Yoshiyuki Iwata

List of Publications by Year
in descending order

131	2,368	186209	265120
papers	citations	28 h-index	42 g-index

133	133	133	1725
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Performance of the NIRS fast scanning system for heavyâ€ion radiotherapy. Medical Physics, 2010, 37, 5672-5682.	1.6	144
2	A new approach for measuring the muon anomalous magnetic moment and electric dipole moment. Progress of Theoretical and Experimental Physics, 2019, 2019, .	1.8	112
3	Investigation of Single-Event Damages on Silicon Carbide (SiC) Power MOSFETs. IEEE Transactions on Nuclear Science, 2014, 61, 1924-1928.	1.2	102
4	Polyethylene as a radiation shielding standard in simulated cosmic-ray environments. Nuclear Instruments & Methods in Physics Research B, 2006, 252, 319-332.	0.6	89
5	Design of a superconducting rotating gantry for heavy-ion therapy. Physical Review Special Topics: Accelerators and Beams, 2012, 15, .	1.8	89
6	Multiple-energy operation with extended flattops at HIMAC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 33-38.	0.7	72
7	New Accelerator Facility for Carbon-Ion Cancer-Therapy. Journal of Radiation Research, 2007, 48, A43-A54.	0.8	65
8	Lunar soil as shielding against space radiation. Radiation Measurements, 2009, 44, 163-167.	0.7	63
9	Fragmentation cross sections of 28Si at beam energies from to. Nuclear Physics A, 2007, 784, 341-367.	0.6	59
10	Fragmentation cross sections of 600 MeV/nucleon20Neon elemental targets. Physical Review C, 2001, 64, .	1.1	52
11	Fragmentation cross sections of 290 and 400 MeV/nucleon<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">C</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>12</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>beams on elemental targets. Physical Review C, 2007, 76, .	1.1	44
12	A large-area, position-sensitive neutron detector with neutron/Î³-ray discrimination capabilities. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 401, 329-344.	0.7	42
13	Cross Section for the Astrophysical14C(n, Î³)15C Reaction via the Inverse Reaction. Astrophysical Journal, 2002, 570, 926-933.	1.6	40
14	E1 strength of the subthreshold 3/2+ state in 15O studied by Coulomb excitation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 579, 265-270.	1.5	40
15	Double-differential cross sections for the neutron production from heavy-ion reactions at energiesE/A=290â€“600MeV. Physical Review C, 2001, 64, .	1.1	38
16	Fragmentation cross sections of medium-energy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">Cl</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>35</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">Ar</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>40</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>Fragmentation of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">N</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>14</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">O</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>16</mml:mn></mml:m	1.1	38
17	Magnetisation and field quality of a cosine-theta dipole magnet wound with coated conductors for rotating gantry for hadron cancer therapy. Superconductor Science and Technology, 2016, 29, 024006.	1.8	35
18		1.1	34

