

# Riccardo Piccoli

## List of Publications by Year in descending order

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68  
papers

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68  
all docs

68  
docs citations

68  
times ranked

707  
citing authors

#	ARTICLE	IF	CITATIONS
1	Terahertz multi-dimensional imaging for nanoparticle-assisted therapeutics. , 2022, , .		0
2	Guiding of Laser Pulses at the Theoretical Limit â€“ 97% Throughput Hollow-Core Fibers. , 2021, , .		0
3	Homodyne Solid-State Biased Coherent Detection of Ultra-Broadband Terahertz Pulses with Static Electric Fields. Nanomaterials, 2021, 11, 283.	1.9	7
4	Nonlinear Midâ€“Infrared Metasurface based on a Phaseâ€“Change Material. Laser and Photonics Reviews, 2021, 15, 2000373.	4.4	25
5	Rotational Doppler Frequency Shift from Timeâ€“Evolving Highâ€“Order Pancharatnamâ€“Berry Phase: A Metasurface Approach. Laser and Photonics Reviews, 2021, 15, 2000576.	4.4	10
6	3D-Printed Resonant Gold Nanocones for Out-of-Plane Terahertz-Field-Driven Electron Photoemission. , 2021, , .		0
7	Field-driven electron photoemission via 3D-printed terahertz resonant vertical nanostructures. , 2021, , .		0
8	Enhanced Third-Harmonic Generation by a Mid-Infrared Phase-Change Metasurface. , 2021, , .		0
9	Ge2Sb2Se4Te1 Metasurface for Enhancing Third-Harmonic Generation in the Mid-Infrared. , 2021, , .		0
10	Guiding of Laser Pulses at the Theoretical Limit â€“ 97% Throughput Hollow-Core Fibers. , 2021, , .		0
11	Few-Cycle Visible Light Generation in a Hollow-Core Fiber. , 2021, , .		0
12	Ultrafast phenomena in hollow-core fibres. , 2020, , .		0
13	Improving nanoscale terahertz field localization by means of sharply tapered resonant nanoantennas. Nanophotonics, 2020, 9, 683-690.	2.9	6
14	Highly Sensitive Polarization Rotation Measurement through a Highâ€“Order Vector Beam Generated by a Metasurface. Advanced Materials Technologies, 2020, 5, 1901008.	3.0	10
15	Terahertz three-dimensional monitoring of nanoparticle-assisted laser tissue soldering. Biomedical Optics Express, 2020, 11, 2254.	1.5	14
16	Time-domain terahertz compressive imaging. Optics Express, 2020, 28, 3795.	1.7	31
17	Extreme Raman red shift: ultrafast multimode nonlinear space-time dynamics, pulse compression, and broadly tunable frequency conversion. Optica, 2020, 7, 1349.	4.8	45
18	Guiding of Laser Pulses at the Theoretical Limit â€“ 97% Throughput Hollow-Core Fibers. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	Polarization rotation measurements via a high-order vector beam generated by a metasurface. , 2020, , .		0
20	Homodyne Coherent Detection of THz Pulses via DC-biased Solid-State Devices. , 2020, , .		0
21	Dynamic Terahertz Investigation of Nanoparticle-assisted Laser-tissue Interaction. , 2020, , .		0
22	Modifying the Optical Phonon Response of Nanocrystals inside Terahertz Plasmonic Nanocavities. , 2019, , .		0
23	Antenna Tapering Strategy for Near-Field Enhancement Optimization in Terahertz Gold Nanocavities. , 2019, , .		0
24	Quantifying the photothermal conversion efficiency of plasmonic nanoparticles by means of terahertz radiation. APL Photonics, 2019, 4, .	3.0	32
25	Molecular Gases for Low Energy Pulse Compression in Hollow Core Fibers. , 2019, , .		0
26	Investigation of Nanoparticle-Assisted Laser Tissue Soldering by Terahertz Radiation. , 2019, , .		1
27	Extremely broadband terahertz generation via pulse compression of an Ytterbium laser amplifier. Optics Express, 2019, 27, 32659.	1.7	17
28	Low Energy Hollow Core Fiber Pulse Compression Using Molecular Gases. , 2019, , .		0
29	Reshaping the phonon energy landscape of nanocrystals inside a terahertz plasmonic nanocavity. Nature Communications, 2018, 9, 763.	5.8	30
30	Invited Article: Ultra-broadband terahertz coherent detection via a silicon nitride-based deep sub-wavelength metallic slit. APL Photonics, 2018, 3, 110805.	3.0	11
31	Molecular gases for pulse compression in hollow core fibers. Optics Express, 2018, 26, 25426.	1.7	17
32	Modeling Light-Matter Interaction in Terahertz Plasmonic Nanocavities. , 2018, , .		0
33	Generation of high-field terahertz pulses in an HMQ-TMS organic crystal pumped by an ytterbium laser at 1030 nm. Optics Express, 2018, 26, 2509.	1.7	23
34	Direct compression of 170-fs 50-cycle pulses down to 1.5 cycles with 70% transmission. Scientific Reports, 2018, 8, 11794.	1.6	78
35	33-fold pulse compression down to 1.5 cycles in a 6-m-long hollow-core fiber. , 2018, , .		0
36	High-field terahertz pulses generated in an HMQ-TMS organic crystal pumped by an amplified ytterbium laser. , 2018, , .		0

