Martin Mittendorff

List of Publications by Year
in descending order

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74 papers	1,822 citations	279798 23 h-index	265206 42 g-index
74 all docs	74 docs citations	74 times ranked	2498 citing authors

#	Article	IF	Citations
1	Plasmonic Terahertz Nonlinearity in Graphene Disks. Advanced Photonics Research, 2022, 3, .	3.6	2
2	Plasmonic Terahertz Nonlinearity in Graphene Disks. Advanced Photonics Research, 2022, 3, 2100218.	3.6	3
3	The role of electrons during the martensitic phase transformation in NiTi-based shape memory alloys. Materials Today Physics, 2022, 24, 100671.	6.0	2
4	2D THz Optoelectronics. Advanced Optical Materials, 2021, 9, 2001500.	7.3	42
5	Observation of strong magneto plasmonic nonlinearity in bilayer graphene discs. JPhys Photonics, 2021, 3, 01LT01.	4.6	2
6	Electrical tunability of terahertz nonlinearity in graphene. Science Advances, 2021, 7, .	10.3	52
7	Interfaceâ€Dominated Topological Transport in Nanograined Bulk Bi₂Te₃. Small, 2021, 17, e2103281.	10.0	7
8	Nonlinear optical control of chiral charge pumping in a topological Weyl semimetal. Physical Review B, 2020, 102, .	3.2	15
9	Magnetically Tuned THz Nonlinearity in Bilayer Graphene Disc Arrays. , 2020, , .		0
10	Suppressed Auger scattering and tunable light emission of Landau-quantized massless Kane electrons. Nature Photonics, 2019, 13, 783-787.	31.4	23
11	Black phosphorus frequency mixer for infrared optoelectronic signal processing. APL Photonics, 2019, 4, 034502.	5.7	5
12	Optical Control of Plasmonic Hot Carriers in Graphene. ACS Photonics, 2019, 6, 302-307.	6.6	20
13	Field-effect transistors as electrically controllable nonlinear rectifiers for the characterization of terahertz pulses. APL Photonics, 2018, 3, .	5.7	21
14	Probing the free-carrier absorption in multi-layer black phosphorus. Applied Physics Letters, 2018, 113, .	3.3	7
15	Low-energy carrier dynamics in graphene and other 2D materials. , 2018, , .		0
16	Terahertz detection in 2D materials. , 2018, , .		1
17	Dynamics of nonâ€equilibrium charge carriers in pâ€germanium doped by gallium. Physica Status Solidi (B): Basic Research, 2017, 254, 1600803.	1.5	8
18	Unconventional double-bended saturation of carrier occupation in optically excited graphene due to many-particle interactions. Nature Communications, 2017, 8, 15042.	12.8	4

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19	Graphene-Based Waveguide-Integrated Terahertz Modulator. ACS Photonics, 2017, 4, 316-321.	6.6	96
20	Optical Gating of Black Phosphorus for Terahertz Detection. Nano Letters, 2017, 17, 5811-5816.	9.1	21
21	Ultrafast Processes in Graphene: From Fundamental Manybody Interactions to Device Applications. Annalen Der Physik, 2017, 529, 1700022.	2.4	10
22	Carrier Dynamics in Graphene: Ultrafast Manyâ€Particle Phenomena. Annalen Der Physik, 2017, 529, 1700038.	2.4	26
23	Symmetry-Breaking Supercollisions in Landau-Quantized Graphene. Physical Review Letters, 2017, 119, 067405.	7.8	10
24	Terahertz photoresponse of black phosphorus. Optics Express, 2017, 25, 12666.	3.4	29
25	Broadband Third-Harmonic Generation in Black Phosphorus. , 2017, , .		0
26	Terahertz detection mechanisms in black phosphorus. , 2017, , .		0
27	Mid-Infrared Pump-Probe Measurements of Carrier Dynamics in Black Phosphorus. , 2017, , .		0
28	A Black Phosphorus Optoelectronic Mixer. , 2017, , .		0
29	Long-lived Anisotropy of Photoexcited Graphene Electrons. , 2016, , .		0
30	Tracing the Gouy phase shift of focused, radially polarized THz pulses. , 2016, , .		0
31	Tunable Ultrafast Thermal Relaxation in Graphene Measured by Continuous-Wave Photomixing. Physical Review Letters, 2016, 117, 257401.	7.8	16
32	Role of Transient Reflection in Graphene Nonlinear Infrared Optics. ACS Photonics, 2016, 3, 1069-1075.	6.6	14
33	Slow Noncollinear Coulomb Scattering in the Vicinity of the Dirac Point in Graphene. Physical Review Letters, 2016, 117, 087401.	7.8	40
34	Mid-infrared time-resolved photoconduction in black phosphorus. 2D Materials, 2016, 3, 041006.	4.4	52
35	Gouy phase shift of a tightly focused, radially polarized beam. Optica, 2016, 3, 35.	9.3	32
36	Nonlinear Terahertz Absorption of Graphene Plasmons. Nano Letters, 2016, 16, 2734-2738.	9.1	77

