

# Alejandro Martin Sanchez

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2511999/publications.pdf>

Version: 2024-02-01

105  
papers

1,218  
citations

361413

20  
h-index

526287

27  
g-index

106  
all docs

106  
docs citations

106  
times ranked

719  
citing authors

#	ARTICLE	IF	CITATIONS
1	Radioactivity in bottled mineral waters. <i>Applied Radiation and Isotopes</i> , 1999, 50, 1049-1055.	1.5	53
2	Optimizing the parameters affecting the yield and energy resolution in the electrodeposition of uranium. <i>International Journal of Radiation Applications and Instrumentation Part A, Applied Radiation and Isotopes</i> , 1991, 42, 135-140.	0.5	46
3	Structure and melting of lead overlayers on Cu(100) studied with thermal-energy atom scattering. <i>Physical Review B</i> , 1989, 39, 5778-5786.	3.2	44
4	SIMPLEX method for optimization of experiments Application to electrodeposition in alpha spectrometry. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 348, 183-187.	1.6	44
5	FITBOR: a new program for the analysis of complex alpha spectra. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1996, 369, 593-596.	1.6	36
6	Determination of <sup>222</sup> Rn and <sup>226</sup> Ra in aqueous samples using a low-level liquid scintillation counter. <i>Applied Radiation and Isotopes</i> , 1996, 47, 861-867.	1.5	35
7	Present status of <sup>222</sup> Rn in groundwater in Extremadura. <i>Journal of Environmental Radioactivity</i> , 2008, 99, 1539-1543.	1.7	34
8	Quantum anharmonic symmetrical oscillators using elliptic functions. <i>Journal of Physics A</i> , 1986, 19, 887-902.	1.6	26
9	Distribution of uranium and thorium in sediments and plants from a granitic fluvial area. <i>Applied Radiation and Isotopes</i> , 1997, 48, 1137-1143.	1.5	26
10	Multi-technique characterization of a nuclearbomb particle from the Palomares accident. <i>Journal of Environmental Radioactivity</i> , 2006, 90, 15-28.	1.7	26
11	Radon in workplaces in Extremadura (Spain). <i>Journal of Environmental Radioactivity</i> , 2012, 107, 86-91.	1.7	26
12	Extractive procedure for uranium determination in water samples by liquid scintillation counting. <i>Applied Radiation and Isotopes</i> , 1998, 49, 875-883.	1.5	24
13	Analysis of plutonium in soil samples. <i>Applied Radiation and Isotopes</i> , 2000, 53, 259-264.	1.5	24
14	Plutonium contamination from accidental release or simply fallout: study of soils at Palomares (Spain). <i>Journal of Environmental Radioactivity</i> , 2001, 55, 157-165.	1.7	23
15	Estimates of the dose due to <sup>222</sup> Rn concentrations in water. <i>Radiation Protection Dosimetry</i> , 2004, 111, 3-7.	0.8	22
16	A simple method of analysing alpha spectra of environmental natural uranium samples. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1989, 276, 289-296.	1.6	21
17	A weighted mean-square method of "cubication" for non-linear oscillators. <i>Journal of Sound and Vibration</i> , 1989, 134, 423-433.	3.9	20
18	Energy levels of the quartic double well using a phase-integral method. <i>Physical Review A</i> , 1993, 48, 3478-3485.	2.5	20

#	ARTICLE	IF	CITATIONS
19	Experimental studies of self-absorption and backscattering in alpha-particle sources. Applied Radiation and Isotopes, 1997, 48, 1215-1220.	1.5	20
20	Isotopic uranium and plutonium analysis by alpha-particle spectrometry. Nuclear Instruments & Methods in Physics Research B, 2004, 213, 429-433.	1.4	20
21	$\hat{\alpha}$ -particle emission probabilities in the decay of <sup>235</sup> U. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 550, 581-592.	1.6	20
22	Simplifying data fitting using branching ratios as constraints in alpha spectrometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 420, 481-488.	1.6	19
23	A rapid method for determination of the isotopic composition of uranium samples by alpha spectrometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 313, 219-226.	1.6	18
24	Fitting of alpha spectra. Application to low-level measurements. Applied Radiation and Isotopes, 1996, 47, 899-903.	1.5	18
25	Application of ultra-low level liquid scintillation to the determination of <sup>222</sup> Rn in groundwater. Journal of Radioanalytical and Nuclear Chemistry, 2004, 261, 631-636.	1.5	18
26	Alpha-particle emission probabilities in the decay of <sup>240</sup> Pu. Applied Radiation and Isotopes, 2010, 68, 1459-1466.	1.5	18
27	<i>In situ</i> energy dispersive X-ray fluorescence analysis of rock art pigments from the "Abrigo dos Gaivões"™ and "Igreja dos Mouros"™ caves (Portugal). X-Ray Spectrometry, 2012, 41, 1-5.	1.4	17
28	Late Pleistocene and Holocene mid-latitude palaeoclimatic and palaeoenvironmental reconstruction: an approach based on the isotopic record from a travertine formation in the Guadix-Baza basin, Spain. Geological Magazine, 2013, 150, 602-625.	1.5	17
29	Yields and losses at each step in preparing uranium and thorium samples for alpha spectrometry. Applied Radiation and Isotopes, 1994, 45, 449-452.	1.5	16
30	Application of ion transport simulation to the backscattering in $\hat{\alpha}$ -particle sources. Nuclear Instruments & Methods in Physics Research B, 2004, 213, 129-133.	1.4	16
31	Application of XRF spectrometry to the study of pigments in glazed ceramic pots. Applied Radiation and Isotopes, 2011, 69, 574-579.	1.5	16
32	Computer simulation of backscattered alpha particles. Applied Radiation and Isotopes, 2000, 52, 341-346.	1.5	15
33	Study of self-absorption for the determination of gross alpha and beta activities in water and soil samples. Applied Radiation and Isotopes, 2009, 67, 817-820.	1.5	15
34	Additional contamination when radon is in excess. Applied Radiation and Isotopes, 2013, 81, 212-215.	1.5	15
35	Anharmonic asymmetric oscillator: A classical and quantum treatment. Journal of Chemical Physics, 1986, 85, 5128-5131.	3.0	14
36	Study of the energy resolution and yield of several methods for preparing uranium samples for alpha spectrometry. International Journal of Radiation Applications and Instrumentation Part A, Applied Radiation and Isotopes, 1990, 41, 449-452.	0.5	14

