

Dmitry Turchinovich

List of Publications by Year in descending order

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140
papers

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citations

109321

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141
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docs citations

141
times ranked

6242
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasmonic Terahertz Nonlinearity in Graphene Disks. <i>Advanced Photonics Research</i> , 2022, 3, 2100218.	3.6	3
2	Grating-Graphene Metamaterial as a Platform for Terahertz Nonlinear Photonics. <i>ACS Nano</i> , 2021, 15, 1145-1154.	14.6	69
3	Observation of strong magneto plasmonic nonlinearity in bilayer graphene discs. <i>JPhys Photonics</i> , 2021, 3, 01LT01.	4.6	2
4	Electrical tunability of terahertz nonlinearity in graphene. <i>Science Advances</i> , 2021, 7, .	10.3	52
5	Ultrastrong magnon-magnon coupling dominated by antiresonant interactions. <i>Nature Communications</i> , 2021, 12, 3115.	12.8	39
6	Ultrafast Terahertz Nanoseismology of GaInN/GaN Multiple Quantum Wells. <i>Advanced Optical Materials</i> , 2021, 9, 2100258.	7.3	8
7	Rigorous signal reconstruction in terahertz emission spectroscopy. <i>Optics Express</i> , 2021, 29, 24411.	3.4	5
8	Terahertz signatures of ultrafast Dirac fermion relaxation at the surface of topological insulators. <i>Npj Quantum Materials</i> , 2021, 6, .	5.2	23
9	Terahertz Nonlinear Optics of Graphene: From Saturable Absorption to High-Harmonics Generation. <i>Advanced Optical Materials</i> , 2020, 8, 1900771.	7.3	97
10	Dynamical Control over Terahertz Electromagnetic Interference Shielding with 2D $\text{Ti}_3\text{C}_2\text{T}_x$ MXene by Ultrafast Optical Pulses. <i>Nano Letters</i> , 2020, 20, 636-643.	9.1	75
11	Ultrafast terahertz magnetometry. <i>Nature Communications</i> , 2020, 11, 4247.	12.8	61
12	Thickness-dependent electron momentum relaxation times in iron films. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	5
13	Observation of Ultrastrong Magnon-Magnon Coupling in YFeO_3 Using Terahertz Magnetospectroscopy. , 2020, , .		1
14	Terahertz Nonlinear Optics of Graphene, Probably the Most Nonlinear Material We Know. , 2020, , .		1
15	Ultrafast Magnetization Dynamics Revealed by Terahertz Magnetometry. , 2020, , .		0
16	Mid-infrared, long-wave infrared, and terahertz photonics: introduction. <i>Optics Express</i> , 2020, 28, 14169.	3.4	4
17	Volt-per-Ångstrom terahertz fields from X-ray free-electron lasers. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 796-798.	2.4	0
18	Terahertz physics of graphene: from linear conductivity to high-harmonics generation. , 2020, , .		0

