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A terahertz view on magnetization dynamics

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List of publications

Publications described in this thesis

1. “Magnetic field dependence of antiferromagnetic resonance in NiO”,
Zhe Wang, S. Kovalev, N. Awari, Min Chen, S. Germanskiy, B. Green, J.-C. Deinert, T. Kampfrath, J. Milano, and M. Gensch
Applied Physics Letters, **112**, 25 (2018)
2. “Narrow-band tunable terahertz emission from ferrimagnetic Mn₃-xGa thin films”,
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3. “Speed limits of ultrafast demagnetization”,
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In preparation
4. “Continuously Tunable Spintronic Emission in the sub-THz Range”,
N. Awari, A. Titova, S. Kovalev, C. Fowley, J. Lindner, M. Gensch, A. Deac
In preparation

Other publication(s) during Ph.D. work

5. “Extremely efficient terahertz high-harmonic generation in graphene by hot Dirac fermions”,
Hassan A. Hafez, Sergey Kovalev, Jan-Christoph Deinert, Zoltán Mics, Bertram

- Green, Nilesh Awari, Min Chen, Semyon Germanskiy, Ulf Lehnert, Jochen Teichert, Zhe Wang, Klaas-Jan Tielrooij, Zhaoyang Liu, Zongping Chen, Akimitsu Narita, Klaus Müllen, Mischa Bonn, Michael Gensch and Dmitry Turchinovich
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6. “On-chip THz spectrometer for bunch compression fingerprinting at fourth-generation light sources”,
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M. Chen, S. Kovalev, N. Awari, Z. Wang, S. Germanskiy, B. Green, J-C Deinert, M. Gensch
Optics letters **43** (9), 2213-2216 (2018).
8. “Selective THz control of magnetic order: new opportunities from superradiant undulator sources”,
S. Kovalev, Zhe Wang, J-C Deinert, N. Awari, M. Chen, B. Green, S. Germanskiy, TVAG de Oliveira, J.S. Lee, A. Deac, Dmitry Turchinovich, N. Stojanovic, S. Eisebitt, I. Radu, Stefano Bonetti, Tobias Kampfrath, M. Gensch
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9. “High-field high-repetition-rate sources for the coherent THz control of matter”,
B. Green, S. Kovalev, V. Asgekar, G. Geloni, U. Lehnert, T. Golz, M. Kuntzsch, C. Bauer, J. Hauser, J. Voigtlaender, B. Wustmann, I. Koesterke, M. Schwarz, M. Freitag, A. Arnold, J. Teichert, M. Justus, W. Seidel, C. Ilgner, N. Awari, Daniele Nicoletti, Stefan Kaiser, Yannis Laplace, Srivats Rajasekaran, Lijian Zhang, S. Winnerl, H. Schneider, G. Schay, I. Lorincz, A.A. Rauscher, I. Radu, Sebastian Mährlein, T.H. Kim, J.S. Lee, Tobias Kampfrath, S. Wall, J. Heberle, A. Malnasi-Csizmadia, A. Steiger, A.S. Müller, M. Helm, U. Schramm, T. Cowan, P. Michel, Andrea Cavalleri, A.S. Fisher, N. Stojanovic, M. Gensch
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Publication(s) prior to Ph.D. work

10. "Multilayer broadband absorbing structures for terahertz region",
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11. "Charge-density wave condensate in charge-ordered manganites: impact of ferro-
magnetic order and spin-glass disorder",
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P. Pandey, N. Awari, R. Rana, A. Singh, S.S. Prabhu, D.S. Rana
Applied Physics Letters **100** (6), 062408 (2012).