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19	Experimental validation of stochastic microdosimetric kinetic model for multi-ion therapy treatment planning with helium-, carbon-, oxygen-, and neon-ion beams. Physics in Medicine and Biology, 2020, 65, 045005.	1.6	34
20	Dissociation of6He. Physical Review C, 2002, 65, .	1.1	32
21	Interdigital<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>H</mml:mi></mml:math>-mode drift-tube linac design with alternative phase focusing for muon linac. Physical Review Accelerators and Beams, 2016, 19, .	0.6	32
22	Alternating-phase-focused IH-DTL for an injector of heavy-ion medical accelerators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 685-696.	0.7	31
23	Single-Event Damage Observed in GaN-on-Si HEMTs for Power Control Applications. IEEE Transactions on Nuclear Science, 2018, 65, 1956-1963.	1.2	31
24	Neutron cross-talk in a multi-detector system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 397, 380-390.	0.7	30
25	Calibration and Characterization of the Radiation Assessment Detector (RAD) on Curiosity. Space Science Reviews, 2016, 201, 201-233.	3.7	30
26	Dissociation of8He. Physical Review C, 2000, 62, .	1.1	29
27	Beam commissioning of a superconducting rotating-gantry for carbon-ion radiotherapy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 834, 71-80.	0.7	29
28	Isobaric analog state of 14Be. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 515, 255-260.	1.5	28
29	New treatment facility for heavy-ion cancer therapy at HIMAC. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2182-2185.	0.6	28
30	Experimental studies of systematic multiple-energy operation at HIMAC synchrotron. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 243-247.	0.6	28
31	The Response of a Spherical Tissue-Equivalent Proportional Counter to Iron Particles from 200â€Šâ€“â€Š1000 MeV/nucleon. Radiation Research, 2002, 157, 350-360.	0.7	26
32	Molecular states in neutron-rich beryllium isotopes. Nuclear Physics A, 2004, 738, 337-341.	0.6	26
33	Development of NIRS pencil beam scanning system for carbon ion radiotherapy. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 361-367.	0.6	25
34	Development of a superconducting rotating-gantry for heavy-ion therapy. Nuclear Instruments & Methods in Physics Research B, 2013, 317, 793-797.	0.6	24
35	Performance of a compact injector for heavy-ion medical accelerators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 1007-1021.	0.7	23
36	Measurement of the8Li(n,Î³)9Li cross section at astrophysical energies by reverse kinematics. Physical Review C, 1998, 57, 959-966.	1.1	22

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37	Signatures of volatiles in the lunar proton albedo. Icarus, 2016, 273, 25-35.	1.1	22
38	Performance of the HIMAC beam control system using multiple-energy synchrotron operation. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 347-351.	0.6	22
39	Development of Carbon-Ion Radiotherapy Facilities at NIRS. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-7.	1.1	22
40	Development of Curved Combined-Function Superconducting Magnets for a Heavy-Ion Rotating-Gantry. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	21
41	Progress of Research and Development of Fundamental Technologies for Accelerator Magnets Using Coated Conductors. IEEE Transactions on Applied Superconductivity, 2013, 23, 4601905-4601905.	1.1	20
42	Strongly-suppressed post-Coulomb acceleration in non-resonant breakup of 7Li. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 416, 43-49.	1.5	19
43	Measurements of galactic cosmic ray shielding with the CRaTER instrument. Space Weather, 2013, 11, 284-296.	1.3	19
44	The Response of a Spherical Tissue-Equivalent Proportional Counter to Different Ions Having Similar Linear Energy Transfer. Radiation Research, 2004, 161, 64-71.	0.7	18
45	Secondary Neutron-Production Cross Sections from Heavy-Ion Interactions between 230 and 600 MeV/Nucleon. Nuclear Science and Engineering, 2007, 157, 142-158.	0.5	18
46	The deep space galactic cosmic ray lineal energy spectrum at solar minimum. Space Weather, 2013, 11, 361-368.	1.3	18
47	Progress of Fundamental Technology R&D Toward Accelerator Magnets Using Coated Conductors in S-Innovation Program. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.1	18
48	PHITS â€“ benchmark of partial charge-changing cross sections for intermediate-mass systems. Nuclear Instruments & Methods in Physics Research B, 2007, 254, 30-38.	0.6	17
49	Recent progress of HIMAC for sophisticated heavy-ion cancer radiotherapy. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 6-9.	0.6	17
50	Development of beam current control system in RF-knockout slow extraction. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2915-2918.	0.6	16
51	Astrophysical reaction rate for the8Li(n,Î³)9Lireaction. Physical Review C, 2003, 67, .	1.1	15
52	Acceleration of high current fully stripped carbon ion beam by direct injection scheme. Review of Scientific Instruments, 2006, 77, 03B305.	0.6	15
53	Design of Superconducting Magnets for a Compact Carbon Gantry. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.1	15
54	Recent progress and future plans of heavy-ion cancer radiotherapy with HIMAC. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 374-378.	0.6	15