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19	Bismuth Nanofilms as Efficient Broadband THz Antireflection Coating. , 2020, , .		0
20	2D MXenes: Terahertz Properties and Applications. , 2020, , .		1
21	A Novel THz Electromagnetic Interference Shielding Material: 2D Ti3C2Ty MXene. , 2020, , .		1
22	Ultrafast carrier dynamics in graphene and graphene nanostructures. Terahertz Science & Technology, 2020, 13, 135-148.	0.5	1
23	Terahertz Physics of Graphene, Possibly The Most Nonlinear Material We Know. , 2019, , .		0
24	Study of Ultrafast Magnetism by THz Emission Spectroscopy. , 2019, , .		0
25	Control of Terahertz Nonlinearity in Graphene by Gating. , 2019, , .		0
26	Low-noise femtosecond Cherenkov fiber laser, continuously tunable across the entire red-green-blue spectral range. EPJ Web of Conferences, 2019, 205, 01002.	0.3	0
27	Graphene: The Ultimate Nonlinear Material at Terahertz Frequencies. , 2019, , .		1
28	Ultrastrong Coupling of Two Terahertz Magnon Modes in YFeO3 in Pulsed High Magnetic Fields. , 2019, , .		0
29	Selective THz control of magnetic order: new opportunities from superradiant undulator sources. Journal Physics D: Applied Physics, 2018, 51, 114007.	2.8	30
30	Coupling between intra- and intermolecular motions in liquid water revealed by two-dimensional terahertz-infrared-visible spectroscopy. Nature Communications, 2018, 9, 885.	12.8	67
31	Out-of-plane heat transfer in van der Waals stacks through electronâ€“hyperbolic phonon coupling. Nature Nanotechnology, 2018, 13, 41-46.	31.5	128
32	Intense THz-assisted modulation of semiconductor optical properties. , 2018, , .		0
33	Giant Terahertz Nonlinearity of Graphene. , 2018, , .		0
34	Extremely efficient terahertz high-harmonic generation in graphene by hot Dirac fermions. Nature, 2018, 561, 507-511.	27.8	365
35	Accurate terahertz spectroscopy of supported thin films by precise substrate thickness correction. Optics Letters, 2018, 43, 447.	3.3	22
36	The ultrafast dynamics and conductivity of photoexcited graphene at different Fermi energies. Science Advances, 2018, 4, eaar5313.	10.3	95

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37	Observation of Dicke cooperativity in magnetic interactions. <i>Science</i> , 2018, 361, 794-797.	12.6	91
38	Reversible Photochemical Control of Doping Levels in Supported Graphene. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4083-4091.	3.1	28
39	Chemical Vapor Deposition Synthesis and Terahertz Photoconductivity of Low-Band-Gap $N = 9$ Armchair Graphene Nanoribbons. <i>Journal of the American Chemical Society</i> , 2017, 139, 3635-3638.	13.7	88
40	Role of Edge Engineering in Photoconductivity of Graphene Nanoribbons. <i>Journal of the American Chemical Society</i> , 2017, 139, 7982-7988.	13.7	64
41	Femtosecond-timescale buildup of electron mobility in GaAs observed via ultrabroadband transient terahertz spectroscopy. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	8
42	Direct observation of mode-specific phonon-band gap coupling in methylammonium lead halide perovskites. <i>Nature Communications</i> , 2017, 8, 687.	12.8	63
43	Large area conductive nanoaperture arrays with strong optical resonances and spectrally flat terahertz transmission. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	3
44	Photoswitchable Micro-Supercapacitor Based on a Diarylethene-Graphene Composite Film. <i>Journal of the American Chemical Society</i> , 2017, 139, 9443-9446.	13.7	96
45	Nonlinearity-tailored fiber laser technology for low-noise, ultra-wideband tunable femtosecond light generation. <i>Photonics Research</i> , 2017, 5, 750.	7.0	18
46	Progress in Cherenkov femtosecond fiber lasers. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 023001.	2.8	27
47	Thermodynamic picture of terahertz conduction in graphene. , 2016, , .		0
48	Spin-resolved terahertz spectroscopy. , 2016, , .		0
49	Probing the charge separation process on $In_2S_3/Pt-TiO_2$ nanocomposites for boosted visible-light photocatalytic hydrogen production. <i>Applied Catalysis B: Environmental</i> , 2016, 198, 25-31.	20.2	56
50	Stain-free histopathology by programmable supercontinuum pulses. <i>Nature Photonics</i> , 2016, 10, 534-540.	31.4	177
51	Efficient metallic spintronic emitters of ultrabroadband terahertz radiation. <i>Nature Photonics</i> , 2016, 10, 483-488.	31.4	605
52	Self-referenced ultra-broadband transient terahertz spectroscopy using air-photonics. <i>Optics Express</i> , 2016, 24, 10157.	3.4	8
53	Ultrafast electron transport in graphene and magnetic nanostructures. , 2016, , .		0
54	Multiscale Self-Assembly of Silicon Quantum Dots into an Anisotropic Three-Dimensional Random Network. <i>Nano Letters</i> , 2016, 16, 1942-1948.	9.1	9

