

Muhammad Zakaullah

List of Publications by Year in descending order

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69
papers

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times ranked

622
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of nanocrystalline multiphase titanium oxycarbide (TiC _x O _y) thin films by UNU/ICTP and NX2 plasma focus devices. Applied Physics A: Materials Science and Processing, 2008, 90, 669-677.	2.3	66
2	Optical Emission Spectroscopy of Abnormal Glow Region in Nitrogen Plasma. Plasma Chemistry and Plasma Processing, 2005, 25, 551-564.	2.4	65
3	Scope of plasma focus with argon as a soft X-ray source. IEEE Transactions on Plasma Science, 2002, 30, 2089-2094.	1.3	62
4	Low-Energy Plasma Focus as a Tailored X-Ray Source. Journal of Fusion Energy, 2000, 19, 143-157.	1.2	61
5	Soft X-ray Imaging using a Neon Filled Plasma Focus X-ray Source. Journal of Fusion Energy, 2004, 23, 49-53.	1.2	44
6	Plasma Focus as a High Intensity Flash X-Ray Source for Biological Radiography. Journal of Fusion Energy, 2003, 22, 195-200.	1.2	41
7	ROLE OF ANODE LENGTH IN A MATHER-TYPE PLASMA FOCUS. Modern Physics Letters B, 1992, 06, 593-597.	1.9	38
8	On the plume splitting of pulsed laser ablated Fe and Al plasmas. Physics of Plasmas, 2010, 17, .	1.9	38
9	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
10	SOFT X-RAY EMISSION IN THE (1.0-1.5 KEV) WINDOW WITH NITROGEN FILLING IN A LOW ENERGY PLASMA FOCUS. Modern Physics Letters B, 2002, 16, 309-318.	1.9	27
11	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
12	SYNTHESIS OF ZIRCONIUM OXYNITRIDE (ZrON) NANOCOMPOSITE FILMS ON ZIRCONIUM SUBSTRATE BY DENSE PLASMA FOCUS DEVICE. International Journal of Modern Physics B, 2008, 22, 3941-3955.	2.0	22
13	Enhanced Crystallinity of PTFE by Ion Irradiation in a Dense Plasma Focus. Plasma Processes and Polymers, 2007, 4, 186-191.	3.0	21
14	Langmuir probe and spectroscopic studies of RF generated helium-nitrogen mixture plasma. European Physical Journal D, 2008, 47, 395-402.	1.3	20
15	Carbonitriding of silicon using plasma focus device. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 381-387.	2.1	20
16	Synthesis and spectroscopic characterization of gold nanoparticles via plasma-liquid interaction technique. AIP Advances, 2018, 8, .	1.3	20
17	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
18	Metrology of non-thermal capacitively coupled N ₂ -Ar mixture plasma. Optics Communications, 2013, 296, 72-78.	2.1	19

#	ARTICLE	IF	CITATIONS
19	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
20	Plasma-liquid synthesis of silver nanoparticles and their antibacterial and antifungal applications. Materials Research Express, 2020, 7, 035015.	1.6	17
21	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
22	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
23	Effect of Excitation and Vibrational Temperature on the Dissociation of Nitrogen Molecules in Ar-N ₂ Mixture RF Discharge. Spectroscopy Letters, 2011, 44, 194-202.	1.0	13
24	Investigation of plasma parameters in an active screen cage-pulsed dc plasma used for plasma nitriding. Radiation Effects and Defects in Solids, 2014, 169, 893-905.	1.2	13
25	Characterization of RF He-N ₂ /Ar mixture plasma via Langmuir probe and optical emission spectroscopy techniques. Physics of Plasmas, 2016, 23, .	1.9	13
26	A SIMPLE PRESSURIZED SPARKGAP FOR PLASMA FOCUS OPERATION. Modern Physics Letters B, 1993, 07, 835-840.	1.9	11
27	Mode transition in magnetic pole enhanced inductively coupled argon plasmas. European Physical Journal D, 2012, 66, 1.	1.3	10
28	Deuteron Beam Source Based on Mather Type Plasma Focus. Journal of Fusion Energy, 2013, 32, 287-292.	1.2	10
29	Effect of anode shape on correlation of neutron emission with pinch energy for a 2.7kJ Mather-type plasma focus device. Journal of Applied Physics, 2009, 106, 023311.	2.5	9
30	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. Physics of Plasmas, 2012, 19, .	1.9	9
31	Mechanical properties of epoxy composites with low content of diamond particles. Journal of Applied Polymer Science, 2013, 127, 4079-4085.	2.6	9
32	Optical emission spectroscopy of the active species in nitrogen plasma. Plasma Devices and Operations, 2006, 14, 61-70.	0.6	8
33	Characterization of nonthermal Ne-N ₂ mixture radio frequency discharge. Journal of Applied Physics, 2008, 104, 123304.	2.5	8
34	Evolution of plasma parameters in a He-N ₂ /Ar magnetic pole enhanced inductive plasma source. Physics of Plasmas, 2016, 23, .	1.9	8
35	High Efficiency Neutron Detector for Low Neutron Flux Measurement. Journal of Fusion Energy, 2000, 19, 91-92.	1.2	7
36	Plasma characterization for nitridation of aluminium alloy using 50ÂHz ac discharge. Plasma Devices and Operations, 2008, 16, 247-266.	0.6	7

