

# Tenio Popmintchev

## List of Publications by Year in descending order

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115  
papers

5,719  
citations

201658

27  
h-index

265191

42  
g-index

116  
all docs

116  
docs citations

116  
times ranked

3543  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bright Coherent Ultrahigh Harmonics in the keV X-ray Regime from Mid-Infrared Femtosecond Lasers. <i>Science</i> , 2012, 336, 1287-1291.	12.6	1,537
2	The attosecond nonlinear optics of bright coherent X-ray generation. <i>Nature Photonics</i> , 2010, 4, 822-832.	31.4	523
3	Generation of bright phase-matched circularly-polarized extreme ultraviolet high harmonics. <i>Nature Photonics</i> , 2015, 9, 99-105.	31.4	403
4	90 GW peak power few-cycle mid-infrared pulses from an optical parametric amplifier. <i>Optics Letters</i> , 2011, 36, 2755.	3.3	372
5	Phase matching of high harmonic generation in the soft and hard X-ray regions of the spectrum. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 10516-10521.	7.1	334
6	Bright, Coherent, Ultrafast Soft X-Ray Harmonics Spanning the Water Window from a Tabletop Light Source. <i>Physical Review Letters</i> , 2010, 105, 173901.	7.8	306
7	Bright circularly polarized soft X-ray high harmonics for X-ray magnetic circular dichroism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14206-14211.	7.1	235
8	Quasi-phase-matching and quantum-path control of high-harmonic generation using counterpropagating light. <i>Nature Physics</i> , 2007, 3, 270-275.	16.7	211
9	Monitoring molecular dynamics using coherent electrons from high harmonic generation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 13279-13285.	7.1	173
10	Ultraviolet surprise: Efficient soft x-ray high-harmonic generation in multiply ionized plasmas. <i>Science</i> , 2015, 350, 1225-1231.	12.6	165
11	Extended phase matching of high harmonics driven by mid-infrared light. <i>Optics Letters</i> , 2008, 33, 2128.	3.3	156
12	Zeptosecond High Harmonic keV X-Ray Waveforms Driven by Midinfrared Laser Pulses. <i>Physical Review Letters</i> , 2013, 111, 033002.	7.8	123
13	Near- and Extended-Edge X-Ray-Absorption Fine-Structure Spectroscopy Using Ultrafast Coherent High-Order Harmonic Supercontinua. <i>Physical Review Letters</i> , 2018, 120, 093002.	7.8	121
14	Generation of bright isolated attosecond soft X-ray pulses driven by multicycle midinfrared lasers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E2361-7.	7.1	116
15	Self-Compression of Ultrashort Pulses through Ionization-Induced Spatiotemporal Reshaping. <i>Physical Review Letters</i> , 2004, 93, 173902.	7.8	103
16	Time- and angle-resolved photoemission spectroscopy with optimized high-harmonic pulses using frequency-doubled Ti:Sapphire lasers. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2014, 195, 231-236.	1.7	95
17	Schemes for generation of isolated attosecond pulses of pure circular polarization. <i>Physical Review A</i> , 2016, 93, .	2.5	70
18	High-Order Harmonic Generation from Ions in a Capillary Discharge. <i>Physical Review Letters</i> , 2006, 96, 203001.	7.8	65

