Jian Wu

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/688355/publications.pdf

Version: 2024-02-01

85 papers	1,988 citations	304743 22 h-index	276875 41 g-index
91 all docs	91 docs citations	91 times ranked	2205 citing authors

#	Article	IF	Citations
1	Detonation of a nitromethane-based energetic mixture driven by electrical wire explosion. Journal Physics D: Applied Physics, 2022, 55, 05LT01.	2.8	16
2	Current distribution at underwater electrical explosion of wires with different diameter connected in parallel. Journal of Applied Physics, 2022, 131, 063301.	2.5	0
3	Experimental study of the dynamics of planar wire array Z-pinch preconditioned by a controlled prepulse current. Physics of Plasmas, 2022, 29, .	1.9	3
4	Quantitative analysis of chlorine in cement pastes based on collinear dual-pulse laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 191, 106392.	2.9	10
5	Polarization Aberrations in High-Numerical-Aperture Lens Systems and Their Effects on Vectorial-Information Sensing. Remote Sensing, 2022, 14, 1932.	4.0	12
6	Parametric study of spot size and multi-elemental quantification of geomaterials under complex matrix conditions using fiber-optic laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 192, 106428.	2.9	6
7	Measurement of dynamic atomic polarizabilities of Al at 19 wavelengths from 420â€…nm to 680â€…nm in electrical exploding wire experiments. Optics Express, 2022, 30, 26102.	3.4	1
8	Permanent P/N-rich polymeric coating capable of extinguishing flame on cotton fabrics. Progress in Organic Coatings, 2022, 171, 107004.	3.9	5
9	Large Deformation and Instability of Soft Hollow Cylinder With Surface Effects. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	5
10	Ablated precursor plasma and evolution of magnetic field of exploding cylindrical thin liner. Plasma Physics and Controlled Fusion, 2021, 63, 035029.	2.1	9
11	Electrical wire explosion as a source of underwater shock waves. Journal Physics D: Applied Physics, 2021, 54, 403001.	2.8	24
12	Measurement of magnetic field distribution produced by high-current pulse using Zeeman splitting of Na emission distributed by laser ablation. Review of Scientific Instruments, 2021, 92, 093502.	1.3	5
13	Comparative study of the influence of imaging resolution on linear retardance parameters derived from the Mueller matrix. Biomedical Optics Express, 2021, 12, 211.	2.9	37
14	Development Of Dual-Pulse Laser Induced Breakdown Spectroscopy Systems In Nuclear Power Plant Applications. , 2021, , .		0
15	Progress of laser-induced breakdown spectroscopy in nuclear industry applications. Journal Physics D: Applied Physics, 2020, 53, 023001.	2.8	39
16	Measurement of trace chromium on structural steel surface from a nuclear power plant using dual-pulse fiber-optic laser-induced breakdown spectroscopy. Applied Surface Science, 2020, 533, 147497.	6.1	16
17	The effect of inter-pulse delay on the spectral emission and expansion dynamics of plasma in dual-pulse fiber-optic laser-induced breakdown spectroscopy. Physics of Plasmas, 2020, 27, 083516.	1.9	14
18	Effect of the prepulse current with an adjustable time-delay on the implosion dynamics of two-wire Z-pinch. Plasma Physics and Controlled Fusion, 2020, 62, 075010.	2.1	10

#	Article	IF	Citations
19	Plasma formation and ablation dynamics of stainless steel cylindrical liner. Physics of Plasmas, 2020, 27, .	1.9	10
20	Effects of circuit inductance on electrical and shock wave characteristics at underwater wire explosion. Journal Physics D: Applied Physics, 2020, 53, 195502.	2.8	11
21	Implosion dynamics and radiation characteristics of preconditioned hybrid X-pinch driven by double pulse current. Physics of Plasmas, 2020, 27, .	1.9	4
22	Spatial restriction on properties of nanosecond pulsed laser ablation of aluminum in water. Journal Physics D: Applied Physics, 2020, 53, 475204.	2.8	4
23	A gas-insulated mega-ampere-class linear transformer driver with pluggable bricks. Review of Scientific Instruments, 2020, 91, 123303.	1.3	7
24	Bio-inspired tunable anisotropic thermal conductivities investigation of periodic lattice composite via external strains. AIP Advances, 2019, 9, .	1.3	4
25	Influence of Partial Reheating on Aluminum Nanoparticles From Electrical Exploding Wires. IEEE Nanotechnology Magazine, 2019, 18, 1103-1109.	2.0	5
26	Multilayer weak shocks generated by restrike during underwater electrical explosion of Cu wires. Applied Physics Letters, 2019, 115, .	3.3	17
27	Frequency compensation for resistive voltage divider using specially shaped inner conductor. Review of Scientific Instruments, 2019, 90, .	1.3	7
28	Numerical investigation of shock wave characteristics at microsecond underwater electrical explosion of Cu wires. Journal Physics D: Applied Physics, 2019, 52, 374002.	2.8	12
29	A method for ultrasound probe calibration based on arbitrary wire phantom. Cogent Engineering, 2019, 6, .	2.2	12
30	Climbing-inspired twining electrodes using shape memory for peripheral nerve stimulation and recording. Science Advances, 2019, 5, eaaw1066.	10.3	180
31	Quantitative Analysis of 4 Ã— 4 Mueller Matrix Transformation Parameters for Biomedical Imaging. Photonics, 2019, 6, 34.	2.0	28
32	Comparisons of laser-produced plasma in atmosphere between fiber-delivery and direct-focusing laser pulse. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 155, 12-23.	2.9	18
33	Researches on preconditioned wire array Z pinches in Xiâ€™an Jiaotong University. Matter and Radiation at Extremes, 2019, 4, .	3.9	16
34	Discharge Modes of Electrical Explosion of Aluminum Wires in Argon. IEEE Transactions on Plasma Science, 2019, 47, 1933-1938.	1.3	1
35	Tunable Contact of Epidermal Electronics With Skin Based on Ionic Polymerâ€“Metal Composite Material. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	2.2	2
36	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. Nature Biomedical Engineering, 2019, 3, 194-205.	22.5	253

