

Stephane Petit

List of Publications by Year in descending order

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121
papers

3,696
citations

126708

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138251

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121
docs citations

121
times ranked

2730
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental and numerical study of laser-induced secondary jetting. <i>Journal of Fluid Mechanics</i> , 2022, 934, .	1.4	3
2	Photoelectron elliptical dichroism spectroscopy of resonance-enhanced multiphoton ionization <i>via</i> the 3s, 3p and 3d Rydberg series in fenchone. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 6415-6427.	1.3	10
3	Ultrafast polarization-tunable monochromatic extreme ultraviolet source at high-repetition-rate. <i>Journal of Optics (United Kingdom)</i> , 2022, 24, 084003.	1.0	4
4	High-order parametric generation of coherent XUV radiation. <i>Optics Express</i> , 2021, 29, 5982.	1.7	7
5	Aromatic Formation Promoted by Ion-Driven Radical Pathways in EUV Photochemical Experiments Simulating Titan's Atmospheric Chemistry. <i>Journal of Physical Chemistry A</i> , 2021, 125, 3159-3168.	1.1	5
6	High-power sub-15-fs nonlinear pulse compression at 515-nm of an ultrafast Yb-doped fiber amplifier. <i>Optics Letters</i> , 2021, 46, 1804.	1.7	11
7	Sub-Picosecond Non-Equilibrium States in the Amorphous Phase of GeTe Phase-Change Material Thin Films. <i>Advanced Materials</i> , 2021, 33, e2102721.	11.1	8
8	Ultrafast relaxation investigated by photoelectron circular dichroism: an isomeric comparison of camphor and fenchone. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 25612-25628.	1.3	11
9	Revealing the Influence of Molecular Chirality on Tunnel-Ionization Dynamics. <i>Physical Review X</i> , 2021, 11, .	2.8	7
10	On an EUV Atmospheric Simulation Chamber to Study the Photochemical Processes of Titan's Atmosphere. <i>Scientific Reports</i> , 2020, 10, 10009.	1.6	5
11	Laser Generation of Sub-Micrometer Wrinkles in a Chalcogenide Glass Film as Physical Unclonable Functions. <i>Advanced Materials</i> , 2020, 32, e2003032.	11.1	18
12	Using photoelectron elliptical dichroism (PEELD) to determine real-time variation of enantiomeric excess. <i>Chirality</i> , 2020, 32, 1225-1233.	1.3	7
13	Aurore: A platform for ultrafast sciences. <i>Review of Scientific Instruments</i> , 2020, 91, 105104.	0.6	7
14	Bright, polarization-tunable high repetition rate extreme ultraviolet beamline for coincidence electron-ion imaging. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 234003.	0.6	12
15	Single-shot phase-matching free ultrashort pulse characterization based on transient absorption in solids. <i>Optics Express</i> , 2020, 28, 35807.	1.7	4
16	1.9 mW XUV source by cascaded harmonic generation from an Yb: fiber laser. , 2020, , .		0
17	Ultrashort, sub-20fs, high-power visible source. , 2020, , .		0
18	Absolute gas density profiling in high-order harmonic generation: erratum. <i>Optics Express</i> , 2020, 28, 32105.	1.7	0