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55	Enhancement of biological effectiveness of carbon-ion beams by applying a longitudinal magnetic field. International Journal of Radiation Biology, 2019, 95, 720-724.	1.0	15
56	Off-line correction for excessive constant-fraction-discriminator walk in neutron time-of-flight experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 522, 495-503.	0.7	14
57	Design study of compact medical fixed-field alternating-gradient accelerators. Physical Review Special Topics: Accelerators and Beams, 2004, 7, .	1.8	13
58	Design of carbon therapy facility based on 10 years experience at HIMAC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 562, 1038-1041.	0.7	13
59	Secondary neutron-production cross sections from heavy-ion interactions in composite targets. Physical Review C, 2006, 73, .	1.1	13
60	Test of weak and strong factorization in nucleusâ€“nucleus collisions at several hundred MeV/nucleon. Nuclear Physics A, 2007, 791, 434-450.	0.6	12
61	Carbon-ion radiotherapy: clinical aspects and related dosimetry. Radiation Protection Dosimetry, 2009, 137, 149-155.	0.4	12
62	Recent progress of a superconducting rotating-gantry for carbon-ion radiotherapy. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 338-342.	0.6	12
63	Development of an HTS Accelerator Magnet With REBCO Coils for Tests at HIMAC Beam Line. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	12
64	Design study of a rotating gantry for the HIMAC new treatment facility. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2186-2189.	0.6	11
65	Comparison of two liquid scintillators used for neutron detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 440, 241-244.	0.7	10
66	The response of a spherical tissue-equivalent proportional counter to different heavy ions having similar velocities. Radiation Measurements, 2006, 41, 1227-1234.	0.7	10
67	Development of a compact ECR ion source for various ion production. Review of Scientific Instruments, 2016, 87, 02C110.	0.6	10
68	New technologies for carbon-ion radiotherapy â€" Developments at the National Institute of Radiological Sciences, QST, Japan. Radiation Physics and Chemistry, 2019, 162, 90-95.	1.4	10
69	Estimating the biological effects of helium, carbon, oxygen, and neon ion beams using 3D silicon microdosimeters. Physics in Medicine and Biology, 2021, 66, 045017.	1.6	10
70	Overview of secondary neutron production relevant to shielding in space. Radiation Protection Dosimetry, 2005, 116, 140-143.	0.4	9
71	Model cavity of an alternating-phase-focused IH-DTL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 566, 256-263.	0.7	9
72	Reduction of uncontrollable spilled beam in RF-knockout slow extraction. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 606, 325-329.	0.7	9

