Anton Husakou

List of Publications by Year
in descending order

88 papers	3,344 citations	172457 29 h-index	138484 58 g-index
90 all docs	90 docs citations	90 times ranked	2223 citing authors

#	Article	IF	Citations
1	Supercontinuum Generation of Higher-Order Solitons by Fission in Photonic Crystal Fibers. Physical Review Letters, 2001, 87, 203901.	7.8	669
2	Experimental Evidence for Supercontinuum Generation by Fission of Higher-Order Solitons in Photonic Fibers. Physical Review Letters, 2002, 88, 173901.	7.8	465
3	Tailoring terahertz radiation by controlling tunnel photoionization events in gases. New Journal of Physics, 2011, 13, 123029.	2.9	168
4	Supercontinuum generation, four-wave mixing, and fission of higher-order solitons in photonic-crystal fibers. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 2171.	2.1	165
5	Theory of plasmon-enhanced high-order harmonic generation in the vicinity of metal nanostructures in noble gases. Physical Review A, 2011, 83, .	2.5	139
6	Multi-meter fiber-delivery and pulse self-compression of milli-Joule femtosecond laser and fiber-aided laser-micromachining. Optics Express, 2014, 22, 10735.	3.4	120
7	Spatial distribution of refractive index variations induced in bulk fused silica by single ultrashort and short laser pulses. Journal of Applied Physics, 2007, 101, 043506.	2.5	102
8	Boosting Terahertz Generation in Laser-Field Ionized Gases Using a Sawtooth Wave Shape. Physical Review Letters, 2015, 114, 183901.	7.8	87
9	Supercontinuum generation in photonic crystal fibers made from highly nonlinear glasses. Applied Physics B: Lasers and Optics, 2003, 77, 227-234.	2.2	80
10	Flipping the sign of refractive index changes in ultrafast and temporally shaped laser-irradiated borosilicate crown optical glass at high repetition rates. Physical Review B, 2008, 77, .	3.2	79
11	Linear and nonlinear optical characteristics of composites containing metal nanoparticles with different sizes and shapes. Optics Express, 2010, 18, 7488.	3.4	76
12	Two-octave supercontinuum generation in a water-filled photonic crystal fiber. Optics Express, 2010, 18, 6230.	3.4	74
13	Steplike Transmission of Light through a Metal-Dielectric Multilayer Structure due to an Intensity-Dependent Sign of the Effective Dielectric Constant. Physical Review Letters, 2007, 99, 127402.	7.8	68
14	Transient response of dielectric materials exposed to ultrafast laser radiation. Applied Physics A: Materials Science and Processing, 2006, 84, 413-422.	2.3	65
15	Polarization gating and circularly-polarized high harmonic generation using plasmonic enhancement in metal nanostructures. Optics Express, 2011, 19, 25346.	3.4	59
16	Supercontinuum generation in liquid-filled photonic crystal fiber with slow nonlinear response. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1763.	2.1	58
17	Carrier-envelope phase stabilization with sub-10 as residual timing jitter. Optics Letters, 2011, 36, 4146.	3.3	57
18	Sub-4 fs laser pulses at high average power and high repetition rate from an all-solid-state setup. Optics Express, 2018, 26, 8941.	3.4	53