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19	Controlling Subcycle Optical Chirality in the Photoionization of Chiral Molecules. <i>Physical Review X</i> , 2019, 9, .	2.8	38
20	Hyper-Raman lines emission concomitant with high-order harmonic generation. <i>New Journal of Physics</i> , 2019, 21, 073006.	1.2	3
21	Ultrafast electronic relaxations from the S ₃ state of pyrene. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 14111-14125.	1.3	8
22	Cascaded harmonic generation from a fiber laser: a milliwatt XUV source. <i>Optics Express</i> , 2019, 27, 20383.	1.7	32
23	Phase-matching-free pulse retrieval based on transient absorption in solids. <i>Optics Express</i> , 2019, 27, 28998.	1.7	30
24	Photoexcitation circular dichroism in chiral molecules. <i>Nature Physics</i> , 2018, 14, 484-489.	6.5	145
25	Real-time determination of enantiomeric and isomeric content using photoelectron elliptical dichroism. <i>Nature Communications</i> , 2018, 9, 5212.	5.8	65
26	Multiphoton photoelectron circular dichroism of limonene with independent polarization state control of the bound-bound and bound-continuum transitions. <i>Journal of Chemical Physics</i> , 2018, 149, 134301.	1.2	13
27	Ultrafast changes in optical properties of SiO ₂ excited by femtosecond laser at the damage threshold and above. <i>Physical Review B</i> , 2018, 98, .	1.1	6
28	Dynamics of laser-induced defects by multiple femtosecond pulses in potassium dihydrogen phosphate crystals. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2018, 35, 1119.	0.9	3
29	Absolute gas density profiling in high-order harmonic generation. <i>Optics Express</i> , 2018, 26, 6001.	1.7	17
30	Phase-resolved two-dimensional spectroscopy of electronic wave packets by laser-induced XUV free induction decay. <i>Physical Review A</i> , 2017, 95, .	1.0	23
31	Attosecond-resolved photoionization of chiral molecules. <i>Science</i> , 2017, 358, 1288-1294.	6.0	150
32	100-kHz Yb-fiber laser pumped 3-μm optical parametric amplifier for probing solid-state systems in the strong field regime. <i>Optics Letters</i> , 2017, 42, 891.	1.7	28
33	Femtosecond versus picosecond laser pulses for film-free laser bioprinting. <i>Applied Optics</i> , 2017, 56, 8648.	0.9	15
34	Study of middle infrared difference frequency generation using a femtosecond laser source in LGT. <i>Optics Letters</i> , 2017, 42, 3698.	1.7	9
35	High Order Harmonic Generation in ZnSe Driven by 3-μm Parametric Laser Source at High Repetition Rate. , , .		0
36	Universality of photoelectron circular dichroism in the photoionization of chiral molecules. <i>New Journal of Physics</i> , 2016, 18, 102002.	1.2	83

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37	Complex structure of spatially resolved high-order-harmonic spectra. <i>Physical Review A</i> , 2016, 94, .	1.0	38
38	Effective parameters for film-free femtosecond laser assisted bioprinting. <i>Applied Optics</i> , 2016, 55, 3879.	2.1	16
39	Using high harmonic radiation to reveal the ultrafast dynamics of radiosensitiser molecules. <i>Faraday Discussions</i> , 2016, 194, 407-425.	1.6	5
40	Two-Dimensional Frequency Resolved Optomolecular Gating of High-Order Harmonic Generation. <i>Physical Review Letters</i> , 2016, 116, 053002.	2.9	9
41	Collection and spectral control of high-order harmonics generated with a 50 W high-repetition rate Ytterbium femtosecond laser system. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 085601.	0.6	9
42	Role of Excited States In High-order Harmonic Generation. <i>Physical Review Letters</i> , 2016, 117, 203001.	2.9	66
43	Probing ultrafast dynamics of chiral molecules using time-resolved photoelectron circular dichroism. <i>Faraday Discussions</i> , 2016, 194, 325-348.	1.6	65
44	Relaxation Dynamics in Photoexcited Chiral Molecules Studied by Time-Resolved Photoelectron Circular Dichroism: Toward Chiral Femtochemistry. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 4514-4519.	2.1	81
45	Laser assisted bioprinting using a femtosecond laser with and without a gold transductive layer: a parametric study. <i>Proceedings of SPIE</i> , 2016, , .	0.8	3
46	Transverse Electromagnetic Mode Conversion for High-Harmonic Self-Probing Spectroscopy. <i>Photonics</i> , 2015, 2, 184-199.	0.9	11
47	Combined high-harmonic interferometries for vectorial spectroscopy. <i>Optics Letters</i> , 2015, 40, 5387.	1.7	8
48	Multi-channel electronic and vibrational dynamics in polyatomic resonant high-order harmonic generation. <i>Nature Communications</i> , 2015, 6, 5952.	5.8	64
49	Probing molecular chirality on a sub-femtosecond timescale. <i>Nature Physics</i> , 2015, 11, 654-658.	6.5	219
50	Postcompression of high-energy terawatt-level femtosecond pulses and application to high-order harmonic generation. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2015, 32, 1055.	0.9	17
51	A table-top ultrashort light source in the extreme ultraviolet for circular dichroism experiments. <i>Nature Photonics</i> , 2015, 9, 93-98.	15.6	217
52	High-order harmonic transient grating spectroscopy of SF ₆ molecular vibrations. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014, 47, 124023.	0.6	11
53	Enhanced high harmonic generation driven by high-intensity laser in argon gas-filled hollow core waveguide. <i>Optics Letters</i> , 2014, 39, 3770.	1.7	11
54	Experimental determination of temperature-dependent electron-electron collision frequency in isochorically heated warm dense gold. <i>Physical Review B</i> , 2014, 89, .	1.1	42