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73	Design and Test Results of Superconducting Magnet for Heavy-Ion Rotating Gantry. Journal of Physics: Conference Series, 2017, 871, 012083.	0.3	9
74	Concept Design of a Superconducting Magnet for a Compact Heavy-Ion Synchrotron. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	9
75	Time scales from two-neutron intensity interferometry for the reaction40Ar+165HoatE/A=25MeV. Physical Review C, 1998, 58, 2161-2166.	1.1	8
76	Two Major Factors Involved in the Reverse Dose-rate Effect for Somatic Mutation Induction are the Cell Cycle Position and LET Value. Journal of Radiation Research, 2009, 50, 441-448.	0.8	8
77	Effect of External Magnetic Fields on Biological Effectiveness of Proton Beams. International Journal of Radiation Oncology Biology Physics, 2020, 106, 597-603.	0.4	8
78	Excitation of continuum states in 7Li and their decay by quantum tunneling. Nuclear Physics A, 1999, 654, 928c-931c.	0.6	7
79	Recent progress on new treatment research project at HIMAC. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2924-2927.	0.6	7
80	Solar modulation of the deep space galactic cosmic ray lineal energy spectrum measured by CRaTER, 2009â€“2014. Space Weather, 2016, 14, 247-258.	1.3	7
81	Nuclear fragmentation database for GCR transport code development. Advances in Space Research, 2010, 46, 728-734.	1.2	6
82	Influence of a perpendicular magnetic field on biological effectiveness of carbon-ion beams. International Journal of Radiation Biology, 2019, 95, 1346-1350.	1.0	6
83	Development of Inter-Digital H-Mode Drift-Tube Linac Prototype With Alternative Phase Focusing for a Muon Linac in the J-PARC Muon G-2/EDM Experiment. Journal of Physics: Conference Series, 2019, 1350, 012054.	0.3	6
84	Thermal Design and Test Results of the Superconducting Magnet for a Compact Heavy-Ion Synchrotron. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-5.	1.1	6
85	Application of compact electron cyclotron resonance ion source. Review of Scientific Instruments, 2008, 79, 02A328.	0.6	5
86	Development of a compact superconducting rotating-gantry for heavy-ion therapy. Journal of Radiation Research, 2014, 55, i24-i25.	0.8	5
87	Thermal Stability of Conduction-Cooled HTS Magnets for Rotating Gantry. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.1	5
88	Ion species discrimination method by linear energy transfer measurement in Fujifilm BAS-SR imaging plate. Review of Scientific Instruments, 2020, 91, 093305.	0.6	5
89	Experimental study on monitoring system of clinical beam purity in multiple-ion beam operation for heavy-ion radiotherapy. Review of Scientific Instruments, 2020, 91, 023309.	0.6	5
90	Application of lung substitute material as ripple filter for multi-ion therapy with helium-, carbon-, oxygen-, and neon-ion beams. Physics in Medicine and Biology, 2021, 66, 055002.	1.6	5

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91	Development of HTS Magnet for Rotating Gantry. Physics Procedia, 2016, 81, 162-165.	1.2	4
92	Experimental verification of beam switching operation for multiple-ion therapy applications at HIMAC. Nuclear Instruments & Methods in Physics Research B, 2019, 459, 115-119.	0.6	4
93	Thick target neutron yields from 100- and 230-MeV/nucleon helium ions bombarding water, PMMA, and iron. Nuclear Instruments & Methods in Physics Research B, 2019, 449, 62-70.	0.6	4
94	AC Loss and Shielding-Current-Induced Field in a Coated-Conductor Test Magnet for Accelerator Applications under Repeated Excitations. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.1	4
95	Astrophysical implications of non-resonant break-up of. Journal of Physics G: Nuclear and Particle Physics, 1998, 24, 1637-1640.	1.4	3
96	Fragment detection system for studies of exotic neutron-rich nuclei. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 480, 598-609.	0.7	3
97	Indirect â€œone-sideâ€•cooling method of a magnetic-alloyâ€“loaded rf cavity. Physical Review Special Topics: Accelerators and Beams, 2004, 7, .	1.8	3
98	Investigation of single-event damages on silicon carbide (SiC) power MOSFETs. , 2013, , .		3
99	Test of Cryocooler-Cooled RE-123 Magnet on HIMAC Beam Line in S-Innovation Program. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	3
100	Soft dipole resonance in exotic nuclei?. Nuclear Physics A, 1996, 599, 353-365.	0.6	2
101	Improvement of the Kei2 source for a new carbon therapy facility. Review of Scientific Instruments, 2006, 77, 03A307.	0.6	2
102	Acceleration of heavy ions with a new RF system at HIMAC synchrotron. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2886-2890.	0.6	2
103	Influence of Manufacturing Accuracy on Magnetic Field Distribution in Magnet for HTS Rotating Gantry. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.1	2
104	Fabrication and Excitation of a Model Magnet Using Coated Conductors for Spiral Sector FFAG Accelerators. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.1	2
105	Emittance matching of a slow extracted beam for a rotating gantry. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 229-232.	0.6	2
106	Effects of Magnetic Field Applied Just Before, During or Immediately after Carbon-Ion Beam Irradiation on its Biological Effectiveness. Radiation Research, 2019, 192, 662.	0.7	2
107	Method of Coulomb breakup probing primordial 7Li synthesis. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 402, 417-420.	0.7	1
108	Neutron Spectra from Intermediate-Energy Nucleus-Nucleus Reactions. AIP Conference Proceedings, 2005, , .	0.3	1

