Vladimir Ivanov

List of Publications by Citations

38 papers	419 citations	13 h-index	18 g-index
39 ext. papers	464 ext. citations	2.5 avg, IF	3.02 L-index

#	Paper	IF	Citations
38	Dynamics of mass transport and magnetic fields in low-wire-number-array Z pinches. *Physical Review Letters*, **2006**, 97, 125001	7.4	38
37	Amplified spontaneous emission in a Ti:sapphire regenerative amplifier. *Applied Optics*, **2003**, 42, 7231-4	1.7	31
36	Implosion dynamics and x-ray generation in small-diameter wire-array Z pinches. *Physical Review E*, **2009**, 79, 056404	2.4	25
35	Mitigation of the plasma-implosion inhomogeneity in starlike wire-array Z pinches. *Physical Review Letters*, **2008**, 100, 025004	7.4	25
34	Development of the 50 TW laser for joint experiments with 1 MA z-pinches. *Journal of Physics: Conference Series*, **2010**, 244, 032013	0.3	21
33	Study of the internal structure and small-scale instabilities in the dense Z pinch. *Physical Review Letters*, **2011**, 107, 165002	7.4	20
32	Investigation of regimes of wire array implosion on the 1MA Zebra accelerator. *Physics of Plasmas*, **2006**, 13, 012704	2.1	20
31	Effect of current prepulse on wire array initiation on the 1-MA ZEBRA accelerator. *Physics of Plasmas*, **2007**, 14, 052704	2.1	20
30	Investigation of plasma instabilities in the stagnated Z pinch. *Physical Review E*, **2012**, 86, 046403	2.4	16
29	Four-color laser diagnostics for Z-pinch and laser-produced plasma. *Applied Optics*, **2016**, 55, 498-501	0.2	15
28	. *IEEE Transactions on Plasma Science*, **2008**, 36, 62-69	1.3	15
27	Experimental Study of the Dynamics of Large- and Small-Scale Structures in the Plasma Column of Wire Array Z-Pinches. *IEEE Transactions on Plasma Science*, **2007**, 35, 1170-1177	1.3	14
26	Generation of disc-like plasma from laser-matter interaction in the presence of a strong external magnetic field. *Plasma Physics and Controlled Fusion*, **2017**, 59, 085008	2	13
25	Development of UV Laser Probing Diagnostics for 1-MA Z-Pinches. *IEEE Transactions on Plasma Science*, **2010**, 38, 574-580	1.3	13
24	Study of transparent and nontransparent regimes of implosion in star wire arrays. *Physics of Plasmas*, **2010**, 17, 102702	2.1	11
23	UV Laser-Probing Diagnostics for the Dense Z Pinch. *IEEE Transactions on Plasma Science*, **2014**, 42, 1153-1162	1.3	10
22	Study of micro-pinches in wire-array Z pinches. *Physics of Plasmas*, **2013**, 20, 112703	2.1	10

21	Current redistribution and generation of kinetic energy in the stagnated Z pinch. *Physical Review E*, **2013**, 88, 013108	2.4	10
20	Study of laser produced plasma in a longitudinal magnetic field. *Physics of Plasmas*, **2019**, 26, 062707	2.1	9
19	Fountain effect of laser-driven relativistic electrons inside a solid dielectric. *Applied Physics Letters*, **2011**, 99, 131501	3.4	9
18	Significant change in threshold for plasma formation and evolution with small variation in copper alloys driven by a mega-ampere current pulse. *Physics of Plasmas*, **2019**, 26, 042708	2.1	8
17	Laboratory Simulation of Magnetospheric Plasma Shocks. *Astrophysics and Space Science*, **2005**, 298, 299-303	1.6	8
16	Measurement of the ionization state and electron temperature of plasma during the ablation stage of a wire-array Z pinch using absorption spectroscopy. *Physical Review Letters*, **2011**, 106, 225005	7.4	7
15	Study of magnetic fields and current in the Z pinch at stagnation. *Physics of Plasmas*, **2015**, 22, 092710	2.1	6
14	Modeling magnetic confinement of laser-generated plasma in cylindrical geometry leading to disk-shaped structures. *Physics of Plasmas*, **2020**, 27, 022116	2.1	6
13	Experimental platform for investigations of high-intensity laser plasma interactions in the magnetic field of a pulsed power generator. *Review of Scientific Instruments*, **2018**, 89, 033504	1.7	6
12	High-Resolution UV Laser Diagnostics on the 1-MA Zebra Generator. *IEEE Transactions on Plasma Science*, **2012**, 40, 3378-3383	1.3	6
11	Observation of impact of eddy current on laser targets in a strong fast rising magnetic field. *Physics of Plasmas*, **2017**, 24, 112707	2.1	4
10	Study of the precursor and non-precursor implosion regimes in wire array Z-pinches. *Physics of Plasmas*, **2012**, 19, 092704	2.1	4
9	Implosion Dynamics in Conical Wire Array Z-pinches. *AIP Conference Proceedings*, **2006**,	0	4
8	Investigation of wire-array Z-pinches by laser probing diagnostics. *Matter and Radiation at Extremes*, **2019**, 4, 017401	4.7	3
7	Study of laser-driven magnetic fields with a continuous wave Faraday rotation diagnostic. *Physics of Plasmas*, **2020**, 27, 033102	2.1	3
6	Development of broadband x-ray radiography for diagnosing magnetically driven cylindrically compressed matter. *Physics of Plasmas*, **2019**, 26, 083104	2.1	3
5	Study of ablation and implosion stages in wire arrays using coupled ultraviolet and X-ray probing diagnostics. *Physics of Plasmas*, **2015**, 22, 112702	2.1	3
4	Generation of strong magnetic fields for magnetized plasma experiments at the 1-MA pulsed power machine. *Matter and Radiation at Extremes*, **2021**, 6, 046901	4.7	2

3	Note: Infrared laser diagnostics for deuterium gas puff Z pinches. *Review of Scientific Instruments*, **2017**, 88, 076111	1.7	1
2	Study of Implosion and Precursor Dynamics and Collapse in Wire Arrays With End-On Laser Diagnostics. *IEEE Transactions on Plasma Science*, **2018**, 46, 3789-3793	1.3	0
1	Development and integration of photonic Doppler velocimetry as a diagnostic for radiation driven experiments on the Z-machine.. *Review of Scientific Instruments*, **2022**, 93, 043502	1.7	0