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55	Spatio-temporal spectral structures in high-order harmonic beams generated with Terawatt 10-fs pulses. Nature Communications, 2014, 5, 4637.	5.8	36
56	Ultrafast Short-Range Disorder of Femtosecond-Laser-Heated Warm Dense Aluminum. Physical Review Letters, 2013, 111, 245004.	2.9	41
57	High-energy femtosecond laser pulse compression in single- and multi-ionization regime of rare gases: experiment versus theory. Applied Physics B: Lasers and Optics, 2013, 111, 75-87.	1.1	7
58	Inhomogeneous High Harmonic Generation in Krypton Clusters. Physical Review Letters, 2013, 110, 083902.	2.9	68
59	Sub-picosecond and nanometer scale dynamics of aluminum target surface heated by ultrashort laser pulse. Applied Physics Letters, 2013, 102, 194104.	1.5	10
60	Tunable 1.6- μm near infrared few-cycle pulse generation by filamentation. Applied Physics Letters, 2013, 102, .	1.5	17
61	Terawatt Post compression of high energy fs pulses using ionization: A way to overcome the conventional limitation in energy of few optical cycle pulses. EPJ Web of Conferences, 2013, 41, 10021.	0.1	1
62	An interferometric diagnostic for the experimental study of dynamics of solids exposed to intense and ultrashort radiation. , 2013, , .		3
63	Optimized XUV source at 100 kHz repetition rate. EPJ Web of Conferences, 2013, 41, 01015.	0.1	2
64	Génération d'harmoniques d'ordre ≤ 10 en régime de forte focalisation λ 100 kHz. , 2013, , .		0
65	Dynamique ultra-rapide de la transition de phase solide-liquide-vapeur par spectroscopie XANES résolue en temps. , 2013, , .		0
66	High-harmonic transient grating spectroscopy of NO ₂ electronic relaxation. Journal of Chemical Physics, 2012, 137, 224303.	1.2	23
67	Application of optical-field-ionization-induced spectral broadening in helium gas to the postcompression of high-energy femtosecond laser pulses. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1277.	0.9	10
68	Role of the Ionic Potential in High Harmonic Generation. Physical Review Letters, 2012, 108, 203001.	2.9	33
69	High-order Harmonic Spectroscopy : Experimental and Theoretical study of Cooper Minimum in Argon. Journal of Physics: Conference Series, 2012, 388, 022023.	0.3	1
70	Spatial shaping of intense femtosecond beams for the generation of high-energy attosecond pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 074018.	0.6	13
71	Controlling high harmonics generation by spatial shaping of high-energy femtosecond beam. Optics Letters, 2011, 36, 2486.	1.7	18
72	Phase characterization of the reflection on an extreme UV multilayer: comparison between attosecond metrology and standing wave measurements. Optics Letters, 2011, 36, 3386.	1.7	15

