

Daniel Rodriguez

List of Publications by Year in descending order

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88
papers

1,917
citations

257450

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265206

42
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91
docs citations

91
times ranked

895
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation of two-ion crystals by injection from a Paul-trap source into a high-magnetic-field Penning trap. <i>Physical Review A</i> , 2022, 105, .	2.5	4
2	Motional quantum metrology in a Penning trap. <i>Europhysics Letters</i> , 2021, 134, 38001.	2.0	5
3	Non-equilibrium coupling of a quartz resonator to ions for Penning-trap fast resonant detection. <i>Quantum Science and Technology</i> , 2021, 6, 044002.	5.8	2
4	Quartz resonators for penning traps toward mass spectrometry on the heaviest ions. <i>Review of Scientific Instruments</i> , 2020, 91, 093202.	1.3	4
5	The TRAPSENSOR facility: an open-ring 7 tesla Penning trap for laser-based precision experiments. <i>New Journal of Physics</i> , 2019, 21, 023023.	2.9	12
6	A quartz amplifier for high-sensitivity Fourier-transform ion-cyclotron-resonance measurements with trapped ions. <i>Review of Scientific Instruments</i> , 2019, 90, 063202.	1.3	5
7	The open LPC Paul trap for precision measurements in beta decay. <i>European Physical Journal A</i> , 2019, 55, 1.	2.5	4
8	Dynamics of an unbalanced two-ion crystal in a Penning trap for application in optical mass spectrometry. <i>Physical Review A</i> , 2019, 100, .	2.5	12
9	A double Paul trap system for the electronic coupling of ions. <i>European Physical Journal: Special Topics</i> , 2018, 227, 445-456.	2.6	3
10	Motional studies of one and two laser-cooled trapped ions for electric-field sensing applications. <i>Journal of Modern Optics</i> , 2018, 65, 613-621.	1.3	4
11	A Single-Ion Reservoir as a High-Sensitive Sensor of Electric Signals. <i>Scientific Reports</i> , 2017, 7, 8336.	3.3	13
12	Recent Upgrades of the SHIPTRAP Setup: On the Finish Line Towards Direct Mass Spectroscopy of Superheavy Elements. <i>Acta Physica Polonica B</i> , 2017, 48, 423.	0.8	6
13	An optimized geometry for a micro Penning-trap mass spectrometer based on interconnected ions. <i>International Journal of Mass Spectrometry</i> , 2016, 410, 22-30.	1.5	10
14	A preparation Penning trap for the TRAPSENSOR project with prospects for MATS at FAIR. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 376, 288-291.	1.4	3
15	Extending the applicability of an open-ring trap to perform experiments with a single laser-cooled ion. <i>Review of Scientific Instruments</i> , 2015, 86, 103104.	1.3	8
16	An online FT-ICR Penning-trap mass spectrometer for the DPS2-F section of the KATRIN experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 757, 54-61.	1.6	2
17	Status of the project TRAPSENSOR. <i>Hyperfine Interactions</i> , 2014, 227, 223-237.	0.5	6
18	Precise measurement of the angular correlation parameter $\langle i \rangle \langle \sub \hat{1}^{1/2} \rangle$ in the $\langle i \rangle^2$ decay of ^{35}Ar with LPCTrap. <i>EPJ Web of Conferences</i> , 2014, 66, 08002.	0.3	5

