Robin Golser

List of Publications by Year
in descending order

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		236925	206112
124	2,930	25	48
papers	citations	h-index	g-index

126	126	126	1763
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	5 YEARS OF ION-LASER INTERACTION MASS SPECTROMETRYâ€"STATUS AND PROSPECTS OF ISOBAR SUPPRESSION IN AMS BY LASERS. Radiocarbon, 2022, 64, 555-568.	1.8	9
2	Anthropogenic 236U and 233U in the Baltic Sea: Distributions, source terms, and budgets. Water Research, 2022, 210, 117987.	11.3	5
3	Developing Accelerator Mass Spectrometry Capabilities for Anthropogenic Radionuclide Analysis to Extend the Set of Oceanographic Tracers. Frontiers in Marine Science, 2022, 9, .	2.5	9
4	Novel ⁹⁰Sr analysis of environmental samples by Ion-Laser InterAction Mass Spectrometry. Analytical Methods, 2022, 14, 2732-2738.	2.7	3
5	Deciphering sources of U contamination using isotope ratio signatures in the Loire River sediments: Exploring the relevance of 233U/236U and stable Pb isotope ratios. Chemosphere, 2022, 307, 135658.	8.2	3
6	An unknown source of reactor radionuclides in the Baltic Sea revealed by multi-isotope fingerprints. Nature Communications, 2021, 12, 823.	12.8	26
7	On the Quality Control for the Determination of Ultratrace-Level ²³⁶U and ²³³U in Environmental Samples by Accelerator Mass Spectrometry. Analytical Chemistry, 2021, 93, 3362-3369.	6.5	11
8	70-Year Anthropogenic Uranium Imprints of Nuclear Activities in Baltic Sea Sediments. Environmental Science & Technology, 2021, 55, 8918-8927.	10.0	22
9	Highly sensitive 26Al measurements by Ion-Laser-InterAction Mass Spectrometry. International Journal of Mass Spectrometry, 2021, 465, 116576.	1.5	14
10	The quest for AMS of ¹⁸²Hf â€" why poor gas gives pure beams. EPJ Web of Conferences, 2020, 232, 02003.	0.3	9
11	Pushing Limits of ICPâ€"MS/MS for the Determination of Ultralow ²³⁶U/²³⁸U Isotope Ratios. Analytical Chemistry, 2020, 92, 7869-7876.	6.5	16
12	Comparison of methods for the detection of 10Be with AMS and a new approach based on a silicon nitride foil stack. International Journal of Mass Spectrometry, 2019, 444, 116175.	1.5	16
13	36Cl in a new light: AMS measurements assisted by ion-laser interaction. Nuclear Instruments & Methods in Physics Research B, 2019, 456, 163-168.	1.4	12
14	The actinide beamline at VERA. Nuclear Instruments & Methods in Physics Research B, 2019, 458, 82-89.	1.4	23
15	The ILIAMS project â€" An RFQ ion beam cooler for selective laser photodetachment at VERA. Nuclear Instruments & Methods in Physics Research B, 2019, 456, 213-217.	1.4	19
16	Limits on Supernova-Associated <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Fe</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>60</mml:mn></mml:mrow></mml:mmultiscripts><mml:mo>/</mml:mo><mml:mmultiscripts><mml:mrow><mml:mi>Fe</mml:mi></mml:mrow><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>26</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> N	7.8	23
17	Selective laser photodetachment of intense atomic and molecular negative ion beams with the ILIAS RFQ ion beam cooler. International Journal of Mass Spectrometry, 2017, 415, 9-17.	1.5	15
18	Plutonium Isotopes (^{239â€"241}Pu) Dissolved in Pacific Ocean Waters Detected by Accelerator Mass Spectrometry: No Effects of the Fukushima Accident Observed. Environmental Science & Technology, 2017, 51, 2031-2037.	10.0	21

