

# Ahmad Salar Elahi

## List of Publications by Year in descending order

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139  
all docs

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docs citations

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times ranked

599  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design and Manufacturing of the Electrode Biasing System for the Tokamak. IEEE Transactions on Plasma Science, 2012, 40, 892-897.	1.3	23
2	Investigation of Tokamak Plasma MHD Activity Using FFT Analysis of Mirnov Coils Oscillations. Journal of Fusion Energy, 2013, 32, 103-106.	1.2	23
3	Growth and characterization of boron doped graphene by Hot Filament Chemical Vapor Deposition Technique (HFCVD). Journal of Crystal Growth, 2016, 438, 70-75.	1.5	22
4	Effects of Annealing on TiN Thin Film Growth by DC Magnetron Sputtering. Advances in Mechanical Engineering, 2014, 6, 373847.	1.6	20
5	Controlling the energy of runaway electrons by emissive limiter biasing in tokamaks. Physica Scripta, 2012, 85, 055502.	2.5	18
6	Analytical Technique for Determination of Toroidal Plasma Displacement. Journal of Fusion Energy, 2012, 31, 191-194.	1.2	18
7	Effects of fusion relevant transient energetic radiation, plasma and thermal load on PLANSEE double forged tungsten samples in a low-energy plasma focus device. Applied Surface Science, 2018, 443, 311-320.	6.1	17
8	Tokamak edge plasma rotation in the presence of the biased electrode. Fusion Engineering and Design, 2013, 88, 94-99.	1.9	16
9	Evolution of the IR-T1 Tokamak Plasma Local and Global Parameters. Journal of Fusion Energy, 2014, 33, 1-7.	1.2	14
10	Measurement of runaway electrons energy by hard X-ray spectroscopy in a small circular cross-section tokamak. Radiation Effects and Defects in Solids, 2011, 166, 789-794.	1.2	13
11	Turbulent Transport in the Tokamak Edge Plasma and SOL Region. Journal of Fusion Energy, 2013, 32, 496-502.	1.2	13
12	Magnetic-Based Measurements of Tokamak Plasma Equilibrium Parameters. IEEE Transactions on Plasma Science, 2013, 41, 334-340.	1.3	13
13	Particle transport in the edge plasma of the IR-T1 tokamak in the presence of limiter biasing and resonant helical field. Physica Scripta, 2013, 88, 035502.	2.5	13
14	Modification of tokamak edge plasma turbulence and transport by biasing and resonant helical magnetic field. Review of Scientific Instruments, 2013, 84, 053504.	1.3	13
15	Review of carbon nanotubes production by thermal chemical vapor deposition technique. Molecular Crystals and Liquid Crystals, 2016, 629, 158-164.	0.9	13
16	Topographical, structural and hardness changes in surface layer of stainless steel-AISI 304 irradiated by fusion-relevant high energy deuterium ions and neutrons in a low energy plasma focus device. Surface and Coatings Technology, 2017, 313, 73-81.	4.8	13
17	x-ray irradiation analysis based on wavelet transform in tokamak plasma. Journal of X-Ray Science and Technology, 2014, 22, 777-783.	1.0	12
18	Multipole Moments Based Study on Determination of Toroidal Plasma Equilibrium Position and Shift. Journal of Fusion Energy, 2011, 30, 477-480.	1.2	11

