Aleksei M Zheltikov

List of Publications by Year in Descending Order

625 papers	9,730 citations	45 h-index	64 g-index
715 ext. papers	11,309 ext. citations	2.5 avg, IF	6.53 L-index

#	Paper	IF	Citations
625	State-vector geometry and guided-wave physics behind optical super-resolution.. *Optics Letters*, **2022**, 47, 1586-1589	3	
624	Lightwave engineering for on-site few-cycle pulse widths in high-peak-power laser matter interaction optics. *Optics Communications*, **2022**, 502, 127311	2	0
623	Subcycle terahertz field waveforms clocked by attosecond high-harmonic pulses from relativistic laser plasmas. *Journal of Applied Physics*, **2022**, 131, 103104	2.5	
622	Adaptive Wave-Front Shaping and Beam Focusing through Fiber Bundles for High-Resolution Bioimaging. *Photonics*, **2022**, 9, 21	2.2	0
621	Enhanced coherent transition radiation from midinfrared-laser-driven microplasmas.. *Scientific Reports*, **2022**, 12, 7660	4.9	0
620	Information geometry, Pythagorean-theorem extension, and Euclidean distance behind optical sensing via spectral analysis. *Laser Physics Letters*, **2022**, 19, 065401	1.5	
619	Laser Microscopy of Scattering Media Based on the Regularized Minimally Diffuse Image Reconstruction. *JETP Letters*, **2021**, 114, 451-455	1.2	
618	In vivo dynamics of acidosis and oxidative stress in the acute phase of an ischemic stroke in a rodent model. *Redox Biology*, **2021**, 48, 102178	11.3	5
617	Ultrabroadband Characterization of Microwave-to-Terahertz Supercontinua Driven by Ultrashort Pulses in the Mid-Infrared. *Journal of Lightwave Technology*, **2021**, 1-1	4	
616	Imaging through a scattering medium: the Fisher information and the generalized Abbe limit. *Optics Letters*, **2021**, 46, 5902-5905	3	0
615	Broadband terahertz generation by optical rectification of ultrashort multiterawatt laser pulses near the beam breakup threshold. *Optics Letters*, **2021**, 46, 5866-5869	3	1
614	Ultralow-power instant-on photon-pair counting and photon-entanglement analysis. *Laser Physics Letters*, **2021**, 18, 045401	1.5	
613	Analysis of intensity correlation enhanced plasmonic structured illumination microscopy. *Optics Letters*, **2021**, 46, 1554-1557	3	3
612	Enhancement of Plasma Nonlinearities and Generation of a Microwave Terahertz Supercontinuum in the Field of Subterawatt Mid-Infrared Pulses. *JETP Letters*, **2021**, 113, 301-307	1.2	2
611	Light-induced uncertainty and information limits of optical neural recording. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2021**, 251, 119351	4.4	0
610	High-harmonic-driven inverse Raman scattering. *Optics Letters*, **2021**, 46, 3219-3222	3	1
609	Enhanced-contrast two-photon optogenetic pH sensing and pH-resolved brain imaging. *Journal of Biophotonics*, **2021**, 14, e202000301	3.1	0