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19	Origin of strong-field-induced low-order harmonic generation in amorphous quartz. Nature Physics, 2020, 16, 1035-1039.	16.7	51
20	Characterization of a nonlinear filter for the front-end of a high contrast double-CPA Ti:sapphire laser. Optics Express, 2004, 12, 5088.	3.4	50
21	High-harmonic and single attosecond pulse generation using plasmonic field enhancement in ordered arrays of gold nanoparticles with chirped laser pulses. Optics Express, 2013, 21, 2195.	3.4	50
22	High-power fifth-harmonic generation of femtosecond pulses in the vacuum ultraviolet using a Ti:sapphire laser. Optics Express, 2007, 15, 6389.	3.4	41
23	Guiding properties and dispersion control of kagome lattice hollow-core photonic crystal fibers. Optics Express, 2009, 17, 13050.	3.4	37
24	Supercontinuum generation in aqueous colloids containing silver nanoparticles. Optics Letters, 2009, 34, 2132.	3.3	35
25	Coherence of subsequent supercontinuum pulses generated in tapered fibers in the femtosecond regime. Optics Express, 2007, 15, 2732.	3.4	33
26	Saturable absorption in composites doped with metal nanoparticles. Optics Express, 2010, 18, 21918.	3.4	33
27	High-power soliton-induced supercontinuum generation and tunable sub-10-fs VUV pulses from kagome-lattice HC-PCFs. Optics Express, 2010, 18, 5367.	3.4	32
28	Frequency comb generation by four-wave mixing in a multicore photonic crystal fiber. Applied Physics Letters, 2003, 83, 3867-3869.	3.3	29
29	Frequency-selective self-trapping and supercontinuum generation in arrays of coupled nonlinear waveguides. Optics Express, 2007, 15, 11978.	3.4	29
30	Terahertz and higher-order Brunel harmonics: from tunnel to multiphoton ionization regime in tailored fields. Journal of Modern Optics, 2017, 64, 1078-1087.	1.3	28
31	Low-threshold supercontinuum generation in glasses doped with silver nanoparticles. Optics Express, 2009, 17, 17989.	3.4	27
32	Supercontinuum generation in planar rib waveguides enabled by anomalous dispersion. Optics Express, 2006, 14, 1512.	3.4	20
33	Plasma formation and relaxation dynamics in fused silica driven by femtosecond short-wavelength infrared laser pulses. Applied Physics Letters, 2019, 115, .	3.3	20
34	Superfocusing of light below the diffraction limit by photonic crystals with negative refraction. Optics Express, 2004, 12, 6491.	3.4	18
35	Slow light in dielectric composite materials of metal nanoparticles. Optics Express, 2012, 20, 25790.	3.4	17
36	Quasi-phase-matched high-harmonic generation in composites of metal nanoparticles and a noble gas. Physical Review A, 2014, 90, .	2.5	17

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37	Application of mid-infrared pulses for quasi-phase-matching of high-order harmonics in silver plasma. Optics Express, 2016, 24, 3414.	3.4	17
38	Strong nonlinear optical effects in micro-confined atmospheric air. Photonics Research, 2019, 7, 1134.	7.0	13
39	Supercontinuum generation in a two-dimensional photonic kagome crystal. Applied Physics B: Lasers and Optics, 2005, 81, 209-217.	2.2	12
40	All-optical attoclock for imaging tunnelling wavepackets. Nature Physics, 2022, 18, 417-422.	16.7	12
41	Soliton delivery of few-cycle optical gigawatt pulses in Kagome-lattice hollow-core photonic crystal fibers. Physical Review A, 2010, 82, .	2.5	10
42	High-order harmonic generation employing field enhancement by metallic fractal rough surfaces. Optics Express, 2011, 19, 20910.	3.4	10
43	Femtosecond Fieldâ€Driven Onâ€Chip Unidirectional Electronic Currents in Nonadiabatic Tunneling Regime. Laser and Photonics Reviews, 2021, 15, 2000475.	8.7	10
44	High-power, high-coherence supercontinuum generation in dielectric-coated metallic hollow waveguides. Optics Express, 2009, 17, 12481.	3.4	9
45	Theory of plasmonic femtosecond pulse generation by mode-locking of long-range surface plasmon polariton lasers. Optics Express, 2012, 20, 462.	3.4	9
46	Combined action of the bound-electron nonlinearity and the tunnel-ionization current in low-order harmonic generation in noble gases. Optics Express, 2013, 21, 25582.	3.4	9
47	Focusing of Scanning Light Beams below the Diffraction Limit without Near-Field Spatial Control Using a Saturable Absorber and a Negative-Refraction Material. Physical Review Letters, 2006, 96, 013902.	7.8	8
48	Nonlinearity of surface-plasmon polaritons in sub-wavelength metal nanowires. Optics Express, 2016, 24, 6162.	3.4	8
49	Characterization of Laser-Induced Ionization Dynamics in Solid Dielectrics. ACS Photonics, 2022, 9, 233-240.	6.6	8
50	Dispersion control in ultrabroadband dielectric-coated metallic hollow waveguides. Optics Express, 2008, 16, 3834.	3.4	7
51	Soliton-effect pulse compression in the single-cycle regime in broadband dielectric-coated metallic hollow waveguides. Optics Express, 2009, 17, 17636.	3.4	7
52	Subdiffraction focusing of scanning beams by a negative-refraction layer combined with a nonlinear layer. Optics Express, 2006, 14, 11194.	3.4	6
53	2.6 mJ energy and 81 GW peak power femtosecond laser-pulse delivery and spectral broadening in inhibited coupling Kagome fiber. , 2015, , .		6
54	Raman gas self-organizing into deep nano-trap lattice. Nature Communications, 2016, 7, 12779.	12.8	5