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19	Design and construction of hot limiter biasing system for the tokamak. Radiation Effects and Defects in Solids, 2013, 168, 642-653.	1.2	11
20	Energetic electrons, hard x-ray emission and MHD activity studies in the IR-T1 tokamak. Journal of X-Ray Science and Technology, 2015, 23, 267-274.	1.0	11
21	Determination of Electron Energy Distribution Function in Tokamak Plasma. Journal of Fusion Energy, 2015, 34, 911-917.	1.2	11
22	Estimating Time Dependence of Edge Plasma Turbulence in IR-T1 Tokamak. Journal of Fusion Energy, 2013, 32, 268-272.	1.2	10
23	Low MHD activity using resonant helical field and limiter biasing in IR-T1 tokamak. Journal of Plasma Physics, 2013, 79, 765-770.	2.1	10
24	A novel design of feedback control system for plasma horizontal position in IR-T1 tokamak. Fusion Engineering and Design, 2016, 107, 82-89.	1.9	10
25	Controlling the Diffusion of Runaway Electrons by Safety Factor Changes in IR-T1 Tokamak. Journal of Fusion Energy, 2016, 35, 180-186.	1.2	10
26	Application of argon atmospheric cold plasma for indium tin oxide (ITO) based diodes. AIP Advances, 2017, 7, .	1.3	10
27	Effects of Hot Limiter Biasing on Tokamak Runaway Discharges. Journal of Fusion Energy, 2013, 32, 580-588.	1.2	9
28	Analysis of the radial and poloidal turbulent transport in the edge tokamak plasma. Journal of Plasma Physics, 2013, 79, 647-655.	2.1	9
29	STFT Analysis of the Particle Transport on the IR-T1 Tokamak Plasma Sheath. Journal of Fusion Energy, 2014, 33, 108-118.	1.2	9
30	Preparation of Poriferous Glass Bodies by Useless Glasses Partial Sintering Process. Materials and Manufacturing Processes, 2015, 30, 1348-1353.	4.7	9
31	Plasma-based sputtering of indium tin oxide for the application of photovoltaic cells. Radiation Effects and Defects in Solids, 2015, 170, 541-547.	1.2	9
32	The influence of the cathode array and the pressure variations on the current sheath dynamics of a small plasma focus device in the presence of an axial magnetic probe. Physics of Plasmas, 2017, 24, 043504.	1.9	9
33	Control of the Plasma Characteristics by Hot Limiter Biasing in the IR-T1 Tokamak. IEEE Transactions on Plasma Science, 2013, 41, 2394-2399.	1.3	8
34	First results of movable limiter experiments and its effects on the tokamak plasma confinement. Radiation Effects and Defects in Solids, 2013, 168, 636-641.	1.2	8
35	Nano-Scale Precipitates of Reduced Activation Steels for the Application of Nuclear Fusion Reactors. Journal of Fusion Energy, 2015, 34, 449-455.	1.2	8
36	Feedback System Design for Plasma Horizontal Position Control in IR-T1 Tokamak. Journal of Fusion Energy, 2016, 35, 415-421.	1.2	8

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37	Effects of External Resonant Fields on the Tokamak Edge Plasma Fluctuations. Journal of Fusion Energy, 2013, 32, 627-633.	1.2	7
38	New approaches on application of multipole moments for determination of toroidal plasma shift. Radiation Effects and Defects in Solids, 2013, 168, 654-663.	1.2	7
39	Plasma Confinement Modification in IR-T1 Tokamak by Velocity Shear Stabilization. Journal of Fusion Energy, 2014, 33, 158-165.	1.2	7
40	The Impact of Improved Nucleation Layer on the Properties of Boron-Doped Diamond Films. Journal of Inorganic and Organometallic Polymers and Materials, 2015, 25, 1040-1043.	3.7	7
41	A confident source of hard X-rays: radiation from a tokamak applicable for runaway electrons diagnosis. Journal of Synchrotron Radiation, 2016, 23, 1227-1231.	2.4	7
42	Review of the chemical vapour deposition applications for the microelectronic devices. International Journal of Materials and Product Technology, 2016, 52, 353.	0.2	7
43	A new perspective on synchrotron radiation applications: Runaway electrons studies using a hard x-ray detection in tokamaks. Journal of X-Ray Science and Technology, 2017, 25, 15-23.	1.0	7
44	Medical equipment antiseptic processes using the atmospheric plasma sprayed copper coatings. Journal of X-Ray Science and Technology, 2017, 25, 479-485.	1.0	7
45	Effect of Resonant Helical Field (RHF) on Runaway Electrons in Tokamaks. Journal of Fusion Energy, 2013, 32, 543-546.	1.2	6
46	Fast Electrons Behavior in Presence of External Radial Electric Field in IR-T1 Tokamak. Journal of Fusion Energy, 2014, 33, 242-251.	1.2	6
47	Increase of the Surface Mobility of Carbon Molecular Crystals (CMCs) Using the PECVD Technique. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 773-779.	3.7	6
48	Investigation on the effect of pressure on turbulent transports of the IR-T1 Tokamak plasma. European Physical Journal D, 2017, 71, 1.	1.3	6
49	The effects of pre-ionization on the impurity and x-ray level in a dense plasma focus device. Physics of Plasmas, 2017, 24, 022509.	1.9	6
50	Laser fusion energy from p-7Li with minimized radioactivity. Laser and Particle Beams, 2012, 30, 459-463.	1.0	5
51	Tokamak Plasma Parameters in the Presence of Resonant Field and Biased Electrode. IEEE Transactions on Plasma Science, 2014, 42, 3397-3402.	1.3	5
52	The MDF technique for the analysis of tokamak edge plasma fluctuations. Journal of Plasma Physics, 2014, 80, 43-58.	2.1	5
53	Plasma Stability Evaluation Based on MHD Activity and Hard X-Ray Emission in the IR-T1 Tokamak. Journal of Fusion Energy, 2014, 33, 264-268.	1.2	5
54	Biased Limiter and RHF Effects on X-Ray Intensity and Mirnov Oscillations. IEEE Transactions on Plasma Science, 2014, 42, 3555-3559.	1.3	5