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55	Terahertz Carrier Dynamics in Graphene Nanoribbons with Different Peripheral Functional Groups. , 2016, , .		0
56	Efficient formation of excitons in a dense electron-hole plasma at room temperature. Physical Review B, 2015, 92, .	3.2	31
57	Perspective on terahertz spectroscopy of graphene. Europhysics Letters, 2015, 111, 67001.	2.0	31
58	Controlled Folding of Graphene: GraFold Printing. Nano Letters, 2015, 15, 857-863.	9.1	27
59	Thermodynamic picture of ultrafast charge transport in graphene. Nature Communications, 2015, 6, 7655.	12.8	147
60	Accessing the fundamentals of magnetotransport in metals with terahertz probes. Nature Physics, 2015, 11, 761-766.	16.7	103
61	Photovoltaic Polymer-Fullerene Blends: Terahertz Carrier Dynamics and Device Performance. , 2015, , .		0
62	Experimental Distinction between Femtosecond Transient Demagnetization and Spin Current Dynamics in Metals. , 2015, , .		0
63	Phononâ€“Electron Scattering Limits Free Charge Mobility in Methylammonium Lead Iodide Perovskites. Journal of Physical Chemistry Letters, 2015, 6, 4991-4996.	4.6	186
64	Self-referenced Transient THz Spectroscopy with ABCD Detection. , 2015, , .		1
65	Control of Energy Relaxation Pathways in Graphene: Carrier-Carrier Scattering vs Phonon Emission. , 2015, , .		0
66	Nano-holes vs Nano-cracks in Thin Gold Films: What Causes Anomalous THz Transmission?. , 2015, , .		0
67	Ultra-broadband THz time-domain spectroscopy of common polymers using THz air photonics. Optics Express, 2014, 22, 12475.	3.4	121
68	Terahertz Carrier Dynamics in Graphene and Graphene Nanostructures. , 2014, , .		0
69	Tunable femtosecond Cherenkov fiber laser. , 2014, , .		1
70	Ultra-broadband THz time-domain spectroscopy of common polymers with THz air-photonics. , 2014, , .		0
71	Inherent Resistivity of Graphene to Strong THz Fields. , 2014, , .		0
72	Ultrafast carrier dynamics in graphene and graphene nanostructures. , 2014, , .		0

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73	Ultrafast Terahertz Photoconductivity of Photovoltaic Polymer–Fullerene Blends: A Comparative Study Correlated with Photovoltaic Device Performance. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 3662-3668.	4.6	52
74	Competing Ultrafast Energy Relaxation Pathways in Photoexcited Graphene. <i>Nano Letters</i> , 2014, 14, 5839-5845.	9.1	97
75	Electrically-Tunable Multi-Color Ultrafast Cherenkov Fiber Laser. , 2014, , .		0
76	Density-dependent electron scattering in photoexcited GaAs in strongly diffusive regime. <i>Applied Physics Letters</i> , 2013, 102, 231120.	3.3	48
77	Ultrafast Photoconductivity of Graphene Nanoribbons and Carbon Nanotubes. <i>Nano Letters</i> , 2013, 13, 5925-5930.	9.1	117
78	Nonlinear terahertz conductivity in graphene. , 2013, , .		0
79	Ultra-broadband dielectric THz spectroscopy with air-biased-coherent-detection. , 2013, , .		0
80	Low-Noise Operation of All-Fiber Femtosecond Cherenkov Laser. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 892-895.	2.5	14
81	On Ultrafast Photoconductivity Dynamics and Crystallinity of Black Silicon. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2013, 3, 331-341.	3.1	9
82	Single-pulse terahertz coherent control of spin resonance in the canted antiferromagnet YFeO ₃ , mediated by dielectric anisotropy. <i>Physical Review B</i> , 2013, 87, .	3.2	74
83	Terahertz semiconductor nonlinear optics. , 2013, , .		0
84	All-fiber femtosecond Cherenkov laser at visible wavelengths. , 2013, , .		0
85	Transient THz photoconductivity in dynamically screened InGaN/GaN quantum wells. , 2013, , .		0
86	Terahertz nonlinear optics in semiconductors. , 2013, , .		0
87	Single-pulse terahertz coherent control of spin resonance in a canted antiferromagnet. , 2013, , .		0
88	Terahertz photoconductivity of graphene nanostructures. , 2013, , .		0
89	Density-dependent electron scattering in photoexcited GaAs. , 2013, , .		0
90	Self-phase modulation of a single-cycle THz pulse. <i>EPJ Web of Conferences</i> , 2013, 41, 09003.	0.3	0

