

## Publications

### Journal Publications (\* Invited)

- [92] E. W. de Vos, S. Neb, A. Niedermayr, F. Burri, M. Hollm, L. Gallmann, U. Keller  
"Ultrafast transition from state-blocking dynamics to electron localization in transition metal  $\beta$ -tungsten"  
*Phys. Rev. Lett.* **131**, 226901 (2023), doi: 10.1103/PhysRevLett.131.226901
- [91] M. Volkov, S. A. Sato, A. Niedermayr, A. Rubio, L. Gallmann, U. Keller  
"Floquet-Bloch resonances in near-petahertz electroabsorption spectroscopy of  $\text{SiO}_2$ "  
*Phys. Rev. B* **107**, 184304 (2023), doi: 10.1103/PhysRevB.107.184304 –  
**Editors' Suggestion**
- [90] Z. Schumacher, S. A. Sato, A. Niedermayr, L. Gallmann, A. Rubio, U. Keller  
"Ultrafast electron localization and screening in a transition metal dichalcogenide"  
*Proc. Natl. Acad. Sci.* **120**(15), e2221725120 (2023), doi: 10.1073/pnas.2221725120
- [89] P.-A. Chevreuril, F. Brunner, U. Thumm, U. Keller, L. Gallmann  
"Breakdown of the single-collision condition for soft X-ray high harmonic generation in noble gases"  
*Optica* **9**(12), 1448 – 1457 (2022), doi: 10.1364/OPTICA.471084
- [88] A. Niedermayr, M. Volkov, S. A. Sato, N. Hartmann, Z. Schumacher, S. Neb, A. Rubio, L. Gallmann, U. Keller  
"Few-femtosecond dynamics of free-free opacity in optically heated metals"  
*Phys. Rev. X* **12**, 021045 (2022), doi: 10.1103/PhysRevX.12.021045
- [87] P.-A. Chevreuril, F. Brunner, S. Hrisafov, J. Pupeikis, , C. R. Phillips, U. Keller, L. Gallmann  
"Water-window high harmonic generation with 0.8- $\mu\text{m}$  and 2.2- $\mu\text{m}$  OPCPAs at 100 kHz"  
*Opt. Express* **29**(21), 33002 (2021), doi: 10.1364/OE.440273
- [86] S. Hrisafov, J. Pupeikis, P.-A. Chevreuril, F. Brunner, C. R. Phillips, L. Gallmann, U. Keller  
"High-power few-cycle near-infrared OPCPA for soft X-ray generation at 100 kHz"  
*Opt. Express* **28**(26), 40145 (2020), doi: 10.1364/OE.412564
- \*[85] M. Lucchini, S. A. Sato, F. Schlaepfer, K. Yabana, L. Gallmann, A. Rubio, U. Keller  
"Attosecond timing of the dynamical Franz-Keldysh effect"  
*J. Phys.: Photonics* **2**, 025001 (2020), doi: 10.1088/2515-7647/ab70cb
- [84] J. Pupeikis, P.-A. Chevreuril, N. Bigler, L. Gallmann, C. R. Phillips, U. Keller  
"Water window soft x-ray source enabled by a 25 W few-cycle 2.2  $\mu\text{m}$  OPCPA at 100 kHz"  
*Optica* **7**(2), 168 (2020), doi: 10.1364/OPTICA.379846

- [83] N. Hartmann, S. Bhattacharyya, F. Schlaepfer, M. Volkov, Z. Schumacher, M. Lucchini, L. Gallmann, U. Rothlisberger, U. Keller  
"Ultrafast nuclear dynamics of the acetylene cation  $C_2H_2^+$  and its impact on the infrared probe pulse induced C–H bond breaking efficiency"  
*Phys. Chem. Chem. Phys.* **21**, 18380 (2019), doi: 10.1039/c9cp03138c
- [82] M. Volkov, S. A. Sato, F. Schlaepfer, L. Kasmi, N. Hartmann, M. Lucchini, L. Gallmann, A. Rubio, U. Keller  
"Attosecond screening dynamics mediated by electron-localization in transition metals"  
*Nature Phys.* **15**, 1145-1149 (2019), doi: 10.1038/s41567-019-0602-9
- [81] F. Schlaepfer, M. Volkov, N. Hartmann, A. Niedermayr, Z. Schumacher, L. Gallmann, U. Keller  
"Phase stabilization of an attosecond beamline combining two IR colors"  
*Opt. Express* **27**(16), 22385 (2019)
- [80] M. Volkov, J. Pupeikis, C. R. Phillips, F. Schlaepfer, L. Gallmann, U. Keller  
"Reduction of laser-intensity-correlated noise in high-harmonic generation"  
*Opt. Express* **27**(6), 7886 (2019)
- [79] N. Bigler, J. Pupeikis, S. Hrisafov, L. Gallmann, C. R. Phillips, U. Keller  
"High-power OPCPA generating 1.7-cycle pulses at 2.5  $\mu\text{m}$ "  
*Opt. Express* **26**(20), 26750 (2018)
- [78] S. A. Sato, M. Lucchini, M. Volkov, F. Schlaepfer, L. Gallmann, U. Keller, A. Rubio  
"Role of intraband transitions in photocarrier generation"  
*Phys. Rev. B* **98**, 035202 (2018)
- [77] J. Daněk, M. Klaiber, K. Z. Hatsagortsyan, C. H. Keitel, J. Maurer, B. Willenberg, B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Interplay between Coulomb-focusing and non-dipole effects in strong-field ionization with elliptical polarization"  
*J. Phys. B: At. Mol. Opt. Phys.* **51**, 114001 (2018)
- [76] F. Schlaepfer, M. Lucchini, S. A. Sato, M. Volkov, L. Kasmi, N. Hartmann, A. Rubio, L. Gallmann, U. Keller  
"Attosecond optical-field-enhanced carrier injection into the GaAs conduction band"  
*Nature Phys.*, doi: 10.1038/s41567-018-0069-0 (2018)
- [75] C. Cirelli, C. Marante, S. Heuser, C. L. M. Petersson, Á. J. Galán, L. Argenti, S. Zhong, D. Busto, M. Isinger, S. Nandi, S. Maclot, L. Rading, P. Johnsson, M. Gisselbrecht, M. Lucchini, L. Gallmann, J. M. Dahlström, E. Lindroth, A. L'Huillier, F. Martín, U. Keller  
"Anisotropic photoemission time delays close to a Fano resonance"  
*Nature Commun.* **9**, 955 (2018)
- [74] N. Bigler, J. Pupeikis, S. Hrisafov, L. Gallmann, C. R. Phillips, U. Keller  
"Decoupling phase-matching bandwidth and interaction geometry using non-collinear quasi-phase-matching gratings"  
*Opt. Express* **26** (5), 6036 (2018)

- [73] J. Maurer, B. Willenberg, J. Daněk, B. W. Mayer, C. R. Phillips, L. Gallmann, M. Klaiber, K. Z. Hatsagortsyan, C. H. Keitel, U. Keller  
"Probing the ionization wavepacket and recollision dynamics with an elliptically polarized strong laser field in the non-dipole regime"  
*Phys. Rev. A* **97**, 013404 (2018)
- \*[72] I. Crassee, L. Gallmann, G. Gaeumann, M. Matthews, H. Yanagisawa, T. Feurer, M. Hengsberger, U. Keller, J. Osterwalder, H. J. Wörner, J.-P. Wolf  
"Strong field transient manipulation of electronic states and bands"  
*Struct. Dynam.* **4**, 061505 (2017)
- \*[71] L. Gallmann, I. Jordan, H. J. Wörner, L. Castiglioni, M. Hengsberger, J. Osterwalder, C. A. Arrell, M. Chergui, E. Liberatore, U. Rothlisberger, U. Keller  
"Photoemission and photoionization time delays and rates"  
*Struct. Dynam.* **4** (6), 061502 (2017)
- [70] L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, J. Osterwalder, M. Hengsberger, L. Gallmann, P. Krüger, U. Keller  
"Effective mass effect in attosecond electron transport"  
*Optica* **4** (12), 1492 (2017) – **Editors' Choice (Science 359, 409 (2018), DOI: 10.1126/science.359.6374.408-e)**
- [69] F. Schlaepfer, A. Ludwig, M. Lucchini, L. Kasmi, M. Volkov, L. Gallmann, U. Keller  
"Gouy Phase Shift for Annular Beam Profiles in Attosecond Experiments"  
*Opt. Express* **25** (4), 3646 (2017)
- [68] L. Cattaneo, J. Vos, M. Lucchini, L. Gallmann, C. Cirelli, U. Keller  
"Comparison of attosecond streaking and RABBITT"  
*Opt. Express* **24** (25), 29060 (2016)
- [67] S. Heuser, Á. Jiménez Galán, C. Cirelli, C. Marante, M. Sabbar, R. Boge, M. Lucchini, L. Gallmann, I. Ivanov, A. S. Kheifets, J. M. Dahlström, E. Lindroth, L. Argenti, F. Martín, U. Keller  
"Angular dependence of photoemission time delay in helium"  
*Phys. Rev. A* **94**, 063409 (2016)
- [66] H. Yanagisawa, S. Schnepf, Ch. Hafner, M. Hengsberger, D. E. Kim, M. F. Kling, A. Landsman, L. Gallmann, J. Osterwalder  
"Delayed electron emission in strong-field driven tunneling from a metallic nanotip in the multi-electron regime"  
*Scientific Reports* **6**, 35877 (2016)
- [65] M. Lucchini, S. A. Sato, A. Ludwig, J. Herrmann, M. Volkov, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Attosecond dynamical Franz-Keldysh effect in polycrystalline diamond"  
*Science* **353**, 916-919 (2016)
- [64] M. Greif, L. Kasmi, L. Castiglioni, M. Lucchini, L. Gallmann, U. Keller, J. Osterwalder, M. Hengsberger  
"Access to phases of coherent phonon excitations by femtosecond ultraviolet photoelectron diffraction"  
*Phys. Rev. B* **94**, 054309 (2016)

- [63] C. R. Phillips, B. W. Mayer, L. Gallmann, U. Keller  
"Frequency-domain nonlinear optics in two-dimensionally patterned quasi-phase-matching media"  
*Opt. Express* **24** (14), 15940-15953 (2016)
- [62] A. Ludwig, E. Liberatore, J. Herrmann, L. Kasmi, P. López-Tarifa, L. Gallmann, U. Rothlisberger, U. Keller, M. Lucchini  
"Ultrafast Relaxation Dynamics of the Ethylene Cation  $C_2H_4^+$ "  
*J. Phys. Chem. Lett.* **7**, 1901-1906 (2016)
- [61] M. Lucchini, M. H. Brüggemann, A. Ludwig, L. Gallmann, U. Keller, T. Feurer  
"Ptychographic reconstruction of attosecond pulses"  
*Opt. Express* **23** (23), 29502 (2015) – **OSA Spotlight**
- [60] M. Lucchini, L. Castiglioni, L. Kasmi, P. Kliuiev, A. Ludwig, M. Greif, J. Osterwalder, M. Hengsberger, L. Gallmann, U. Keller  
"Light-matter interaction at surfaces in the spatio-temporal limit of macroscopic models"  
*Phys. Rev. Lett.* **115**, 137401 (2015) – **Editor's suggestion**
- [59] M. Sabbar, S. Heuser, R. Boge, M. Lucchini, T. Carette, E. Lindroth, L. Gallmann, C. Cirelli, U. Keller  
"Resonance effects in photoemission time delays"  
*Phys. Rev. Lett.* **115**, 133001 (2015)
- \*[58] C. Cirelli, M. Sabbar, S. Heuser, R. Boge, M. Lucchini, L. Gallmann, U. Keller  
"Energy dependent photoemission time delays of noble gas atoms using coincidence attosecond streaking"  
*IEEE J. Sel. Topics Quantum Electron.* **21** (5), 8700307 (2015)  
DOI: 10.1109/JSTQE.2015.2416152 (2015)
- [57] M. Lucchini, A. Ludwig, T. Zimmermann, L. Kasmi, J. Herrmann, A. Scrinzi, A. S. Landsman, L. Gallmann, U. Keller  
"Anisotropic emission in quantum-beat spectroscopy of helium excited states"  
*Phys. Rev. A* **91**, 063406 (2015)
- [56] R. Locher, L. Castiglioni, M. Lucchini, L. Gallmann, J. Osterwalder, M. Hengsberger, U. Keller  
"Energy-dependent photoemission delays from noble metal surfaces by attosecond interferometry"  
*Optica* **2** (5), 405 (2015)
- [55] M. Lucchini, A. Ludwig, L. Kasmi, L. Gallmann, U. Keller  
"Semi-classical approach to compute RABBITT traces in multi-dimensional complex field distributions"  
*Opt. Express* **23** (7), 8867 (2015)
- [54] J. Herrmann, M. Lucchini, S. Chen, M. Wu, A. Ludwig, L. Kasmi, K. J. Schafer, L. Gallmann, U. Keller  
"Multiphoton transitions for delay-zero calibration in attosecond spectroscopy"  
*New J. Phys.* **17**, 013007 (2015)

