Richard Racz

List of Publications by Year
in descending order

53	504	759233 12	752698 20
papers	citations	h-index	g-index

53	53	53	333
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of silver nanoparticles on titanium surface created by ion implantation technology . International Journal of Nanomedicine, 2019, Volume 14, 4709-4721.	6.7	50
2	Ion guiding accompanied by formation of neutrals in polyethylene terephthalate polymer nanocapillaries: Further insight into a self-organizing process. Physical Review A, 2010, 82, .	2.5	41
3	Electron cyclotron resonance ion source plasma characterization by X-ray spectroscopy and X-ray imaging. Review of Scientific Instruments, 2016, 87, 02A510.	1.3	31
4	Impact of two-close-frequency heating on ECR ion source plasma radio emission and stability. Plasma Sources Science and Technology, 2019, 28, 085021.	3.1	31
5	Electron cyclotron resonance ion source plasma characterization by energy dispersive x-ray imaging. Plasma Sources Science and Technology, 2017, 26, 075011.	3.1	27
6	Status and special features of the Atomki ECR ion source. Review of Scientific Instruments, 2012, 83, 02A341.	1.3	24
7	ECR plasma photographs as a plasma diagnostic. Plasma Sources Science and Technology, 2011, 20, 025002.	3.1	21
8	Multidiagnostics setups for magnetoplasmas devoted to astrophysics and nuclear astrophysics research in compact traps. Journal of Instrumentation, 2019, 14, C10008-C10008.	1.2	20
9	The Atomki Accelerator Centre. European Physical Journal Plus, 2021, 136, 1.	2.6	19
10	A Novel Approach to Î²-Decay: PANDORA, a New Experimental Setup for Future In-Plasma Measurements. Universe, 2022, 8, 80.	2.5	19
11	Multi-diagnostic setup to investigate the two-close-frequency phenomena. Journal of Instrumentation, 2018, 13, C11016-C11016.	1.2	15
12	Guided transmission of 3keV Ar7+ ions through dense polycarbonate nanocapillary arrays: Blocking effect and time dependence of the transmitted neutrals. Nuclear Instruments & Methods in Physics Research B, 2012, 279, 177-181.	1.4	12
13	X-ray pinhole camera setups used in the Atomki ECR Laboratory for plasma diagnostics. Review of Scientific Instruments, 2016, 87, 02A741.	1.3	12
14	Preliminary studies of creation of gold nanoparticles on titanium surface towards biomedical applications. Vacuum, 2016, 126, 55-58.	3.5	12
15	Effect of the two-close-frequency heating to the extracted ion beam and to the X-ray flux emitted by the ECR plasma. Journal of Instrumentation, 2018, 13, C12012-C12012.	1.2	12
16	Innovative experimental setup for X-ray imaging to study energetic magnetized plasmas. Journal of Instrumentation, 2021, 16, P03003.	1.2	12
17	Synthesis of Feâ€“C60 complex by ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2013, 310, 18-22.	1.4	11
18	Two-frequency heating technique at the 18 GHz electron cyclotron resonance ion source of the National Institute of Radiological Sciences. Review of Scientific Instruments, 2014, 85, 02A931.	1.3	11