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91	All-fiber femtosecond Cherenkov source. EPJ Web of Conferences, 2013, 41, 10017.	0.3	0
92	All-fiber femtosecond Cherenkov radiation source. Optics Letters, 2012, 37, 2769.	3.3	36
93	Nonlinear polarization dynamics in a weakly birefringent all-normal dispersion photonic crystal fiber: toward a practical coherent fiber supercontinuum laser. Optics Express, 2012, 20, 1113.	3.4	49
94	THz quantum-confined Stark effect in semiconductor quantum dots. , 2012, , .		1
95	Nonlinear propagation of strong-field THz pulses in doped semiconductors. Proceedings of SPIE, 2012, , .	0.8	1
96	Monolithic Highly Stable Yb-Doped Femtosecond Fiber Lasers for Applications in Practical Biophotonics. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1439-1450.	2.9	19
97	Coherent fiber supercontinuum laser for nonlinear biomedical imaging. , 2012, , .		4
98	Self-phase modulation of a single-cycle terahertz pulse by nonlinear free-carrier response in a semiconductor. Physical Review B, 2012, 85, .	3.2	79
99	Cross-validation of theoretically quantified fiber continuum generation and absolute pulse measurement by MIIPS for a broadband coherently controlled optical source. Applied Physics B: Lasers and Optics, 2012, 106, 379-384.	2.2	10
100	Ultrafast Terahertz Dynamics and Switching in Quantum Dots. , 2012, , 223-249.		1
101	Ultrafast THz Saturable Absorption in Doped Semiconductors. , 2011, , .		0
102	Compression of fiber supercontinuum pulses to the Fourier-limit in a high-numerical-aperture focus. Optics Letters, 2011, 36, 2315.	3.3	20
103	Effect of Copper on the Carrier Lifetime in Black Silicon. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 883-886.	2.2	2
104	Optimized Optical Rectification and Electro-optic Sampling in ZnTe Crystals with Chirped Femtosecond Laser Pulses. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 1371-1381.	2.2	19
105	Correlated terahertz acoustic and electromagnetic emission in dynamically screened InGaN/GaN quantum wells. Physical Review B, 2011, 84, .	3.2	29
106	Monolithic Yb-fiber femtosecond laser with intracavity all-solid PBG fiber and ex-cavity HC-PCF. , 2010, , .		0
107	Ultrafast conductivity dynamics in optically excited InGaN/GaN multiple quantum wells observed by transient THz spectroscopy. Proceedings of SPIE, 2010, , .	0.8	0
108	Semiconductor saturable absorbers for ultrafast terahertz signals. Applied Physics Letters, 2010, 96, .	3.3	59