- [53] A. Ludwig, J. Maurer, B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Breakdown of the Dipole Approximation in Strong-Field Ionization"  
*Phys. Rev. Lett.* **113**, 243001 (2014)
- [52] C. A. Arrell, J. Ojeda, M. Sabbar, W. Okell, T. Witting, Z. Diveki,  
S. Hutchinson, L. Gallmann, U. Keller, F. van Mourik, R. T. Chapman,  
C. Cacho, N. Rodrigues, I. C. E. Turcu, J. W. G. Tisch, E. Springate,  
J. P. Marangos, M. Chergui  
"A simple electron time-of-flight spectrometer for ultrafast VUV  
photoelectron spectroscopy of liquid solutions"  
*Rev. Sci. Instr.* **85**, 103117 (2014)
- [51] R. Boge, M. Sabbar, M. Lucchini, L. Gallmann, C. Cirelli, U. Keller  
"Revealing the time-dependent polarization of ultrashort pulses with sub-cycle  
resolution"  
*Opt. Express* **22** (22), 26967 (2014)
- [50] A. S. Landsman, M. Weger, J. Maurer, R. Boge, A. Ludwig, S. Heuser,  
C. Cirelli, L. Gallmann, U. Keller  
"Ultrafast resolution of tunneling delay time"  
*Optica* **1** (5), 343 (2014)
- [49] M. Sabbar, S. Heuser, R. Boge, M. Lucchini, L. Gallmann, C. Cirelli,  
U. Keller  
"Combining attosecond XUV pulses with coincidence spectroscopy"  
*Rev. Sci. Instr.* **85**, 103113 (2014)
- [48] B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Mid-infrared pulse generation via achromatic quasi-phase-matched OPCPA"  
*Opt. Express.* **22** (17), 20798 (2014)
- [47] C. R. Phillips, B. W. Mayer, L. Gallmann, M. M. Fejer, U. Keller  
"Design constraints of optical parametric chirped pulse amplification based on  
chirped quasi-phase-matching gratings"  
*Opt. Express* **22** (8), 9627 (2014)
- [46] R. Locher, M. Lucchini, J. Herrmann, M. Sabbar, M. Weger, A. Ludwig,  
L. Castiglioni, M. Greif, M. Hengsberger, L. Gallmann, U. Keller  
"Versatile attosecond beamline in a two-foci configuration for simultaneous  
time-resolved measurements"  
*Rev. Sci. Instr.* **85**, 013113 (2014)
- [45] J. Herrmann, M. Weger, R. Locher, M. Sabbar, P. Rivière, U. Saalman,  
J.-M. Rost, L. Gallmann, U. Keller  
"Virtual single-photon transition interrupted: time-gated optical gain and loss"  
*Phys. Rev. A* **88**, 043843 (2013)
- [44] B. W. Mayer, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"Sub-four-cycle laser pulses directly from a high-repetition-rate optical  
parametric chirped-pulse amplifier at 3.4  $\mu\text{m}$ "  
*Opt. Lett.* **38** (21), 4265 (2013)

- [43] M. Lucchini, J. Herrmann, A. Ludwig, R. Locher, M. Sabbar, L. Gallmann, U. Keller  
"Role of electron wavepacket interference in the optical response of helium atoms"  
*New J. Phys.* **15**, 103010 (2013), **selected for IOPselect** (<http://select.iop.org/>)
- [42] M. Weger, J. Maurer, A. Ludwig, L. Gallmann, U. Keller  
"Transferring the attoclock technique to velocity map imaging"  
*Opt. Express* **21** (19), 21981 (2013)
- [41] R. Boge, C. Cirelli, A. S. Landsman, S. Heuser, A. Ludwig, J. Maurer, M. Weger, L. Gallmann, U. Keller  
"Probing non-adiabatic effects in strong-field tunnel ionization"  
*Phys. Rev. Lett.* **111**, 103003 (2013)
- \*[40] L. Gallmann, J. Herrmann, R. Locher, M. Sabbar, A. Ludwig, M. Lucchini, U. Keller  
"Resolving intra-atomic electron dynamics with attosecond transient absorption spectroscopy"  
*Mol. Phys.* **111** (14-15), 2243 (2013), **invited paper**
- [39] C. R. Phillips, C. Langrock, D. Chang, Y. W. Lin, L. Gallmann, M. M. Fejer  
"Apodization of chirped quasi-phaseshifting devices"  
*J. Opt. Soc. Am. B* **30** (6), 1551 (2013)
- [38] C. R. Phillips, L. Gallmann, M. M. Fejer  
"Design of quasi-phaseshifting gratings via convex optimization"  
*Opt. Express* **21** (8), 10139 (2013)
- [37] C. Heese, C. R. Phillips, B. W. Mayer, L. Gallmann, M. M. Fejer, U. Keller  
"75 MW few-cycle mid-infrared pulses from a collinear apodized APPLN-based OPCPA"  
*Opt. Express* **20** (24), 26888 (2012)
- [36] C. Heese, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"The role of apodization in optical parametric amplifiers based on aperiodic quasi-phaseshifting gratings"  
*Opt. Express* **20** (16), 18066 (2012)
- \*[35] L. Gallmann, C. Cirelli, U. Keller  
"Attosecond Science: Recent Highlights and Future Trends"  
*Annu. Rev. Phys. Chem.* **63**, 447 (2012), **invited paper**
- [34] C. Heese, A. E. Oehler, L. Gallmann, U. Keller  
"High energy picosecond Nd:YVO<sub>4</sub> slab amplifier for OPCPA pumping"  
*Appl. Phys. B* **103**, 5 (2011)
- [33] M. Holler, F. Schapper, L. Gallmann, U. Keller  
"Attosecond electron wavepacket interference observed by transient absorption"  
*Phys. Rev. Lett.* **106**, 123601 (2011)
- [32] C. Heese, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"Ultrabroadband, highly flexible amplifier for ultrashort midinfrared laser pulses based on aperiodically poled Mg:LiNbO<sub>3</sub>"  
*Opt. Lett.* **35** (14), 2340 (2010)

- [31] F. Schapper, M. Holler, T. Auguste, A. Zaïr, M. Weger, P. Salières, L. Gallmann, U. Keller  
"Spatial fingerprint of quantum path interferences in high order harmonic generation"  
*Opt. Express* **18** (3), 2987 (2010)
- [30] T. Auguste, P. Salières, A. S. Wyatt, A. Monmayrant, I. A. Walmsley, E. Cormier, A. Zaïr, M. Holler, A. Guandalini, F. Schapper, J. Biegert, L. Gallmann, U. Keller  
"Theoretical and experimental analysis of quantum path interferences in high-order harmonic generation"  
*Phys. Rev. A* **80**, 033817 (2009)
- [29] M. Holler, A. Zaïr, F. Schapper, T. Auguste, E. Cormier, A. Wyatt, A. Monmayrant, I. A. Walmsley, L. Gallmann, P. Salières, U. Keller  
"Ionization effects on spectral signatures of quantum-path interference in high-harmonic generation"  
*Opt. Express* **17** (7), 5716 (2009)
- [28] C. Erny, L. Gallmann, U. Keller  
"High-repetition-rate femtosecond optical parametric chirped-pulse amplifier in the mid-infrared"  
*Appl. Phys. B* **96** (2), 257 (2009)
- [27] E. Mansten, J. M. Dahlström, J. Mauritsson, T. Ruchon, A. L'Huillier, J. Tate, M. B. Gaarde, P. Eckle, A. Guandalini, M. Holler, F. Schapper, L. Gallmann, U. Keller  
"Spectral signature of short attosecond pulse trains"  
*Phys. Rev. Lett.* **102**, 083002 (2009)
- [26] C. Erny, C. Heese, M. Haag, L. Gallmann, U. Keller  
"High-repetition-rate optical parametric chirped pulse amplifier producing 1- $\mu$ J, sub-100-fs pulses in the mid-infrared"  
*Opt. Express* **17** (3), 1340 (2009)
- [25] A. Zaïr, M. Holler, A. Guandalini, F. Schapper, J. Biegert, L. Gallmann, U. Keller, A. S. Wyatt, A. Monmayrant, I. A. Walmsley, E. Cormier, T. Auguste, J. P. Caumes, P. Salières  
"Quantum-path interferences in high-order harmonic generation"  
*Phys. Rev. Lett.* **100**, 143902 (2008)  
(covered in News and Views, *Nature Photonics* **2**, 339 (2008))
- [24] T. Pfeifer, A. Jullien, M. J. Abel, P. M. Nagel, L. Gallmann, D. M. Neumark, S. R. Leone  
"Generating coherent broadband continuum soft-x-ray radiation by attosecond ionization gating"  
*Opt. Express* **15** (25), 17120 (2007)
- [23] A. Zaïr, A. Guandalini, F. Schapper, M. Holler, J. Biegert, L. Gallmann, U. Keller, A. Couairon, M. Franco, A. Mysyrowicz  
"Spatio-temporal characterization of few-cycle pulses obtained by filamentation"  
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- [22] L. Gallmann, T. Pfeifer, P. M. Nagel, M. J. Abel, D. M. Neumark, S. R. Leone  
"Comparison of the filamentation and the hollow-core fiber characteristics for pulse compression into the few-cycle regime"  
*Appl. Phys. B* **86**, 561 (2007)
- [21] T. Pfeifer, L. Gallmann, M. J. Abel, P. M. Nagel, D. M. Neumark, S. R. Leone  
"Heterodyne mixing of laser fields for temporal gating of high-order harmonic generation"  
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"Circular phase mask for control and stabilization of single optical filaments"  
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"Single attosecond pulse generation in the multicycle-driver regime by adding a weak second-harmonic field"  
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"Fluoride semiconductor saturable absorber mirror for ultrashort pulse generation"  
*Opt. Lett.* **27**, 1845 (2002)
- [17] L. Gallmann, G. Steinmeyer, G. Imeshev, J.-P. Meyn, M. M. Fejer, U. Keller  
"Sub-6-fs blue pulses generated by quasi phase-matching second-harmonic generation pulse compression"  
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- [16] M. Zavelani-Rossi, D. Polli, G. Cerullo, S. De Silvestri, L. Gallmann, G. Steinmeyer, U. Keller  
"Few-optical-cycle laser pulses by OPA: broadband chirped mirror compression and SPIDER characterization"  
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*C. R. Acad. Sci. Paris* **2**(10), Série IV, 1391 (2001), **invited paper**
- [13] M. Zavelani-Rossi, G. Cerullo, S. De Silvestri, L. Gallmann, N. Matuschek, G. Steinmeyer, U. Keller, G. Angelow, V. Scheuer, T. Tschudi  
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"GaAs absorber layer growth for broadband AlGaAs/fluoride SESAMs"  
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"Generation of sub-6-fs blue pulses by frequency doubling with quasi-phase-matching gratings"  
*Opt. Lett.* **26**, 614 (2001)
- [10] L. Gallmann, G. Steinmeyer, D. H. Sutter, T. Rupp, C. Iaconis, I. A. Walmsley, U. Keller  
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"Collinear type-II second-harmonic-generation frequency-resolved optical gating for the characterization of sub-10-fs optical pulses"  
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"Frontiers in Ultrashort Pulse Generation: Pushing the Limits in Linear and Nonlinear Optics"  
*Science* **286**, 1507 (1999), **invited paper**
- [3] L. Gallmann, D. H. Sutter, N. Matuschek, G. Steinmeyer, U. Keller, C. Iaconis, I. A. Walmsley  
"Characterization of sub-6-fs optical pulses with spectral phase interferometry for direct electric-field reconstruction"  
*Opt. Lett.* **24**, 1314 (1999)
- [2] D. H. Sutter, G. Steinmeyer, L. Gallmann, N. Matuschek, F. Morier-Genoud, U. Keller, V. Scheuer, G. Angelow, T. Tschudi  
"Semiconductor saturable-absorber mirror-assisted Kerr-lens mode-locked Ti:sapphire laser producing pulses in the two-cycle regime"  
*Opt. Lett.* **24**, 631 (1999)

- [1] G. J. Spühler, L. Gallmann, R. Fluck, G. Zhang, L. R. Brovelli, C. Harder, P. Laporta, U. Keller  
"Passively modelocked diode-pumped Erbium-Ytterbium glass laser using a semiconductor saturable absorber mirror"  
*Electron. Lett.* **35**, 567 (1999)

### Book Chapters

- [1] L. Gallmann, U. Keller  
"Femtosecond and attosecond light sources and techniques for spectroscopy"  
Chapter in *Handbook of High-Resolution Spectroscopy*, Editors: M. Quack and F. Merkt, John Wiley & Sons, Ltd., Vol. 3, 1805 (2011)  
ISBN 978-0-470-06653-9

### General Publications (\* Invited)

- \*[4] L. Gallmann  
"Nobel Award 2018 in Physics: Chirped pulse amplification: the technology and its applications"  
*SPS Communications* **57**, pp. 40-44 (2019)
- \*[3] L. Gallmann, U. Keller  
"Progress in Physics: The attosecond science of solids"  
*SPS Communications* **57**, pp. 11-17 (2019)
- \*[2] L. Gallmann  
"Unexpected gain"  
*Nature Physics* **6**, News & Views, pp. 406-407 (2010)
- \*[1] G. Steinmeyer, D. H. Sutter, L. Gallmann, U. Keller  
"Extreme Photonics: Ultrafast Lasers"  
*Photonics Spectra* **34**, Special issue on "Extreme Photonics", pp. 106-108, February 2000