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55	Tokamak plasma equilibrium analysis based on the relaxation method with a specified magnetic axis. Radiation Effects and Defects in Solids, 2014, 169, 669-678.	1.2	5
56	Effect of external resonant fields and limiter biasing on hard X-ray intensity and mirnov oscillations in IR-T1 Tokamak. Journal of Plasma Physics, 2015, 81, .	2.1	5
57	Design and Fabrication of Comparative Langmuir Ball-Pen Probe (LBP) for the Tokamak. Journal of Fusion Energy, 2015, 34, 394-397.	1.2	5
58	Application of picosecond terawatt laser pulses for fast ignition of fusion. Laser and Particle Beams, 2013, 31, 249-256.	1.0	4
59	Design and fabrication of emissive biased limiter and its effect on tokamak plasma. Radiation Effects and Defects in Solids, 2013, 168, 42-47.	1.2	4
60	Application of partial sintering of waste glasses for preparation of porous glass bodies. Journal of Porous Materials, 2014, 21, 993-999.	2.6	4
61	Application of multipole moments and magnetic techniques for determination of tokamak plasma shift. Journal of Plasma Physics, 2014, 80, 9-25.	2.1	4
62	The effect of varying the introduction mode of reactants on electrical, physical and thermal stability properties of polypyrrole synthesized with CTAB. AIP Advances, 2017, 7, 105222.	1.3	4
63	Coating stainless steel with diamond-like carbon using the hot filament chemical vapor deposition system, and its effects on fusion devices. Radiation Effects and Defects in Solids, 2013, 168, 717-723.	1.2	3
64	Novel Design of Multi-Purpose Probe for the Measurement of Plasma Density Gradient, Flow and Transport. Journal of Fusion Energy, 2015, 34, 273-276.	1.2	3
65	The Effects of Percent and Position of Nitrogen Atoms on Electronic and Thermoelectric Properties of Graphene Nanoribbons. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 1095-1100.	3.7	3
66	First investigation on plasma impurities of the IR-T1 tokamak. AIP Advances, 2017, 7, 115303.	1.3	3
67	Estimating the Radial Profile of Edge Plasma Electrical Fluctuations in the IR-T1 Tokamak. Chinese Physics Letters, 2013, 30, 025202.	3.3	2
68	Plasma Internal Inductance in the Presence of External Resonant Fields in IR-T1 Tokamak. Journal of Fusion Energy, 2014, 33, 619-626.	1.2	2
69	Review on Recent Developments in Laser Driven Inertial Fusion. Science and Technology of Nuclear Installations, 2014, 2014, 1-14.	0.8	2
70	Clinical surface modification process using the nitrogen plasma and its anti-bacterial efficiency. Journal of X-Ray Science and Technology, 2016, 24, 893-900.	1.0	2
71	Magnetic Studies of Tokamak Plasma Equilibrium Based on Magnetic System Materials and Characteristics. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 467-471.	3.7	2
72	New perspective on nano-porous gallium nitride formation on p-type silicon with plasma focus device. Materials and Manufacturing Processes, 2017, 32, 1274-1278.	4.7	2