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109	Time-resolved terahertz spectroscopy of black silicon. , 2010, , .		1
110	Quantum well saturable absorber mirror with electrical control of modulation depth. Applied Physics Letters, 2010, 97, 051103.	3.3	11
111	Nonlinear generation and detection of THz pulses in ZnTe with chirped femtosecond laser pulses. , 2010, , .		0
112	Highly-stable monolithic femtosecond Yb-fiber laser system based on photonic crystal fibers. Optics Express, 2010, 18, 15475.	3.4	34
113	Self-stabilization of a mode-locked femtosecond fiber laser using a photonic bandgap fiber. Optics Letters, 2010, 35, 913.	3.3	24
114	Terahertz electro-absorption effect enabling femtosecond all-optical switching in semiconductor quantum dots. Applied Physics Letters, 2010, 97, .	3.3	47
115	Semiconductor saturable absorbers for ultrafast THz signals. , 2010, , .		0
116	Quantum Well Saturable Absorber Mirror with Electrical Control of Modulation Depth. , 2010, , .		0
117	Ultrafast release and capture of carriers in InGaAs/GaAs quantum dots observed by time-resolved terahertz spectroscopy. Applied Physics Letters, 2009, 94, .	3.3	46
118	Monolithic all-PM femtosecond Yb-doped fiber laser using photonic bandgap fibers. , 2009, , .		0
119	Transient photoconductivity in InGaN/GaN multiple quantum wells, measured by time-resolved terahertz spectroscopy. , 2009, , .		0
120	Observation of trapping and release of carriers in InGaAs/GaAs quantum dots by ultrafast THz spectroscopy. , 2009, , .		0
121	Capture and release of carriers in InGaAs/GaAs quantum dots. Journal of Physics: Conference Series, 2009, 193, 012085.	0.4	1
122	Terahertz study of ultrafast carrier dynamics in InGaN/GaN multiple quantum wells. Journal of Physics: Conference Series, 2009, 193, 012084.	0.4	7
123	All-PM Monolithic fs Yb-Fiber Laser, Dispersion-Managed with All-Solid Photonic Bandgap Fiber. , 2009, , .		0
124	Low-loss polarization-maintaining fusion splicing of single-mode fibers and hollow-core photonic crystal fibers, relevant for monolithic fiber laser pulse compression. Optics Express, 2008, 16, 9986.	3.4	50
125	Monolithic all-PM femtosecond Yb-fiber laser stabilized with a narrow-band fiber Bragg grating and pulse-compressed in a hollow-core photonic crystal fiber. Optics Express, 2008, 16, 14004.	3.4	44
126	A polarization maintaining filter based on a liquid-crystal-photonic-bandgap-fiber. , 2008, , .		1

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127	Tunable polarisation-maintaining filter based on liquid crystal photonic bandgap fibre. Electronics Letters, 2008, 44, 1189.	1.0	4
128	Monolithic stabilized Yb-fiber All-PM laser directly delivering nJ-level femtosecond pulses. , 2008, , .		0
129	Monolithic ytterbium all-single-mode fiber laser with direct fiber-end delivery of nJ-level femtosecond pulses. , 2008, , .		0
130	Femtosecond all-polarization-maintaining fiber laser operating at 1028 nm. Proceedings of SPIE, 2007, , .	0.8	1
131	Performance of combined $\sim 100\%$ and $\sim 110\%$ ZnTe crystals in an amplified THz time-domain spectrometer. Optics Communications, 2007, 270, 96-99.	2.1	32
132	Nonlinear excitation kinetics of biased quantum wells: Coherent dynamical screening effect. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2494-2497.	0.8	1
133	Role of dynamical screening in excitation kinetics of biased quantum wells: Nonlinear absorption and ultrabroadband terahertz emission. Journal of Applied Physics, 2006, 99, 013510.	2.5	33
134	Ultrafast polarization dynamics in optically excited biased quantum wells. , 2004, 5354, 151.		0
135	InAs/GaAs quantum dots as efficient free carrier deep traps. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1556-1559.	0.8	22
136	Ultrafast polarization dynamics in biased quantum wells under strong femtosecond optical excitation. Physical Review B, 2003, 68, .	3.2	56
137	Flexible all-plastic mirrors for the THz range. Applied Physics A: Materials Science and Processing, 2002, 74, 291-293.	2.3	65
138	THz time-domain spectroscopy on 4-(trans-4'-pentylcyclohexyl)-benzonitril. , 2001, , .		22
139	Trions in quantum-well structures with two-dimensional electron gas. Physics of the Solid State, 1998, 40, 747-749.	0.6	1
140	Terahertz pulse emission from strained GaN/GaN quantum well structures. , 0, , .		1