

# Muhammad Zakaullah

## List of Publications by Year in descending order

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69  
papers

934  
citations

430874

18  
h-index

501196

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69  
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69  
docs citations

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times ranked

622  
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasma-liquid synthesis of silver nanoparticles and their antibacterial and antifungal applications. <i>Materials Research Express</i> , 2020, 7, 035015.	1.6	17
2	Synthesis and spectroscopic characterization of gold nanoparticles via plasma-liquid interaction technique. <i>AIP Advances</i> , 2018, 8, .	1.3	20
3	Comparative study of X-ray emission from plasma focus relative to different preionization schemes. <i>Plasma Physics Reports</i> , 2017, 43, 749-755.	0.9	6
4	Langmuir probe study of an inductively coupled magnetic-pole-enhanced helium plasma. <i>Plasma Physics Reports</i> , 2017, 43, 588-593.	0.9	6
5	Characterization of RF He-N <sub>2</sub> /Ar mixture plasma via Langmuir probe and optical emission spectroscopy techniques. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	13
6	Evolution of plasma parameters in a He-N <sub>2</sub> /Ar magnetic pole enhanced inductive plasma source. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	8
7	Optical emission spectroscopy of 50 Hz pulsed dc nitrogen-hydrogen plasma in the presence of active screen cage. <i>Radiation Effects and Defects in Solids</i> , 2016, 171, 384-397.	1.2	5
8	Spectroscopic study of 50 Hz pulsed Ar-O <sub>2</sub> mixture plasma. <i>Radiation Physics and Chemistry</i> , 2016, 123, 115-121.	2.8	6
9	Optical emission spectroscopy of He-N <sub>2</sub> mixture plasma. <i>Radiation Effects and Defects in Solids</i> , 2015, 170, 668-678.	1.2	4
10	Correlation of Neutron and X-ray Emission from Plasma Focus with Pre-ionization. <i>Journal of Fusion Energy</i> , 2014, 33, 720-725.	1.2	2
11	Investigation of plasma parameters in an active screen cage-pulsed dc plasma used for plasma nitriding. <i>Radiation Effects and Defects in Solids</i> , 2014, 169, 893-905.	1.2	13
12	Mechanical properties of epoxy composites with low content of diamond particles. <i>Journal of Applied Polymer Science</i> , 2013, 127, 4079-4085.	2.6	9
13	Deuteron Beam Source Based on Mather Type Plasma Focus. <i>Journal of Fusion Energy</i> , 2013, 32, 287-292.	1.2	10
14	Metrology of non-thermal capacitively coupled N <sub>2</sub> -Ar mixture plasma. <i>Optics Communications</i> , 2013, 296, 72-78.	2.1	19
15	Effect of preionization on the axial run-down velocity, focus amplitude and current sheath formation in 3.3 kJ small He plasma. <i>Radiation Effects and Defects in Solids</i> , 2013, 168, 10-17.	1.2	7
16	Effect of Cathode Designs on Radiation Emission of Compact Diode (CD) Device. <i>Journal of Fusion Energy</i> , 2013, 32, 34-41.	1.2	4
17	A Report on H mode in Magnetic Pole Enhanced Inductively Coupled Nitrogen Plasmas. <i>Contributions To Plasma Physics</i> , 2013, 53, 492-502.	1.1	1
18	Investigation of magnetic-pole-enhanced inductively coupled nitrogen-argon plasmas. <i>Journal of Applied Physics</i> , 2012, 112, 063305.	2.5	3

