Robert Fedosejevs

List of Publications by Year in Descending Order

54 papers	744 citations	15 h-index	25 g-index
73 ext. papers	880 ext. citations	2.9 avg, IF	3.77 L-index

#	Paper	IF	Citations
54	Design and Development of a High-Power Pulse Transmitter for Underground Environmental Perception. *IEEE Transactions on Microwave Theory and Techniques*, **2022**, 1-1	4.1	0
53	Electron Kinetics Induced by Ultrafast Photoexcitation of Warm Dense Matter in a 30-nm-Thick Foil. *Physical Review Letters*, **2021**, 127, 097403	7.4	3
52	Optimal Laguerre-Gaussian modes for high-intensity optical vortices. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2020**, 37, 841-848	1.8	3
51	Off-axis spiral phase mirrors for generating high-intensity optical vortices. *Optics Letters*, **2020**, 45, 2187-2190	3	11
50	The Experimental Albertan Satellite #1 (Ex-Alta 1) Cube-Satellite Mission. *Space Science Reviews*, **2020**, 216, 1	7.5	1
49	Development of an adjustable Kirkpatrick-Baez microscope for laser driven x-ray sources. *Review of Scientific Instruments*, **2019**, 90, 063704	1.7	1
48	Generation of high energy laser-driven electron and proton sources with the 200 TW system VEGA 2 at the Centro de Laseres Pulsados. *High Power Laser Science and Engineering*, **2019**, 7,	4.3	14
47	Spectral calibration of EBT3 and HD-V2 radiochromic film response at high dose using 20 MeV proton beams. *Review of Scientific Instruments*, **2018**, 89, 043511	1.7	12
46	Collisionless shock acceleration of narrow energy spread ion beams from mixed species plasmas using 1 Ħh lasers. *Physical Review Accelerators and Beams*, **2018**, 21,	1.8	22
45	Observation of long-range dipole-dipole interactions in hyperbolic metamaterials. *Science Advances* , **2018**, 4, eaar5278	14.3	34
44	Postfabrication Phase Error Correction of Silicon Photonic Circuits by Single Femtosecond Laser Pulses. *Journal of Lightwave Technology*, **2017**, 35, 588-595	4	6
43	Reduced Ensemble Plasmon Line Widths and Enhanced Two-Photon Luminescence in Anodically Formed High Surface Area Au-TiO 3D Nanocomposites. *ACS Applied Materials & Interfaces*, **2017**, 9, 740-749	9.5	17
42	Measurements of ionization states in warm dense aluminum with betatron radiation. *Physical Review E*, **2017**, 95, 053208	2.4	15
41	Collimated Propagation of Fast Electron Beams Accelerated by High-Contrast Laser Pulses in Highly Resistive Shocked Carbon. *Physical Review Letters*, **2017**, 118, 205001	7.4	9
40	Guest Editorial Special Issue on Invited and Tutorial Papers From ICOPS 2016. *IEEE Transactions on Plasma Science*, **2017**, 45, 525-526	1.3	
39	Characterisation and Modelling of a Passively Q-Switched Yb:CaF2 Laser. *IEEE Journal of Quantum Electronics*, **2017**, 1-1	2	1
38	Mode conversion efficiency to Laguerre-Gaussian OAM modes using spiral phase optics. *Optics Express*, **2017**, 25, 17382-17392	3.3	23