### International Conference Publications (\* Invited)

- \*[234] L. Gallmann, E. W. de Vos, M. Hollm, F. Burri, S. Neb, U. Keller  
"The balance of independent and correlated electron dynamics in transition metals," **invited talk**  
32nd International Laser Physics Workshop (LPHYS'24), São Carlos, Brazil, July 3-9 (2024)
- [233] E. W. de Vos, S. Neb, M. Hollm, F. Burri, L. Gallmann, U. Keller  
"The Balance Between Independent-Electron Dynamics and the Local-Field Effect in Transition Metals," talk, session We-2A  
Ultrafast Phenomena conference 2024, Barcelona, Spain, July 14-19 (2024)

- [232] M. Volkov, S. A. Sato, A. Niedermayr, A. Rubio, L. Gallmann, U. Keller  
"Floquet-Bloch Resonances in the Dynamical Franz-Keldysh Effect in SiO<sub>2</sub>,"  
poster  
9<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO),  
Jeju Island, South Korea, July 10-14 (2023)
- [231] E. W. de Vos, S. Neb, A. Niedermayr, F. Burri, M. Hollm, L. Gallmann,  
U. Keller  
"Ultrafast Transition from State-Blocking Dynamics to Electron Localization  
in Transition Metal  $\beta$ -Tungsten," talk  
9<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO),  
Jeju Island, South Korea, July 10-14 (2023)
- [230] S. Neb, D. Shin, Z. Schumacher, A. Niedermayr, D. A. Kuznetsov,  
C. R. Mueller, A. Fedorov, S. A. Sato, A. Rubio, L. Gallmann, U. Keller  
"The Role of Interlayer Charge Transfer on Ultrafast Carrier Cooling in  
Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> (MXene)," talk  
9<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO),  
Jeju Island, South Korea, July 10-14 (2023)
- [229] P.-A. Chevreuril, F. Brunner, U. Thumm, U. Keller, L. Gallmann  
"Breakdown of the Single-Collision Condition in Gas-Phase High-Harmonic  
Generation," talk CG-6.1  
CLEO/Europe - EQEC, Munich, Germany, June 26-30 (2023)
- [228] E. W. de Vos, S. Neb, A. Niedermayr, F. Burri, M. Hollm, L. Gallmann,  
U. Keller  
"Ultrafast Transition from State-Blocking Dynamics to Electron Localization  
in Transition Metal  $\beta$ -Tungsten," talk CG-2.3  
CLEO/Europe - EQEC, Munich, Germany, June 26-30 (2023)
- [227] Z. Schumacher, S. A. Sato, S. Neb, A. Niedermayr, A. Rubio, L. Gallmann,  
U. Keller  
"Element Specific Ultrafast Carrier Localization in a 2D Transition Metal  
Dichalcogenide," talk  
Ultrafast Phenomena Conference 2022, Montreal, Canada, July 18-22 (2022)
- [226] A. Niedermayr, M. Volkov, S. A. Sato, N. Hartmann, Z. Schumacher, S. Neb,  
A. Rubio, L. Gallmann, U. Keller  
"Few-Femtosecond Dynamics of Free-Free Opacity in Optically Heated  
Metals," poster  
Ultrafast Phenomena Conference 2022, Montreal, Canada, July 18-22 (2022)
- [225] S. Neb, D. Shin, Z. Schumacher, A. Niedermayr, D. Kuznetsov, Ch. Mueller,  
A. Fedorov, S. A. Sato, A. Rubio, L. Gallmann, U. Keller  
"Sub-Cycle Phonon Dynamics Induced by Ultrafast Electron-Phonon  
Relaxations in 2D Carbide Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> (MXene)," talk  
Ultrafast Phenomena Conference 2022, Montreal, Canada, July 18-22 (2022)
- [224] P.-A. Chevreuril, F. Brunner, U. Keller, L. Gallmann  
"Soft X-ray Generation with Ultrashort Pulses: The Krypton Surprise,"  
highlighted poster  
8<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO),  
Orlando, Florida, USA, July 11-15 (2022)

- [223] S. Neb, D. Shin, Z. Schumacher, A. Niedermayr, D. A. Kuznetsov, C. R. Müller, A. Fedorov, S. A. Sato, A. Rubio, L. Gallmann, U. Keller  
"Ultrafast electron-phonon relaxations in 2D carbide  $Ti_3C_2T_x$  (MXene): A case study by attosecond transient absorption spectroscopy," highlighted poster  
8<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO), Orlando, Florida, USA, July 11-15 (2022)
- [222] A. Niedermayr, M. Volkov, S. A. Sato, N. Hartmann, Z. Schumacher, S. Neb, A. Rubio, L. Gallmann, U. Keller  
"Few-femtosecond dynamics of free-free opacity in optically heated metals," talk  
8<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO), Orlando, Florida, USA, July 11-15 (2022)
- [221] S. Neb, D. Shin, Z. Schumacher, A. Niedermayr, D. A. Kuznetsov, C. R. Müller, A. Fedorov, S. A. Sato, A. Rubio, L. Gallmann, U. Keller  
"Element, Site, and Carrier Specific Sub-Cycle Phonon Dynamics Induced by Ultrafast Electron-Phonon Relaxations in  $Ti_3C_2T_x$ ," poster  
International Conference on Molecular Ultrafast Science and Technology (MUST 2022), Grindelwald, Switzerland, June 7-10 (2022)
- [220] A. Niedermayr, M. Volkov, S. A. Sato, N. Hartmann, Z. Schumacher, S. Neb, A. Rubio, L. Gallmann, U. Keller  
"Attosecond electron dynamics in optically excited metals," poster  
International Conference on Molecular Ultrafast Science and Technology (MUST 2022), Grindelwald, Switzerland, June 7-10 (2022)
- [219] Z. Schumacher, S. A. Sato, S. Neb, A. Niedermayr, L. Gallmann, A. Rubio, U. Keller  
"Element-Specific Electron Localization and Screening Dynamics in Few-Layer  $MoSe_2$ ," talk  
International Conference on Molecular Ultrafast Science and Technology (MUST 2022), Grindelwald, Switzerland, June 7-10 (2022)
- [218] P.-A. Chevreuril, S. Hrisafov, F. Brunner, J. Pupeikis, C. R. Phillips, L. Gallmann, U. Keller  
"Sources of Water-Window Radiation at 100 kHz," talk  
European Optical Society Annual Meeting (EOSAM 2021), Rome, Italy, September 13-17 (2021)
- [217] P.-A. Chevreuril, S. Hrisafov, F. Brunner, J. Pupeikis, C. R. Phillips, L. Gallmann, U. Keller  
"Comparison of 100-kHz Near-IR and Mid-IR Driven High-Harmonic Generation in the Water Window," talk CG-7  
CLEO/Europe - EQEC, virtual, June 21-25 (2021)
- [216] P.-A. Chevreuril, S. Hrisafov, F. Brunner, J. Pupeikis, C. R. Phillips, L. Gallmann, U. Keller  
"Comparison of 100-kHz Near-IR and Mid-IR Driven High-Harmonic Generation in the Water Window," talk  
Conference on Lasers and Electro-Optics (CLEO), virtual, May 9-14 (2021)

- \*[215] P.-A. Chevreuril, J. Pupeikis, N. Bigler, L. Gallmann, C. R. Phillips, U. Keller  
"High-harmonic generation in the water window with a high-average power mid-infrared OPCPA at 100 kHz," **invited talk**  
EPS-QEOD Europhoton Virtual Conference, August 30 – September 4 (2020)
- \*[214] L. Gallmann  
"Attosecond transient absorption spectroscopy of field-driven dynamics in solids," **invited talk**  
ELI Summer School 2020 (ELISS 2020), virtual, August 26 – 28 (2020)
- \*[213] L. Gallmann, M. Lucchini, F. Schläpfer, M. Volkov, S. A. Sato, L. Kasmi, N. Hartmann, A. Ludwig, J. Herrmann, Y. Shinohara, K. Yabana, A. Rubio, U. Keller  
"Attosecond electron dynamics driven by optical fields: moving from atoms to condensed matter," **plenary talk**  
Ultrafast Science & Technology Spain 2019, Madrid, Spain, November 6-8 (2019)
- \*[212] C. R. Phillips, J. Pupeikis, N. Bigler, P.-A. Chevreuril, S. Hrisafov, L. Gallmann, U. Keller  
"Optical parametric chirped pulse amplification with PPLN: high average power sub-two-cycle 2.5  $\mu\text{m}$  pulses," **invited talk**  
Ultrafast Optics (UFO XII), Bol, Croatia, October 6-11 (2019)
- [211] J. Maurer, B. Willenberg, B. W. Mayer, C. R. Phillips, L. Gallmann, J. Danek, M. Klaiber, K. Z. Hatsagortsyan, C. H. Keitel, U. Keller  
"Strong-field ionization beyond the dipole approximation: ellipticity dependence, rescattering and holographic interferences," talk, **special report**  
XXXI<sup>st</sup> International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC 2019), Deauville, France, July 23-30 (2019)
- [210] M. Volkov, S. A. Sato, F. Schlaepfer, L. Kasmi, N. Hartmann, M. Lucchini, L. Gallmann, A. Rubio, U. Keller  
"Attosecond electron localization in metallic titanium," poster  
7<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO2019), Szeged, Hungary, July 1-5 (2019)
- [209] M. Volkov, J. Pupeikis, C. R. Phillips, F. Schlaepfer, L. Gallmann, U. Keller  
"Sensitive detection scheme for attosecond transient absorption spectroscopy," poster  
7<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO2019), Szeged, Hungary, July 1-5 (2019)
- [208] F. Schlaepfer, M. Lucchini, S. A. Sato, M. Volkov, L. Kasmi, N. Hartmann, A. Rubio, L. Gallmann, U. Keller  
"Attosecond photocarrier excitation in III-V semiconductors," poster  
7<sup>th</sup> International Conference on Attosecond Science and Technology (ATTO2019), Szeged, Hungary, July 1-5 (2019)
- [207] M. Volkov, S. A. Sato, F. Schlaepfer, L. Kasmi, N. Hartmann, M. Lucchini, L. Gallmann, A. Rubio, U. Keller  
"Attosecond electron localization and screening dynamics in metals," talk CG-4.3  
CLEO/Europe - EQEC, Munich, Germany, June 23-27 (2019)

- [206] M. Volkov, J. Pupeikis, C. R. Phillips, F. Schlaepfer, L. Gallmann, U. Keller  
"Reducing spectral fluctuations of high-harmonics with indirect balanced detection scheme," poster  
CLEO/Europe - EQEC, Munich, Germany, June 23-27 (2019)
- [205] N. Bigler, J. Pupeikis, S. Hrisafov, L. Gallmann, C. R. Phillips, U. Keller  
"High-Power and Sub-Two-Cycle 2.5  $\mu\text{m}$  Optical Parametric Chirped Pulse Amplification System," talk CF-7.4  
CLEO/Europe - EQEC, Munich, Germany, June 23-27 (2019)
- [204] F. Schlaepfer, M. Lucchini, S. A. Sato, M. Volkov, L. Kasmi, N. Hartmann, A. Rubio, L. Gallmann, U. Keller  
"Optically driven attosecond electron dynamics in III-V semiconductors," talk CG-4.4  
CLEO/Europe - EQEC, Munich, Germany, June 23-27 (2019)
- [203] M. Volkov, J. Pupeikis, C. R. Phillips, F. Schlaepfer, L. Gallmann, U. Keller  
"Reduction of Laser-Intensity-Correlated Noise in High-Harmonic Generation," talk  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, May 5-10 (2019)
- \*[202] J. Pupeikis, N. Bigler, S. Hrisafov, L. Gallmann, C. R. Phillips, U. Keller  
"Sub-Two-Cycle High-Average-Power Pulses at 2.5  $\mu\text{m}$ ," **invited talk**  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, May 5-10 (2019)
- [201] J. Danek, M. Klaiber, K. Z. Hatsagortsyan, B. Willenberg, J. Maurer, B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller, C. H. Keitel  
"Nondipole and ellipticity effects in the strong-field ionization physics," talk  
Super-Intense Laser-Atom Physics 2018 (SILAP), Toronto, Canada, December 11-14 (2018)
- [200] N. Bigler, J. Pupeikis, S. Hrisafov, L. Gallmann, C. R. Phillips, U. Keller  
"High-Average-Power Few-Cycle Pulses at 2.5  $\mu\text{m}$ ," talk  
Advanced Solid State Lasers Conference (ASSL 2018), Boston, USA, November 4-8 (2018)
- \*[199] L. Gallmann, L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, J. Osterwalder, M. Hengsberger, P. Krüger, U. Keller  
"The effective mass in attosecond photoemission from solids," **invited talk**  
International Workshop on Dynamics, Interactions and Electronic Transitions at Surfaces (DIET 16), Garmisch-Partenkirchen, Germany, October 8-12 (2018)
- \*[198] L. Gallmann, L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, J. Osterwalder, M. Hengsberger, P. Krüger, U. Keller  
"The effective mass in attosecond photoemission from solids," **invited talk**  
5<sup>th</sup> Meeting of Ultrafast Dynamic Imaging of Matter (UFDIM), Agios Nikolaos, Crete, Greece, September 28 – October 4 (2018)