608	Resolving neural states from optical neural response readout. *Laser Physics Letters*, **2021**, 18, 025402	1.5	
607	Effect of Laser Radiation near 1.5 μm on the Photoluminescence Parameters and the Ensemble of NV Centers in Diamond. *JETP Letters*, **2021**, 113, 1-6	1.2	1
606	Keldysh time bounds of laser-driven ionization dynamics. *Optics Letters*, **2021**, 46, 989-992	3	4
605	Coherently enhanced microwave pulses from midinfrared-driven laser plasmas. *Optics Letters*, **2021**, 46, 1081-1084	3	6
604	Polarization and Spatial Mode Structure of Mid-Infrared-Driven Terahertz-to-Microwave Radiation. *ACS Photonics*, **2021**, 8, 1988-1996	6.3	4
603	In search of lost time: attosecond physics, petahertz optoelectronics, and quantum speed limit. *Physics-Uspekhi*, **2021**, 64, 370-385	2.8	5
602	Single-beam dual-color alternate-pathway two-photon spectroscopy: Toward an optical toolbox for redox biology. *Journal of Raman Spectroscopy*, **2021**, 52, 1552-1560	2.3	0
601	Laser filaments as pulsed antennas. *Optics Letters*, **2021**, 46, 4984-4987	3	1
600	Single-beam multimodal nonlinear-optical imaging of structurally complex events in cell-cycle dynamics. *JPhys Photonics*, **2021**, 3, 044001	2.5	2
599	Perfect swap and transfer of arbitrary quantum states. *Optics Communications*, **2021**, 496, 126870	2	0
598	Multisite cell- and neural-dynamics-resolving deep brain imaging in freely moving mice with implanted reconnectable fiber bundles. *Journal of Biophotonics*, **2020**, 13, e202000081	3.1	6
597	Laser-driven tunneling photocurrent as a source of midinfrared to microwave multidecade supercontinua yoked to high-order harmonics. *Physical Review A*, **2020**, 101,	2.6	6
596	Spin cat-state family for Heisenberg-limit metrology. *Journal of the Optical Society of America B: Optical Physics*, **2020**, 37, 1021	1.7	6
595	Optical beam shift as a vectorial pointer of curved-path geodesics: an evolution-operator perspective. *Optics Express*, **2020**, 28, 12302-12310	3.3	4
594	High-energy self-mode-locked Cr:forsterite laser near the soliton blowup threshold. *Optics Letters*, **2020**, 45, 1890-1893	3	4
593	Light and corona: guided-wave readout for coronavirus spike protein-host-receptor binding. *Optics Letters*, **2020**, 45, 5428-5431	3	1
592	Chirp-controlled high-harmonic and attosecond-pulse generation via coherent-wake plasma emission driven by mid-infrared laser pulses. *Optics Letters*, **2020**, 45, 750-753	3	6
591	Cell-specific three-photon-fluorescence brain imaging: neurons, astrocytes, and gliovascular interfaces. *Optics Letters*, **2020**, 45, 836-839	3	15

590	Extreme Raman red shift: ultrafast multimode nonlinear space-time dynamics, pulse compression, and broadly tunable frequency conversion. *Optica*, **2020**, 7, 1349	8.6	15
589	Ultraviolet-to-millimeter-band supercontinua driven by ultrashort mid-infrared laser pulses. *Optica*, **2020**, 7, 15	8.6	21
588	A fiber optic–nanophotonic approach to the detection of antibodies and viral particles of COVID-19. *Nanophotonics*, **2020**, 10, 235-246	6.3	6
587	Relativistic Nonlinear Optical Phenomena in the Field of Subterawatt Laser Pulses. *JETP Letters*, **2020**, 112, 17-23	1.2	4
586	Enhancing sensitivity of lateral flow assay with application to SARS-CoV-2. *Applied Physics Letters*, **2020**, 117, 120601	3.4	19
585	Photonic toolbox for fast real-time polymerase chain reaction. *Laser Physics Letters*, **2020**, 17, 076202	1.5	3
584	Single-beam optogenetic multimodal (3)/(5) nonlinear microscopy and brain imaging. *Journal of Raman Spectroscopy*, **2020**, 51, 1942-1950	2.3	2
583	Thermogenetics as a New Direction in Controlling the Activity of Neural Networks. *Neuroscience and Behavioral Physiology*, **2020**, 50, 1018-1023	0.3	3
582	Sub-half-cycle field transients from shock-wave-assisted soliton self-compression. *Scientific Reports*, **2020**, 10, 12253	4.9	2
581	All-Optical Brain Thermometry in Freely Moving Animals. *ACS Photonics*, **2020**, 7, 3353-3360	6.3	4
580	Two- and three-photon absorption cross-section characterization for high-brightness, cell-specific multiphoton fluorescence brain imaging. *Journal of Biophotonics*, **2020**, 13, e201900243	3.1	12
579	Relativistic electron bunches locked to attosecond optical field waveforms: an attosecond light–matter bound state. *Laser Physics Letters*, **2020**, 17, 055401	1.5	1
578	Photonic-Crystal-Fiber Quantum Probes for High-Resolution Thermal Imaging. *Physical Review Applied*, **2020**, 13,	4.3	2
577	Entropy- and purity-tailored broadband entanglement from vectorial four-wave mixing: Insights from pulse modes and classical-field dynamics. *Physical Review A*, **2019**, 100,	2.6	1
576	Fiber-Optic Quantum Thermometry with Germanium-Vacancy Centers in Diamond. *ACS Photonics*, **2019**, 6, 1690-1693	6.3	14
575	Broadband quantum light on a fiber-optic platform: from biphotons and heralded single photons to bright squeezed vacuum. *Laser Physics Letters*, **2019**, 16, 075401	1.5	3
574	Nonlinear-optical stain-free stereoimaging of astrocytes and gliovascular interfaces. *Journal of Biophotonics*, **2019**, 12, e201800432	3.1	4
573	Ultrahigh-contrast cross-polarized entangled photon pairs from a strongly birefringent photonic-crystal fiber. *Applied Physics B: Lasers and Optics*, **2019**, 125, 1	1.9	5