37	Permanent Phase Correction in a Polarization Diversity Si PIC by Femtosecond Laser Pulses. *IEEE Photonics Technology Letters*, **2015**, 27, 1880-1883	2.2	3
36	Characterization of laser wakefield generated betatron X-ray radiation using grazing incidence mirror reflection. *European Physical Journal D*, **2014**, 68, 1	1.3	4
35	Single-shot ablation threshold of chromium using UV femtosecond laser pulses. *Applied Physics A: Materials Science and Processing*, **2014**, 117, 1473-1478	2.6	2
34	Detection of buried layers in silicon devices using LIBS during hole drilling with femtosecond laser pulses. *Applied Physics A: Materials Science and Processing*, **2013**, 111, 791-798	2.6	12
33	Femtosecond laser plasma plume characteristics in the nanojoule ablation regime. *Journal of Applied Physics*, **2013**, 113, 183101	2.5	7
32	Generation of 500 MeV□ GeV energy electrons from laser wakefield acceleration via ionization induced injection using CO2 mixed in He. *Applied Physics Letters*, **2013**, 102, 134102	3.4	12
31	Kirkpatrick-Baez microscope for hard X-ray imaging of fast ignition experiments. *Review of Scientific Instruments*, **2013**, 84, 023704	1.7	7
30	Laser wakefield generated X-ray probe for femtosecond time-resolved measurements of ionization states of warm dense aluminum. *Review of Scientific Instruments*, **2013**, 84, 123106	1.7	20
29	Quasimonoenergetic electron beams from laser wakefield acceleration in pure nitrogen. *Applied Physics Letters*, **2012**, 100, 074101	3.4	34
28	Single-shot divergence measurements of a laser-generated relativistic electron beam. *Physics of Plasmas*, **2010**, 17, 113106	2.1	11
27	Experiment and Numerical Modeling of High-Power Passively Q-Switched Ytterbium-Doped Double-Clad Fiber Lasers. *IEEE Journal of Quantum Electronics*, **2010**, 46, 68-75	2	12
26	Laser-accelerated proton conversion efficiency thickness scaling. *Physics of Plasmas*, **2009**, 16, 123108	2.1	13
25	Experimental and theoretical study of absorption of femtosecond laser pulses in interaction with solid copper targets. *Physical Review B*, **2009**, 79,	3.3	56
24	Quasi-monoenergetic electron beams generated from 7 TW laser pulses in N2 and He gas targets. *Laser and Particle Beams*, **2008**, 26, 147-155	0.9	46
23	Development of laser-induced breakdown spectroscopy for microanalysis applications. *Laser and Particle Beams*, **2008**, 26, 95-104	0.9	27
22	A continuous kilohertz Cu K□ource produced by submillijoule femtosecond laser pulses for phase contrast imaging. *Applied Physics Letters*, **2008**, 93, 261501	3.4	17
21	Laser-triggered quasi-monoenergetic ion beams at a moderate intensity and pulse duration. *Laser Physics*, **2008**, 18, 1025-1030	1.2	3
20	Passively Q -switched Ytterbium-Doped Double-Clad Fiber Laser With a Cr^{4+}:YAG Saturable Absorber. *IEEE Photonics Technology Letters*, **2007**, 19, 1979-1981	2.2	47

19	Quantum dot saturable absorber for passive mode locking of Nd:YVO4 lasers at 1064 nm. *Applied Physics B: Lasers and Optics*, **2007**, 87, 671-675	1.9	10
18	Two photon absorption coefficients and processing parameters for photoresists. *Microsystem Technologies*, **2007**, 14, 59-67	1.7	3
17	Energetic electrons produced in the interaction of a kiloHertz femtosecond laser with tantalum targets. *Journal of Modern Optics*, **2007**, 54, 2585-2593	1.1	2
16	Characterization of Glancing Angle Deposition Thin Film Optical Filters with Engineered Index Profiles. *Materials Research Society Symposia Proceedings*, **2006**, 928, 1		
15	Spatial and Temporal Evolution of Laser-Generated Microplasmas. *IEEE Transactions on Plasma Science*, **2006**, 34, 2594-2599	1.3	3
14	Distinctive features of photoionized plasma from short x-ray-pulse interaction with gaseous medium. *Physics of Plasmas*, **2006**, 13, 013101	2.1	9
13	Electron radiography using hot electron jets from sub-millijoule femtosecond laser pulses. *Applied Physics B: Lasers and Optics*, **2006**, 83, 521-525	1.9	7
12	Images of femtosecond laser plasma plume expansion into background air. *IEEE Transactions on Plasma Science*, **2005**, 33, 482-483	1.3	9
11	Single and multiple shot near-infrared femtosecond laser pulse ablation thresholds of copper. *Applied Physics A: Materials Science and Processing*, **2005**, 81, 729-735	2.6	81
10	Optical properties of porous nanostructured Y2O3:Eu thin films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2005**, 23, 856-861	2.9	23
9	Influence of rapid thermal annealing on self-assembled quantum-dot superluminescent diodes. *Materials Research Society Symposia Proceedings*, **2005**, 866, 132		
8	Pressure dependence of emission intensity in femtosecond laser-induced breakdown spectroscopy. *Journal of Analytical Atomic Spectrometry*, **2004**, 19, 1295-1301	3.7	51
7	High-efficiency optical compression of Ti:sapphire laser pulses at 800 nm using a silver-coated hollow fiber. *Applied Physics B: Lasers and Optics*, **2003**, 76, 345-350	1.9	3
6	Debris reduction for copper and diamond-like carbon thin films produced by magnetically guided pulsed laser deposition. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2002**, 20, 744-747	2.9	14
5	Ablative generation of surface acoustic waves in aluminum using ultraviolet laser pulses. *Journal of Applied Physics*, **2002**, 92, 564-571	2.5	2
4	Diamond-like-carbon films produced by magnetically guided pulsed laser deposition. *Applied Physics A: Materials Science and Processing*, **2001**, 73, 531-534	2.6	13
3	UV laser excited surface acoustic waves - quantitative measurements and comparison with theory **2001**,		1
2	Laser micromachining for microfluidic, microelectronic and MEMS applications		4

List of Publications