).

[47] Yuzhu Liu, Gregor Knopp, Patrick Hemberger, Yaroslav Sych, Peter Radi, Andras Bodi, and Thomas Gerber, *Ultrafast imaging of electronic relaxation in o-xylene: A new competing intersystem crossing channel*, Physical Chemistry Chemical Physics, DOI: 10.1039/C3CP53004C (2013).

[48] Yaroslav Sych, Peter Bornhauser, Gregor Knopp, Yuzhu Liu, Thomas Gerber, Roberto Marquardt, and Peter Radi, *Perturbation Facilitated Two-Color Four-Wave-Mixing Spectroscopy of C_3*, Journal of Physical Chemistry, Vol. 139, Issue 15, DOI: 10.1063/1.4825198 (2013).

[49] Yuzhu Liu, Peter Radi, Thomas Gerber, Gregor Knopp, *Study on the ultrafast dynamics of o-xylene cation by combined, fs-photoelectron imaging-photofragmentation spectroscopy,* Chem.Phys., DOI: 10.1016/ j.chemphys.2014.02.009, (2014).

[50] Yuzhu Liu, Thomas Gerber, Yaroslav Sych, Peter Radi, and Gregor Knopp, *Switching the vibrational excitation of a polyatomic ion in multi-photon strong field ionization*, Chem. Phys. Lett., 610/611, 153–158 (2014).

[51] Liu, Y., Knopp, G., Gerber, T., *Ultrafast dynamics of ethylbenzene cations probed by photofragmentation and photoelectron spectrometry,* Journal of Molecular Structure, Vol. 1076, 26-30, (2014).

[52] Liu Yu-Zhu, Knopp Gregor, XIAO Shao-Rong et al. *Ultrafast Imaging of Electronic Relaxation in Ortho-xylene: New Features from Fragmentation-Ion Spectroscopy.* Chin. Phys. Lett., 31(12), 127802, (2014).

[53] Liu, Y., Gerber, T., Radi P., Knopp G., *Ultrafast imaging of electronic relaxation in n-propylbenzene: Direct observation of intermediate state.* Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 149, p. 54-58, (2015).

[54] P. Bornhauser, R. Marquardt, C. Gourlaouen, G. Knopp, M. Beck, T. Gerber, J. van Bokhoven, and P.P. Radi, *Perturbation-facilitated detection of the first quintet-quintet band in C_2.* The Journal of Chemical Physics, 142(9), p. 094313, (2015).

[55] Liu Y., Knopp G. and T. Gerber, *Direct observation of up-conversion via femtosecond photoelectron imaging*, Phys. Review A, 92, 042501, (2015).

[56] G. Knopp et al., *Time-Resolved X-ray Spectroscopy Mapping electron flow in matter with the ATHOS beamline at SwissFEL Part IV. Non-Linear X-Ray Optics*, Paul Scherrer Institut, PSI Bericht Nr. 14-01 (2014).

[57] Yuzhu Liu, Thomas Gerber, Chaochao Qin, Feng Jin, and Gregor Knopp, *Visualizing competing intersystem crossing and internal conversion with a complementary measurement,* The Journal of Chemical Physics, 144, 084201, DOI: 10.1063/1.4942124, (2016).

[58] F. Bencivenga, A. Calvi, F. Capotondi, R. Cucini, R. Mincigrucci, A. Simoncig, M. Manfredda, E. Pedersoli, E. Principi, F. Dallari, R. A. Duncan, M. G. Izzo, G. Knopp, A. A. Maznev, G. Monaco, S. Di Mitri, A. Gessini, L. Giannessi, N. Mahne, I. P. Nikolov, R. Passuello, L Raimondi,M. Zangrando, and C. Masciovecchio, *Four-wave-mixing experiments with seeded free electron lasers,* Faraday Discussions, doi:10.1039/C6FD00089D, (2016).

[59] B. Visser, M. Beck, P. Bornhauser, G. Knopp, T. Gerber, R. Abela, J. A. van Bokhoven and P. P. Radi, *Unraveling the electronic structure of transition metal dimers using resonant four-wave mixing,* Journal of Raman Spectroscopy , 47, 425–431, doi: 10.1002/jrs.4841, (2016).