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73	Investigation on the Hard X-ray Radiations of the IR-T1 Tokamak Plasma: Electric and Magnetic Perspectives. Brazilian Journal of Physics, 2017, 47, 567-574.	1.4	2
74	Surface protection from high energy electrons and X-ray radiation analysis in tokamak plasma. Journal of X-Ray Science and Technology, 2017, 25, 777-785.	1.0	2
75	Growth and Characterization of Boron-Carbon Structures with the Hot Filament Chemical Vapor Deposition Technique. Silicon, 2018, 10, 1731-1736.	3.3	2
76	Antibacterial characteristics of thermal plasma spray system. Journal of X-Ray Science and Technology, 2018, 26, 509-521.	1.0	2
77	Increase of Diagnostic Mirror Lifetime Using TiN Coated Stainless Steel by Using a Plasma Focus Device. Plasma Science and Technology, 2013, 15, 485-488.	1.5	1
78	Growth of Diamond-Like Carbon and Icosahedral Boron Carbide by Chemical Vapor Deposition System. Molecular Crystals and Liquid Crystals, 2015, 608, 223-236.	0.9	1
79	Growth of Dual DLC and Icosahedral Boron Carbide Nano-Crystals by HFCVD. Molecular Crystals and Liquid Crystals, 2015, 608, 103-115.	0.9	1
80	Growth of Inorganic Solid Nanorods by Hot Filament Chemical Vapor Deposition Technique. Molecular Crystals and Liquid Crystals, 2015, 609, 228-234.	0.9	1
81	Magnetron Amplifier-Type Helix Loaded Waveguide Analysis Based on Dispersion Relation. IEEE Transactions on Electron Devices, 2015, 62, 3413-3418.	3.0	1
82	Double capacitive probe for the measurement of plasma potential in tokamak. Instruments and Experimental Techniques, 2016, 59, 688-691.	0.5	1
83	Analysis of tokamak plasma confinement modes using the fast Fourier transformation. Pramana - Journal of Physics, 2016, 87, 1.	1.8	1
84	Biasing Effect on the Edge Plasma Electrical Fluctuations in IR-T1 Tokamak. Journal of Fusion Energy, 2017, 36, 21-24.	1.2	1
85	A novel technique based on a plasma focus device for nano-porous gallium nitride formation on P-type silicon. Physics of Plasmas, 2017, 24, 043511.	1.9	1
86	Effects of the location of a biased limiter on turbulent transport in the IR-T1 tokamak plasma. European Physical Journal D, 2017, 71, 1.	1.3	1
87	Structure of chaotic magnetic field lines in IR-T1 tokamak due to ergodic magnetic limiter. AIP Advances, 2018, 8, .	1.3	1
88	Effects of Resonant Helical Field on Toroidal Field Ripple in IR-T1 Tokamak. Journal of Physics: Conference Series, 2018, 982, 012004.	0.4	1
89	Candidates for Laser Fusion Energy with Minimized Radioactivity. Journal of Fusion Energy, 2013, 32, 298-303.	1.2	0
90	Conductivity of the PGT Synthesized by the High Energy Ball Milling (HEBM). Advances in Materials Science and Engineering, 2013, 2013, 1-8.	1.8	0

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91	Nuclear Fusion. Advances in Materials Science and Engineering, 2014, 2014, 1-1.	1.8	0
92	Nuclear reactors. Advances in Mechanical Engineering, 2015, 7, 168781401560236.	1.6	0
93	Review on Plasma Edge Analysis Using the Auto-Correlation and Probability Distributions of Fluctuations. Journal of Fusion Energy, 2015, 34, 1356-1364.	1.2	0
94	Carbonization, Impregnation and Activation Synthesis for Sulfur Dioxide Adsorbent Capacity of Carbon. Journal of Inorganic and Organometallic Polymers and Materials, 2015, 25, 1542-1546.	3.7	0
95	Design and fabrication of a new compound probe for plasma flux measurement in IR-T1 tokamak. Review of Scientific Instruments, 2017, 88, 093516.	1.3	0
96	Control of Heat and Mass Transfers Due to Tearing Mode-Based Magnetic Islands During Disruption Phase in IR-T1 Tokamak. Journal of Heat Transfer, 2018, 140, .	2.1	0
97	The effect of spacing factor on the confinement time of the electrons in a low beta Polywell device. AIP Advances, 2020, 10, 055305.	1.3	0
98	Design and Fabrication of Multipurpose Diagnostic in IR-T1 Tokamak. Advances in Mechanical Engineering, 2014, 6, 491804.	1.6	0