- \*[197] L. Gallmann, M. Lucchini, F. Schlaepfer, M. Volkov, S. A. Sato, L. Kasmi, N. Hartmann, A. Ludwig, J. Herrmann, Y. Shinohara, K. Yabana, A. Rubio, U. Keller  
"Attosecond electron dynamics in dielectrics and metals driven by optical fields," **invited talk**  
International Conference on Non-Equilibrium Dynamics of Condensed Matter in the Time Domain, Abbey Rolduc, Kerkrade, The Netherlands, September 3-6 (2018)
- [196] N. Bigler, J. Pupeikis, S. Hrisafov, L. Gallmann, C. R. Phillips, U. Keller  
"Broadband phase-matching using tilted quasi-phase-matching gratings," talk NpTh1C.4  
OSA Advanced Photonics Congress 2018, Zurich, Switzerland, July 2-5 (2018)
- \*[195] U. Keller, F. Schläpfer, M. Volkov, S. A. Sato, M. Lucchini, L. Gallmann, A. Rubio  
"New physical insight gained in condensed matter with attosecond transient absorption spectroscopy," **invited talk MON.2**  
Ultrafast Phenomena Conference 2018, Hamburg, Germany, July 15-20 (2018)
- [194] C. Cirelli, C. Marante, S. Heuser, L. Petersson, Á. Jiménez-Galán, L. Argenti, S. Zhong, D. Busto, M. Isinger, S. Nandi, S. Maclot, L. Rading, P. Johnsson, M. Gisselbrecht, M. Lucchini, L. Gallmann, M. Dahlström, E. Lindroth, A. L'Huillier, F. Martín, U. Keller  
"Anisotropic photoemission time delays close to a Fano resonance," talk TUE.1.3  
Ultrafast Phenomena Conference 2018, Hamburg, Germany, July 15-20 (2018)
- \*[193] C. R. Phillips, N. Bigler, J. Pupeikis, S. Hrisafov, L. Gallmann, N. Ishizuki, T. Taira, U. Keller  
"Broadband and high power mid-infrared optical parametric amplification via quasi-phase-matching devices," **invited talk**  
Mid-Infrared Coherent Sources (MICS 2018), Strasbourg, France, March 26-28 (2018)
- [192] S. Bhattacharyya, N. Hartmann, F. Schlaepfer, L. Kasmi, M. Volkov, M. Lucchini, L. Gallmann, U. Keller, and U. Röthlisberger  
"Photo-ionization induced fragmentation dynamics of acetylene," poster  
Jerusalem Nonadiabatica 2018: Theory of nonadiabatic processes, Jerusalem, Israel, March 12-15 (2018)
- \*[191] L. Gallmann, L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, J. Osterwalder, M. Hengsberger, P. Krüger, U. Keller  
"The effective mass in attosecond photoemission from solids," **invited talk**  
The Winter Colloquium on Physics in Quantum Electronics (PQE), Snowbird, Utah, USA, January 7-13 (2018)

- \*[190] M. Lucchini, S. A. Sato, J. Herrmann, A. Ludwig, M. Volkov, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Attosecond time-resolved dynamical Franz-Keldysh effect in polycrystalline diamond," **invited talk**  
International Conference on Extreme Light (ICEL 2017), Szeged, Hungary, November 5 - 9 (2017)
- [189] J. Daněk, B. Willenberg, J. Maurer, B. W. Mayer, C. R. Phillips, L. Gallmann, M. Klaiber, K. Z. Hatsagortsyan, C. H. Keitel, U. Keller  
"Modification of Coulomb-focusing in strong-field ionization due to the ellipticity of the laser field and non-dipole effects," poster  
14<sup>th</sup> International Conference on Multiphoton Processes (ICOMP 2017), Budapest, Hungary, September 24 - 27 (2017)
- \*[188] M. Lucchini, S. A. Sato, J. Herrmann, A. Ludwig, M. Volkov, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Time-resolved attosecond dynamical Franz-Keldysh effect," **invited talk**  
14<sup>th</sup> International Conference on Multiphoton Processes (ICOMP 2017), Budapest, Hungary, September 24 - 27 (2017)
- \*[187] L. Gallmann, M. Lucchini, F. Schlaepfer, S. A. Sato, M. Volkov, L. Kasmi, N. Hartmann, Y. Shinohara, K. Yabana, A. Rubio, U. Keller  
"Attosecond inter- and intra-band dynamics in bulk solids," **invited talk**  
Quantum Dynamics in Tailored Intense Fields International Conference (QUTIF International Conference), Bad Honnef, Germany, September 4 - 7 (2017)
- [186] L. Cattaneo, J. Vos, M. Lucchini, L. Gallmann, C. Cirelli, U. Keller  
"Comparison of attosecond streaking and RABBITT," poster  
6<sup>th</sup> International Conference on Attosecond Physics (ATTO2017), Xi'an, China, July 2 - 7 (2017)
- [185] L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, J. Osterwalder, M. Hengsberger, L. Gallmann, P. Krüger, U. Keller  
"Effective mass effect on atomic scale electron propagation in solids," talk  
6<sup>th</sup> International Conference on Attosecond Physics (ATTO2017), Xi'an, China, July 2 - 7 (2017)
- \*[184] M. Lucchini, S. A. Sato, J. Herrmann, A. Ludwig, M. Volkov, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Attosecond dynamical Franz-Keldysh effect in polycrystalline diamond," **invited talk**  
6<sup>th</sup> International Conference on Attosecond Physics (ATTO2017), Xi'an, China, July 2 - 7 (2017)
- [183] B. Willenberg, J. Maurer, B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Sub-cycle resolution of field-momentum transfer in non-dipole strong-field ionization," talk CG-7.4  
CLEO/Europe - EQEC, Munich, Germany, June 25-29 (2017)
- [182] N. Bigler, C. R. Phillips, J. Pupeikis, L. Gallmann, H. Ishizuki, T. Taira, U. Keller  
"Ultra-broadband optical parametric chirped-pulse amplifier generating 9.1 W at 2.2  $\mu\text{m}$ ," talk CF-4.2  
CLEO/Europe - EQEC, Munich, Germany, June 25-29 (2017)



- [181] F. Schlaepfer, A. Ludwig, M. Lucchini, L. Kasmi, M. Volkov, L. Gallmann, U. Keller  
"Gouy Phase Effects in Attosecond Photoemission Delay Measurements Using Truncated Beams," talk CG-1.1  
CLEO/Europe - EQEC, Munich, Germany, June 25-29 (2017)
- [180] L. Gallmann, L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, J. Osterwalder, M. Hengsberger, P. Krüger, U. Keller  
"Band structure effects in attosecond photoemission delays from Cu(111) surface," poster  
Ultrafast Surface Dynamics 10 (USD 10), Inzell, Germany, June 11-16 (2017)
- \*[179] C. R. Phillips, N. Bigler, J. Pupeikis, L. Gallmann, U. Keller, H. Ishizuki, T. Taira  
"High power mid-infrared optical parametric chirped pulse amplification for attosecond science," **invited talk**  
19<sup>th</sup> Photonics North Conference (Photonics North 2017), Ottawa, Canada, June 6-8 (2017)
- [178] N. Bigler, C. R. Phillips, J. Pupeikis, L. Gallmann, H. Ishizuki, T. Taira, U. Keller  
"High-power optical parametric chirped-pulse amplifier operating at 2.2  $\mu\text{m}$ ," talk SM3I  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, May 14-19 (2017)
- [177] F. Schlaepfer, A. Ludwig, M. Lucchini, L. Kasmi, M. Volkov, L. Gallmann, U. Keller  
"Gouy Phase Shift for Annular Beam Profiles in Attosecond Pump-Probe Measurements," poster JTh2A  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, May 14-19 (2017)
- [176] M. Volkov, M. Lucchini, S. A. Sato, J. Herrmann, A. Ludwig, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Attosecond dynamical Franz-Keldysh effect in dielectric nanofilms," talk  
Extreme Atomic Systems (EAS 2017), Riezlern, Austria, January 29 – February 3 (2017)
- \*[175] M. Lucchini, S. A. Sato, J. Herrmann, A. Ludwig, M. Volkov, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Attosecond Dynamical Franz-Keldysh Effect," **invited talk**  
Atomic Physics 2016, Dresden, Germany, November 28 – December 2 (2016)
- \*[174] N. Bigler, C. R. Phillips, J. Pupeikis, L. Gallmann, U. Keller  
"Mid-infrared OPCPA based on two-dimensional quasi-phase-matching devices," **invited talk**  
Advanced Solid State Lasers Conference (ASSL 2016), Boston, Massachusetts, USA, October 30 – November 3 (2016)

- \*[173] L. Gallmann, N. Bigler, C. R. Phillips, B. W. Mayer, B. Willenberg, J. Maurer, U. Keller  
"Advanced quasi-phase-matching structures for ultrabroadband parametric amplification," **invited talk**  
Future of Ultrashort Pulses II Workshop, Stirin Castle, Prague, Czech Republic, September 16-17 (2016)
- [172] M. Lucchini, S. A. Sato, J. Herrmann, A. Ludwig, M. Volkov, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Direct Observation of a Sub-Femtosecond Optical Response in the Diamond Conduction Band," talk  
Ultrafast Phenomena 2016, Santa Fe, New Mexico, USA, July 17-22 (2016)
- [171] M. Lucchini, A. Ludwig, E. Liberatore, J. Herrmann, L. Kasmi, L. Gallmann, U. Rothlisberger, U. Keller  
"New Insights into Ultrafast Relaxation Dynamics of the Ethylene Cation  $C_2H_4^+$ ," talk  
Ultrafast Phenomena 2016, Santa Fe, New Mexico, USA, July 17-22 (2016)
- [170] J. Maurer, B. Willenberg, B.W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Non-dipole Effects on Rescattered Photoelectrons from Strong-field Ionization with Elliptical Polarization," poster  
Ultrafast Phenomena 2016, Santa Fe, New Mexico, USA, July 17-22 (2016)
- \*[169] J. Maurer, B. Willenberg, B. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Non-dipole effects on rescattered electrons from strong-field ionization with elliptical polarization," **invited talk**  
25<sup>th</sup> International Laser Physics Workshop (LPhys 2016), Yerevan, Armenia, July 11-15 (2016)
- [168] L. Castiglioni, M. Lucchini, P. Kliuiev, L. Kasmi, M. Greif, A. Ludwig, P. Krüger, L. Gallmann, J. Osterwalder, M. Hengsberger, U. Keller  
"Final state effects in attosecond photoemission from solids," poster  
39<sup>th</sup> International Conference on Vacuum Ultraviolet and X-ray Physics (VUVX 2016), Zurich, Switzerland, July 3-8 (2016)
- [167] L. Kasmi, L. Castiglioni, M. Lucchini, P. Kliuiev, J. Osterwalder, P. Krüger, M. Hengsberger, L. Gallmann, U. Keller  
"Band structure effects in attosecond photoemission delays from the 3d valence band of copper," poster  
39<sup>th</sup> International Conference on Vacuum Ultraviolet and X-ray Physics (VUVX 2016), Zurich, Switzerland, July 3-8 (2016)
- [166] M. Lucchini, A. Ludwig, E. Liberatore, J. Herrmann, L. Kasmi, P. López-Tarifa, L. Gallmann, U. Rothlisberger, U. Keller  
"Ultrafast relaxation dynamics of ethylene ionized by XUV attosecond pulses," talk  
39<sup>th</sup> International Conference on Vacuum Ultraviolet and X-ray Physics (VUVX 2016), Zurich, Switzerland, July 3-8 (2016)