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19	Reconstruction of the temporal distribution of 236U/238U in the Northwest Pacific Ocean using a coral core sample from the Kuroshio Current area. Marine Chemistry, 2017, 190, 28-34.	2.3	13
20	Anthropogenic ²³⁶U in Danish Seawater: Global Fallout versus Reprocessing Discharge. Environmental Science & Technology, 2017, 51, 6867-6876.	10.0	24
21	Radiocarbon concentration in tree-ring samples collected in the south-west Slovakia (1974â€“2013). Applied Radiation and Isotopes, 2017, 126, 58-60.	1.5	12
22	Twenty Years of VERA: Toward a Universal Facility for Accelerator Mass Spectrometry. Nuclear Physics News, 2017, 27, 29-34.	0.4	4
23	Preparation Methods of Î¼g Carbon Samples for¹⁴C MeasuremenTS. Radiocarbon, 2017, 59, 803-814.	1.8	14
24	Multiactinide Analysis with Accelerator Mass Spectrometry for Ultratrace Determination in Small Samples: Application to an in Situ Radionuclide Tracer Test within the Colloid Formation and Migration Experiment at the Grimsel Test Site (Switzerland). Analytical Chemistry, 2017, 89, 7182-7189.	6.5	9
25	The Link Between the Local Bubble and Radioisotopic Signatures on Earth. , 2017, , .		1
26	Formation probability of metastable molecular hydrogen anions H m D n â˜’ (m , n = 0â€“3 and m + n = 2, 3) in sputtering. International Journal of Mass Spectrometry, 2016, 410, 52-56.	1.5	0
27	Recent near-Earth supernovae probed by global deposition of interstellar radioactive 60Fe. Nature, 2016, 532, 69-72.	27.8	205
28	Temporal and vertical distributions of anthropogenic ²³⁶<scp>U</scp> in the <scp>J</scp>apan <scp>S</scp>ea using a coral core and seawater samples. Journal of Geophysical Research: Oceans, 2016, 121, 4-13.	2.6	30
29	Retrospective study of 14C concentration in the vicinity of NPP JaslovskÃ© Bohunice using tree rings and the AMS technique. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 129-132.	1.4	24
30	The ILIAS project for selective isobar suppression by laser photodetachment. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 217-221.	1.4	14
31	He stripping for AMS of 236U and other actinides using a 3 MV tandem accelerator. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 458-464.	1.4	25
32	Developments towards detection of 135Cs at VERA. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 440-444.	1.4	13
33	Accelerator Mass Spectrometry of Actinides in Ground- and Seawater: An Innovative Method Allowing for the Simultaneous Analysis of U, Np, Pu, Am, and Cm Isotopes below ppq Levels. Analytical Chemistry, 2015, 87, 5766-5773.	6.5	31
34	Preliminary AMS measurements of 10Be at the CENTA facility. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 139-142.	1.4	8
35	Using the nuclear activation AMS method for determining chlorine in solids at ppb-levels and below. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 649-653.	1.4	1
36	On the effect of organic carbon on rehydroxylation (RHX) dating. Journal of Archaeological Science, 2015, 57, 92-97.	2.4	10