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37	Far-Infrared Nonlinear Optics in Multilayer Epitaxial Graphene. , 2016, , .		0
38	THz Photoresponse of Thin Layers of Black Phosphorus. , 2016, , .		0
39	Intrinsic Speed of a Black Phosphorus Photoconductive Detector. , 2016, , .		0
40	Nonlinear Plasmonic THz Absorption in Graphene Ribbons. , 2016, , .		0
41	Towards a life-time-limited 8-octave-infrared photoconductive germanium detector. Journal of Physics: Conference Series, 2015, 647, 012070.	0.4	0
42	Symmetry effects in broadband, room-temperature field effect transistor THz detectors. , 2015, , .		1
43	Broadband THz detection from 01 to 22 THz with large area field-effect transistors. Optics Express, 2015, 23, 20732.	3.4	26
44	Universal ultrafast detector for short optical pulses based on graphene. Optics Express, 2015, 23, 28728.	3.4	23
45	Lifetime-limited, subnanosecond terahertz germanium photoconductive detectors. Applied Physics Letters, 2015, 106, .	3.3	14
46	Characterization of Graphene Photothermoelectric Detector via Two-wave Mixing Technique. , 2015, , .		0
47	Efficient Auger scattering in Landau-quantized graphene. , 2015, , .		2
48	Carrier dynamics and transient photobleaching in thin layers of black phosphorus. Applied Physics Letters, 2015, 107, .	3.3	77
49	THz Autocorrelators for ps Pulse Characterization Based on Schottky Diodes and Rectifying Field-Effect Transistors. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 922-929.	3.1	15
50	Carrier dynamics in Landau-quantized graphene featuring strong Auger scattering. Nature Physics, 2015, 11, 75-81.	16.7	79
51	Intraband carrier dynamics in Landau-quantized multilayer epitaxial graphene. New Journal of Physics, 2014, 16, 123021.	2.9	17
52	Compact quasi-optical Schottky detector with fast voltage response. , 2014, , .		4
53	Microscopic Description of Intraband Absorption in Graphene: The Occurrence of Transient Negative Differential Transmission. Physical Review Letters, 2014, 113, 035502.	7.8	40
54	Time-resolved electronic capture in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math>-type germanium doped with antimony. Physical Review B, 2014, 89, .	3.2	18

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55	Terahertz Stimulated Emission from Silicon Doped by Hydrogenlike Acceptors. Physical Review X, 2014, 4, .	8.9	9
56	Anisotropy of Excitation and Relaxation of Photogenerated Charge Carriers in Graphene. Nano Letters, 2014, 14, 1504-1507.	9.1	77
57	Ultrafast graphene-based broadband THz detector. Applied Physics Letters, 2013, 103, .	3.3	174
58	Transient Increase of the Energy Gap of Superconducting NbN Thin Films Excited by Resonant Narrow-Band Terahertz Pulses. Physical Review Letters, 2013, 110, 267003.	7.8	68
59	Terahertz generation and detection with InGaAs-based large-area photoconductive devices excited at 1.55â€‰Î¼m. Applied Physics Letters, 2013, 103, .	3.3	18
60	Broadband THz detection and homodyne mixing using GaAs high-electron-mobility transistor rectifiers. Proceedings of SPIE, 2013, , .	0.8	5
61	InGaAs-based large area photoconductive emitters for 1.55 µm excitation. , 2013, , .		0
62	Longitudinal fields in focused terahertz beams. , 2013, , .		0
63	Large area photoconductive terahertz emitter for 1.55 Î¼m excitation based on an InGaAs heterostructure. Nanotechnology, 2013, 24, 214007.	2.6	25
64	Ultra-fast transistor-based detectors for precise timing of near infrared and THz signals. Optics Express, 2013, 21, 17941.	3.4	31
65	Time-resolved spectroscopy on epitaxial graphene in the infrared spectral range: relaxation dynamics and saturation behavior. Journal of Physics Condensed Matter, 2013, 25, 054202.	1.8	59
66	The THz user facility FELBE at the radiation source ELBE of Helmholtz-Zentrum Dresden-Rossendorf. , 2013, , .		1
67	Fast relaxation of free carriers in compensated n- and p-type germanium. , 2013, , .		0
68	Ultrafast graphene-based THz detection at room temperature. , 2013, , .		0
69	Universal phase relation between longitudinal and transverse fields observed in focused terahertz beams. New Journal of Physics, 2012, 14, 103049.	2.9	47
70	Phase sensitive monitoring of electron bunch form and arrival time in superconducting linear accelerators. Applied Physics Letters, 2012, 100, 141103.	3.3	4
71	Time-resolved electronic capture in germanium doped with hydrogen-like impurity centers. , 2012, , .		0
72	1550â€‰nm ErAs:In(Al)GaAs large area photoconductive emitters. Applied Physics Letters, 2012, 101, .	3.3	65

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73	Absorption saturation in optically excited graphene. Applied Physics Letters, 2012, 101, .	3.3	54
74	CMOS Integrated Antenna-Coupled Field-Effect Transistors for the Detection of Radiation From 0.2 to 4.3 THz. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 3834-3843.	4.6	232