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37	Silicon nitride-based deep sub-wavelength slit for ultra-broadband THz coherent detection. , 2018, , .		1
38	Hydrofluorocarbon Gases for Pulse Compression in Hollow Core Fibers. , 2018, , .		0
39	High power hollow-core fiber compression of Yb lasers as ideal drivers for HHG. , 2018, , .		0
40	Terahertz Thermometry: Combining Hyperspectral Imaging and Temperature Mapping at Terahertz Frequencies. Laser and Photonics Reviews, 2017, 11, 1600342.	4.4	25
41	Terahertz spectral imaging and thermal sensing for biomedical applications. , 2017, , .		1
42	Ultra-broadband terahertz time domain spectroscopy by Solid State Biased Coherent Detection. , 2017, , .		0
43	Solid-state-biased coherent detection of ultra-broadband terahertz pulses. Optica, 2017, 4, 1358.	4.8	27
44	Affordable, ultra-broadband coherent detection of terahertz pulses via CMOS-compatible solid-state devices. , 2017, , .		0
45	Multi-dimensional Imaging in the Terahertz Regime for Theranostic Applications. , 2017, , .		0
46	Conical nanoantenna arrays for terahertz light. , 2016, , .		1
47	On the optimization of tapered nanoantennas resonating in the terahertz range. , 2016, , .		0
48	Asymmetric Dual-Grating Micro-Slit Configuration for Broadband Solid State Coherent Detection of THz Pulses. , 2016, , .		0
49	Effective mitigation of photodarkening in Yb-doped lasers based on Al-silicate using UV/visible light. , 2014, , .		8
50	Narrow-bandwidth, picosecond, 1064-nm pumped optical parametric generator for the mid-IR based on HgGa <sub>2</sub> S <sub>4</sub> . , 2014, , .		0
51	Impact of photodarkening on Yb lifetime in Al-silicate fibres and on the rate-equation system. , 2014, , .		1
52	Effective photodarkening suppression in Yb-doped fiber lasers by visible light injection. Optics Express, 2014, 22, 7638.	1.7	26
53	Narrow bandwidth, picosecond, 1064-nm pumped optical parametric generator for the mid-IR based on HgGa <sub>2</sub> S <sub>4</sub> . Optics Letters, 2014, 39, 4895.	1.7	6
54	Photodarkening in Yb-doped Al-silicate fibers: Investigation, modelling and mitigation. , 2014, , .		1

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55	Evidence of Photodarkening Mitigation in Yb-Doped Fiber Lasers by Low Power 405 nm Radiation. IEEE Photonics Technology Letters, 2014, 26, 50-53.	1.3	18
56	Photodarkening: Investigation, Measurement and Standard. , 2014, , .		0
57	Lifetime reduction due to photodarkening phenomenon in ytterbium-doped fibers and rate equation term. Optics Letters, 2013, 38, 4370.	1.7	11
58	Narrow-bandwidth, ~100Åps seeded optical parametric generation in CdSiP <sub>2</sub> pumped by Raman-shifted pulses at 1198Ånm. Optics Letters, 2013, 38, 3344.	1.7	19
59	Low repetition rate, hybrid fiber/solid-state, 1064â€‰nm picosecond master oscillator power amplifier laser system. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2960.	0.9	26
60	Photodarkening mitigation in Yb-doped fiber lasers by 405 nm irradiation. , 2013, , .		1
61	Lifetime variation induced by photodarkening effect in Yb-doped fibers. , 2013, , .		0
62	Narrow-bandwidth, ~100 ps, optical parametric generation in CdSiP <sub>2</sub> pumped by Raman shifted pulses at 1198 nm. , 2013, , .		0
63	Nd:YVO <sub>4</sub> amplifier for ultrafast low-power lasers. Optics Letters, 2012, 37, 3612.	1.7	21
64	Narrow-bandwidth, mid-infrared, seeded optical parametric generation in 90Å° phase-matched CdSiP <sub>2</sub> crystal pumped by diffraction limited 500Åps pulses at 1064Ånm. Optics Letters, 2012, 37, 3219.	1.7	17
65	Fourier-Limited 19-ps Yb-Fiber Seeder Stabilized by Spectral Filtering and Tunable Between 1015 and 1085 nm. IEEE Photonics Technology Letters, 2012, 24, 927-929.	1.3	17
66	Characterization of tunable low power Yb-doped fiber CW oscillators. Optics and Laser Technology, 2012, 44, 1437-1441.	2.2	3
67	Narrow-bandwidth, mid-infrared, seeded optical parametric generation in 90Å° phase-matched CdSiP <sub>2</sub> crystal pumped by diffraction limited 500-ps pulses at 1064 nm. , 2012, , .		0
68	Intense few-cycle visible pulses directly generated via nonlinear fibre mode mixing. Nature Photonics, 0, , .	15.6	20