#	Article	IF	Citations
19	A novel numerical tool to study electron energy distribution functions of spatially anisotropic and non-homogeneous ECR plasmas. Physics of Plasmas, 2021, 28, 102509.	1.9	11
20	Innovative Analytical Method for X-ray Imaging and Space-Resolved Spectroscopy of ECR Plasmas. Condensed Matter, 2022, 7, 5.	1.8	11
21	Synthesis of endohedral iron-fullerenes by ion implantation. Review of Scientific Instruments, 2014, 85, 02A945.	1.3	10
22	Quantitative analysis of an ECR Ar plasma structure by X-ray spectroscopy at high spatial resolution. Journal of Instrumentation, 2022, 17, C01009.	1.2	10
23	Recent developments of ion sources for life-science studies at the Heavy Ion Medical Accelerator in Chiba (invited). Review of Scientific Instruments, 2016, 87, 02C107.	1.3	9
24	Optimized Size and Distribution of Silver Nanoparticles on the Surface of Titanium Implant Regarding Cell Viability. Applied Sciences (Switzerland), 2020, 10, 7063.	2.5	9
25	Status of the Bio-Nano electron cyclotron resonance ion source at Toyo University. Review of Scientific Instruments, 2014, 85, 02C317.	1.3	8
26	Imaging of ECR Plasma by Computer Simulation. IEEE Transactions on Plasma Science, 2011, 39, 2474-2475.	1.3	7
27	Synthesis of Endohedral Fullerene Using ECR Ion Source. AIP Conference Proceedings, 2011, , .	0.4	6
28	Experiments with biased side electrodes in electron cyclotron resonance ion sources. Review of Scientific Instruments, 2014, 85, 02A921.	1.3	6
29	Experimental study of single- vs two-close-frequency heating impact on confinement and loss dynamics in ECR ion source plasmas by means of x-ray spectroscopy and imaging. Plasma Physics and Controlled Fusion, 2022, 64, 035020.	2.1	5
30	Molecular and negative ion production by a standard electron cyclotron resonance ion source. Review of Scientific Instruments, 2012, 83, 02A313.	1.3	4
31	Fullerene-rare gas mixed plasmas in an electron cyclotron resonance ion source. Review of Scientific Instruments, 2014, 85, 02A936.	1.3	4
32	Electron cyclotron resonance plasma photos. Review of Scientific Instruments, 2010, 81, 02B708.	1.3	3
33	Ion beam emittance from an ECRIS. Review of Scientific Instruments, 2016, 87, 02A724.	1.3	3
34	X-ray diagnostics of ECR ion sourcesâ€"Techniques, results, and challenges. Review of Scientific Instruments, 2022, 93, 021102.	1.3	3
35	Pinhole X-Ray Camera Photographs of an ECR Ion Source Plasma. IEEE Transactions on Plasma Science, 2011, 39, 2494-2495.	1.3	2
36	Effect of pulse-modulated microwaves on fullerene ion production with electron cyclotron resonance ion source. Review of Scientific Instruments, 2012, 83, 02A303.	1.3	2

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37	Long-term stable transmission of 3-keV Ne7+ ions guided through nanocapillaries in polymers. Nuclear Instruments & Methods in Physics Research B, 2016, 387, 96-102.	1.4	2
38	Study on the beam transport from the Bio-Nano ECRIS. Review of Scientific Instruments, 2012, 83, 02B713.	1.3	1
39	Ion guiding and formation of neutrals in PET polymer nanocapillaries. Journal of Physics: Conference Series, 2012, 388, 132007.	0.4	1
40	Guiding of Ar7+ ions through a glass microcapillary array. Nuclear Instruments & Methods in Physics Research B, 2015, 354, 71-74.	1.4	1
41	Two-chamber configuration of Bio-Nano electron cyclotron resonance ion source for fullerene modification. Review of Scientific Instruments, 2016, 87, 02A720.	1.3	1
42	Role of conductivity for the production of charge patches by ions guided in capillaries. Nuclear Instruments & Methods in Physics Research B, 2017, 408, 56-60.	1.4	1
43	First results on radial and azimuthal dependence of plasma parameters in a hexapole-trapped ECR discharge. AIP Conference Proceedings, 2018, , .	0.4	1
44	Implantation of multiply charged silicon ions into bioinert zirconia. Vacuum, 2019, 164, 15-17.	3.5	1
45	Transmission of $$3hbox {-keV Ne}^{7+}$$ ion through nanocapillaries probing the discharge process. European Physical Journal D, 2021, 75, 1.	1.3	1
46	Probing Electron Properties in ECR Plasmas Using X-ray Bremsstrahlung and Fluorescence Emission. Condensed Matter, 2021, 6, 41.	1.8	1
47	Visible Light Emission of Electron Cyclotron Resonance Plasmas. IEEE Transactions on Plasma Science, 2011, 39, 2462-2463.	1.3	0
48	Fast camera studies at an electron cyclotron resonance table plasma generator. Review of Scientific Instruments, 2014, 85, 02A507.	1.3	0
49	Guiding of Ar7+ ions through a glass microcapillary array. Journal of Physics: Conference Series, 2014, 488, 132011.	0.4	0
50	Blocking effect on transmission of Ne⁷⁺ ions through nanocapillaries. Journal of Physics: Conference Series, 2015, 635, 032028.	0.4	0
51	Conductivity mechanism probed by ion transmission through nanocapillaries during the discharging process. Journal of Physics: Conference Series, 2015, 635, 032027.	0.4	0
52	On the formation mechanism of modified fullerenes in the two-chamber configuration of the bio-nano ECRIS. AIP Conference Proceedings, 2018, , .	0.4	0
53	Low energy fragments from O²⁺ + H₂ collisions following single and double electron removal from the target. Journal of Physics: Conference Series, 2020, 1412, 162012.	0.4	0