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19	Effects of laser energy fluence on the onset and growth of the Rayleigh-Taylor instabilities and its influence on the topography of the Fe thin film grown in pulsed laser deposition facility. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	9
20	Mode transition in magnetic pole enhanced inductively coupled argon plasmas. <i>European Physical Journal D</i> , 2012, 66, 1.	1.3	10
21	Effect of Excitation and Vibrational Temperature on the Dissociation of Nitrogen Molecules in Ar-N <sub>2</sub> Mixture RF Discharge. <i>Spectroscopy Letters</i> , 2011, 44, 194-202.	1.0	13
22	Effect of preionization on soft x-ray emission and plasma dynamics in a small plasma focus system. <i>Journal of Applied Physics</i> , 2010, 107, 073301.	2.5	5
23	Vibrational Distribution of N <sub>2</sub> (C, $\hat{1}/2$ ) State in a Pulsed-DC Generated N <sub>2</sub> -Ar Glow Discharge. <i>Spectroscopy Letters</i> , 2010, 43, 259-265.	1.0	2
24	Tailoring a plasma focus as hard x-ray source for imaging. <i>Applied Physics Letters</i> , 2010, 96, 031501.	3.3	6
25	Effect of insulator sleeve material on the x-ray emission from a plasma focus device. <i>Physics of Plasmas</i> , 2010, 17, 092705.	1.9	5
26	On the plume splitting of pulsed laser ablated Fe and Al plasmas. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	38
27	Characterization of carbon film by Raman spectroscopy. <i>Radiation Effects and Defects in Solids</i> , 2009, 164, 153-161.	1.2	1
28	Effect of anode shape on correlation of neutron emission with pinch energy for a 2.7kJ Mather-type plasma focus device. <i>Journal of Applied Physics</i> , 2009, 106, 023311.	2.5	9
29	Carbonitriding of silicon using plasma focus device. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2009, 27, 381-387.	2.1	20
30	Soft X-ray emission from preionized He plasma in a 3.3kJ Mather type plasma focus device. <i>Plasma Devices and Operations</i> , 2009, 17, 257-264.	0.6	1
31	X-ray Emission from Plasma Focus: Envisioned by Various Competitive Detectors. <i>Journal of Fusion Energy</i> , 2009, 28, 124-129.	1.2	2
32	Reactive sputter-deposition of titanium nitride on AISI 304 in a plasma focus environment (Work) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		
33	Synthesis of nanocrystalline multiphase titanium oxycarbide (TiC <sub>x</sub> O <sub>y</sub> ) thin films by UNU/ICTP and NX2 plasma focus devices. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 90, 669-677.	2.3	66
34	Langmuir probe and spectroscopic studies of RF generated helium-nitrogen mixture plasma. <i>European Physical Journal D</i> , 2008, 47, 395-402.	1.3	20
35	Dense plasma focus-assisted nitriding of AISI-304. <i>Radiation Effects and Defects in Solids</i> , 2008, 163, 729-736.	1.2	3
36	SYNTHESIS OF ZIRCONIUM OXYNITRIDE (ZrON) NANOCOMPOSITE FILMS ON ZIRCONIUM SUBSTRATE BY DENSE PLASMA FOCUS DEVICE. <i>International Journal of Modern Physics B</i> , 2008, 22, 3941-3955.	2.0	22

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37	Plasma characterization for nitridation of aluminium alloy using 50ÂHz ac discharge. Plasma Devices and Operations, 2008, 16, 247-266.	0.6	7
38	Characterization of nonthermal Neâ€N <sub>2</sub> mixture radio frequency discharge. Journal of Applied Physics, 2008, 104, 123304.	2.5	8
39	Optical actinometry of the N-atom density in nitrogen plasma. Plasma Devices and Operations, 2007, 15, 87-93.	0.6	5
40	Enhanced Crystallinity of PTFE by Ion Irradiation in a Dense Plasma Focus. Plasma Processes and Polymers, 2007, 4, 186-191.	3.0	21
41	STUDY OF PLASMA FOCUS AS A HARD X-RAY SOURCE FOR NON-DESTRUCTIVE TESTING. Modern Physics Letters B, 2007, 21, 1643-1650.	1.9	5
42	Deposition of Diamond-like Carbon Films using Graphite Sputtering in Neon Dense Plasma. Plasma Chemistry and Plasma Processing, 2007, 27, 127-139.	2.4	13
43	Measurement of the plasma electron density and temperature from Stark-broadened H <sup>Î</sup> <sub>2</sub> and H <sup>Î</sup> <sub>3</sub> emission profiles. Plasma Devices and Operations, 2006, 14, 99-109.	0.6	2
44	Optical emission spectroscopy of the active species in nitrogen plasma. Plasma Devices and Operations, 2006, 14, 61-70.	0.6	8
45	Enhancement of X-ray emission in the side on direction in a Mather-type plasma focus. European Physical Journal D, 2006, 38, 337-341.	1.3	1
46	Co-deposition of titanium and iron nitrides on SS-321 by using plasma focus. Radiation Effects and Defects in Solids, 2006, 161, 121-129.	1.2	13
47	Optical Emission Spectroscopy of Abnormal Glow Region in Nitrogen Plasma. Plasma Chemistry and Plasma Processing, 2005, 25, 551-564.	2.4	65
48	EFFECT OF PLASMA OXIDE SURFACE COATING OF ELECTRODES ON IMPURITY LEVEL AND PLASMA PARAMETERS. International Journal of Modern Physics B, 2004, 18, 1687-1696.	2.0	5
49	Generation of titanium K-radiation in a 1ÂkV plasma focus. Plasma Devices and Operations, 2004, 12, 305-312.	0.6	5
50	Soft X-ray Imaging using a Neon Filled Plasma Focus X-ray Source. Journal of Fusion Energy, 2004, 23, 49-53.	1.2	44
51	Plasma Focus as a High Intensity Flash X-Ray Source for Biological Radiography. Journal of Fusion Energy, 2003, 22, 195-200.	1.2	41
52	Study of Neutron Yield Degradation in a Low Energy Plasma Focus. Journal of Fusion Energy, 2003, 22, 247-250.	1.2	2
53	Characterization of Argon Plasma by Use of Optical Emission Spectroscopy and Langmuir Probe Measurements. International Journal of Modern Physics B, 2003, 17, 2749-2759.	2.0	24
54	SOFT X-RAY EMISSION IN THE (1.0â€1.5 KEV) WINDOW WITH NITROGEN FILLING IN A LOW ENERGY PLASMA FOCUS. Modern Physics Letters B, 2002, 16, 309-318.	1.9	27