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37	Effect of preionization on the axial run-down velocity, focus amplitude and current sheath formation in 3.3 kJ small He plasma. Radiation Effects and Defects in Solids, 2013, 168, 10-17.	1.2	7
38	Tailoring a plasma focus as hard x-ray source for imaging. Applied Physics Letters, 2010, 96, 031501.	3.3	6
39	Spectroscopic study of 50Hz pulsed Ar-O ₂ mixture plasma. Radiation Physics and Chemistry, 2016, 123, 115-121.	2.8	6
40	Comparative study of X-ray emission from plasma focus relative to different preionization schemes. Plasma Physics Reports, 2017, 43, 749-755.	0.9	6
41	Langmuir probe study of an inductively coupled magnetic-pole-enhanced helium plasma. Plasma Physics Reports, 2017, 43, 588-593.	0.9	6
42	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
43	Generation of titanium K-radiation in a 1 kJ plasma focus. Plasma Devices and Operations, 2004, 12, 305-312.	0.6	5
44	Optical actinometry of the N-atom density in nitrogen plasma. Plasma Devices and Operations, 2007, 15, 87-93.	0.6	5
45	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
46	Effect of preionization on soft x-ray emission and plasma dynamics in a small plasma focus system. Journal of Applied Physics, 2010, 107, 073301.	2.5	5
47	Effect of insulator sleeve material on the x-ray emission from a plasma focus device. Physics of Plasmas, 2010, 17, 092705.	1.9	5
48	Optical emission spectroscopy of 50 Hz pulsed dc nitrogen-hydrogen plasma in the presence of active screen cage. Radiation Effects and Defects in Solids, 2016, 171, 384-397.	1.2	5
49	A Simple Technique to Record X-Ray Fluence Anisotropy of a Source. Journal of Fusion Energy, 2001, 20, 69-73.	1.2	4
50	Effect of Cathode Designs on Radiation Emission of Compact Diode (CD) Device. Journal of Fusion Energy, 2013, 32, 34-41.	1.2	4
51	Optical emission spectroscopy of He-N ₂ mixture plasma. Radiation Effects and Defects in Solids, 2015, 170, 668-678.	1.2	4
52	Dense plasma focus-assisted nitriding of AISI-304. Radiation Effects and Defects in Solids, 2008, 163, 729-736.	1.2	3
53	Investigation of magnetic-pole-enhanced inductively coupled nitrogen-argon plasmas. Journal of Applied Physics, 2012, 112, 063305.	2.5	3
54	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

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55	Study of Neutron Yield Degradation in a Low Energy Plasma Focus. Journal of Fusion Energy, 2003, 22, 247-250.	1.2	2
56	Measurement of the plasma electron density and temperature from Stark-broadened $H\hat{I}^2$ and $H\hat{I}^3$ emission profiles. Plasma Devices and Operations, 2006, 14, 99-109.	0.6	2
57	X-ray Emission from Plasma Focus: Envisioned by Various Competitive Detectors. Journal of Fusion Energy, 2009, 28, 124-129.	1.2	2
58	Vibrational Distribution of $N_{₂}(C, \hat{I}^{1/2})$ State in a Pulsed-DC Generated $N_{₂}\hat{a}r$ Glow Discharge. Spectroscopy Letters, 2010, 43, 259-265.	1.0	2
59	Correlation of Neutron and X-ray Emission from Plasma Focus with Pre-ionization. Journal of Fusion Energy, 2014, 33, 720-725.	1.2	2
60	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
61	A COST EFFECTIVE X-RAY DETECTOR FOR PLASMA FOCUS DIAGNOSTICS. Modern Physics Letters B, 2000, 14, 563-570.	1.9	1
62	Study of x-ray emission from a low energy (2.3 kJ) plasma focus by W-insert at the anode tip. , 0, , .		1
63	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
64	Characterization of carbon film by Raman spectroscopy. Radiation Effects and Defects in Solids, 2009, 164, 153-161.	1.2	1
65	Soft X-ray emission from preionized He plasma in a 3.3 kJ Mather type plasma focus device. Plasma Devices and Operations, 2009, 17, 257-264.	0.6	1
66	A Report on H mode in Magnetic Pole Enhanced Inductively Coupled Nitrogen Plasmas. Contributions To Plasma Physics, 2013, 53, 492-502.	1.1	1
67	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
68	HIGH-FREQUENCY SUPERCONDUCTING PROPERTIES OF THE NdBa ₂ Cu ₃ O _{6+x} SYSTEM. Modern Physics Letters B, 2000, 14, 929-933.	1.9	0
69	Reactive sputter-deposition of titanium nitride on AISI 304 in a plasma focus environment (Work) Tj ETQq1 1 0.784314 rgBT /Overlo		