#	Article	IF	Citations
37	Spatial confinement effects of bubbles produced by laser ablation in liquids. AIP Advances, 2019, 9, .	1.3	8
38	Tailoring porous media for controllable capillary flow. Journal of Colloid and Interface Science, 2019, 539, 379-387.	9.4	20
39	Plasma characteristics and element analysis of steels from a nuclear power plant based on fiber-optic laser-induced breakdown spectroscopy. Journal Physics D: Applied Physics, 2019, 52, 014006.	2.8	18
40	Imaging of Discharge Plasma Channel Evolution Process of Microsecond Wire Explosion in Air. IEEE Transactions on Plasma Science, 2018, 46, 3473-3477.	1.3	1
41	Explosion symmetry improvement of polyimide-coated tungsten wire in vacuum on negative discharge facility. Physics of Plasmas, 2018, 25, 012705.	1.9	2
42	Comparative study of the imaging contrasts of Mueller matrix derived parameters between transmission and backscattering polarimetry. Biomedical Optics Express, 2018, 9, 4413.	2.9	53
43	Preconditioned wire array Z-pinches driven by a double pulse current generator. Plasma Physics and Controlled Fusion, 2018, 60, 075014.	2.1	18
44	Study of density distribution of electrical exploding tungsten wire in air. Physics of Plasmas, 2018, 25, 072709.	1.9	12
45	Parametric study of fiber-optic laser-induced breakdown spectroscopy for elemental analysis of Z3CN20-09M steel from nuclear power plants. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 149, 48-56.	2.9	27
46	Experimental verification of the vaporization's contribution to the shock waves generated by underwater electrical wire explosion under micro-second timescale pulsed discharge. Physics of Plasmas, 2017, 24, .	1.9	25
47	Spatial confinement in laser-induced breakdown spectroscopy. Journal Physics D: Applied Physics, 2017, 50, 015203.	2.8	18
48	Calculation of thermodynamic properties and transport coefficients of C5F10O-CO2 thermal plasmas. Journal of Applied Physics, 2017, 122, .	2.5	35
49	Review of effects of dielectric coatings on electrical exploding wires andZpinches. Journal Physics D: Applied Physics, 2017, 50, 403002.	2.8	30
50	Calculations of total electron-impact ionization cross sections for Fluoroketone C₅F₁₀O and Fluoronitrile C₄F₇N using modified Deutschâ€“MÃrk formula. Journal Physics D: Applied Physics, 2017, 50, 445206.	2.8	27
51	Investigations on stratification structure parameters formed from electrical exploding wires in vacuum. Physics of Plasmas, 2017, 24, .	1.9	14
52	Numerical simulation of the initial plasma formation and current transfer in single-wire electrical explosion in vacuum. Chinese Physics B, 2017, 26, 075204.	1.4	3
53	The effect of target materials on colliding laser-produced plasmas. Journal of Applied Physics, 2016, 119, .	2.5	13
54	Laser-induced plasmas in air studied using two-color interferometry. Physics of Plasmas, 2016, 23, .	1.9	10