572	Multioctave supercontinua from shock-coupled soliton self-compression. *Physical Review A*, **2019**, 99,	2.6	2
571	Three-photon-resonance-enhanced third-harmonic generation for label-free deep-brain imaging: In search of a chemical contrast. *Journal of Raman Spectroscopy*, **2019**, 50, 1296-1302	2.3	3
570	Multi-mJ mid-IR light bullets in air. *EPJ Web of Conferences*, **2019**, 205, 01004	0.3	0
569	Macroscopic tripartite entanglement of nitrogen-vacancy centers in diamond coupled to a superconducting resonator. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, 443	1.7	4
568	Multioctave supercontinua and subcycle lightwave electronics [Invited]. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, A168	1.7	6
567	Laser-induced tunneling, the Kapitza effective potential, and the limits of perturbative nonlinear optics. *Optics Express*, **2019**, 27, 8246-8257	3.3	3
566	Linear entropy of multiqutrit nonorthogonal states. *Optics Express*, **2019**, 27, 8291-8307	3.3	7
565	High-order harmonic analysis of anisotropic petahertz photocurrents in solids. *Optics Letters*, **2019**, 44, 1888-1891	3	6
564	Chirp-controlled filamentation and formation of light bullets in the mid-IR. *Optics Letters*, **2019**, 44, 2173-2176	3	8
563	Stain-free subcellular-resolution astrocyte imaging using third-harmonic generation. *Optics Letters*, **2019**, 44, 3166-3169	3	8
562	Anomalous and near-zero group-velocity dispersion in the sub-THz and mm-band atmospheric windows. *Optics Letters*, **2019**, 44, 3170-3173	3	2
561	Background-free two-photon fluorescence readout via a three-photon charge-state modulation of nitrogen-vacancy centers in diamond. *Optics Letters*, **2019**, 44, 3737-3740	3	8
560	Physics behind laser thermogenetic neurostimulation. *Journal of Applied Physics*, **2019**, 126, 233102	2.5	0
559	Quantum technologies in Russia. *Quantum Science and Technology*, **2019**, 4, 040501	5.5	12
558	A high-N00N output of harmonically driven cavity QED. *Scientific Reports*, **2019**, 9, 16780	4.9	9
557	Intensity and wavelength scaling of laser-driven electron transition radiation: toward a table-top source of electromagnetic pulses. *Laser Physics Letters*, **2019**, 16, 015401	1.5	2
556	The whither of bacteriophytochrome-based near-infrared fluorescent proteins: Insights from two-photon absorption spectroscopy. *Journal of Biophotonics*, **2019**, 12, e201800353	3.1	3
555	Ultrafast nonlinear phenomena in fiber-optic photon-pair generation by ultrashort laser pulses. *Laser Physics Letters*, **2019**, 16, 015402	1.5	