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19	Status of the project TRAPSENSOR: Performance of the laser-desorption ion source. Nuclear Instruments & Methods in Physics Research B, 2013, 317, 522-527.	1.4	8
20	High-precision mass measurements of 203-207Rn and 213Ra with SHIPTRAP. European Physical Journal A, 2013, 49, 1.	2.5	11
21	The advanced trapping facility MATS at FAIR. International Journal of Mass Spectrometry, 2013, 349-350, 255-263.	1.5	2
22	Recent developments for high-precision mass measurements of the heaviest elements at SHIPTRAP. Nuclear Instruments & Methods in Physics Research B, 2013, 317, 501-505.	1.4	8
23	Extending Penning trap mass measurements with SHIPTRAP to the heaviest elements. , 2013, , . Electron shakeoff following the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:msup} \langle \text{mml:mi} \hat{I}^2 \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle$ decay of trapped $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:msup} \langle \text{mml:mrow} / \rangle \langle \text{mml:mn} \rangle 35 \langle \text{mml:mn} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle \text{Ar} \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:msup} \langle \text{mml:mrow} / \rangle \langle \text{mml:math} \rangle$		0
24		2.5	19
25	A Quantum Sensor for Neutrino Mass Measurements. Advances in High Energy Physics, 2012, 2012, 1-24.	1.1	7
26	A quantum sensor for applications in neutrino mass spectrometry. , 2012, , .		0
27	First Measurement of Pure Electron Shakeoff in the \hat{I}^2 Decay of Trapped He+6Ions. Physical Review Letters, 2012, 108, 243201.	7.8	45
28	Direct Mapping of Nuclear Shell Effects in the Heaviest Elements. Science, 2012, 337, 1207-1210.	12.6	121
29	A quantum sensor for high-performance mass spectrometry. Applied Physics B: Lasers and Optics, 2012, 107, 1031-1042.	2.2	24
30	One- and two-pulse quadrupolar excitation schemes of the ion motion in a Penning trap investigated with FT-ICR detection. Applied Physics B: Lasers and Optics, 2012, 107, 1019-1029.	2.2	6
31	High-precision method of measuring short-lived nuclides by means of developed systems of ion traps for high-charge ions (MATS project). Atomic Energy, 2012, 112, 139-146.	0.4	1
32	Temperature measurement of $6\text{He}^{\oplus 6}$ ions confined in a transparent Paul trap. Hyperfine Interactions, 2011, 199, 21-27.	0.5	8
33	The LPCTrap experiment: measurement of the \hat{I}^2 - \hat{I}^2 Angular Correlation in 6He^+ decay using a transparent Paul trap. Hyperfine Interactions, 2011, 199, 29-38.	0.5	4
34	Dipolar and quadrupolar detection using an FT-ICR MS setup at the MPIK Heidelberg. Hyperfine Interactions, 2011, 199, 347-355.	0.5	9
35	Mass Measurements of Very Neutron-Deficient Mo and Tc Isotopes and Their Impact on $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mi} \rangle r \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle p \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ Process Nucleosynthesis. Physical Review Letters, 2011, 106, 122501.	7.8	46
36	Measurement of the \hat{I}^2 - \hat{I}^2 correlation coefficient $\langle i \rangle a \langle i \rangle \langle \text{sub} \rangle \hat{I}^2 \langle \text{sub} \rangle$ in the \hat{I}^2 decay of trapped $\langle \text{sup} \rangle 6 \langle \text{sup} \rangle \text{He} \langle \text{sup} \rangle + \langle \text{sup} \rangle$ ions. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 055101.	3.6	55

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37	Temperature measurement of 6He^{+} ions confined in a transparent Paul trap. , 2011, , 21-27.		0
38	Dipolar and quadrupolar detection using an FT-ICR MS setup at the MPIK Heidelberg. , 2011, , 347-355.		0
39	MATS and LaSpec: High-precision experiments using ion traps and lasers at FAIR. European Physical Journal: Special Topics, 2010, 183, 1-123.	2.6	76
40	Penning trap mass measurements of transfermium elements with SHIPTRAP. Hyperfine Interactions, 2010, 196, 225-231.	0.5	4
41	Production and investigations of negative osmium ions for fundamental applications: REOSTRAP. Hyperfine Interactions, 2010, 196, 253-260.	0.5	2
42	Direct mass measurements above uranium bridge the gap to the island of stability. Nature, 2010, 463, 785-788.	27.8	176
43	Penning trap mass measurements on nobelium isotopes. Physical Review C, 2010, 81, .	2.9	47
44	Production of negative osmium ions by laser desorption and ionization. Review of Scientific Instruments, 2010, 81, 013301.	1.3	5
45	Measurement of the ${}^8\text{Li}$ half-life. Physical Review C, 2010, 82, .	2.9	12
46	Broad-Band FT-ICR MS for the Penning-Trap Mass Spectrometer MATS. , 2010, , .		3
47	Beta Neutrino Correlation Measurement with Trapped Radioactive Ions. AIP Conference Proceedings, 2010, , .	0.4	1
48	Production and investigations of negative osmium ions for fundamental applications: REOSTRAP. , 2010, , 253-260.		0
49	A broad-band FT-ICR Penning trap system for KATRIN. International Journal of Mass Spectrometry, 2009, 288, 1-5.	1.5	30
50	Position-sensitive ion detection in precision Penning trap mass spectrometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 606, 475-483.	1.6	18
51	Geant4 Monte Carlo simulations for the LPCTrap setup. European Physical Journal A, 2009, 42, 397.	2.5	5
52	Signature of a strong coupling with the continuum in ${}^{11}\text{Be} + {}^{120}\text{Sn}$ scattering at the Coulomb barrier. European Physical Journal A, 2009, 42, 461.	2.5	34
53	Status of the LPCTrap facility at GANIL. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 4537-4541.	1.4	11
54	Paul Trapping of Radioactive ${}^6\text{He}$ Ions and Direct Observation of Their ${}^2\text{He}$ Decay. Physical Review Letters, 2008, 101, 212504.	7.8	51