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55	On-target diagnosing of few-cycle pulses by high-order-harmonic generation. Physical Review A, 2017, 96, .	2.5	4
56	Generation and compression of femtosecond pulses in the vacuum ultraviolet by chirped-pulse four-wave difference-frequency mixing. , 2006, , .		3
57	Pulse compression and pedestal suppression by self-similar propagation in nonlinear optical loop mirror. Optics Communications, 2020, 474, 126083.	2.1	3
58	Non-instantaneous third-order optical response of gases in low-frequency fields. Optics Express, 2022, 30, 23579.	3.4	3
59	Superfocusing of optical beams below the diffraction limit by media with negative refraction. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 3862-3877.	1.8	2
60	Designing laser-induced refractive index changes in "thermal" glasses. , 2008, , .		2
61	Chirped multilayer hollow waveguides with broadband transmission. , 2009, , .		2
62	All-optical delay of images by backward four-wave mixing in metal-nanoparticle composites. Physical Review A, 2013, 87, .	2.5	2
63	Milli-Joule energy-level comb and supercontinuum generation in atmospheric air-filled inhibited coupling Kagome fiber. , 2015, , .		2
64	Symmetry Breaking and Strong Persistent Plasma Currents via Resonant Destabilization of Atoms. Physical Review Letters, 2017, 119, 243202.	7.8	2
65	High Harmonic Generation Assisted by Metal Nanostructures and Nanoparticles. Nano-optics and Nanophotonics, 2015, , 251-268.	0.2	1
66	Propagator operator for pulse propagation in resonant media. Optics Express, 2021, 29, 29128.	3.4	1
67	Supercontinuum generation in highly nonlinear photonic crystal fibers. , 0, , .		0
68	Superfocusing of light beams below the diffraction limit by photonic crystals with negative refraction. , 0, , .		0
69	<title>Dispersion modification and supercontinuum formation in planar rib waveguide structures</title>. , 2006, , .		0
70	Subdiffraction focusing of scanning beams by combined nonlinear and negative-refraction layers. , 2006, , .		0
71	Generation of Supercontinuum in a Waveguide with Slow Nonlinearity Related to Shock Formation. , 2007, , .		0
72	All-optical bistable switching in a metal-dielectric multilayer structure due to intensity-dependent sign of the effective dielectric constant. , 2007, , .		0

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73	All-optical bistable switching in a metal-dielectric multilayer structure due to intensity-dependent sign of the effective dielectric constant. , 2007, , .		0
74	Coherence preservation in supercontinuum generation in hollow waveguides due to contribution from plasma. , 2009, , .		0
75	Supercontinuum generation in aqueous colloids with silver nanoparticles inclusions. , 2009, , .		0
76	Soliton pulse compression in the single-cycle regime in dielectric-coated metallic hollow waveguides. , 2009, , .		0
77	Two-octave supercontinuum generation in a liquid-core photonic crystal fiber. , 2010, , .		0
78	Generation of 5-fs Pulses Tunable from 400 to 120 nm by Kagome-Lattice Hollow-Core PCF. , 2010, , .		0
79	The contribution of reorientational nonlinearity of CS 2 liquid in supercontinuum generation. , 2010, , .		0
80	Polarization gating for high-harmonic generation in the vicinity of metal nanostructures. , 2011, , .		0
81	Spatiotemporal dynamics of Raman coherence in hydrogen-filled hollow core photonic crystal fibers. , 2011, , .		0
82	High harmonic generation assisted by the field enhancement near rough metallic surface. , 2011, , .		0
83	Ultrafast Nonlinear Optical Effects of Metal Nanoparticles Composites. , 0, , .		0
84	Quasi-phase-matched high harmonic generation in corrugated micrometer-scale waveguides. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 137.	2.1	0
85	Unidirectional electronic currents in asymmetric nanojunctions driven by strong optical fields. , 2021, , .		0
86	Supercontinuum Generation and Superfocusing in Microstructure Fibers, Hollow Waveguides and Photonic Crystals. , 2005, , .		0
87	Generation of ultrahigh-power supercontinua and self-compressed single-cycle pulses in metal-dielectric hollow waveguides. , 2008, , .		0
88	Subcycle dynamics of ionization revealed via polarization of lowest harmonics. , 2019, , .		0