554	Optical breakdown of solids by few-cycle laser pulses. *Scientific Reports*, **2018**, 8, 1824	4.9	22
553	Free-beam soliton self-compression in air. *Journal of Optics (United Kingdom)*, **2018**, 20, 025504	1.7	0
552	Generating maximally-path-entangled number states in two spin ensembles coupled to a superconducting flux qubit. *Physical Review A*, **2018**, 97,	2.6	17
551	Germanium-Vacancy Color Center in Diamond as a Temperature Sensor. *ACS Photonics*, **2018**, 5, 765-770	6.3	60
550	Two-photon imaging of fiber-coupled neurons. *Journal of Biophotonics*, **2018**, 11, e201600203	3.1	6
549	Reconnectable fiberscopes for chronic in vivo deep-brain imaging. *Journal of Biophotonics*, **2018**, 11, e201700196	3.1	7
548	Witnessing quantum entanglement in ensembles of nitrogen-vacancy centers coupled to a superconducting resonator. *Optics Express*, **2018**, 26, 17849-17858	3.3	10
547	Filamentation of mid-IR pulses in ambient air in the vicinity of molecular resonances. *Optics Letters*, **2018**, 43, 2185-2188	3	16
546	Analytical insights into self-phase modulation: beyond the basic theory. *Optics Express*, **2018**, 26, 17571-17577	3.3	5
545	Quantum stereomagnetometry with a dual-core photonic-crystal fiber. *Applied Physics Letters*, **2018**, 113, 011112	3.4	4
544	Thermodynamic limitations on the temperature sensitivity of cell-membrane ion channels: Trouble with enthalpy uncertainty. *Journal of Applied Physics*, **2018**, 123, 224701	2.5	2
543	Supercontinuum generation in large-mode-area photonic crystal fibers for coherent Raman microspectroscopy **2018**,		2
542	High-order harmonic generation from a solid-surface plasma by relativistic-intensity sub-100-fs mid-infrared pulses. *Optics Letters*, **2018**, 43, 5571-5574	3	12
541	Free-beam spectral self-compression at supercritical peak powers. *Optics Letters*, **2018**, 43, 5693-5696	3	3
540	Ultrafast mid-infrared spectrochronography of dispersion near molecular absorption bands. *Optics Letters*, **2018**, 43, 1327-1330	3	1
539	Wavelength beam combining by spectrally selective polarization transformation. *Journal of the Optical Society of America B: Optical Physics*, **2018**, 35, 2842	1.7	1
538	An ultraslim all-fiber microendoscope for depth-resolved imaging. *Applied Physics Letters*, **2018**, 113, 191102	3.4	6
537	Enhanced-contrast optical readout in ultrafast broadband Raman quantum memories. *Scientific Reports*, **2018**, 8, 13774	4.9	

536	Thermogenetic stimulation of single neocortical pyramidal neurons transfected with TRPV1-L channels. *Neuroscience Letters*, **2018**, 687, 153-157	3.3	5
535	Optical shock wave and photon-number conservation. *Physical Review A*, **2018**, 98,	2.6	8
534	Coherent Raman spectroscopy of solid-state broadband quantum memories. *Journal of Raman Spectroscopy*, **2018**, 49, 1128-1135	2.3	1
533	Picosecond supercontinuum generation in large mode area photonic crystal fibers for coherent anti-Stokes Raman scattering microspectroscopy. *Scientific Reports*, **2018**, 8, 9526	4.9	19
532	Three-dimensional fiber-optic readout of single-neuron-resolved fluorescence in living brain of transgenic mice. *Journal of Biophotonics*, **2017**, 10, 775-779	3.1	6
531	Quantitative cognitive-test characterization of reconnectable implantable fiber-optic neurointerfaces for optogenetic neurostimulation. *Journal of Biophotonics*, **2017**, 10, 1485-1491	3.1	6
530	Laser-induced filaments in the mid-infrared. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2017**, 50, 092001	1.3	18
529	Temporal solitons in air. *Physical Review A*, **2017**, 95,	2.6	13
528	Causality arguments behind closed-form description of air dispersion in the mid-infrared. *Laser Physics Letters*, **2017**, 14, 045401	1.5	
527	Polarization map of correlated sideband generation in vectorial four-wave mixing. *Applied Physics Letters*, **2017**, 110, 181108	3.4	6
526	Power-scalable subcycle pulses from laser filaments. *Scientific Reports*, **2017**, 7, 36263	4.9	8
525	Thermogenetic neurostimulation with single-cell resolution. *Nature Communications*, **2017**, 8, 15362	17.4	42
524	Amplitude concentration in a phase-modulated spectrum due to femtosecond filamentation. *Scientific Reports*, **2017**, 7, 43367	4.9	6
523	Defect guidance in kagome-clad fibers: the role of photonic band gaps and self-similarity of the lattice. *Laser Physics Letters*, **2017**, 14, 015402	1.5	1
522	Depth-resolved subcycle dynamics of photoionization in solids. *Physical Review A*, **2017**, 96,	2.6	4
521	Multibeam synthesis of high-power subcycle field waveforms. *Physical Review A*, **2017**, 96,	2.6	1
520	Long-wavelength infrared solitons in air. *Optics Letters*, **2017**, 42, 3614-3617	3	7
519	The generalized Sellmeier equation for air. *Scientific Reports*, **2017**, 7, 46111	4.9	10