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19	Ultrafast Modulation of the Chemical Potential in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> < \text{mml:mrow} > < \text{mml:msub} > < \text{mml:mrow} > < \text{mml:mi} > \text{BaFe} < / \text{mml:mi} > < / \text{mml:mrow} > < \text{mml:mrow} > < \text{mml:mn} > 2 < / \text{mml:mn} > < / \text{mml:mrow} > < / \text{mml:math} \rangle$ . Coherent Phonons. Physical Review Letters, 2014, 112, .	7.8	56
20	Phase-Matching Techniques for Coherent Soft X-Ray Generation. IEEE Journal of Quantum Electronics, 2006, 42, 14-26.	1.9	52
21	High flux coherent super-continuum soft X-ray source driven by a single-stage, 10mJ, Ti:sapphire amplifier-pumped OPA. Optics Express, 2014, 22, 6194.	3.4	52
22	Grating-Assisted Phase Matching in Extreme Nonlinear Optics. Physical Review Letters, 2007, 99, 053902.	7.8	51
23	Self-amplified photo-induced gap quenching in a correlated electron material. Nature Communications, 2016, 7, 12902.	12.8	50
24	Enhanced High Harmonic Generation from Multiply Ionized Argon above 500ÅeV through Laser Pulse Self-Compression. Physical Review Letters, 2009, 103, 143901.	7.8	41
25	Helicity-selective phase-matching and quasi-phase matching of circularly polarized high-order harmonics: towards chiral attosecond pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 123501.	1.5	41
26	Spatially coherent, phase matched, high-order harmonic EUV beams at 50 kHz. Optics Express, 2009, 17, 17376.	3.4	38
27	Hot-electron-driven charge transfer processes on O <sub>2</sub> /Pt(111) surface probed by ultrafast extreme-ultraviolet pulses. Physical Review B, 2002, 66, .	3.2	37
28	Isolated broadband attosecond pulse generation with near- and mid-infrared driver pulses via time-gated phase matching. Optics Express, 2017, 25, 11855.	3.4	24
29	Enhanced high-order harmonic generation from Xe, Kr, and Ar in a capillary discharge. Physical Review A, 2007, 76, .	2.5	22
30	Group velocity matching in high-order harmonic generation driven by mid-infrared lasers. New Journal of Physics, 2016, 18, 073031.	2.9	21
31	Phase matching, quasi-phase matching, and pulse compression in a single waveguide for enhanced high-harmonic generation. Optics Letters, 2005, 30, 1971.	3.3	19
32	Unified Microscopic-Macroscopic Formulation of High-Order Difference-Frequency Mixing in Plasmas. Physical Review Letters, 2007, 98, 043903.	7.8	16
33	Picosecond ionization dynamics in femtosecond filaments at high pressures. Physical Review A, 2017, 95, .	2.5	16
34	Design of fully spatially coherent extreme-ultraviolet light sources. Applied Physics Letters, 2004, 84, 3903-3905.	3.3	12
35	Sawtooth grating-assisted phase-matching. Optics Express, 2010, 18, 22686.	3.4	12
36	Lorentz drift compensation in high harmonic generation in the soft and hard X-ray regions of the spectrum. Optics Express, 2016, 24, 21818.	3.4	12

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37	Ionization-assisted spatiotemporal localization in gas-filled capillaries. Optics Letters, 2018, 43, 3112.	3.3	12
38	Extreme Nonlinear Optics: Attosecond Photonics at Short Wavelengths. IEEE Journal of Selected Topics in Quantum Electronics, 2004, 10, 1339-1350.	2.9	7
39	Ultrahigh-Efficiency High Harmonic Generation Driven by UV Lasers. , 2013, , .		4
40	Bright Circularly Polarized Soft X-Ray High Harmonics for X-Ray Magnetic Circular Dichroism. , 2015, , .		3
41	Bright, Coherent, Attosecond Soft X-Ray Harmonics Spanning the Water Window from a Tabletop Source. , 2010, , .		2
42	Phase Matching of High Harmonic Generation in the Soft and Hard X-ray Regions of the Spectrum. , 2009, , .		2
43	Laser restoration of ceramic artifacts with archeological value. , 2001, 4397, 343.		1
44	High-Order X-Ray Raman Scattering Using Coherent Electrons from High Harmonic Generation. Optics and Photonics News, 2006, 17, 43.	0.5	1
45	Talbot solitons. Optics Letters, 2008, 33, 830.	3.3	1
46	Fully Spatially Coherent High Harmonic Beams in the keV Region of the Spectrum. , 2012, , .		1
47	High Repetition Rate, mJ-Level, mid-IR OPCPA System. , 2014, , .		1
48	Bright Isolated Attosecond Soft X-Ray Pulses. Springer Proceedings in Physics, 2015, , 95-98.	0.2	1
49	X-Ray Magnetic Circular Dichroism Probed Using High Harmonics. Springer Proceedings in Physics, 2015, , 60-63.	0.2	1
50	Extended Phase-Matching of High Harmonics Driven by Focusing Light in Planar Waveguide. , 2012, , .		1
51	Bright Coherent Attosecond-to-Zeptosecond Kiloelectronvolt X-ray Supercontinua. , 2011, , .		1
52	Passive mode-locking and pulse-shortening capabilities of frequency doubling polarization mirror. , 2001, 4397, 59.		0
53	Cavity design for diode end-pumped passive mode-locked solid state laser. , 2003, , .		0
54	Molecular structure effects on high harmonic generation in CO/sub 2/. , 0, , .		0

