Elena Cherepetskaya

List of Publications by Year
in descending order

35	288	933447 10	940533 16
papers	citations	h-index	g-index

35	35	35	224
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-dimensional hybrid optoacoustic imaging of the laser-induced plasma and deposited energy density under optical breakdown in water. Applied Physics Letters, 2021, 118, .	3.3	2
2	Toroidally focused sensor array for real-time laser-ultrasonic imaging: The first experimental study. Photoacoustics, 2020, 17, 100160.	7.8	6
3	Thermal Infrared Radiation and Laser Ultrasound for Deformation and Water Saturation Effects Testing in Limestone. Remote Sensing, 2020, 12, 4036.	4.0	5
4	A comprehensive approach to the characterization of the deposited energy density during laserâ€“matter interactions in liquids and solids. Measurement Science and Technology, 2020, 31, 085204.	2.6	6
5	Photoacoustic energy conversion efficiency under femtosecond filamentation in water: dependence on temperature and filamentation regime.. , 2020, , .		0
6	Model-based measurement of internal geometry of solid parts with sub-PSF accuracy using laser-ultrasonic imaging. NDT and E International, 2019, 105, 56-63.	3.7	5
7	Photoacoustic and optical imaging of the femtosecond filament in water. , 2019, , .		4
8	Broadband immersion laser ultrasonic tomography of graphite-epoxy composite. , 2019, , .		0
9	A method of laser ultrasound tomography for solid surfaces mapping. MATEC Web of Conferences, 2018, 145, 05009.	0.2	2
10	Semi-analytical modelling of the forward and inverse problems in photoacoustic tomography of a femtosecond laser filament in water accounting for refraction and acoustic attenuation. Journal of Physics: Conference Series, 2018, 1141, 012060.	0.4	3
11	The Progress in Photoacoustic and Laser Ultrasonic Tomographic Imaging for Biomedicine and Industry: A Review. Applied Sciences (Switzerland), 2018, 8, 1931.	2.5	38
12	Laser-induced ultrasonic imaging for measurements of solid surfaces in optically opaque liquids [Invited]. Applied Optics, 2018, 57, C70.	1.8	7
13	Real-Time Laser Ultrasound Tomography for Profilometry of Solids. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2018, 73, 75-82.	0.4	1
14	Improvement of Image Spatial Resolution in Optoacoustic Tomography with the Use of a Confocal Array. Acoustical Physics, 2018, 64, 77-82.	1.0	7
15	Two-dimensional photoacoustic imaging of femtosecond filament in water. Laser Physics Letters, 2018, 15, 075403.	1.4	10
16	On the use of an optoacoustic and laser ultrasonic imaging system for assessing peripheral intravenous access. Photoacoustics, 2017, 5, 10-16.	7.8	21
17	Determination of uniaxial stresses in steel structures by the laser-ultrasonic method. Journal of Applied Mechanics and Technical Physics, 2017, 58, 503-510.	0.5	12
18	Transfer efficiency of angular momentum in sum-frequency generation and control of its spin and orbital parts by varying polarization and frequency of fundamental beams. Laser Physics Letters, 2017, 14, 085401.	1.4	8

#	Article	IF	Citations
19	Second harmonic generation in isotropic chiral medium with nonlocality of nonlinear optical response by heterogeneously polarized pulsed beams. Optics Express, 2017, 25, 6253.	3.4	18
20	Structure of polarization singularities of a light beam at triple frequency generated in isotropic medium by singularly polarized beam. Optics Express, 2017, 25, 25416.	3.4	4
21	Laser-ultrasonic imaging for evaluation of temperature fields in paratellurite optical crystal. Proceedings of Meetings on Acoustics, 2017, , .	0.3	2
22	Analysis of structure and elastic properties of geomaterials using contact broadband ultrasonic structural spectroscopy. Gornyi Zhurnal, 2017, , 29-32.	0.1	2
23	Laser optoacoustic tomography for the study of femtosecond laser filaments in air. Laser Physics Letters, 2016, 13, 085401.	1.4	16
24	Laser optoacoustic diagnostics of femtosecond filaments in air using wideband piezoelectric transducers. Laser Physics Letters, 2016, 13, 095401.	1.4	20
25	Nonlinear reflection of a nanosecond laser pulse from thin aluminum film in the temperature range 2â€“14 kK. Laser Physics Letters, 2015, 12, 115403.	1.4	3
26	Emission of terahertz pulses from vanadium dioxide films undergoing metalâ€“insulator phase transition. Optica, 2015, 2, 790.	9.3	22
27	Experimental study of the critical point region of aluminum under the action of the powerful nanosecond laser pulse. Laser Physics Letters, 2015, 12, 125401.	1.4	0
28	Laser optoacoustic method for quantitative nondestructive evaluation of the subsurface damage depth in ground silicon wafers. Laser Physics, 2014, 24, 086003.	1.2	17
29	Ultrashort elliptically polarized laser pulse interaction with helical photonic metamaterial. Optical Materials Express, 2014, 4, 2090.	3.0	9
30	Measuring the dependence of the local Youngâ€™s modulus on the porosity of isotropic composite materials by a pulsed acoustic method using a laser source of ultrasound. Journal of Applied Mechanics and Technical Physics, 2013, 54, 500-507.	0.5	19
31	Thermal nonlinearity effect used in laser excitation of ultrasonic signals in geomaterials. Journal of Applied Mechanics and Technical Physics, 2005, 46, 299-305.	0.5	1
32	Ultrasonic laser spectroscopy of mechanic-acoustic nonlinearity of cracked rocks. Journal of Applied Mechanics and Technical Physics, 2005, 46, 452-457.	0.5	9
33	Ultrasonic echo sounding by thermal optical sources of longitudal waves. Journal of Mining Science, 2004, 40, 231-235.	0.6	2
34	Theoretical Estimate for the Parameters of Ultrasonic Impulses Excited in Geomaterials by Laser Emission. Journal of Mining Science, 2003, 39, 323-330.	0.6	1
35	Qualitative Estimation of Mineral Grain Sizes by Ultrasonic Laser Spectroscopy. Journal of Mining Science, 2003, 39, 419-424.	0.6	6