518	Nonlinear optics in the mid-infrared: new morning. *Journal of Physics: Conference Series*, **2017**, 793, 012019	0.3	1
517	Mapping anomalous dispersion of air with ultrashort mid-infrared pulses. *Scientific Reports*, **2017**, 7, 2103	4.9	3
516	Fiber-optic soliton self-compression to subcycle pulse widths in the mid-infrared. *Laser Physics Letters*, **2017**, 14, 125401	1.5	
515	Phase matching as a gate for photon entanglement. *Scientific Reports*, **2017**, 7, 46115	4.9	4
514	Keldysh photoionization theory: through the barriers. *Physics-Uspekhi*, **2017**, 60, 1087-1120	2.8	13
513	Controllable two-color dispersive wave generation in argon-filled hypocycloid-core kagome fiber. *Optics Express*, **2017**, 25, 32972	3.3	11
512	Mapping the electron band structure by intraband high-harmonic generation in solids. *Optica*, **2017**, 4, 516	8.6	82
511	Self-compression of high-peak-power mid-infrared pulses in anomalously dispersive air. *Optica*, **2017**, 4, 1405	8.6	24
510	Keldysh photoionization theory: through the barriers. *Uspekhi Fizicheskikh Nauk*, **2017**, 187, 1169-1204	0.5	2
509	X-SEA-F-SPIDER characterization of over octave spanning pulses in the infrared range. *Optics Express*, **2016**, 24, 12713-29	3.3	14
508	Angle-resolved multioctave supercontinua from mid-infrared laser filaments. *Optics Letters*, **2016**, 41, 3479-82	3	19
507	Solid-State Source of Subcycle Pulses in the Midinfrared. *Physical Review Letters*, **2016**, 117, 043901	7.4	36
506	Strong-Field Photoionization as Excited-State Tunneling. *Physical Review Letters*, **2016**, 116, 123901	7.4	22
505	Keldysh parameter, photoionization adiabaticity, and the tunneling time. *Physical Review A*, **2016**, 94,	2.6	8
504	Multi-millijoule few-cycle mid-infrared pulses through nonlinear self-compression in bulk. *Nature Communications*, **2016**, 7, 12877	17.4	86
503	Optical attosecond pulses and tracking the nonlinear response of bound electrons. *Nature*, **2016**, 530, 66-70	50.4	241
502	High-resolution magnetic field imaging with a nitrogen-vacancy diamond sensor integrated with a photonic-crystal fiber. *Optics Letters*, **2016**, 41, 472-5	3	23
501	Subterawatt few-cycle mid-infrared pulses from a single filament. *Optica*, **2016**, 3, 299	8.6	52