- [165] M. Hengsberger, M. Greif, L. Kasmi, L. Castiglioni, M. Lucchini, L. Gallmann, U. Keller, P. Krüger, J. Osterwalder  
"Study of structural dynamics by means of time- and angle-resolved photoelectron spectroscopy and diffraction," talk  
39<sup>th</sup> International Conference on Vacuum Ultraviolet and X-ray Physics (VUVX 2016), Zurich, Switzerland, July 3-8 (2016)
- [164] M. Lucchini, S. A. Sato, J. Herrmann, A. Ludwig, M. Volkov, L. Kasmi, Y. Shinohara, K. Yabana, L. Gallmann, U. Keller  
"Observation of Femtosecond Dynamical Franz-Keldysh Effect in Polycrystalline Diamond," **postdeadline talk**  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 5-10 (2016)
- [163] B. Willenberg, J. Maurer, B.W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Non-dipole Effects on Rescattered Photoelectrons from Strong-Field Ionization with Elliptical Polarization," talk FTh4M.5  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 5-10 (2016)
- [162] M. Lucchini, L. Castiglioni, L. Kasmi, P. Kliuiev, A. Ludwig, M. Greif, M. Hengsberger, J. Osterwalder, L. Gallmann, U. Keller  
"Photoemission Time Delays from a Cu(111)-Surface: Validity of Macroscopic Laws for Probe-Field Effects," talk FTu4N.5  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 5-10 (2016)
- \*[161] J. Maurer, B. Willenberg, B.W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Photoelectron rescattering dynamics beyond the dipole approximation," **invited talk**  
Molecules and Laser Fields - An Honorary André Bandrauk Symposium, Sherbrooke, Canada, May 4 - 7 (2016)
- \*[160] J. Maurer, B. Willenberg, B.W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Non-dipole Effects on Rescattered Photoelectrons from Strong-field Ionization with Elliptical Polarization," **invited talk**  
High-Intensity Lasers and High-Field Phenomena (HILAS), Long Beach, California, USA, March 20-22 (2016)
- \*[159] L. Gallmann, C. R. Phillips, B. W. Mayer, A. Ludwig, J. Maurer, U. Keller  
"Exploring the long-wavelength limit of the electric dipole approximation," **invited talk**  
International Conference on Extreme Light (ICEL 2015), Bucharest, Romania, November 23-27 (2015)
- [158] J. Maurer, B.W. Mayer, C. R. Phillips, A. Ludwig, L. Gallmann, U. Keller  
"Rescattering dynamics in strong-field ionization of atomic and molecular targets beyond the dipole approximation," talk  
Super Intense Laser-Atom Physics (SILAP), Bordeaux, France, September 7-10 (2015)
- \*[157] L. Gallmann, C. R. Phillips, B. W. Mayer, U. Keller  
"Broadband Mid-Infrared OPA through Nonlinear-Fanout Quasi-Phasematching in the Fourier-Plane," **invited talk**  
Ultrafast Optics 2015, Beijing, China, August 16-21 (2015)

- [156] S. Heuser, Á. Jiménez-Galán, C. Cirelli, M. Sabbar, R. Boge, M. Lucchini, L. Gallmann, I. Ivanov, A. Kheifets, J. M. Dahlström, E. Lindroth, L. Argenti, F. Martín, U. Keller  
"Time delay anisotropy in photoelectron emission from isotropic helium," poster  
XXIX International Conference on Photonic, Electronic and Atomic Collisions (ICPEAC 2015), Toledo, Spain, July 22-28 (2015)
- \*[155] J. Maurer, A. Ludwig, B.W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Strong-field ionization beyond the long-wavelength limit of the dipole approximation," **invited talk**  
Conference on Extremely High-Intensity Laser Physics (ExHILP), Heidelberg, Germany, July 21-24 (2015)
- [154] L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, A. Ludwig, M. Greif, M. Hengsberger, J. Osterwalder, L. Gallmann, U. Keller  
"Probe Field in Photoemission Delay Measurements on a Cu(111)-Surface: Validity of Macroscopic Laws on Atomic and Attosecond Scales," talk  
5<sup>th</sup> International Conference on Attosecond Physics (ATTO2015), Saint-Saveur, Québec, Canada, July 6-10 (2015)
- [153] M. Lucchini, S. Sato, J. Herrmann, A. Ludwig, M. Volkov, L. Kasmi, K. Yabana, Y. Shinohara, L. Gallmann, U. Keller  
"Direct Observation of Sub-Cycle Electron Dynamics in Polycrystalline Diamond," poster  
5<sup>th</sup> International Conference on Attosecond Physics (ATTO2015), Saint-Saveur, Québec, Canada, July 6-10 (2015)
- \*[152] S. Heuser, Á. Jiménez-Galán, C. Cirelli, M. Sabbar, R. Boge, M. Lucchini, L. Gallmann, I. Ivanov, A. Kheifets, J. M. Dahlström, E. Lindroth, L. Argenti, F. Martín, U. Keller  
"Time delay anisotropy in photoelectron emission from the isotropic ground state of helium," **invited talk**  
5<sup>th</sup> International Conference on Attosecond Physics (ATTO2015), Saint-Saveur, Québec, Canada, July 6-10 (2015)
- [151] M. Hengsberger, M. Greif, L. Castiglioni, M. Lucchini, L. Kasmi, P. Kliuiev, A. Ludwig, L. Gallmann, J. Osterwalder, U. Keller  
"Study of Coherent Phonon Excitation by Means of Time-Resolved Photoelectron Diffraction," talk  
3<sup>rd</sup> International Conference on Ultrafast Structural Dynamics (ICUSD), Zurich, Switzerland, June 10-12 (2015)
- [150] L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, A. Ludwig, M. Greif, M. Hengsberger, J. Osterwalder, L. Gallmann, U. Keller  
"Probe-Induced Time Delays in Single Photon Emission from a Copper(111) Surface," talk CG-4.5  
CLEO Europe - EQEC, Munich, Germany (2015)
- [149] B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Monolithic 2D-QPM Frequency Domain OPA," talk CF-2.3  
CLEO Europe - EQEC, Munich, Germany, June 21-25 (2015)

- [148] A. Ludwig, J. Maurer, B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Breakdown of the Dipole Approximation in Strong-Field Ionization,"  
talk EE-4.2  
CLEO Europe - EQEC, Munich, Germany, June 21-25 (2015)
- [147] C. Cirelli, M. Sabbar, S. Heuser, R. Boge, M. Lucchini, L. Gallmann,  
U. Keller  
"Attosecond time delays in single and multi-photon ionization," talk CG-4.1  
CLEO Europe - EQEC, Munich, Germany (2015)
- [146] M. Lucchini, T. Zimmermann, A. Ludwig, L. Kasmi, J. Herrmann,  
A. S. Landsman, L. Gallmann, U. Keller  
"Time-resolved Study of Helium Excited States with Attosecond Quantum-  
Beat Spectroscopy," talk CG-5.3  
CLEO Europe - EQEC, Munich, Germany (2015)
- [145] L. Castiglioni, M. Lucchini, P. Kliuiev, L. Kasmi, M. Greif, R. Locher,  
P. Krüger, L. Gallmann, J. Osterwalder, U. Keller, M. Hengsberger  
"Photoemission dynamics studied by attosecond interferometry," talk  
9<sup>th</sup> International Symposium on Ultrafast Surface Dynamics (USD9), Lake  
Biwa, Japan (2015)
- [144] S. Heuser, M. Sabbar, R. Boge, M. Lucchini, L. Gallmann, C. Cirelli,  
U. Keller  
"Photoionization time delay dynamics in noble gases," talk FTh4C.3  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2015)
- [143] C. R. Phillips, B. W. Mayer, L. Gallmann, U. Keller  
"Monolithic Broadband Mid-Infrared Frequency-Domain OPA Via Nonlinear-  
Fanout Quasi-Phasematching," talk SF2M.3  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, May 10-15  
(2015)
- \*[142] C. Cirelli, M. Sabbar, S. Heuser, R. Boge, M. Lucchini, L. Gallmann,  
U. Keller  
"Attosecond ionization dynamics," **invited talk**  
International Workshop on Photon and Ion Induced Processes in Atoms,  
Molecules and Nanomaterials (PIPAMON), Debrecen, Hungary (2015)
- [141] J. Maurer, A. Ludwig, B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Breakdown of the dipole approximation in strong field ionization," poster  
Ultrafast Dynamic Imaging of Matter (UDIM 2015), Grindelwald,  
Switzerland, March 8-12 (2015)
- [140] S. Heuser, C. Cirelli, M. Sabbar, R. Boge, M. Lucchini, L. Gallmann,  
U. Keller  
"Influence of Autoionizing States on the Photoionization Dynamics of H<sub>2</sub>,"  
poster  
Ultrafast Dynamic Imaging of Matter (UDIM 2015), Grindelwald,  
Switzerland (2015)

- [139] L. Kasmi, M. Lucchini, L. Castiglioni, P. Kliuiev, A. Ludwig, M. Greif, M. Hengsberger, J. Osterwalder, L. Gallmann, U. Keller  
"IR-transient-grating induced phase on photoemission delays from copper(111) surface," poster  
Ultrafast Dynamic Imaging of Matter (UDIM 2015), Grindelwald, Switzerland (2015)
- [138] M. Hengsberger, M. Greif, A. Schuler, L. Kasmi, L. Castiglioni, M. Lucchini, L. Gallmann, U. Keller, P. Krüger, J. Osterwalder  
"Time-resolved photoelectron diffraction from solids," talk  
Ultrafast Dynamic Imaging of Matter (UDIM 2015), Grindelwald, Switzerland (2015)
- [137] L. Castiglioni, M. Lucchini, M. Greif, R. Locher, L. Kasmi, P. Kliuiev, P. Krüger, L. Gallmann, J. Osterwalder, U. Keller, M. Hengsberger  
"Photoemission delays and ultrafast electron dynamics in solids by attosecond interferometry," poster  
Ultrafast Dynamic Imaging of Matter (UDIM 2015), Grindelwald, Switzerland (2015)
- [136] M. Lucchini, T. Zimmermann, A. Ludwig, L. Kasmi, L. Gallmann, U. Keller  
"Attosecond quantum-beat spectroscopy of helium excited states," poster  
Ultrafast Dynamic Imaging of Matter (UDIM 2015), Grindelwald, Switzerland (2015)
- [135] C. Cirelli, M. Sabbar, S. Heuser, R. Boge, M. Lucchini, J. Herrmann, A. Landsman, L. Gallmann, U. Keller  
"Direct measurement of photoemission time-delays in argon and neon," talk  
Ultrafast Dynamic Imaging of Matter (UDIM 2015), Grindelwald, Switzerland (2015)
- [134] S. Heuser, C. Cirelli, M. Sabbar, R. Boge, L. Gallmann, U. Keller  
"Role of electron correlation in photoionization of H<sub>2</sub>,"  
13<sup>th</sup> International Conference on Multiphoton Processes (ICOMP 2014), Shanghai, China (2014)
- \*[133] S. Heuser, M. Sabbar, R. Boge, M. Lucchini, L. Gallmann, C. Cirelli, U. Keller  
"Attosecond ionization dynamics," **invited talk**  
13<sup>th</sup> International Conference on Multiphoton Processes (ICOMP 2014), Shanghai, China (2014)
- [132] L. Castiglioni, M. Lucchini, M. Greif, R. Locher, L. Gallmann, J. Osterwalder, U. Keller, M. Hengsberger  
"Attosecond interferometry for the determination of photoemission delays and ultrafast electron dynamics in solids," talk  
International Workshop on Photoionization and Resonant Inelastic X-Ray Scattering (IWP & RIXS 2014), Erice, Sicily, Italy (2014)
- [131] M. Hengsberger, L. Castiglioni, M. Greif, J. Osterwalder, M. Lucchini, R. Locher, L. Gallmann, U. Keller  
"Attosecond Dynamics of the Photoelectric Effect in Solids," talk  
European Conference on Surface Science (ECOSS 30), Antalya, Turkey (2014)

- [130] L. Castiglioni, M. Greif, D. Becker-Koch, J. Osterwalder, M. Hengsberger, M. Lucchini, L. Kasmi, R. Locher, L. Gallmann, U. Keller  
"Origin of attosecond delays in photoemission from noble metal surfaces,"  
talk  
European Conference on Surface Science (ECOSS 30), Antalya, Turkey  
(2014)
- [129] B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Few-Cycle Mid-Infrared Pulses From Achromatic QPM OPCPA," talk TuA-T1-O-02  
6<sup>th</sup> EPS-QEOD Europhoton Conference (Europhoton 2014), Neuchâtel, Switzerland, August 24-29 (2014)
- \*[128] M. Lucchini, L. Castiglioni, R. Locher, M. Greif, L. Gallmann, J. Osterwalder, M. Hengsberger, U. Keller  
"RABBITT from solid surfaces: Extending the attosecond toolbox for condensed matter systems," **invited talk**  
23<sup>rd</sup> Congress of the International Commission for Optics (ICO-23), Santiago de Compostela, Spain (2014)
- [127] J. Herrmann, M. Lucchini, S. Chen, M. Wu, A. Ludwig, L. Kasmi, K. Schafer, L. Gallmann, M. Gaarde, U. Keller  
"Multiphoton Transitions for Robust Delay-Zero Calibration in Attosecond Transient Absorption," talk 08.Tue.A.6  
Ultrafast Phenomena 2014, Ginowan City, Okinawa, Japan (2014)
- [126] M. Lucchini, L. Castiglioni, R. Locher, M. Greif, L. Gallmann, J. Osterwalder, M. Hengsberger, U. Keller  
"Accessing Energy-Dependent Photoemission Delays in Solids," poster 08.Tue.P2.40  
Ultrafast Phenomena 2014, Ginowan City, Okinawa, Japan (2014)
- [125] C. R. Phillips, B. W. Mayer, L. Gallmann, M. M. Fejer, U. Keller  
"Ultrabroadband Mid-IR OPCPA Schemes Enabled By Quasi-Phase-Matching," poster 08.Tue.P2.56  
Ultrafast Phenomena 2014, Ginowan City, Okinawa, Japan, July 7-11 (2014)
- \*[124] L. Gallmann  
"Attosecond science of solids and solid interfaces," **plenary talk**  
Annual Meeting of the Swiss Physical Society, Fribourg, Switzerland (2014)
- [123] M. Sabbar, S. Heuser, R. Boge, M. Lucchini, L. Gallmann, C. Cirelli, U. Keller  
"Probing single photon ionization times with coincidence spectroscopy," poster  
Gordon Research Conference on Multiphoton Processes, Waltham, Massachusetts, USA (2014)
- [122] S. Heuser, M. Sabbar, R. Boge, M. Lucchini, L. Gallmann, C. Cirelli, U. Keller  
"Angle-resolved attosecond coincidence experiments in atoms and molecules," poster  
Gordon Research Conference on Multiphoton Processes, Waltham, Massachusetts, USA (2014)