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55	Mass measurements in the vicinity of the r -process and the p -process	2.9	119
56	First Penning Trap Mass Measurements beyond the Proton Drip Line. Physical Review Letters, 2008, 100, 012501.	7.8	41
57	Mass Measurements at SHIPTRAP. AIP Conference Proceedings, 2007, , .	0.4	0
58	Precise mass measurements of exotic nuclei at the SHIPTRAP Penning trap mass spectrometer. AIP Conference Proceedings, 2007, , .	0.4	1
59	Mass measurements of exotic nuclides at SHIPTRAP. AIP Conference Proceedings, 2007, , .	0.4	0
60	The LPCTrap facility: A transparent Paul Trap for the search of exotic couplings in the beta decay of radioactive 6He^+ ions. Journal of Physics: Conference Series, 2007, 58, 431-434.	0.4	1
61	Mass measurements of neutron-deficient radionuclides near the end-point of the rp-process with SHIPTRAP. European Physical Journal A, 2007, 34, 341-348.	2.5	57
62	Towards direct mass measurements of nobelium at SHIPTRAP. European Physical Journal D, 2007, 45, 39-45.	1.3	94
63	Direct mass measurements around $A=146$ at SHIPTRAP. European Physical Journal: Special Topics, 2007, 150, 329-335.	2.6	36
64	Search for tensor couplings in the weak interaction. European Physical Journal: Special Topics, 2007, 150, 385-388.	2.6	0
65	The LPCTrap facility for in-trap decay experiments. Hyperfine Interactions, 2007, 174, 15-20.	0.5	4
66	The LPCTrap facility: A novel transparent Paul trap for high-precision experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 565, 876-889.	1.6	43
67	The ion-catcher device for SHIPTRAP. Nuclear Instruments & Methods in Physics Research B, 2006, 244, 489-500.	1.4	70
68	The LPCTrap experiment: measurement of the I^2 angular correlation in 6He using a transparent Paul trap. Hyperfine Interactions, 2006, 172, 29-33.	0.5	4
69	Mass measurements in the endpoint region of the rp-process at SHIPTRAP. Hyperfine Interactions, 2006, 173, 133-142.	0.5	11
70	Accurate mass measurements on neutron-deficient krypton isotopes. Nuclear Physics A, 2006, 769, 1-15.	1.5	37
71	On-line commissioning of SHIPTRAP. International Journal of Mass Spectrometry, 2006, 251, 146-151.	1.5	38
72	ISOLTRAP Mass Measurements for Weak-Interaction Studies. AIP Conference Proceedings, 2006, , .	0.4	2

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73	The ion-trap facility SHIPTRAP. European Physical Journal A, 2005, 25, 49-50.	2.5	60
74	The LPCTrap for the measurement of the I^2 - $I^{1/2}$ correlation in 6He. European Physical Journal A, 2005, 25, 705-707.	2.5	2
75	Mass measurement on the rp-process waiting point 72Kr. European Physical Journal A, 2005, 25, 41-43.	2.5	15
76	Performance of a micro-channel plates position sensitive detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 551, 375-386.	1.6	58
77	ISOLTRAP pins down masses of exotic nuclides. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1775-S1778.	3.6	18
78	Mass Measurement on therp-Process Waiting PointKr72. Physical Review Letters, 2004, 93, 161104.	7.8	60
79	Recent results from the Penning trap mass spectrometer ISOLTRAP. Nuclear Physics A, 2004, 746, 305-310.	1.5	27
80	Towards high-precision mass measurements on 74Rb for a test of the CVC hypothesis and the unitarity of the CKM matrix. Nuclear Physics A, 2004, 746, 635-638.	1.5	3
81	Masses along the rp-process path and large scale surveys on Cu, Ni and Ga with ISOLTRAP. Nuclear Physics A, 2004, 746, 487-492.	1.5	20
82	SHIPTRAP is Trapping: A Capture and Storage Device on Its Way towards a RIB-Facility. Hyperfine Interactions, 2003, 146/147, 245-251.	0.5	6
83	SHIPTRAP: A capture and storage facility on its way towards an RIB-facility. AIP Conference Proceedings, 2002, , .	0.4	1
84	SHIPTRAPâ€™a capture and storage facility for heavy radionuclides at GSI. Nuclear Physics A, 2002, 701, 579-582.	1.5	7
85	HITRAP: A Facility for Experiments with Trapped Highly Charged Ions. Hyperfine Interactions, 2001, 132, 453-457.	0.5	53
86	Status of the SHIPTRAP Project: A Capture and Storage Facility for Heavy Radionuclides from SHIP. , 2001, , 463-468.		1
87	HITRAP: A Facility for Experiments with Trapped Highly Charged Ions. , 2001, , 457-461.		7
88	The SHIPTRAP project: A capture and storage facility at GSI for heavy radionuclides from SHIP. , 2000, 127, 491-496.		61