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73	Characterization of 8 fs pulses through wideband SPIRIT. , 2011, , .		0
74	High-order harmonic spectroscopy of the Cooper minimum in argon: Experimental and theoretical study. Physical Review A, 2011, 83, .	1.0	100
75	Unraveling the Solid-Liquid-Vapor Phase Transition Dynamics at the Atomic Level with Ultrafast X-Ray Absorption Near-Edge Spectroscopy. Physical Review Letters, 2011, 107, 245006.	2.9	44
76	Noise performances of a high-power picosecond Nd:YVO 4 oscillator. Proceedings of SPIE, 2011, , .	0.8	0
77	Gas Ionization Induced Post-Compression of High Energy and Super-Intense Femtosecond Pulses. , 2010, , .		0
78	Double conical crystal x-ray spectrometer for high resolution ultrafast x-ray absorption near-edge spectroscopy of Al K edge. Review of Scientific Instruments, 2010, 81, 063107.	0.6	19
79	High-power passively mode-locked Nd:YVO 4 oscillator with adjustable pulse duration between 46 ps and 12 ps. , 2010, , .		2
80	Post-compression of high-energy femtosecond pulses using gas ionization. Optics Letters, 2010, 35, 253.	1.7	44
81	Picosecond pulses of variable duration from a high-power passively mode-locked Nd:YVO_4 laser free of spatial hole burning. Optics Letters, 2010, 35, 1644.	1.7	10
82	32 ps-45 W to 12 ps-15 W Spatial-Hole-Burning-Free Nd:YVO4 Oscillator. , 2010, , .		0
83	Broadband, high dynamics and high resolution charge coupled device-based spectrometer in dynamic mode for multi-keV repetitive x-ray sources. Review of Scientific Instruments, 2009, 80, 083505.	0.6	43
84	Broad M-band multi-keV x-ray emission from plasmas created by short laser pulses. Physics of Plasmas, 2009, 16, .	0.7	23
85	High order harmonic generation at ultra high repetition rate from ytterbium doped fiber chirped pulse amplification. Proceedings of SPIE, 2009, , .	0.8	0
86	21 W, 18 ps SESAM-passively modelocked Nd:YAG oscillator with diode-side-pumped single laser head. Electronics Letters, 2009, 45, 884.	0.5	3
87	High-order harmonic generation at a megahertz-level repetition rate directly driven by an ytterbium-doped-fiber chirped-pulse amplification system. Optics Letters, 2009, 34, 1489.	1.7	90
88	Ultra-wide parametric amplification at 800 nm toward octave spanning. Optics Express, 2009, 17, 5153.	1.7	13
89	Polarization-Resolved Pump-Probe Spectroscopy with High Order Harmonics. Springer Series in Chemical Physics, 2009, , 24-26.	0.2	0
90	High Order Harmonic Generation Driven By an Yb-doped Fiber Amplifier System at 1 MHz Repetition Rate. , 2009, , .		0