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109	60 mA Carbon Beam Acceleration with DPIS. , 0, , .		1
110	Effects of voltage errors caused by gap-voltage and automatic-frequency tuning in an alternating-phase-focused linac. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2150-2156.	0.6	1
111	Compact carbon-therapy facility and next-generation irradiation scheme. Radiation Physics and Chemistry, 2008, 77, 1148-1152.	1.4	1
112	Development of Compact Electron Cyclotron Resonance Ion Source with Permanent Magnets for High-Energy Carbon-Ion Therapy. , 2008, , .		1
113	Design of a post linac for an energy upgrade of a heavy-ion injector. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 10-14.	0.6	1
114	2.2.3â€ƒDevelopment of New Heavy-ion Radiotherapy Technologyâ€”Toward Upgrading Heavy-ion Radiotherapyâ€”. Radioisotopes, 2019, 68, 197-206.	0.1	1
115	Predicting the Biological Effects of Human Salivary Gland Tumour Cells for Scanned 4He-, 12C-, 16O-, and 20Ne-Ion Beams Using an SOI Microdosimeter. Applied Sciences (Switzerland), 2022, 12, 6148.	1.3	1
116	Final-state interactions in the system. , 1998, , .		0
117	Alternating-Phase-Focused Linac with Interdigital H-Mode Structure for Medical Injector. , 0, , .		0
118	Development of synchrotron control for Heavy-Ion Medical Accelerators. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2901-2904.	0.6	0
119	Neutron-Production Yields from 400 MeV/Nucleon Iron Stopping in Carbon, Aluminum, Copper, and Lead Targets. Nuclear Science and Engineering, 2011, 169, 279-289.	0.5	0
120	Beam stability improvement of the HIMAC synchrotron using a feed-forward system for magnet power supplies. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2905-2910.	0.6	0
121	Development of a new compact ECR ion source with all permanent magnets for carbon 5+ production. AIP Conference Proceedings, 2018, , .	0.3	0
122	2.2.2ã€€Research for the Promotion of Carbon Therapy. Radioisotopes, 2019, 68, 179-195.	0.1	0
123	Microdosimetric study for helium-ion beam using fully 3D silicon microdosimeters. Journal of Physics: Conference Series, 2020, 1662, 012022.	0.3	0
124	Error Studies for Muon Linac in the Muon g â˜’ 2/EDM Experiment at J-PARC. , 2021, , .		0
125	Ion Linac and Synchrotron. , 2014, , 153-168.		0
126	Study of Î± Decays in the 40Ar+232Th Reaction Using the RIKEN Gas-Filled Separator I -General. , 1995, , .		0

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127	Current Status of Carbon-ion Radiotherapy. Journal of the Institute of Electrical Engineers of Japan, 2017, 137, 365-368.	0.0	0
128	Research and Development of the Coil System for a Beam Transport and Irradiation Line. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2017, 52, 234-243.	0.1	0
129	7.2.2â€€Secondary Neutron Production Cross Section Measurements from Heavy-mass Targets at HIMAC. Radioisotopes, 2019, 68, 553-557.	0.1	0
130	Overview of S-Innovation Project on Fundamental Technology of HTS Accelerator Magnets. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 2020, 55, 89-97.	0.1	0
131	Concept design of new compact electron cyclotron resonance ion source with permanent magnets for multi-ion radiotherapy. Journal of Physics: Conference Series, 2022, 2244, 012094.	0.3	0