500	The Dawn of Quantum Biophotonics **2016**, 147-176		2
499	Nonlinear dynamics of high-power ultrashort laser pulses: exaflop computations on a laboratory station and subcycle light bullets. *Uspekhi Fizicheskikh Nauk*, **2016**, 186, 957-966	0.5	4
498	Modeling high-peak-power few-cycle field waveform generation by optical parametric amplification in the long-wavelength infrared. *Optics Express*, **2016**, 24, 23207-23220	3.3	6
497	Fiber-optic electron-spin-resonance thermometry of single laser-activated neurons. *Optics Letters*, **2016**, 41, 5563-5566	3	20
496	Tunneling phase time in photoionization: in search of a clock. *Optica*, **2016**, 3, 1201	8.6	2
495	Spatiotemporal modulation instability as off-axis parametric amplification: insights from the phase. *Optics Express*, **2016**, 24, 20716-23	3.3	7
494	A compact laser platform for nonlinear Raman microspectroscopy: multimodality through broad chirp tunability. *Journal of Raman Spectroscopy*, **2016**, 47, 1042-1048	2.3	5
493	Advances in nonlinear optical spectroscopies: a historical perspective of developments and applications presented at ECONOS. *Journal of Raman Spectroscopy*, **2016**, 47, 1111-1123	2.3	3
492	Asymptotically one-dimensional dynamics of high-peak-power ultrashort laser pulses. *Journal of Optics (United Kingdom)*, **2016**, 18, 115501	1.7	6
491	Electron band structure detection by high-order optical harmonic generation in solids. *JETP Letters*, **2016**, 104, 449-452	1.2	4
490	Nonlinear dynamics of high-power ultrashort laser pulses: exaflop computations on a laboratory computer station and subcycle light bullets. *Physics-Uspekhi*, **2016**, 59, 869-877	2.8	19
489	Supercomputations and big-data analysis in strong-field ultrafast optical physics: filamentation of high-peak-power ultrashort laser pulses. *Laser Physics Letters*, **2016**, 13, 065403	1.5	5
488	Octave phase matching for optical parametric amplification of single-cycle pulses in the mid-infrared range. *JETP Letters*, **2016**, 103, 167-170	1.2	6
487	Fiber-optic vectorial magnetic-field gradiometry by a spatiotemporal differential optical detection of magnetic resonance in nitrogen-vacancy centers in diamond. *Optics Letters*, **2016**, 41, 2057-60	3	7
486	Stimulated fluorescence quenching in nitrogen-vacancy centers of diamond: temperature effects. *Optics Letters*, **2016**, 41, 2077-80	3	9
485	Pulse self-compression to single-cycle pulse widths a few decades above the self-focusing threshold. *Physical Review A*, **2016**, 94,	2.6	17
484	Subterawatt femtosecondpulses in themid-infrared: A new spatiotemporal dynamics of high-power electromagnetic fields. *Uspekhi Fizicheskikh Nauk*, **2015**, 185, 97-103	0.5	3
483	Neurophotonics: optical methods to study and control the brain. *Physics-Uspekhi*, **2015**, 58, 345-364	2.8	26

482	Modal analysis of kagome-lattice structures. *Laser Physics Letters*, **2015**, 12, 055102	1.5	3
481	Multioctave, 3-18 fs sub-two-cycle supercontinua from self-compressing, self-focusing soliton transients in a solid. *Optics Letters*, **2015**, 40, 974-7	3	56
480	Mid-infrared-to-mid-ultraviolet supercontinuum enhanced by third-to-fifteenth odd harmonics. *Optics Letters*, **2015**, 40, 2068-71	3	45
479	CEP-stable tunable THz-emission originating from laser-waveform-controlled sub-cycle plasma-electron bursts. *Optics Express*, **2015**, 23, 15278-89	3.3	32
478	New horizons of optics of the midinfrared spectral range. *Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)*, **2015**, 119, 569-576	0.7	1
477	Ultrahigh-contrast imaging by temporally modulated stimulated emission depletion. *Optics Letters*, **2015**, 40, 725-8	3	8
476	Stimulated Raman gas sensing by backward UV lasing from a femtosecond filament. *Optics Letters*, **2015**, 40, 2469-72	3	36
475	Room-temperature magnetic gradiometry with fiber-coupled nitrogen-vacancy centers in diamond. *Optics Letters*, **2015**, 40, 3727-30	3	17
474	Optical phase-space modes, self-focusing, and the wavelength as tunable *Physica Scripta*, **2015**, 90, 128003	2.6	6
473	Fiber-optic control and thermometry of single-cell thermosensation logic. *Scientific Reports*, **2015**, 5, 15737	4.9	33
472	Mid-infrared laser filaments in the atmosphere. *Scientific Reports*, **2015**, 5, 8368	4.9	120
471	Multimodal nonlinear Raman microspectroscopy with ultrashort chirped laser pulses. *JETP Letters*, **2015**, 101, 593-597	1.2	3
470	Subterawatt femtosecond pulses in the mid-infrared range: new spatiotemporal dynamics of high-power electromagnetic fields. *Physics-Uspekhi*, **2015**, 58, 89-94	2.8	16
469	Microwave-induced thermogenetic activation of single cells. *Applied Physics Letters*, **2015**, 106, 163702	3.4	19
468	Pulse-width considerations for nonlinear Raman brain imaging: whither the optimum?. *Laser Physics Letters*, **2015**, 12, 115401	1.5	1
467	A strong-field driver in the single-cycle regime based on self-compression in a kagome fibre. *Nature Communications*, **2015**, 6, 6117	17.4	128
466	Multi-millijoule Few-Optical-Cycle Pulses in Mid-IR: Scaling Power, Energy and Wavelength **2015**,		2
465	250-GW Sub-Three-Cycle Multi-Millijoule Mid-IR Pulses Self-Compressed in a YAG plate **2015**,		2