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55	Scope of plasma focus with argon as a soft X-ray source. IEEE Transactions on Plasma Science, 2002, 30, 2089-2094.	1.3	62
56	Study of X-ray Emission from a Compact Diode Operated by a High-Inductance Capacitor Discharge. Journal of Fusion Energy, 2002, 21, 211-215.	1.2	2
57	Study of Lateral Spread of Ions Emitted from 2.3 kJ Plasma Focus with Hydrogen and Nitrogen Gases. Journal of Fusion Energy, 2002, 21, 217-220.	1.2	28
58	A Simple Technique to Record X-Ray Fluence Anisotropy of a Source. Journal of Fusion Energy, 2001, 20, 69-73.	1.2	4
59	Soft X-Ray Emission Optimization Study with Nitrogen Gas in a 1.2 kJ Plasma Focus. Journal of Fusion Energy, 2001, 20, 113-115.	1.2	19
60	Correlation of plasma electron temperature with neutron emission in a low-energy plasma focus. IEEE Transactions on Plasma Science, 2001, 29, 62-68.	1.3	18
61	High Efficiency Neutron Detector for Low Neutron Flux Measurement. Journal of Fusion Energy, 2000, 19, 91-92.	1.2	7
62	Low-Energy Plasma Focus as a Tailored X-Ray Source. Journal of Fusion Energy, 2000, 19, 143-157.	1.2	61
63	A COST EFFECTIVE X-RAY DETECTOR FOR PLASMA FOCUS DIAGNOSTICS. Modern Physics Letters B, 2000, 14, 563-570.	1.9	1
64	HIGH-FREQUENCY SUPERCONDUCTING PROPERTIES OF THE NdBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> SYSTEM. Modern Physics Letters B, 2000, 14, 929-933.	1.9	0
65	USE OF SOLID STATE NUCLEAR TRACK DETECTORS CR-39 TO STUDY CHARGED PARTICLES EMISSION FROM A 3 kJ PLASMA FOCUS. Modern Physics Letters B, 1995, 09, 1033-1037.	1.9	0
66	TEMPORAL CORRELATION OF NEUTRONS, ION BEAM, AND HIGH VOLTAGE PROBE SIGNALS IN A LOW ENERGY PLASMA FOCUS. Modern Physics Letters B, 1994, 08, 393-398.	1.9	1
67	A SIMPLE PRESSURIZED SPARKGAP FOR PLASMA FOCUS OPERATION. Modern Physics Letters B, 1993, 07, 835-840.	1.9	11
68	ROLE OF ANODE LENGTH IN A MATHER-TYPE PLASMA FOCUS. Modern Physics Letters B, 1992, 06, 593-597.	1.9	38
69	Study of x-ray emission from a low energy (2.3 kJ) plasma focus by W-insert at the anode tip. , 0, , .		1