- [121] J. Maurer, A. Ludwig, B.W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Breakdown of dipole approximation in strong field ionization," poster  
Gordon Research Conference on Multiphoton Processes, Waltham,  
Massachusetts, USA, June 15-20 (2014)
- [120] J. Herrmann, M. Lucchini, A. Ludwig, L. Kasmi, L. Gallmann, U. Keller,  
S. Chen, M. Wu, K. J. Schafer, M. B. Gaarde  
"Robust delay-zero calibration in attosecond transient absorption  
spectroscopy," poster  
Gordon Research Conference on Multiphoton Processes, Waltham,  
Massachusetts, USA (2014)
- [119] M. Lucchini, L. Castiglioni, L. Kasmi, M. Greif, R. Locher, L. Gallmann,  
J. Osterwalder, M. Hengsberger, U. Keller  
"Energy-dependent photoemission delays in noble metals with attosecond  
resolution," poster  
Gordon Research Conference on Multiphoton Processes, Waltham,  
Massachusetts, USA (2014)
- [118] C. Hofmann, A. S. Landsman, R. Boge, S. Heuser, C. Cirelli, M. Weger,  
A. Ludwig, J. Maurer, L. Gallmann, U. Keller  
"Studying Momentum Distributions in all Aspects Reveals Important Insight,"  
poster  
Gordon Research Conference on Multiphoton Processes, Waltham,  
Massachusetts, USA (2014)
- [117] J. Maurer, A. Ludwig, B. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Breakdown of dipole approximation in strong field ionization," **postdeadline  
talk** FTH5A.10  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 8-13  
(2014)
- [116] C. Hofmann, A. S. Landsman, R. Boge, S. Heuser, C. Cirelli, M. Weger,  
A. Ludwig, J. Maurer, L. Gallmann, U. Keller  
"Studying Momentum Distributions in all Aspects Reveals Important Insight,"  
poster JTU4A.1  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2014)
- [115] R. Boge, M. Sabbar, S. Heuser, C. Cirelli, L. Gallmann, U. Keller  
"Combining Attosecond Science with Coincidence Momentum Spectroscopy,"  
talk FM2B.6  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2014)
- [114] C. R. Phillips, B. W. Mayer, L. Gallmann, M. M. Fejer, U. Keller  
"OPCPA Systems Based on Chirped Quasi-Phase-Matching Gratings: Physics  
and Design Constraints," talk SM3I.6  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 8-13  
(2014)
- [113] A. Ludwig, J. Maurer, B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Exploring characteristics of strong-field ionization dynamics in the mid-  
infrared regime," poster JW2A.89  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 8-13  
(2014)



- [112] B. W. Mayer, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"Sub-4-Cycle Pulses Directly From an All-Collinear, High-Repetition-Rate, Mid-IR OPCPA," talk STh4E.6  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 8-13 (2014)
- [111] B. W. Mayer, C. R. Phillips, L. Gallmann, U. Keller  
"Ultra-Broadband Non-Collinear Quasi-Phase-Matching in a Hybrid Mid-Infrared OPCPA System," poster JTU4A.88  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA, June 8-13 (2014)
- [110] L. Gallmann, M. Lucchini, L. Castiglioni, R. Locher, M. Greif, J. Osterwalder, M. Hengsberger, U. Keller  
"Following Attosecond Photoemission from Solids Using Interferometry," talk FM2B.4  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2014)
- [109] L. Gallmann, J. Herrmann, M. Lucchini, S. Chen, M. Wu, A. Ludwig, L. Kasmi, K. Schafer, M. Gaarde, U. Keller  
"Quarter-Laser-Cycle Oscillations in Attosecond Transient Absorption for Robust Delay Zero Calibration," poster JTh2A.86  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2014)
- [108] M. Lucchini, L. Castiglioni, R. Locher, M. Greif, L. Gallmann, J. Osterwalder, M. Hengsberger, U. Keller  
"A novel technique to study energy-dependent photoemission delays in solids with attosecond resolution," talk HTh3B.5  
High-Intensity Lasers and High-Field Phenomena (HILAS), Berlin, Germany (2014)
- [107] B. W. Mayer, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"Sub-4-Cycle Laser Pulses from a High-Repetition-Rate, Mid-Infrared OPCPA at 3.4  $\mu\text{m}$ ," talk AF1A.6  
Advanced Solid State Lasers (ASSL 2013), Paris, France, October 27 – November 1 (2013)
- [106] L. Castiglioni, R. Locher, M. Lucchini, M. Greif, L. Gallmann, U. Keller, J. Osterwalder, M. Hengsberger  
"Novel insights into photoemission from solids: Surface RABBITT yields absolute delays and reveals temporal structure beyond transport phenomena," talk 119  
Joint Annual Meeting of the Austrian and Swiss Physical Societies, Linz, Austria (2013)
- [105] M. Lucchini, J. Herrmann, A. Ludwig, M. Sabbar, R. Locher, L. Gallmann, U. Keller  
"Role of electron wave-packet interference in the optical response of helium," poster  
4<sup>th</sup> International Conference on Attosecond Physics (ATTO2013), Paris, France (2013)

- [104] A. S. Landsman, J. Maurer, A. Ludwig, C. Cirelli, R. Boge, M. Weger, S. Heuser, L. Gallmann, U. Keller  
"Ultrafast Resolution of Tunneling Time," poster  
4<sup>th</sup> International Conference on Attosecond Physics (ATTO2013), Paris, France (2013)
- [103] A. S. Landsman, J. Maurer, A. Ludwig, C. Cirelli, R. Boge, M. Weger, S. Heuser, L. Gallmann, U. Keller  
"Ultrafast Resolution of Tunneling Time," poster  
4<sup>th</sup> International Conference on Attosecond Physics (ATTO2013), Paris, France (2013)
- [102] R. Boge, C. Cirelli, A. S. Landsman, S. Heuser, A. Ludwig, J. Maurer, M. Weger, L. Gallmann, U. Keller  
"Probing non-adiabatic effects in strong-field tunnel ionization," poster  
4<sup>th</sup> International Conference on Attosecond Physics (ATTO2013), Paris, France (2013)
- [101] J. Herrmann, M. Weger, R. Locher, M. Sabbar, P. Rivière, U. Saalman, J.-M. Rost, L. Gallmann, U. Keller  
"Optical gain by interrupting the temporal evolution of a dipole," poster  
4<sup>th</sup> International Conference on Attosecond Physics (ATTO2013), Paris, France (2013)
- [100] L. Castiglioni, R. Locher, M. Lucchini, M. Greif, L. Gallmann, J. Osterwalder, M. Hengsberger, U. Keller  
"A novel route towards absolute photoemission delays from surfaces by sub-cycle-resolved LAPE," poster  
4<sup>th</sup> International Conference on Attosecond Physics (ATTO2013), Paris, France (2013)
- [99] A. Ludwig, M. Weger, J. Maurer, R. Boge, S. Heuser, A. Landsman, C. Cirelli, L. Gallmann, U. Keller  
"VMIS attoclock measurements reveal real tunneling time in helium," talk  
4<sup>th</sup> International Conference on Attosecond Physics (ATTO2013), Paris, France (2013)
- [98] R. Locher, L. Castiglioni, M. Lucchini, M. Greif, L. Gallmann, J. Osterwalder, M. Hengsberger, U. Keller  
"Surface RABBITT for determination of absolute ionization phase: a novel route towards absolute photoemission delays," **postdeadline talk** PD-A.1  
CLEO Europe - EQEC, Munich, Germany (2013)
- [97] J. Maurer, A. Landsman, M. Weger, R. Boge, A. Ludwig, S. Heuser, C. Cirelli, L. Gallmann, U. Keller  
"Tunneling Time in Ultrafast Science is Real and Probabilistic", talk QTh1D.3  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2013)
- [96] J. Herrmann, M. Lucchini, A. Ludwig, M. Sabbar, R. Locher, L. Gallmann, U. Keller  
"Probing Electron Wave-packet Interference", talk QF2C.2  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2013)

- [95] J. Herrmann, M. Weger, R. Locher, M. Sabbar, P. Rivière, U. Saalman, J.-M. Rost, L. Gallmann, U. Keller  
"Creation of Optical Gain and Absorption via a Virtual Single Photon Transition", poster JTh2A.08  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2013)
- [94] C. R. Phillips, L. Gallmann, M. M. Fejer  
"New Design Opportunities for Ultrafast Devices Based On Quasi-Phasematching", talk CM2L.4  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2013)
- [93] M. Lucchini, J. Herrmann, A. Ludwig, M. Sabbar, R. Locher, L. Gallmann, U. Keller  
"Optical Response of Electron Wave-packet Interference Revisited," talk CG-7.4  
CLEO Europe - EQEC, Munich, Germany (2013)
- [92] J. Herrmann, M. Weger, R. Locher, M. Sabbar, P. Rivière, U. Saalman, J.-M. Rost, L. Gallmann, U. Keller  
"Interrupted virtual single-photon transition," talk CG-7.3  
CLEO Europe - EQEC, Munich, Germany (2013)
- [91] L. Gallmann, A. Landsman, M. Weger, J. Maurer, R. Boge, A. Ludwig, S. Heuser, C. Cirelli, U. Keller  
"Tunneling Time in Ultrafast Science is Real and Probabilistic," talk CG-1.1  
CLEO Europe - EQEC, Munich, Germany (2013)
- [90] C. R. Phillips, L. Gallmann, M. M. Fejer  
"New design opportunities for ultrafast quasi-phasematching devices," talk CD-7.4  
CLEO Europe - EQEC, Munich, Germany (2013)
- [89] L. Gallmann, C. Heese, C. R. Phillips, B. W. Mayer, M. M. Fejer, U. Keller  
"OPCPA based on engineered QPM for few-cycle pulse compression in the mid-infrared," talk  
Fundamentals and Applications of Laser Filaments Workshop, Okazaki, Japan (2013)
- \*[88] C. R. Phillips, C. Langrock, Y. W. Lin, M. M. Fejer, C. Heese, B. W. Mayer, L. Gallmann, U. Keller, J. Jiang, I. Hartl, M. E. Fermann  
"Ultrafast light sources via high-gain and highly nonlinear quasi-phasematching devices," **invited talk**  
Ultrafast Optics 2013 (UFO IX), Davos, Switzerland, March 4-8 (2013)
- \*[87] L. Gallmann, J. Herrmann, M. Lucchini, M. Weger, R. Locher, M. Sabbar, P. Rivière, U. Saalman, J.-M. Rost, U. Keller  
"Attosecond transient absorption spectroscopy: shedding new light on fundamental light-matter interaction," **invited talk**  
International Workshop on Atomic Physics (atom2012), Dresden, Germany (2012)

- [86] B. W. Mayer, C. Heese, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"High-power femtosecond laser source in the mid-infrared based on parametric transfer," talk  
International Conference on Advanced Laser Technologies (ALT'12), Thun, Switzerland (2012)
- [85] B. W. Mayer, C. Heese, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"Mid-infrared pulses with 115 MW peak power from an OPCPA based on apodized APPLN," talk MoB.2  
5<sup>th</sup> EPS-QEOD Europhoton Conference, Stockholm, Sweden (2012)
- \*[84] L. Gallmann, C. Heese, C. R. Phillips, B. W. Mayer, M. M. Fejer, U. Keller  
"Apodized APPLN based mid-infrared OPCPA system with 115 MW peak and 700 mW average power," **invited talk**  
21<sup>st</sup> International Laser Physics Workshop (LPhys 2012), Calgary, Canada (2012)
- [83] J. Herrmann, M. Weger, R. Locher, M. Sabbar, P. Rivière, U. Saalman, J.-M. Rost, L. Gallmann, U. Keller  
"Attosecond Control of Strong-Field Phenomena in Helium," talk MON.2A.3  
Ultrafast Phenomena 2012, Lausanne, Switzerland (2012)
- [82] L. Castiglioni, M. Greif, D. Leuenberger, M. Hengsberger, J. Osterwalder, R. Locher, L. Gallmann, U. Keller  
"Probing interfacial electron transfer dynamics in the attosecond time domain," talk T13  
Annual Meeting of the Swiss Physical Society, Zurich, Switzerland (2012)
- [81] C. Heese, B. Mayer, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"High-power mid-infrared femtosecond laser source based on parametric transfer," poster P2  
Annual Meeting of the Swiss Physical Society, Zurich, Switzerland (2012)
- [80] J. Herrmann, M. Sabbar, R. Locher, M. Weger, P. Rivière, U. Saalman, J.-M. Rost, L. Gallmann, U. Keller  
"Attosecond Time-Gated Absorption and Emission," talk T2  
Annual Meeting of the Swiss Physical Society, Zurich, Switzerland (2012)
- \*[79] L. Gallmann, J. Herrmann, M. Sabbar, R. Locher, M. Weger, U. Keller  
"All-optical ultrafast spectroscopy in the attosecond domain," **invited talk**  
6<sup>th</sup> International Conference on Laser Probing (LAP 2012), Paris, France (2012)
- [78] J. Herrmann, M. Weger, R. Locher, M. Sabbar, P. Rivière, U. Saalman, J.-M. Rost, L. Gallmann, U. Keller  
"Time-gated XUV-emission,"  
Gordon Research Conference on Multiphoton Processes, South Hadley, MA, USA (2012)
- [77] C. Heese, C. R. Phillips, N. Hartmann, L. Gallmann, M. Fejer, U. Keller  
"High Repetition Rate, 93-MW Mid-Infrared Optical Parametric Chirped-Pulse Amplifier Based on Apodized Aperiodically Poled Mg:LiNbO<sub>3</sub>,"  
Advanced Solid-State Photonics (ASSP 2012), San Diego, CA, USA (2012)

