Robin Golser

List of Publications by Year
in descending order

124 papers	2,930 citations	236925 25 h-index	206112 48 g-index
126 all docs	126 docs citations	126 times ranked	1763 citing authors

#	ARTICLE	IF	CITATIONS
1	Recent near-Earth supernovae probed by global deposition of interstellar radioactive 60Fe. Nature, 2016, 532, 69-72.	27.8	205
2	Iodine-129 in Seawater Offshore Fukushima: Distribution, Inorganic Speciation, Sources, and Budget. Environmental Science & Technology, 2013, 47, 3091-3098.	10.0	193
3	Natural and anthropogenic 236U in environmental samples. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2246-2250.	1.4	166
4	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
5	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
6	Accelerator mass spectrometry of heavy long-lived radionuclides. International Journal of Mass Spectrometry, 2003, 223-224, 713-732.	1.5	108
7	Observation of a striking departure from velocity proportionality in low-energy electronic stopping. Physical Review Letters, 1991, 66, 1831-1833.	7.8	99
8	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
9	Analysis and application of heavy isotopes in the environment. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 1045-1049.	1.4	68
10	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
11	Heavy ion AMS with a â€œsmallâ€•accelerator. Nuclear Instruments & Methods in Physics Research B, 2002, 188, 283-287.	1.4	52
12	VERA, an AMS facility for â€œallâ€•isotopes. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 67-71.	1.4	52
13	VERA: A new AMS facility in Vienna. Nuclear Instruments & Methods in Physics Research B, 1997, 123, 47-50.	1.4	43
14	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
15	Experimental and Theoretical Evidence for Long-Lived Molecular Hydrogen AnionsH2â^’andD2â^’. Physical Review Letters, 2005, 94, 223003.	7.8	40
16	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
17	182Hf, a new isotope for AMS. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 823-828.	1.4	35
18	Energy loss of hydrogen projectiles in gases. Physical Review A, 1993, 48, 4467-4475.	2.5	31

#	Article	IF	Citations
19	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
20	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
21	Method for ²³⁶U Determination in Seawater Using Flow Injection Extraction Chromatography and Accelerator Mass Spectrometry. Analytical Chemistry, 2015, 87, 7411-7417.	6.5	30
22	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
23	Search for live 182Hf in deep-sea sediments. New Astronomy Reviews, 2004, 48, 161-164.	12.8	29
24	Lifetimes of the negative molecular hydrogen ions:H2â˘’,D2â˘’, andHDâ˘’. Physical Review A, 2006, 73, .	2.5	29
25	Opportunities and limits of AMS with 3-MV tandem accelerators. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 445-451.	1.4	27
26	An unknown source of reactor radionuclides in the Baltic Sea revealed by multi-isotope fingerprints. Nature Communications, 2021, 12, 823.	12.8	26
27	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
28	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:none /><mml:mrow><mml:mn>26</mml:mn></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math> N	7.8	25
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	Anthropogenic ²³⁶U in Danish Seawater: Global Fallout versus Reprocessing Discharge. Environmental Science & Technology, 2017, 51, 6867-6876.	10.0	24
31	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
32	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
33	The actinide beamline at VERA. Nuclear Instruments & Methods in Physics Research B, 2019, 458, 82-89.	1.4	23
34	First performance tests of VERA. Nuclear Instruments & Methods in Physics Research B, 1997, 123, 193-198.	1.4	22
35	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
36	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

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37	Determination of the stellar (n,Î³) cross section ofCa40with accelerator mass spectrometry. Physical Review C, 2009, 79, .	2.9	22
38	70-Year Anthropogenic Uranium Imprints of Nuclear Activities in Baltic Sea Sediments. Environmental Science & Technology, 2021, 55, 8918-8927.	10.0	22
39	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
40	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
41	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
42	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
43	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
44	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
45	Systematic Investigations of 14C Measurements at the Vienna Environmental Research Accelerator. Radiocarbon, 1997, 40, 255-263.	1.8	19
46	Extension of the measuring capabilities at VERA. Nuclear Instruments & Methods in Physics Research B, 2000, 172, 100-106.	1.4	19
47	Isobar suppression in AMS using laser photodetachment. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 4565-4568.	1.4	19
48	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
49	PIXE measurements of Renaissance silverpoint drawings at VERA. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2279-2285.	1.4	18
50	Studies on the Preparation of Small 14C Samples with an RGA and 13C-Enriched Material. Radiocarbon, 2010, 52, 1394-1404.	1.8	18
51	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
52	Verification of long-lived molecular hydrogen anions (Hnâˆ’,Dnâˆ’,n=2,3) by secondary-ion mass spectrometry. Physical Review A, 2006, 73, .	2.5	17
53	AMS of 36Cl with the VERA 3MV tandem accelerator. Nuclear Instruments & Methods in Physics Research B, 2013, 294, 115-120.	1.4	17
54	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