#	Article	IF	Citations
55	The pore-load modulus of ordered nanoporous materials with surface effects. AIP Advances, 2016, 6, 035324.	1.3	12
56	Atomization and merging of two Al and W wires driven by a 1â€‰kA, 10â€‰ns current pulse. Physics of Plasmas, 2016, 23, .	1.9	17
57	Study of the pitting effects during the pre-ignition plasmaâ€“propellant interaction process. Journal Physics D: Applied Physics, 2016, 49, 075201.	2.8	11
58	Study of a 2-D Time-Dependent Capillary Discharge Model. IEEE Transactions on Plasma Science, 2016, 44, 715-721.	1.3	7
59	Study of the shock waves characteristics generated by underwater electrical wire explosion. Journal of Applied Physics, 2015, 118, .	2.5	45
60	Effects of load voltage on voltage breakdown modes of electrical exploding aluminum wires in air. Physics of Plasmas, 2015, 22, .	1.9	9
61	The equation of state and ionization equilibrium of dense aluminum plasma with conductivity verification. Physics of Plasmas, 2015, 22, .	1.9	21
62	Experimental investigation on the energy deposition and expansion rate under the electrical explosion of aluminum wire in vacuum. Journal of Applied Physics, 2015, 118, .	2.5	14
63	Experimental study of the behavior of two laser produced plasmas in air. Physics of Plasmas, 2015, 22, .	1.9	19
64	Experimental Study of the Laser-Triggered Discharge for the Application in a Gap Switch. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 460-464.	2.5	4
65	Influence of insulating coating on aluminum wire explosions. Physics of Plasmas, 2014, 21, .	1.9	56
66	Transforming dielectric coated tungsten and platinum wires to gaseous state using negative nanosecond-pulsed-current in vacuum. Physics of Plasmas, 2014, 21, .	1.9	24
67	The calculation of electron chemical potential and ion charge state and their influence on plasma conductivity in electrical explosion of metal wire. Physics of Plasmas, 2014, 21, 032702.	1.9	10
68	Investigations of Plasma Dynamics Within and After Laser Pulse Using Optical Streak Camera. IEEE Transactions on Plasma Science, 2014, 42, 2586-2587.	1.3	1
69	Interferometric and schlieren characterization of the plasmas and shock wave dynamics during laser-triggered discharge in atmospheric air. Physics of Plasmas, 2014, 21, .	1.9	20
70	A high-density, high-channel count, multiplexed Î¼ECoG array for auditory-cortex recordings. Journal of Neurophysiology, 2014, 112, 1566-1583.	1.8	90
71	Study of nanosecond laser-produced plasmas in atmosphere by spatially resolved optical emission spectroscopy. Journal of Applied Physics, 2013, 114, 113304.	2.5	15
72	Understanding plume splitting of laser ablated plasma: A view from ion distribution dynamics. Physics of Plasmas, 2013, 20, .	1.9	14

#	Article	IF	Citations
73	Comparison of nanosecond laser produced brass plasmas under low and moderate pressure air. Journal Physics D: Applied Physics, 2013, 46, 475207.	2.8	8
74	Analysis of the insulation characteristics of CF₃I mixtures with CF₄, CO₂, N₂, O₂and air. Journal Physics D: Applied Physics, 2013, 46, 345203.	2.8	28
75	Estimations of Mo X-pinch plasma parameters on QiangGuang-1 facility by L-shell spectral analyses. Physics of Plasmas, 2013, 20, 082706.	1.9	8
76	The Influence of spot size on the expansion dynamics of nanosecond-laser-produced copper plasmas in atmosphere. Journal of Applied Physics, 2013, 113, .	2.5	92
77	Infrared nanosecond laser-metal ablation in atmosphere: Initial plasma during laser pulse and further expansion. Applied Physics Letters, 2013, 102, .	3.3	37
78	Mechanics of Epidermal Electronics. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	161
79	Investigation of the Resistance and Inductance of Planar Wire Array Z-Pinch at the Qiangguang Accelerator. Plasma Science and Technology, 2012, 14, 842-846.	1.5	6
80	Mechanics of reversible adhesion. Soft Matter, 2011, 7, 8657.	2.7	47
81	Aluminum and tungsten X-pinch experiments on 100 kA, 100 ns linear transformer driver stage. Physics of Plasmas, 2011, 18, .	1.9	12
82	X-Pinch Experiments on 1-MA â€œQiangGuang-1â€•Facility. IEEE Transactions on Plasma Science, 2010, 38, 639-645.	1.3	14
83	Mode Analysis of High-Power Microwave Generation in the Inward-Emitting Coaxial Vircator Based on Computer Simulation. IEEE Transactions on Plasma Science, 2009, 37, 298-303.	1.3	11
84	CONTINUUM MODELING OF INTERFACES IN POLYMER MATRIX COMPOSITES REINFORCED BY CARBON NANOTUBES. Nano, 2007, 02, 139-148.	1.0	25
85	Effect of shock wave formation on propellant ignition in capillary discharge. Plasma Science and Technology, 0, , .	1.5	0