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55	Phase matching, quasi phase matching and pulse compression in a single waveguide for enhancing high harmonic generation. , 0, , .		0
56	High Harmonic Generation from Ions in a Capillary Discharge Plasma Waveguide. Optics and Photonics News, 2006, 17, 44.	0.5	0
57	High harmonic generation from ions in a capillary discharge. , 2006, , .		0
58	Phase-matching in isotropic and homogeneous materials via Talbot effect. , 2006, , .		0
59	Enhanced High Harmonic Generation in Xe, Kr and Ar Using a Capillary Discharge. , 2007, , .		0
60	Grating-assisted phase matching in extreme nonlinear optics. , 2007, , .		0
61	Nonlinear optics for high-order frequency conversion: applied attosecond science. , 2007, , .		0
62	Attosecond Nonlinear Optics in Plasmas for Coherent X-ray Generation. AIP Conference Proceedings, 2007, , .	0.4	0
63	Enhanced high harmonic generation in Xe, Kr and Ar using a capillary discharge. , 2007, , .		0
64	All-optical quasi-phase-matching techniques in high-harmonic generation. , 2008, , .		0
65	Demonstration of Fully Spatially Coherent Soft X-ray High Harmonic Beams in the Water Window. , 2010, , .		0
66	High power, 60MHz, cryogenically cooled, mode-locked, Yb:YAG oscillator. , 2011, , .		0
67	Phase-matched harmonic generation beyond the water window with a mid-IR parametric amplifier. , 2011, , .		0
68	Efficient, phase matched keV high harmonic generation using mid-IR driving laser wavelengths. , 2012, , .		0
69	Unified Microscopic-Macroscopic Picture of High Harmonic Generation from the VUV to the keV X-ray Region. , 2012, , .		0
70	Temporal structure of ultra high-order harmonic generation in the keV regime driven by mid-infrared lasers. , 2012, , .		0
71	Ultrafast keV X-rays from Tabletop Femtosecond Lasers. Optics and Photonics News, 2012, 23, 38.	0.5	0
72	Frontiers in extreme nonlinear optics: Attosecond-to-zeptosecond coherent kiloelectronvolt X-rays on a tabletop. , 2013, , .		0