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55	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
56	Pushing Limits of ICPâ€“MS/MS for the Determination of Ultralow ²³⁶U/²³⁸U Isotope Ratios. Analytical Chemistry, 2020, 92, 7869-7876.	6.5	16
57	Anthropogenic 244Pu in the environment. New Astronomy Reviews, 2004, 48, 151-154.	12.8	15
58	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
59	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
60	The ILIAS project for selective isobar suppression by laser photodetachment. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 217-221.	1.4	14
61	Preparation Methods of Î¼g Carbon Samples for¹⁴C MeasuremenTS. Radiocarbon, 2017, 59, 803-814.	1.8	14
62	Highly sensitive 26Al measurements by Ion-Laser-InterAction Mass Spectrometry. International Journal of Mass Spectrometry, 2021, 465, 116576.	1.5	14
63	Developments towards detection of 135Cs at VERA. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 440-444.	1.4	13
64	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
65	Absolute measurement of 126Sn radionuclide concentration with AMS. Nuclear Instruments & Methods in Physics Research B, 1996, 114, 125-130.	1.4	12
66	Developing a detection method of environmental 244Pu. Nuclear Instruments & Methods in Physics Research B, 2004, 223-224, 817-822.	1.4	12
67	36Cl exposure dating with a 3-MV tandem. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 744-747.	1.4	12
68	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
69	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
70	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
71	Developments towards a fully automated AMS system. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 250-254.	1.4	11
72	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

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73	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
74	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
75	Failure of Braggâ€™s rule for a mixture of nonreacting gases. Physical Review A, 1992, 45, R4222-R4224.	2.5	10
76	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
77	182Hf â€“ FROM GEOPHYSICS TO ASTROPHYSICS. Nuclear Physics A, 2005, 758, 340-343.	1.5	10
78	AMS --A powerful tool for probing nucleosynthesis via long-lived radionuclides. European Physical Journal A, 2006, 27, 337-342.	2.5	10
79	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
80	On the effect of organic carbon on rehydroxylation (RHX) dating. Journal of Archaeological Science, 2015, 57, 92-97.	2.4	10
81	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
82	Ion source refinement at VERA. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 94-99.	1.4	9
83	The new injection beamline at VERA. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 824-826.	1.4	9
84	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
85	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
86	The quest for AMS of ¹⁸²Hf â€“ why poor gas gives pure beams. EPJ Web of Conferences, 2020, 232, 02003.	0.3	9
87	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
88	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
89	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
90	Preliminary AMS measurements of 10Be at the CENTA facility. Nuclear Instruments & Methods in Physics Research B, 2015, 361, 139-142.	1.4	8

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91	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></m by accelerator mass spectrometry and a fully relativistic computation of its photodetachment spectrum. Physical Review A, 2008, 77, .	2.5	7
92	A New UV Oxidation Setup for Small Radiocarbon Samples in Solution. Radiocarbon, 2013, 55, 373-382.	1.8	7
93	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
94	Accelerator mass spectrometry of molecular ions. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 468-473.	1.4	6
95	Sputtered molecular fluoride anions: HfF_{<i>n</i>}^{âˆ’} and WF_{<i>n</i>}^{âˆ’}. Surface and Interface Analysis, 2011, 43, 32-35.	1.8	6
96	Investigation of the ratio of proton-stopping cross sections in Ag and Au. Physical Review A, 1987, 35, 4836-4838.	2.5	5
97	Electronic Stopping in a He-H2Mixture Substantially Exceeds Bragg's Rule Value. Physical Review Letters, 1996, 76, 3104-3107.	7.8	5
98	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
99	26Al measurements with VERA. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 301-305.	1.4	5
100	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
101	Exotic negative molecules in AMS. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 71-75.	1.4	5
102	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
103	Light induced suppression of sulfur in a cesium sputter ion source. International Journal of Mass Spectrometry, 2012, 315, 55-59.	1.5	5
104	Anthropogenic 236U and 233U in the Baltic Sea: Distributions, source terms, and budgets. Water Research, 2022, 210, 117987.	11.3	5
105	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
106	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
107	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
108	Sputtered gas-phase dianions detected by high-sensitivity mass spectrometry. Chemical Physics, 2006, 329, 222-229.	1.9	4

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109	Twenty Years of VERA: Toward a Universal Facility for Accelerator Mass Spectrometry. Nuclear Physics News, 2017, 27, 29-34.	0.4	4
110	A 180Â° backscattering facility used to investigate the yield enhancement. Nuclear Instruments & Methods in Physics Research, 1983, 205, 287-292.	0.9	3
111	Novel ⁹⁰Sr analysis of environmental samples by Ion-Laser InterAction Mass Spectrometry. Analytical Methods, 2022, 14, 2732-2738.	2.7	3
112	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
113	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
114	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
115	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
116	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
117	Precise measurement of the neutron capture reaction54Fe(n,Î³)55Fe via AMS. Journal of Physics: Conference Series, 2010, 202, 012020.	0.4	2
118	Metastable states of diatomic hydrogen anions. Journal of Physics: Conference Series, 2014, 488, 012034.	0.4	2
119	A New UV Oxidation Setup for Small Radiocarbon Samples in Solution. Radiocarbon, 2013, 55, .	1.8	2
120	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
121	New detector concepts for AMS. Nuclear Instruments & Methods in Physics Research B, 1997, 123, 170-173.	1.4	1
122	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
123	The Link Between the Local Bubble and Radioisotopic Signatures on Earth. , 2017, , .		1
124	Formation probability of metastable molecular hydrogen anions H m D n âˆ’ (m , n = 0â€“3 and m + n = 2, 3) in sputtering. International Journal of Mass Spectrometry, 2016, 410, 52-56.	1.5	0