

# Vladimir Ivanov

## List of Publications by Year in descending order

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39  
papers

502  
citations

623734

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752698

20  
g-index

39  
all docs

39  
docs citations

39  
times ranked

337  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics of Mass Transport and Magnetic Fields in Low-Wire-Number-Array Z-Pinches. Physical Review Letters, 2006, 97, 125001.	7.8	39
2	Amplified spontaneous emission in a Ti:sapphire regenerative amplifier. Applied Optics, 2003, 42, 7231.	2.1	37
3	Mitigation of the Plasma-Implosion Inhomogeneity in Starlike Wire-Array $Z$ Pinches. Physical Review Letters, 2008, 100, 025004.	7.8	28
4	Implosion dynamics and x-ray generation in small-diameter wire-array $Z$ pinches. Physical Review E, 2009, 79, 056404.	2.1	28
5	A Zebra Experiment to Study Plasma Formation by Megagauss Fields. IEEE Transactions on Plasma Science, 2008, 36, 62-69.	1.3	22
6	Study of the Internal Structure and Small-Scale Instabilities in the Dense $Z$ Pinch. Physical Review Letters, 2011, 107, 165002.	7.8	22
7	Investigation of regimes of wire array implosion on the 1MA Zebra accelerator. Physics of Plasmas, 2006, 13, 012704.	1.9	21
8	Development of the 50 TW laser for joint experiments with 1 MA z-pinches. Journal of Physics: Conference Series, 2010, 244, 032013.	0.4	21
9	Effect of current prepulse on wire array initiation on the 1-MA ZEBRA accelerator. Physics of Plasmas, 2007, 14, 052704.	1.9	20
10	Four-color laser diagnostics for Z-pinch and laser-produced plasma. Applied Optics, 2016, 55, 498.	2.1	19
11	Investigation of plasma instabilities in the stagnated $Z$ pinch. Physical Review E, 2012, 86, 046403.	2.1	18
12	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.	2.1	17
13	Development of UV Laser Probing Diagnostics for 1-MA Z-Pinches. IEEE Transactions on Plasma Science, 2010, 38, 574-580.	1.3	15
14	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
15	Study of magnetic fields and current in the Z pinch at stagnation. Physics of Plasmas, 2015, 22, .	1.9	13
16	UV Laser-Probing Diagnostics for the Dense Z Pinch. IEEE Transactions on Plasma Science, 2014, 42, 1153-1162.	1.3	12
17	Study of laser produced plasma in a longitudinal magnetic field. Physics of Plasmas, 2019, 26, .	1.9	12
18	Generation of strong magnetic fields for magnetized plasma experiments at the 1-MA pulsed power machine. Matter and Radiation at Extremes, 2021, 6, .	3.9	12

#	ARTICLE	IF	CITATIONS
19	Study of transparent and nontransparent regimes of implosion in star wire arrays. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	11
20	Study of micro-pinchs in wire-array Z pinchs. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	11
21	Current redistribution and generation of kinetic energy in the stagnated $Z$ pinch. <i>Physical Review E</i> , 2013, 88, 013108.	2.1	11
22	Significant change in threshold for plasma formation and evolution with small variation in copper alloys driven by a mega-ampere current pulse. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	11
23	Fountain effect of laser-driven relativistic electrons inside a solid dielectric. <i>Applied Physics Letters</i> , 2011, 99, 131501.	3.3	10
24	Laboratory Simulation of Magnetospheric Plasma Shocks. <i>Astrophysics and Space Science</i> , 2005, 298, 299-303.	1.4	9
25	Measurement of the Ionization State and Electron Temperature of Plasma during the Ablation Stage of a Wire-Array Z Pinch Using Absorption Spectroscopy. <i>Physical Review Letters</i> , 2011, 106, 225005.	7.8	8
26	Modeling magnetic confinement of laser-generated plasma in cylindrical geometry leading to disk-shaped structures. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	8
27	Experimental platform for investigations of high-intensity laser plasma interactions in the magnetic field of a pulsed power generator. <i>Review of Scientific Instruments</i> , 2018, 89, 033504.	1.3	7
28	Investigation of wire-array Z-pinchs by laser probing diagnostics. <i>Matter and Radiation at Extremes</i> , 2019, 4, .	3.9	7
29	High-Resolution UV Laser Diagnostics on the 1-MA Zebra Generator. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 3378-3383.	1.3	6
30	Observation of impact of eddy current on laser targets in a strong fast rising magnetic field. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	6
31	Study of laser-driven magnetic fields with a continuous wave Faraday rotation diagnostic. <i>Physics of Plasmas</i> , 2020, 27, 033102.	1.9	6
32	Development of broadband x-ray radiography for diagnosing magnetically driven cylindrically compressed matter. <i>Physics of Plasmas</i> , 2019, 26, 083104.	1.9	5
33	Implosion Dynamics in Conical Wire Array Z-pinchs. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	4
34	Study of the precursor and non-precursor implosion regimes in wire array Z-pinchs. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	4
35	Study of ablation and implosion stages in wire arrays using coupled ultraviolet and X-ray probing diagnostics. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	3
36	Development and integration of photonic Doppler velocimetry as a diagnostic for radiation driven experiments on the Z-machine. <i>Review of Scientific Instruments</i> , 2022, 93, 043502.	1.3	2

#	ARTICLE	IF	CITATIONS
37	Seeded Perturbations in Wire Array Z-Pinches. AIP Conference Proceedings, 2006, , .	0.4	1
38	Note: Infrared laser diagnostics for deuterium gas puff Z pinches. Review of Scientific Instruments, 2017, 88, 076111.	1.3	1
39	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	1