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73	Generation of Bright Isolated Attosecond Soft X-Ray Pulses Driven by Multi-Cycle Mid-Infrared Lasers. , 2014, , .		0
74	Bright High Order Harmonic Generation in a Multiply Ionized Plasma up to the Water Window. , 2014, , .		0
75	Magnetic Circular Dichroism Probed with Bright High-order Harmonics. , 2014, , .		0
76	Theory of time-gated phase-matching for isolated attosecond soft x-ray pulse generation using mid-infrared lasers. , 2014, , .		0
77	Group-velocity mismatch effect in high-order harmonic generation. , 2015, , .		0
78	Bright High Harmonics with Tunable Polarization. , 2015, , .		0
79	Circularly Polarized Soft X-Ray High Harmonics and XMCD on a Tabletop. , 2015, , .		0
80	Design of coherent x-rays for 5D imaging at the space-time resolution extreme (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 T		0
81	Generation of a single UV pulse from a near-IR pulse burst. , 2017, , .		0
82	Enhanced High Harmonic Generation from Ions using a Capillary Discharge. , 2006, , .		0
83	Enhanced High Harmonic Generation from Ions using a Capillary Discharge. Springer Series in Chemical Physics, 2007, , 15-17.	0.2	0
84	Enhanced High Harmonic Generation from Ions Using a Capillary Discharge Plasma. Springer Proceedings in Physics, 2007, , 383-388.	0.2	0
85	High Harmonic Generation from Multiply Ionized Argon Extending Beyond 500 eV. , 2009, , .		0
86	Practical Compact Spatially-Coherent, Phase-Matched Extreme UV Source at 50 kHz. , 2009, , .		0
87	Sawtooth grating-assisted-phase-matching. , 2009, , .		0
88	Spatially Coherent, Phase Matched, High-Order Harmonic Beams at 50 kHz. , 2009, , .		0
89	Phase Matching of High Harmonic Generation in the Water Window and Beyond at High Pressures using mid-IR Lasers. , 2009, , .		0
90	Full Phase Matching of Ultrafast Coherent High Harmonic X-Rays at 0.5 keV. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
91	Nd:GdVO <sub>4</sub> laser passively mode-locked by cascaded nonlinearity in periodically-poled lithium tantalate. , 2010, , .		0
92	Sawtooth grating-assisted phase-matching. Optics Express, 2010, 18, 21583.	3.4	0
93	Phase Matching of Attosecond-to-Zeptosecond Kiloelectronvolt X-ray Supercontinua from High Harmonic Generation. , 2011, , .		0
94	Bright Coherent Ultrafast X-rays from mid-IR Lasers. , 2011, , .		0
95	Bright Coherent Attosecond-to-Zeptosecond Kiloelectronvolt X-ray Supercontinua. , 2011, , .		0
96	Nonlinear Optics at the Timescale of the Electron $\hat{\epsilon}^{\epsilon}$ Bright Coherent Attosecond-to-Zeptosecond KeV X-Rays. , 2011, , .		0
97	Bright Coherent Attosecond-to-Zeptosecond Kiloelectronvolt X-ray Supercontinua. , 2011, , .		0
98	Role of Self-focusing in Bright Coherent X-Ray Generation by Mid-Infrared Driving Lasers. , 2012, , .		0
99	Coherent EUV High Harmonic Sources for Applications in Imaging, Materials Dynamics and Nanometrology. , 2013, , .		0
100	High flux coherent supercontinuum soft X-ray source driven by a single-stage 10 mJ, kHz, Ti:sapphire laser amplifier. , 2014, , .		0
101	Efficient generation of isolated attosecond soft x-ray pulses. , 2014, , .		0
102	Magnetic Circular Dichroism probed using High Harmonics. , 2014, , .		0
103	Generation of Bright Isolated Attosecond Soft X-Ray Pulses Driven by Multi-Cycle Mid-Infrared Lasers. , 2014, , .		0
104	Generation of Bright Isolated Attosecond Soft X-Ray Pulses Driven by Multi-Cycle Mid-Infrared Lasers. , 2014, , .		0
105	Multi-mJ, High Repetition Rate, mid-IR OPCPA System. , 2014, , .		0
106	High flux coherent supercontinuum soft X-ray source driven by a single-stage Ti:sapphire-pumped OPA. , 2014, , .		0
107	Generation of Bright Circularly-Polarized High Harmonics for Magneto-Optical Investigations. Springer Proceedings in Physics, 2016, , 187-192.	0.2	0
108	Generation of Bright Soft X-ray Harmonics with Circular Polarization for X-ray Magnetic Circular Dichroism. , 2016, , .		0

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109	Spatio-Temporal Localization of Intense Pulses in Gas-Filled Capillaries. , 2016, , .		0
110	Bright Soft X-ray High Harmonic Generation with Circular Polarization for X-ray Magnetic Circular Dichroism. , 2016, , .		0
111	Bright Circularly Polarized Soft X-ray Harmonics for Static and Dynamic X-ray Magnetic Circular Dichroism. , 2016, , .		0
112	Intensity Stabilization of Ionizing Pulses in High-Pressure, Gas-Filled Capillaries. , 2016, , .		0
113	Isolated circularly polarized attosecond pulses driven by few-cycle and multi-cycle non-collinear laser beams. , 2016, , .		0
114	Globally Optimized Monochromator for Coherent Diffractive Imaging with Tunable EUV Wavelength. , 2022, , .		0
115	High Performance Compression of 515 nm Laser Pulses at kHz-MHz Repetition Rates for Ultrabright EUV High Harmonic Generation. , 2022, , .		0