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37	Method for ²³⁶U Determination in Seawater Using Flow Injection Extraction Chromatography and Accelerator Mass Spectrometry. Analytical Chemistry, 2015, 87, 7411-7417.	6.5	30
38	Isobar separation of 93Zr and 93Nb at 24 MeV with a new multi-anode ionization chamber. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 201-206.	1.4	10
39	Interlaboratory study of the ion source memory effect in 36Cl accelerator mass spectrometry. Nuclear Instruments & Methods in Physics Research B, 2014, 329, 22-29.	1.4	21
40	Metastable states of diatomic hydrogen anions. Journal of Physics: Conference Series, 2014, 488, 012034.	0.4	2
41	Iodine-129 in Seawater Offshore Fukushima: Distribution, Inorganic Speciation, Sources, and Budget. Environmental Science & Technology, 2013, 47, 3091-3098.	10.0	193
42	AMS of 36Cl with the VERA 3MV tandem accelerator. Nuclear Instruments & Methods in Physics Research B, 2013, 294, 115-120.	1.4	17
43	Carbon background and ionization yield of an AMS system during 14C measurements of microgram-size graphite samples. Nuclear Instruments & Methods in Physics Research B, 2013, 294, 335-339.	1.4	9
44	Sequential Injection Method for Rapid and Simultaneous Determination of ²³⁶U, ²³⁷Np, and Pu Isotopes in Seawater. Analytical Chemistry, 2013, 85, 11026-11033.	6.5	36
45	A New UV Oxidation Setup for Small Radiocarbon Samples in Solution. Radiocarbon, 2013, 55, 373-382.	1.8	7
46	Cesium, iodine and tritium in NW Pacific waters â€“ a comparison of the Fukushima impact with global fallout. Biogeosciences, 2013, 10, 5481-5496.	3.3	116
47	A New UV Oxidation Setup for Small Radiocarbon Samples in Solution. Radiocarbon, 2013, 55, .	1.8	2
48	The Chronology of Tell El-Daba: A Crucial Meeting Point of ¹⁴C Dating, Archaeology, and Egyptology in the 2nd Millennium BC. Radiocarbon, 2012, 54, 407-422.	1.8	55
49	Light induced suppression of sulfur in a cesium sputter ion source. International Journal of Mass Spectrometry, 2012, 315, 55-59.	1.5	5
50	Recent advances in AMS of 36Cl with a 3-MV-tandem. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 3188-3191.	1.4	11
51	Sputtered molecular fluoride anions: HfF_n^{â^’} and WF_n^{â^’}. Surface and Interface Analysis, 2011, 43, 32-35.	1.8	6
52	The new injection beamline at VERA. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 824-826.	1.4	9
53	Analysis and application of heavy isotopes in the environment. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 1045-1049.	1.4	68
54	36Cl exposure dating with a 3-MV tandem. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 744-747.	1.4	12

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55	Comparison of detector systems for the separation of 36Cl and 36S with a 3-MV tandem. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 847-850.	1.4	5
56	Search for a superheavy nuclide with A=292 and neutron-deficient thorium isotopes in natural thorianite. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 1287-1290.	1.4	21
57	Studies on the Preparation of Small 14C Samples with an RGA and 13C-Enriched Material. Radiocarbon, 2010, 52, 1394-1404.	1.8	18
58	Precise measurement of the neutron capture reaction54Fe(n,Î³)55Fe via AMS. Journal of Physics: Conference Series, 2010, 202, 012020.	0.4	2
59	Calorimetric low temperature detectors for low-energetic heavy ions and their application in accelerator mass spectrometry. Review of Scientific Instruments, 2009, 80, 103304.	1.3	10
60	Determination of the stellar (n,Î³) cross section ofCa40with accelerator mass spectrometry. Physical Review C, 2009, 79, .	2.9	22
61	Characterization and improvement of thin natural diamond detectors for spectrometry of heavy ions below 1MeV/amu. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 590, 221-226.	1.6	2
62	Natural and anthropogenic 236U in environmental samples. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2246-2250.	1.4	166
63	PIXE measurements of Renaissance silverpoint drawings at VERA. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2279-2285.	1.4	18
64	Isobar suppression in AMS using laser photodetachment. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 4565-4568.	1.4	19
65	Applications of a compact ionization chamber in AMS at energies below 1MeV/amu. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2213-2216.	1.4	21
66	Measurement of the stellar cross sections for the reactions⁹Be(n,Î³)¹⁰Be and¹³C(n,Î³)¹⁴C via AMS. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 014018.	3.6	22
67	Identification of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mrow><mml:msub><mml:mi>SiF</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:mrow></mml:mrow></mml:msup></mml:mrow></mml:math> by accelerator mass spectrometry and a fully relativistic computation of its photodetachment spectrum. Physical Review A, 2008, 77, .	2.5	7
68	AMS measurements of 41Ca and 55Fe at VERA â€“ two radionuclides of astrophysical interest. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 677-682.	1.4	23
69	Ion source refinement at VERA. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 94-99.	1.4	9
70	Exotic negative molecules in AMS. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 71-75.	1.4	5
71	Sputtered gas-phase dianions detected by high-sensitivity mass spectrometry. Chemical Physics, 2006, 329, 222-229.	1.9	4
72	AMS --A powerful tool for probing nucleosynthesis via long-lived radionuclides. European Physical Journal A, 2006, 27, 337-342.	2.5	10