464	Ultrafast Photonics with Microstructures Fibers. *NATO Science for Peace and Security Series B: Physics and Biophysics*, **2015**, 153-165	0.2	
463	Strong Field Applications of Gigawatt Self-compressed Pulses from a Kagome Fiber. *Springer Proceedings in Physics*, **2015**, 11-15	0.2	
462	Time-domain spectroscopy in the mid-infrared. *Scientific Reports*, **2014**, 4, 6670	4.9	43
461	Electron spin manipulation and readout through an optical fiber. *Scientific Reports*, **2014**, 4, 5362	4.9	40
460	Half-cycle pulses in the mid-infrared from a two-color laser-induced filament. *Applied Physics B: Lasers and Optics*, **2014**, 117, 611-619	1.9	37
459	Quarter-cycle engineering of terahertz field waveforms. *Laser Physics Letters*, **2014**, 11, 085404	1.5	2
458	Quantum and semiclassical physics behind ultrafast optical nonlinearity in the midinfrared: the role of ionization dynamics within the field half cycle. *Physical Review Letters*, **2014**, 113, 043901	7.4	35
457	Scaling laws for laser-induced filamentation. *Physical Review A*, **2014**, 89,	2.6	10
456	Ultrabroadband XFROG of few-cycle mid-infrared pulses by four-wave mixing in a gas. *Journal of the Optical Society of America B: Optical Physics*, **2014**, 31, 1901	1.7	10
455	Pulse-width-tunable 0.7 W mode-locked Cr: forsterite laser. *Optics Letters*, **2014**, 39, 205-8	3	12
454	Post-filament self-trapping of ultrashort laser pulses. *Optics Letters*, **2014**, 39, 4659-62	3	26
453	Strong field applications of Gigawatt self-compressed pulses from a Kagome fiber **2014**,		1
452	Intense Cr:forsterite-laser-based supercontinuum source. *Optics Letters*, **2014**, 39, 5562-5	3	12
451	Field-cycle-resolved photoionization in solids. *Physical Review Letters*, **2014**, 113, 133903	7.4	27
450	Enhanced-locality fiber-optic two-photon-fluorescence live-brain interrogation. *Applied Physics Letters*, **2014**, 104, 083702	3.4	3
449	Frequency-tunable sub-two-cycle 60-MW-peak-power free-space waveforms in the mid-infrared. *Optics Letters*, **2014**, 39, 6430-3	3	32
448	Efficient terahertz wave generation from GaP crystals pumped by chirp-controlled pulses from femtosecond photonic crystal fiber amplifier. *Applied Physics Letters*, **2014**, 104, 031117	3.4	17
447	Subcycle solitonic breathers. *Physical Review A*, **2014**, 90,	2.6	22

446	Subcycle waveform generation by nonrecolliding tunneling electron wave packets. *Physical Review A*, **2014**, 90,	2.6	3
445	Fiber-optic magnetic-field imaging. *Optics Letters*, **2014**, 39, 6954-7	3	27
444	All-fiber ultralow-energy soliton management at 1.55 μm. *Laser Physics Letters*, **2014**, 11, 125801	1.5	4
443	Pulsed cooperative backward emissions from non-degenerate atomic transitions in sodium. *New Journal of Physics*, **2014**, 16, 103017	2.9	9
442	Fiber-optic magnetometry with randomly oriented spins. *Optics Letters*, **2014**, 39, 6755-8	3	17
441	Fiber-based thermometry using optically detected magnetic resonance. *Applied Physics Letters*, **2014**, 105, 261109	3.4	33
440	Strong Field Ionization in a Multi-color Field. *Springer Series in Optical Sciences*, **2013**, 101-119	0.5	
439	Dark-field third-harmonic imaging. *Applied Physics Letters*, **2013**, 103, 093701	3.4	13
438	Photonic-Crystal Fiber Synthesizers of Ultrafast Lightwaves. *NATO Science for Peace and Security Series B: Physics and Biophysics*, **2013**, 455-456	0.2	
437	The phase-controlled Raman effect. *Scientific Reports*, **2013**, 3, 1842	4.9	5
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