- \*[76] L. Gallmann, M. Holler, F. Schapper, U. Keller  
"Transient absorption spectroscopy with attosecond pulse trains," **invited talk**  
Frontiers in Optics 2011 – Laser Science XXVII, San Jose, California, USA  
(2011)
- \*[75] L. Gallmann, M. Holler, F. Schapper, U. Keller  
"All-optical spectroscopy for the attosecond domain," **invited talk**  
3<sup>rd</sup> International Conference on Ultraintense Laser Interaction Science (ULIS  
2011), Lisbon, Portugal (2011)
- [74] L. Gallmann, M. Holler, F. Schapper, U. Keller  
"Electron wavepacket interference observed by attosecond transient  
absorption spectroscopy," poster  
3<sup>rd</sup> International Conference on Attosecond Physics (ATTO3), Sapporo, Japan  
(2011)
- [73] C. Heese, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"High-Power Mid-Infrared Optical Parametric Chirped-Pulse Amplifier Based  
on Aperiodically Poled Mg:LiNbO<sub>3</sub>," talk CF6.1  
CLEO Europe - EQEC, Munich, Germany (2011)
- [72] C. Heese, A. E. H. Oehler, L. Gallmann, U. Keller  
"50-MW, 12-ps Nd:YVO<sub>4</sub> Slab Amplifier for OPCPA Pumping," talk CA6.2  
CLEO Europe - EQEC, Munich, Germany (2011)
- [71] L. Gallmann, M. Holler, F. Schapper, U. Keller  
"Direct Optical Observation of Attosecond Electron Wavepacket  
Interference," poster CG.P.15  
CLEO Europe - EQEC, Munich, Germany (2011)
- [70] C. Heese, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"High-Power Mid-Infrared Optical Parametric Chirped-Pulse Amplifier Based  
on Aperiodically Poled Mg:LiNbO<sub>3</sub>," talk CMR5  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2011)
- [69] C. Heese, A. E. Oehler, L. Gallmann, U. Keller  
"50-MW, 12-ps Nd:YVO<sub>4</sub> Slab Amplifier for OPCPA Pumping," talk CWG4  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2011)
- [68] F. Schapper, M. Holler, P. Rivière, L. Gallmann, U. Saalman, J.-M. Rost,  
U. Keller  
"Attosecond Transient Absorption Around the Ionization Threshold of  
Helium," talk ThA3  
Ultrafast Phenomena 2010, Snowmass Village, Colorado, USA
- [67] M. Holler, F. Schapper, T. Remetter, L. Gallmann, U. Keller  
"Harmonic Continua by Chirp Assisted Polarization Gating," poster ME29  
Ultrafast Phenomena 2010, Snowmass Village, Colorado, USA
- [66] C. Heese, C. R. Phillips, L. Gallmann, M. M. Fejer, U. Keller  
"Ultrabroadband Optical Parametric Chirped-Pulse Amplifier in the Mid-  
Infrared Using Aperiodically Poled Mg:LiNbO<sub>3</sub>," poster TuE27  
Ultrafast Phenomena 2010, Snowmass Village, Colorado, USA

- \*[65] L. Gallmann, F. Schapper, M. Holler, P. Rivière, U. Saalman, J.-M. Rost, U. Keller  
"Resolving attosecond dynamics around the ionization threshold of helium by XUV transient absorption," **invited talk**  
19th International Laser Physics Workshop (LPhys 2010), Foz do Iguazu, Brazil
- [64] P. Rivière, U. Saalman, J.-M. Rost, F. Schapper, M. Holler, L. Gallmann, U. Keller  
"Attosecond transient absorption around the ionization threshold of helium," poster P-378  
European Conference on Atoms, Molecules and Photons (ECAMP 2010), Salamanca, Spain
- [63] C. R. Phillips, M. M. Fejer, C. Heese, L. Gallmann, U. Keller  
"Aperiodic quasi-phase-matched gratings for efficient and broadband optical parametric chirped pulse amplification," talk CTuGG4  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2010)
- \*[62] C. Heese, L. Gallmann, U. Keller, C. R. Phillips, M. M. Fejer  
"Ultra-broadband optical parametric chirped-pulse amplifier based on aperiodically poled Mg:LiNbO<sub>3</sub> in the mid-infrared," **invited talk** CWH3  
Conference on Lasers and Electro-Optics (CLEO), San Jose, USA (2010)
- [61] C. Heese, L. Gallmann, U. Keller, C. R. Phillips, M. M. Fejer  
"Ultra-broadband optical parametric chirped-pulse amplifier based on aperiodically poled Mg:LiNbO<sub>3</sub> in the mid-infrared at high repetition rates,"  
Advanced Solid-State Photonics (ASSP 2010), San Diego, CA, USA (2010)
- [60] P. Riviere, U. Saalman, M. Holler, F. Schapper, L. Gallmann, U. Keller, J.-M. Rost  
"Transient absorption of high order harmonics from attosecond pulse trains," poster  
International workshop on atomic physics: ultrafast dynamics in finite and molecular systems probed with novel light sources, Dresden, Germany, 2009
- \*[59] L. Gallmann, M. Holler, A. Zaïr, F. Schapper, T. Auguste, E. Cormier, A. Wyatt, A. Monmayrant, I. A. Walmsley, P. Salières, U. Keller  
"Quantum path interferences in high-harmonic generation: spatial structure and spectral signature of ionization effects," **invited talk**  
Conference on Ultrafast and Nonlinear Optics (UFNO'09), Burgas, Bulgaria (2009)
- [58] L. Gallmann, C. Erny, C. Heese, U. Keller  
"High-Repetition-Rate Optical Parametric Chirped-Pulse Amplifier Producing 1- $\mu$ J, Sub-100-fs Pulses in the Mid-Infrared," talk  
Ultrafast Optics and High Field Short Wavelength 2009, Arcachon, France (2009)
- [57] E. Mansten, J. M. Dahlström, J. Mauritsson, T. Ruchon, A. L'Huillier, J. Tate, M. B. Gaarde, P. Eckle, A. Guandalini, M. Holler, F. Schapper, L. Gallmann, U. Keller  
"Spectral signature of short attosecond pulse trains," poster  
Ultrafast Optics and High Field Short Wavelength 2009, Arcachon, France (2009)

- [56] F. Schapper, M. Holler, L. Gallmann, U. Keller  
"Chirp-controlled polarization gating for isolated attosecond pulse generation," talk and poster  
Attosecond Physics 2009 (Atto-09), Manhattan, Kansas, USA (2009)
- [55] M. Holler, F. Schapper, J. Mauritsson, K. J. Schafer, L. Gallmann, U. Keller  
"Attosecond Transient Absorption of High Order Harmonics in Helium," talk and poster  
Attosecond Physics 2009 (Atto-09), Manhattan, Kansas, USA (2009)
- \*[54] L. Gallmann, C. Heese, C. Erny, M. Haag, U. Keller  
"High Repetition Rate Femtosecond Optical Parametric Chirped-Pulse Amplification in the Mid-Infrared," **invited talk**  
18th International Laser Physics Workshop (LPHYS'09), Barcelona, Spain (2009)
- \*[53] C. Erny, C. Heese, M. Haag, L. Gallmann, U. Keller  
"1- $\mu$ J, Sub-100-fs Pulses from a High-Repetition-Rate Optical Parametric Chirped-Pulse Amplifier in the Mid-Infrared," **invited talk**, talk CF4.1  
CLEO Europe - EQEC, Munich, Germany (2009)
- [52] L. Gallmann, M. Holler, A. Zaïr, F. Schapper, T. Augustine, E. Cormier, A. Wyatt, A. Monmayrant, I. A. Walmsley, P. Salières, U. Keller  
"Quantum Path Interferences in High-Harmonic Generation: Ionization Effects and Spatial Structure," talk JThH 6  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2009)
- [51] C. Heese, C. Erny, M. Haag, L. Gallmann, U. Keller  
"1  $\mu$ J from a High Repetition Rate Femtosecond Optical Parametric Chirped-Pulse Amplifier in the Mid-Infrared," talk CWL 6  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2009)
- \*[50] L. Gallmann, F. Schapper, A. Zaïr, A. Guandalini, M. Holler, A. Couairon, M. Franco, A. Mysyrowicz, and U. Keller  
"Spatio-temporal effects in few-cycle filament compression," **invited talk**  
2<sup>nd</sup> International Symposium on Filamentation, Paris, France (2008)
- [49] F. Schapper, M. Holler, T. Augustine, A. Zaïr, M. Weger, P. Salières, L. Gallmann, U. Keller  
"Spatially resolved quantum path interferences in high order harmonic generation in argon," poster  
11<sup>th</sup> International Conference on Multiphoton Processes (ICOMP 2008), Heidelberg, Germany (2008)
- [48] A. Zaïr, M. Holler, F. Schapper, L. Gallmann, U. Keller, A. S. Wyatt, A. Monmayrant, I. A. Walmsley, E. Cormier, T. Augustine, J. P. Caumes, P. Salières  
"Study of quantum-paths interference in the high harmonics generation process", talk  
Ultrafast Phenomena, Stresa (Lago Maggiore), Italy (2008)

- [47] M. Holler, A. Zaïr, F. Schapper, T. Auguste, A. Guandalini, A. S. Wyatt, A. Monmayrant, L. Gallmann, I. A. Walmsley, E. Cormier, P. Salières, U. Keller  
"Quantum-path interferences in high harmonic generation", talk  
Annual Meeting of the Swiss Physical Society, Geneva, Switzerland (2008)
- [46] E. Mansten, J. M. Dahlström, P. Johnsson, M. Swoboda, T. Ruchon, A. L'Huillier, J. Mauritsson, J. Tate, M. Gaarde, P. Eckle, A. Guandalini, M. Holler, L. Gallmann, U. Keller  
"Controlling attosecond pulse generation by using a two-color driving field", poster  
402<sup>nd</sup> Wilhelm and Else Heraeus-Seminar, Novel light sources and applications, Obergurgl, Austria (2008)
- [45] M. Holler, A. Zaïr, F. Schapper, T. Auguste, A. Guandalini, A. S. Wyatt, A. Monmayrant, L. Gallmann, I. A. Walmsley, E. Cormier, P. Salières, U. Keller  
"A comparison of quantum-path interferences in high order harmonic generation in Neon, Argon and Xenon", talk  
Ultrafast Optics and High Field Short Wavelength 2007, Santa Fe, New Mexico, USA (2007)
- [44] F. Schapper, A. Couairon, A. Guandalini, A. Zaïr, M. Holler, M. Franco, A. Mysyrowicz, L. Gallmann, U. Keller  
"Spatio-temporal structure and energy scaling of 4.9 fs pulses generated by filamentation", poster  
Ultrafast Optics and High Field Short Wavelength 2007, Santa Fe, New Mexico, USA (2007)
- [43] A. Zaïr, A. Guandalini, F. Schapper, M. Holler, J. Biegert, L. Gallmann, U. Keller, A. Couairon, M. Franco, A. Mysyrowicz  
"Spatio-temporal characterization of sub-5fs pulses obtained by filamentation", talk CG4-6-WED  
CLEO Europe – EQEC, Munich, Germany (2007)
- [42] A. Guandalini, A. Zaïr, F. Schapper, M. Holler, L. Gallmann, J. Biegert, U. Keller, A. Couairon, M. Franco, A. Mysyrowicz  
"Spatio-Temporal and Interferometric Characterization of Sub-5-fs Pulses Obtained by Filamentation", talk CFO1  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2007)
- \*[41] L. Gallmann, A. Zaïr, A. Guandalini, F. Schapper, M. Holler, U. Keller, T. Pfeifer, P.M. Nagel, M.J. Abel, D.M. Neumark, S.R. Leone  
"Few-cycle pulse generation through optical filamentation in rare gases and its spectral and spatio-temporal characterization", talk  
Nonlinear Effects in Photonic Materials Workshop, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, March 12-14, 2007, **invited talk**
- [40] T. Pfeifer, L. Gallmann, M. J. Abel, P. M. Nagel, D. M. Neumark, S. R. Leone  
"Signatures of electronic and molecular dynamics by pump-probe experiments of above-threshold ionization"  
ACS National Meeting and Exhibition, San Francisco, California, USA (2006)