[60] Jakub Szlachetko, Joanna Hoszowska, Jean-Claude Dousse, Maarten Nachtegaal, Wojciech Błachucki, Yves Kayser, Jacinto Sà, Marc Messerschmidt, Sebastien Boutet, Garth J. Williams, Christian David, Grigory Smolentsev, Jeroen A. van Bokhoven, Bruce D. Patterson, Thomas J. Penfold, Gregor Knopp, Marek Pajek, Rafael Abela and

Christopher J. Milne, *Establishing nonlinearity thresholds with ultra-intense X-ray pulses,* Nature Scientific Reports, DOI: 10.1038/srep33292, (2016).

[61] Thomas J. Penfold, Jakub Szlachetko, Wojciech Gawelda, Fabio G. Santomauro, Alexander Britz, Tim B. van Driel, Leonardo Sala, Simon Ebner, Steve H. Southworth, Gilles Doumy, Anne Marie March, Carl S. Lehmann, Tetsuo Katayama, Melanie Mucke, Denis Iablonskyi, Yoshiaki Kumagai, Gregor Knopp, Koji Motomura, Tadashi Togashi, Shigeki Owada, Makina Yabashi, Jochen Rittmann, Martin M. Nielsen, Marek Pajek, Kiyoshi Ueda, Majed Chergui, Rafael Abela, and Christopher J. Milne, *Femtosecond X-ray Absorption and Emission Spectroscopy on ZnO Nanoparticles in Solution,* International Conference on Ultrafast Phenomena, OSA Technical Digest (online) (Optical Society of America), paper UF1A.6 (2016).

[62] P. Bornhauser, B. Visser, M. Beck, G. Knopp, J. A. van Bokhoven, R. Marquardt, and P. P. Radi, *Experimental and theoretical investigation of the vibrational band structure of the 1^5P_u - 1^5P_g high-spin system of C_2,* The Journal of Chemical Physics 146, 114309; DOI: 10.1063/1.4978334, (2017).

[63] Rafael Abela, Paul Beaud, Jeroen A. van Bokhoven, Majed Chergui, Thomas Feurer, Johannes Haase, Gerhard Ingold, Steven L. Johnson, Gregor Knopp, Henrik Lemke, Chris J. Milne, Bill Pedrini, Peter Radi, Gebhard Schertler, Jörg Standfuss, Urs Staub, and Luc Patthey, *Perspective: Opportunities for ultrafast science at SwissFEL*, Structural Dynamics 4, 061602, DOI: 10.1063/1.4997222, (2017).

[64] Yuzhu Liu, Wenyi Yin, Thomas Gerber, Feng Jin and Gregor Knopp, *Visualization of the formation of cyclopentylcarbene using time-resolved photoelectron imaging spectroscopy,* Laser Phys. Lett. 14 105301, DOI: 10.1088/1612-202X/aa8019, (2017)

[65] Jakub Szlachetko, Maarten Nachtegaal, Daniel Grolimund, Gregor Knopp, Sergey Peredkov, Joanna Czapla–Masztafiak and Christopher J. Milne, *A Dispersive Inelastic X-ray Scattering Spectrometer for Use at X-ray Free Electron Lasers,* Appl. Sci. 2017, 7, 899; doi:10.3390/app7090899, (2017).

[66] A. A. Maznev, F. Bencivenga , A. Cannizzo, F. Capotondi, R. Cucini , R. A. Duncan, T. Feurer, T. D. Frazer , L. Foglia , H.-M. Frey, H. Kapteyn, J.

Knobloch, G. Knopp, C. Masciovecchio, R. Mincigrucci, G. Monaco, M. Murnane, I. Nikolov, E. Pedersoli , A. Simoncig, A. Vega-Flick , and K. A. Nelson, *Generation of coherent phonons by coherent extreme ultraviolet radiation in a transient grating experiment*, Appl. Phys. Lett. 113, 221905; DOI: 10.1063/1.5048023, (2018).

[67] M. Tulej, R. Wiesendanger, A. Riedo, G. Knopp, and P. Wurz, *Mass spectrometric analysis of the Mg plasma produced by double-pulse femtosecond laser irradiation*, J. Anal. At. Spectrom., 33, 1292, DOI: 10.1039/c8ja00036k ,(2018).

[68] Mathias Steglich, Gregor Knopp and Patrick Hemberger, *How the methyl group position influences the ultrafast deactivation in aromatic radicals,* Phys.Chem.Chem.Phys. 21, 581, DOI: 10.1039/c8cp06087h, (2019).