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73	Lifetimes of the negative molecular hydrogen ions:H2â^',D2â^', andHDâ^'. Physical Review A, 2006, 73, .	2.5	29
74	Verification of long-lived molecular hydrogen anions (Hnâ^',Dnâ^',n=2,3) by secondary-ion mass spectrometry. Physical Review A, 2006, 73, .	2.5	17
75	Accelerator mass spectrometry of molecular ions. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 468-473.	1.4	6
76	A study of the tandem-terminal-stripper reaction 1H(12C,Î³)13N with accelerator mass spectrometry. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 495-499.	1.4	2
77	Opportunities and limits of AMS with 3-MV tandem accelerators. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 445-451.	1.4	27
78	The Î"TOF detector for isobar separation at ion energies below 1MeV/amu. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 490-494.	1.4	21
79	182Hf â€" FROM GEOPHYSICS TO ASTROPHYSICS. Nuclear Physics A, 2005, 758, 340-343.	1.5	10
80	Experimental and Theoretical Evidence for Long-Lived Molecular Hydrogen AnionsH2â^'andD2â^'. Physical Review Letters, 2005, 94, 223003.	7.8	40
81	VERA, an AMS facility for â€œallâ€•isotopes. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 67-71.	1.4	52
82	First tests with a natural diamond detector (NDD) â€" a possibly powerful tool for AMS. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 205-208.	1.4	5
83	Analysis of doubly-charged negative molecules by accelerator mass spectrometry. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 221-226.	1.4	8
84	Development of an AMS method to study oceanic circulation characteristics using cosmogenic 39Ar. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 428-434.	1.4	40
85	Developing a detection method of environmental 244Pu. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 817-822.	1.4	12
86	182Hf, a new isotope for AMS. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 823-828.	1.4	35
87	Anthropogenic 244Pu in the environment. New Astronomy Reviews, 2004, 48, 151-154.	12.8	15
88	Search for live 182Hf in deep-sea sediments. New Astronomy Reviews, 2004, 48, 161-164.	12.8	29
89	First tests of a thin natural diamond detector as an energy spectrometer for low-energy heavy ions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 521, 203-207.	1.6	11
90	Recent investigations and applications of thin diamond-like carbon (DLC) foils. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 521, 197-202.	1.6	21