- [39] T. Pfeifer, L. Gallmann, M. J. Abel, D. M. Neumark, S. R. Leone  
"Heterodyne Technique for Temporal Gating of High-Harmonic Generation,"  
Hot Topic oral presentation  
Gordon Conference on Multiphoton Processes, Tilton, New Hampshire, USA  
(2006), **upgraded to "Hot Topic"**
- [38] L. Gallmann, T. Pfeifer, M. J. Abel, P. M. Nagel, D. M. Neumark, S. R. Leone  
"Direct Comparison of the Hollow-Core Fiber and Filamentation Techniques  
for Few-Cycle Pulse Generation," poster MH18  
Ultrafast Phenomena, Pacific Grove, California, USA (2006)
- [37] T. Pfeifer, L. Gallmann, M. J. Abel, D. M. Neumark, S. R. Leone  
"Phase-Mask Control and Stabilization of Optical Filamentation," talk MD2  
Ultrafast Phenomena, Pacific Grove, California, USA (2006)
- [36] T. Pfeifer, L. Gallmann, M. J. Abel, P. M. Nagel, D. M. Neumark, S. R. Leone  
"Multi-Cycle Driven Isolated Attosecond Pulse Generation," poster ThE6  
Ultrafast Phenomena, Pacific Grove, California, USA (2006)
- [35] L. Gallmann, T. Pfeifer, M. J. Abel, D. M. Neumark, S. R. Leone  
"Control of Optical Filaments with Simple Phase Masks and its Application to  
Few-Cycle Pulse Generation," talk CThV3  
Conference on Lasers and Electro-Optics (CLEO), Long Beach, California,  
USA (2006)
- [34] T. Pfeifer, L. Gallmann, M. J. Abel, D. M. Neumark, S. R. Leone  
"Isolated Attosecond Pulses using Multi-Cycle Drivers and a Weak Second-  
Harmonic Field," talk JFB5  
Conference on Lasers and Electro-Optics (CLEO), Long Beach, California,  
USA (2006)
- [33] M. J. Abel, T. Pfeifer, L. Gallmann, P. M. Nagel, D. M. Neumark, S. R. Leone  
"Velocity-Map Imaging of Above Threshold Ionization Using Few-Cycle  
Pulses," poster  
Gordon Research Conference on Photoions, Photoionization &  
Photodetachment, Buellton, California, USA (2006)
- [32] T. Dreischer, K. Kudielka, L. Gallmann, T. Weigel, A. Märki, G. C. Baister  
"System Concept of an Integrated RF-Optical Transceiver for Deep Space  
TT&C," poster #1026  
2004 IEEE Aerospace Conference, Big Sky, Montana, USA (2004)
- [31] G. C. Baister, T. Dreischer, E. Rugi Grond, L. Gallmann, B. Thieme,  
K. Kudielka  
"The OPTEL terminal development programme – enabling technologies for  
future optical crosslink applications," talk AIAA-2003-6229  
American Institute of Aeronautics and Astronautics Space 2003 (AIAA Space  
2003), Long Beach, California, USA (2003)
- [30] F. W. Helbing, G. Steinmeyer, L. Gallmann, U. Keller, R. S. Windeler  
"Carrier-envelope offset dynamics and stabilization of femtosecond lasers,"  
talk CThT3  
Conference on Lasers and Electro-Optics (CLEO), Long Beach, California,  
USA (2002)

- \*[29] G. Steinmeyer, L. Gallmann, U. Keller  
"Ultrashort pulse generation in the 5-fs regime," talk MZ4  
OSA Annual Meeting/ILS-XVII, Long Beach, California, USA (2001),  
**invited talk**
- [28] L. Gallmann, G. Steinmeyer, G. Imeshev, M. M. Fejer, J.-P. Meyn, U. Keller  
"Sub-6-fs pulses generated by second-harmonic generation pulse  
compression," talk  
Ultrafast Optics, Montebello, Québec, Canada (2001)
- [27] G. Cerullo, M. Zavelani-Rossi, S. De Silvestri, L. Gallmann, G. Steinmeyer,  
U. Keller  
"Few-optical-cycle laser pulses by OPA: broadband chirped mirror  
compression and SPIDER characterization," poster 19  
Ultrafast Optics, Montebello, Québec, Canada (2001)
- [26] P. Baum, S. Lochbrunner, E. Riedle, L. Gallmann, G. Steinmeyer, U. Keller  
"Optimal and flexible compression of tunable visible pulses," poster 21  
Ultrafast Optics, Montebello, Québec, Canada (2001)
- [25] G. Cerullo, M. Zavelani-Rossi, S. De Silvestri, L. Gallmann, N. Matuschek,  
G. Steinmeyer, U. Keller  
"Full characterization in amplitude and phase of sub-6-fs visible light pulses,"  
talk  
CLEO Europe Focus Meeting, Munich, Germany (2001)
- \*[24] G. Steinmeyer, L. Gallmann, U. Keller  
"Ultrakurze blaue Pulse durch quasiphasenangepasste Frequenzverdopplung in  
Lithium-Tantalat," talk  
102. Jahrestagung der Deutschen Gesellschaft für angewandte Optik,  
Göttingen, Germany (2001), **invited talk**
- [23] S. Schön, L. Gallmann, M. Haiml, U. Keller  
"Fluoride SESAM for ultrabroadband pulse generation," talk CWB2  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2001)
- [22] M. Zavelani-Rossi, G. Cerullo, S. De Silvestri, L. Gallmann, G. Steinmeyer,  
U. Keller  
"SPIDER characterization of sub-6-fs pulses in the visible," talk CTuN5  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2001)
- [21] L. Gallmann, G. Steinmeyer, U. Keller, G. Imeshev, M. M. Fejer, J.-P. Meyn  
"Generation of sub-6-fs blue pulses by QPM-SHG pulse compression," talk  
CMK1  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2001)
- [20] G. Steinmeyer, L. Gallmann, N. Matuschek, D. H. Sutter, U. Keller  
"Back-side coated chirped mirrors for dispersion compensation over one  
octave," talk CWB1  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2001)
- [19] F. W. Helbing, G. Steinmeyer, L. Gallmann, U. Keller, J. Stenger, H. R. Telle,  
R. S. Windeler  
"Carrier-envelope offset frequency dynamics of a modelocked Ti:sapphire  
laser," talk CTuG3  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (2001)

- \*[18] G. Steinmeyer, L. Gallmann, U. Keller, G. Imeshev, M. M. Fejer, J.-P. Meyn  
"Generation of blue sub-6-fs pulses with quasi-phase-matching," talk (**hot topic**)  
European Conference on Atomic and Molecular Physics (ECAMP VII),  
Berlin, Germany (2001), **invited talk**
- [17] G. Steinmeyer, N. Matuschek, L. Gallmann, D. H. Sutter, U. Keller  
"Eine neue Generation von gechirpten Spiegeln zur Dispersionskompensation  
über mehr als eine optische Oktave," talk  
Frühjahrstagung der Deutschen Physikalischen Gesellschaft, Berlin, Germany  
(2001)
- [16] S. Schön, L. Gallmann, M. Haiml, U. Keller  
"Growth and optical properties of semiconductor saturable absorbers grown  
on ultrabroadband high-reflection mirrors for sub-10-fs pulse generation,"  
11th Euro-MBE Workshop, Hinterzarten, Germany (2001)
- \*[15] S. Schön, M. Haiml, L. Gallmann, M. Achermann, U. Keller  
"Novel semiconductor materials and saturable absorber mirrors for sub-10-  
femtosecond pulse generation," talk  
Conference on Optoelectronic and Microelectronic Materials and Devices  
(COMMAD 2000), Melbourne, Australia (2000), **invited talk**
- [14] S. Schön, M. Haiml, L. Gallmann, U. Keller  
"GaAs absorber layer growth for broadband AlGaAs/Fluoride SESAMs,"  
poster,  
Eleventh International Conference on Molecular Beam Epitaxy (MBE-XI),  
Beijing, China (2000)
- [13] G. Cerullo, M. Zavelani-Rossi, S. De Silvestri, G. Angelow, V. Scheuer, T.  
Tschudi, L. Gallmann, N. Matuschek, D. H. Sutter, G. Steinmeyer, U. Keller  
"Dispersion compensation over 200 THz in the visible using only chirped  
mirrors in an optical parametric amplifier," talk CTuC5  
CLEO Europe, Nice, France (2000)
- [12] G. Steinmeyer, L. Gallmann, U. Keller, I. A. Walmsley  
"Spatially resolved full characterization of sub-10-fs pulses using SPIDER,"  
talk CTuH1  
CLEO Europe, Nice, France (2000)
- [11] L. Gallmann, N. Matuschek, D. H. Sutter, G. Steinmeyer, U. Keller,  
V. Scheuer, G. Angelow, T. Tschudi  
"Smooth dispersion compensation over one octave: novel chirped mirrors with  
suppressed dispersion oscillations," talk WE2  
Ultrafast Phenomena, Charleston, USA (2000)
- [10] G. Cerullo, S. De Silvestri, G. Angelow, V. Scheuer, T. Tschudi, L. Gallmann,  
N. Matuschek, D. H. Sutter, G. Steinmeyer, U. Keller  
"Pulse compression in the visible over 200-THz bandwidth using only chirped  
mirrors," talk CThE4  
Conference on Lasers and Electro-Optics (CLEO), San Francisco, USA (2000)

- [9] L. Gallmann, D. H. Sutter, N. Matuschek, G. Steinmeyer, U. Keller, C. Iaconis, I. A. Walmsley  
"Spatially resolved amplitude and phase characterization of ultrashort optical pulses using SPIDER," talk CFE1  
Conference on Lasers and Electro-Optics (CLEO), San Francisco, USA (2000)
- [8] J. Kunde, S. Arlt, L. Gallmann, F. Morier-Genoud, U. Siegner, U. Keller  
"Sensitive characterization of ultrafast phase and amplitude nonlinearities for broadband semiconductor excitation," talk CFL1  
Conference on Lasers and Electro-Optics (CLEO), San Francisco, USA (2000)
- [7] L. Gallmann, G. Steinmeyer, D. H. Sutter, N. Matuschek, U. Keller  
"Collinear type-II SHG-FROG pulse characterization in the sub-10-fs regime," talk CFL3  
Conference on Lasers and Electro-Optics (CLEO), San Francisco, USA (2000)
- [6] G. Steinmeyer, L. Gallmann, D. H. Sutter, U. Keller  
"Charakterisierung von sub-6-fs Laserpulsen: Vergleich von FROG, SPIDER und Autokorrelation," talk Q32.1  
Frühjahrstagung der Deutschen Physikalischen Gesellschaft, Bonn, Germany (2000)
- \*[5] G. Steinmeyer, D. H. Sutter, L. Gallmann, N. Matuschek, F. Morier-Genoud, U. Keller  
"Pushing the frontiers: generation and full characterization of pulses in the two-cycle regime," talk ThBB3  
IEEE LEOS Annual Meeting, San Francisco, USA (1999), **invited talk**
- [4] D. H. Sutter, L. Gallmann, N. Matuschek, F. Morier-Genoud, G. Steinmeyer, U. Keller, V. Scheuer, G. Angelow, T. Tschudi, T. Gross, D. Ristau  
"Sub-6-fs pulses from a SESAM-assisted KLM-Ti:sapphire laser," talk Tu5,  
Ultrafast Optics, Ascona, Switzerland (1999)
- [3] L. Gallmann, D. H. Sutter, N. Matuschek, G. Steinmeyer, U. Keller  
"Techniques for the characterization of sub-10-fs pulses: a comparison," talk Th12  
Ultrafast Optics, Ascona, Switzerland (1999)
- [2] D. H. Sutter, L. Gallmann, N. Matuschek, F. Morier-Genoud, G. Steinmeyer, U. Keller  
"Pulses in the two-cycle regime from a SESAM-assisted KLM Ti:sapphire laser," talk CFG3  
Conference on Lasers and Electro-Optics (CLEO), Baltimore, USA (1999)
- [1] D. H. Sutter, G. Steinmeyer, L. Gallmann, N. Matuschek, F. Morier-Genoud, U. Keller, V. Scheuer, G. Angelow, T. Tschudi  
"Ultrabroadband pulses in the two-cycle regime by SESAM-assisted Kerr-lens modelocking of an all-solid-state Ti:sapphire laser," talk PD1  
Advanced Solid-State Lasers (ASSL), Boston, USA (1999), **postdeadline talk**

## **Patents**

- [1] N. Matuschek, D. H. Sutter, L. Gallmann, G. Steinmeyer, U. Keller  
"Method and dielectric and/or semiconductor device for influencing the  
dispersion of electromagnetic radiation"  
U.S.-pat. No. 6,256,434 (also registered as International patent No. WO  
01/04998 for Europe and Japan)