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91	High-contrast pump-probe spectroscopy with high-order harmonics. , 2009, , .		0
92	Particle characterization for the evaluation of the ^{181}mTa excitation yield in millijoule laser induced plasmas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 145701.	0.6	11
93	Polarization-resolved pump-probe spectroscopy with high harmonics. New Journal of Physics, 2008, 10, 025028.	1.2	29
94	High-power 1 kHz laser-plasma x-ray source for ultrafast x-ray absorption near-edge spectroscopy in the keV range. Applied Physics Letters, 2008, 93, .	1.5	21
95	Energetic electrons produced in the interaction of a kiloHertz femtosecond laser with tantalum targets. Journal of Modern Optics, 2007, 54, 2585-2593.	0.6	2
96	Absolute energy distribution of hard x rays produced in the interaction of a kilohertz femtosecond laser with tantalum targets. Review of Scientific Instruments, 2006, 77, 093302.	0.6	7
97	Hot electron jets from femtosecond heated plasmas at intensities of 10^{16} – 10^{17}W/cm^2 . European Physical Journal Special Topics, 2006, 133, 271-275.	0.2	1
98	High power Q-switched Yb-doped photonic crystal fiber laser producing sub-10 ns pulses. Applied Physics B: Lasers and Optics, 2005, 81, 19-21.	1.1	31
99	Ultra-broad bandwidth parametric amplification at degeneracy. Optics Express, 2005, 13, 7386.	1.7	63
100	Writing optical waveguides in fused silica using 1 kHz femtosecond infrared pulses. Journal of Applied Physics, 2003, 93, 3724-3728.	1.1	71
101	Writing waveguide in pure fused silica with 1 kHz femtosecond laser. , 2003, , .		0
102	Optical limiting studies in a carbon-black suspension for subnanosecond and subpicosecond laser pulses. Applied Optics, 2002, 41, 2944.	2.1	33
103	Filamentation of femtosecond laser pulses in turbulent air. Applied Physics B: Lasers and Optics, 2002, 74, 67-76.	1.1	108
104	Ultrafast intense laser "explosion" of hardwood. Applied Surface Science, 2002, 191, 328-333.	3.1	6
105	Intensity clamping of a femtosecond laser pulse in condensed matter. Optics Communications, 2002, 202, 189-197.	1.0	235
106	Interference of transverse rings in multifilamentation of powerful femtosecond laser pulses in air. Optics Communications, 2002, 210, 329-341.	1.0	81
107	Transverse ring formation of a focused femtosecond laser pulse propagating in air. Optics Communications, 2001, 188, 181-186.	1.0	58
108	Polarization dependence of the propagation of intense laser pulses in air. Optics Communications, 2000, 175, 323-327.	1.0	52

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109	Fast pulsed electric field created from the self-generated filament of a femtosecond Ti:Sapphire laser pulse in air. Optics Communications, 2000, 174, 305-309.	1.0	60
110	From an intense femtosecond laser pulse to a strongly deformed white-light laser. AIP Conference Proceedings, 2000, , .	0.3	0
111	Femtosecond measurements of the time of flight of photons in a three-dimensional photonic crystal. Physical Review E, 1999, 60, 1030-1035.	0.8	60
112	The White Light Supercontinuum Is Indeed an Ultrafast White Light Laser. Japanese Journal of Applied Physics, 1999, 38, L126-L128.	0.8	70
113	Re-focusing during the propagation of a focused femtosecond Ti:Sapphire laser pulse in air. Optics Communications, 1999, 171, 285-290.	1.0	148
114	Self-Steepening and Self-Compression of Ultrashort Optical Pulses in a Defocusing CdS Crystal. Physical Review Letters, 1999, 82, 1032-1035.	2.9	10
115	FILAMENTATION AND SUPERCONTINUUM GENERATION DURING THE PROPAGATION OF POWERFUL ULTRASHORT LASER PULSES IN OPTICAL MEDIA (WHITE LIGHT LASER). Journal of Nonlinear Optical Physics and Materials, 1999, 08, 121-146.	1.1	130
116	Femtosecond time-resolved spectroscopy of sexithiophene thin single crystals. Chemical Physics Letters, 1998, 283, 201-206.	1.2	7
117	Luminescence and absorption of GaN films under high excitation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 43, 196-200.	1.7	16
118	Optical nonlinearities of gallium nitride. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 50, 197-200.	1.7	5
119	A tunable femtosecond pulses amplifier. Optics Communications, 1996, 124, 49-55.	1.0	9
120	Interferometric detection of crossâ€phase modulation in CdS. Applied Physics Letters, 1994, 65, 959-961.	1.5	4
121	Powerful femtosecond laser pulse propagation in the atmosphere and applications. , 0, , .		0