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91	First application of calorimetric low-temperature detectors in accelerator mass spectrometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 520, 63-66.	1.6	14
92	Detection of sputtered molecular doubly charged anions: a comparison of secondary-ion mass spectrometry (SIMS) and accelerator mass spectrometry (AMS). Applied Surface Science, 2004, 231-232, 117-121.	6.1	2
93	Accelerator mass spectrometry of heavy long-lived radionuclides. International Journal of Mass Spectrometry, 2003, 223-224, 713-732.	1.5	108
94	Heavy ion AMS with a â€œsmallâ€•accelerator. Nuclear Instruments & Methods in Physics Research B, 2002, 188, 283-287.	1.4	52
95	Accelerator mass spectrometry of the heaviest long-lived radionuclides with a 3-MV tandem accelerator. Pramana - Journal of Physics, 2002, 59, 1041-1051.	1.8	6
96	A detailed 2-year record of atmospheric 14CO in the temperate northern hemisphere. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 780-785.	1.4	11
97	Developments towards a fully automated AMS system. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 250-254.	1.4	11
98	Extension of the measuring capabilities at VERA. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 100-106.	1.4	19
99	14C dating with the bomb peak: An application to forensic medicine. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 944-950.	1.4	145
100	AMS ¹⁴C Dating of Equipment from the Iceman and of Spruce Logs from the Prehistoric Salt Mines of Hallstatt. Radiocarbon, 1999, 41, 183-197.	1.8	22
101	Influence of the chemical state on the stopping of protons and He-ions in some oxides. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 103-108.	1.4	23
102	26Al measurements with VERA. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 301-305.	1.4	5
103	Absence of a `Threshold Effect'' in the Energy Loss of Slow Protons Traversing Large-Band-Gap Insulators. Physical Review Letters, 1997, 79, 4112-4115.	7.8	91
104	Systematic Investigations of 14C Measurements at the Vienna Environmental Research Accelerator. Radiocarbon, 1997, 40, 255-263.	1.8	19
105	First performance tests of VERA. Nuclear Instruments & Methods in Physics Research B, 1997, 123, 193-198.	1.4	22
106	New detector concepts for AMS. Nuclear Instruments & Methods in Physics Research B, 1997, 123, 170-173.	1.4	1
107	VERA: A new AMS facility in Vienna. Nuclear Instruments & Methods in Physics Research B, 1997, 123, 47-50.	1.4	43
108	Contribution of valence electrons to the electronic energy loss of hydrogen ions in oxides. Nuclear Instruments & Methods in Physics Research B, 1997, 125, 102-105.	1.4	5

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109	Absolute measurement of 126Sn radionuclide concentration with AMS. Nuclear Instruments & Methods in Physics Research B, 1996, 114, 125-130.	1.4	12
110	A new half-life measurement of the long-lived fission product 126Sn. Nuclear Instruments & Methods in Physics Research B, 1996, 114, 131-137.	1.4	17
111	Electronic Stopping in a He-H2Mixture Substantially Exceeds Bragg's Rule Value. Physical Review Letters, 1996, 76, 3104-3107.	7.8	5
112	The influence of target composition on the specific energy loss measured in transmission geometry. Nuclear Instruments & Methods in Physics Research B, 1994, 90, 45-48.	1.4	4
113	A new method to measure the velocity dependence of electronic stopping for low velocity hydrogen projectiles. Nuclear Instruments & Methods in Physics Research B, 1994, 94, 592-594.	1.4	1
114	Energy loss of hydrogen projectiles in gases. Physical Review A, 1993, 48, 4467-4475.	2.5	31
115	Failure of Braggâ€™s rule for a mixture of nonreacting gases. Physical Review A, 1992, 45, R4222-R4224.	2.5	10
116	Transformation of time-of-flight spectra into energy spectra for extended targets. Nuclear Instruments & Methods in Physics Research B, 1992, 72, 132-138.	1.4	2
117	Energy loss of hydrogen and helium ions in hydrogen and helium gas: looking for exceptions from velocity proportionality. Nuclear Instruments & Methods in Physics Research B, 1992, 69, 18-21.	1.4	30
118	Energy loss of hydrogen projectiles below the Bohr velocity in amorphous carbon. Nuclear Instruments & Methods in Physics Research B, 1992, 67, 69-72.	1.4	10
119	Observation of a striking departure from velocity proportionality in low-energy electronic stopping. Physical Review Letters, 1991, 66, 1831-1833.	7.8	99
120	Experiences in the preparation of thin layers for accelerator measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1989, 282, 185-187.	1.6	4
121	Investigation of the ratio of proton-stopping cross sections in Ag and Au. Physical Review A, 1987, 35, 4836-4838.	2.5	5
122	On the accuracy of measuring proton fluence by beam integration, for the determination of stopping power. Nuclear Instruments & Methods in Physics Research B, 1987, 28, 311-316.	1.4	4
123	Investigation of hydrogen stopping in noble metals around the stopping power maximum. Nuclear Instruments & Methods in Physics Research B, 1984, 2, 149-152.	1.4	16
124	A 180Â° backscattering facility used to investigate the yield enhancement. Nuclear Instruments & Methods in Physics Research, 1983, 205, 287-292.	0.9	3