[69] R. Bohinc, G. Pamfilidis, J. Rehault, P. Radi, C. Milne, J. Szlachetko, F. Bencivenga, F. Capotondi, R. Cucini, L. Foglia, C. Masciovecchio, R. Mincigrucci, E. Pedersoli, A. Simoncig, A. Cannizzo, H. M. Frey, Z. Ollmann, T. Feurer, A. A. Maznev, K. Nelson, and G. Knopp, *Nonlinear XUV-optical transient grating spectroscopy at the Si L2;3 – edge,* Appl. Phys. Lett. 114, 181101, DOI:10.1063/1.5085413, (2019).

[70] C. Svetina, R. Mankowsky, G. Knopp, F. Koch, G. Seniutinas, B. Rösner, A. Kubec, M. Lebugle, I. Mochi, M. Beck, C. Cirelli, J. Krempasky, C. Pradervand, J. Rouxel, G. F. Mancini, S. Zerdane, B. Pedrini, V. Esposito, G. Ingold, U. Wagner, U. Flechsig, R. Follath, M. Chergui, C. Milne, H. T. Lemke, C. David, and P. Beaud, *Towards X-ray transient grating spectroscopy*, Optics Letters, Vol. 44,3, 574-577, DOI: 10.1364/OL.44.000574, (2019).

[71] M. Beck, P. Bornhauser, B. Visser, G. Knopp, J. A. van Bokhoven, P. P. Radi, *Spectroscopic disentanglement of the quantum states of highly excited Cu_2,* Nat. Comm., DOI: 10.1038/s41467-019-11156-2, (2019).

[72] Y. Kayser,*, C. Milne, P. Juranić, L. Sala, J. Czapla-Masztafiak, R. Follath, M. Kavčič, G. Knopp, J. Rehanek, W. Błachucki, M. G. Delcey, M. Lundberg, K. Tyrala, D. Zhu, R. Alonso-Mori, R. Abela, J. Sá, J. Szlachetko, *Core-level nonlinear spectroscopy triggered by stochastic X-ray pulses,* Nat. Comm., DOI: 10.1038/s41467-019-12717-1, (2019).

[73] Q. Zhang, P. Bornhauser, G. Knopp, P. Radi, *Observation of a gerade symmetry state of Cu2 using two-color resonant four-wave mixing*, J Raman Spectrosc. 1-7, DOI: 10.1002/jrs.5794, (2019).

[74] Y. Deng, S. Zerdane, X. Xie, E. Divall, P. Johnson, C. Arell, H. Lemke, R. Mankowsky, A. Oggenfuss, C. Svetina, C. Erny, C. Cirelli, C. Milne, G. Knopp, P. Beaud and S. Johnson, *Optical second harmonic generation in LiB3O5 modulated by intense femtosecond X-ray pulses,* Optics Express, 28, 11117, DOI:10.1364/OE.388911, (2020).

[75] G. Smolentsev, C. Milne, A. Guda, K. Haldrup, J. Szlachetko, N. Azzaroli, C. Cirelli, G. Knopp, R. Bohinc, S. Menzi, G. Pamfilidis, D. Gashi, M. Beck, A. Mozzanica, D. James, C. Bacellar, G. Mancini, A. Tereshchenko, V. Shapovalov, W. Kwiatek , J. Czapla-Masztafiak, A. Cannizzo, M. Gazzetto, M. Sander, M. Levantino, V. Kabanova, E. Rychagova, S. Ketkov, M. Olaru, J. Beckmann and M. Vogt, *Taking a snapshot of the triplet excited state of an OLED organometallic luminophore using X-rays*, Nat. Comm., 11, 2131, DOI: 10.1038/s41467-020-15998-z, (2020).

[76] P. Skopintsev, D. Ehrenberg, T. Weinert, D. James, R. Kar, P. Johnson, D. Ozerov, A. Furrer, I. Martiel, F. Dworkowski, K. Nass, G. Knopp, C. Cirelli, C. Arrell, D. Gashi, S. Mous, M. Wranik, T. Gruhl, D. Kekilli, S. Brünle, X. Deupi, G. Schertler, R. Benoit, V. Panneels, P. Nogly, I. Schapiro, C. Milne, J. Heberle and J. Standfuss, *Femtosecond-to-millisecond structural changes in a light-driven sodium pump,* Nature, DOI: 10.1038/s41586-020-2307-8, (2020)