#	ARTICLE	IF	CITATIONS
37	Gamma and alpha spectrometry for natural radioactive nuclides in the spa waters of Extremadura (Spain). <i>Journal of Environmental Radioactivity</i> , 1995, 28, 209-220.	1.7	14
38	SOLANG: A user-friendly code to calculate the geometry factor using Monte Carlo simulations. Application to alpha-particle spectrometry. <i>Applied Radiation and Isotopes</i> , 2011, 69, 822-824.	1.5	13
39	Diamond detector for alpha-particle spectrometry. <i>Applied Radiation and Isotopes</i> , 2014, 90, 177-180.	1.5	13
40	Characterization of alpha sources by Rutherford backscattering spectrometry. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1996, 369, 603-607.	1.6	12
41	Gross alpha- and beta-activities in rainwater and airborne particulate samples. Influence of rainfall and radon. <i>Journal of Environmental Radioactivity</i> , 1996, 31, 273-285.	1.7	11
42	Study of the peak shape in alpha spectra measured by liquid scintillation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2002, 485, 444-452.	1.6	11
43	Generalized exponential, circular, and hyperbolic functions for nonlinear wave equations. <i>Journal of Mathematical Physics</i> , 1988, 29, 1847-1853.	1.1	10
44	Ion beam analysis and alpha spectrometry of sources electrodeposited on several backings. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1998, 136-138, 290-296.	1.4	10
45	Portable alpha spectrometer. <i>Applied Radiation and Isotopes</i> , 2012, 70, 2267-2269.	1.5	10
46	Natural isotopic separation of uranium in the Guadiana basin. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1987, 118, 291-298.	1.5	9
47	Solution of the anharmonic quartic potential oscillator problem. <i>Journal of Sound and Vibration</i> , 1993, 161, 19-31.	3.9	9
48	A method for removing the emissions of natural uranium in the analysis of thorium alpha spectra. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 346, 298-305.	1.6	9
49	Experimental study of the curve-shape variations in alpha-particle spectrometry. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1998, 414, 265-273.	1.6	9
50	Study of inhomogeneities in sources prepared for $\hat{\alpha}$ -particle spectrometry using scanning probe microscopy. <i>Applied Radiation and Isotopes</i> , 2002, 56, 31-36.	1.5	9
51	A method to reproduce alpha-particle spectra measured with semiconductor detectors. <i>Applied Radiation and Isotopes</i> , 2010, 68, 941-945.	1.5	9
52	Transmission coefficients in anharmonic symmetrical potentials. <i>Journal of Mathematical Physics</i> , 1987, 28, 636-642.	1.1	8
53	An experimental study of symmetric and asymmetric peak-fitting parameters for alpha-particle spectrometry. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 339, 127-130.	1.6	8
54	ALFITeX: a new code for the deconvolution of complex alpha-particle spectra. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2013, 296, 1247-1252.	1.5	8

#	ARTICLE	IF	CITATIONS
55	Activity ratios of natural uranium in surface waters. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1988, 126, 419-427.	1.5	7
56	Generalized Fourier transforms for nonlinear systems. <i>Journal of Mathematical Physics</i> , 1989, 30, 1871-1876.	1.1	7
57	Generalized Fourier series for non-linear systems. <i>Journal of Sound and Vibration</i> , 1989, 134, 333-341.	3.9	7
58	Constraints on uncertainties and their application to the emission probabilities of alpha-particles. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 340, 509-513.	1.6	7
59	Energy resolution, yield and radon diffusion in the electrodeposition of radium. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1995, 364, 349-353.	1.6	7
60	Semipermeable membrane to retain platinum atoms in the electrodeposition process of alpha spectrometry sources. <i>Applied Radiation and Isotopes</i> , 1998, 49, 1269-1272.	1.5	7
61	Uranium isotopic data in uraninite spent fuel from the Bangombé natural nuclear reactor (Gabon) and its surroundings. <i>Applied Radiation and Isotopes</i> , 2000, 53, 91-96.	1.5	7
62	Activity of $^{239+240}\text{Pu}$ and $^{238}\text{Pu}$ in atmospheric deposits. <i>Applied Radiation and Isotopes</i> , 2001, 55, 97-102.	1.5	7
63	Assembly of an alpha- $\gamma$ coincidence measuring device for checking alpha decay schemes. <i>Applied Radiation and Isotopes</i> , 2012, 70, 2263-2266.	1.5	7
64	Using $^{232}\text{U}$ as a yield monitor in assaying natural uranium by alpha-spectrometry. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1990, 141, 69-74.	1.5	6
65	Improvements to alpha-particle spectrometry techniques. <i>Applied Radiation and Isotopes</i> , 2014, 87, 328-330.	1.5	6
66	Spectroscopic analysis of decorated vestiges found in the Roman Theatre of Medellín, Badajoz, Spain. <i>Microchemical Journal</i> , 2016, 124, 675-681.	4.5	6
67	Improvement of the simple method of analysing alpha spectra of natural uranium samples spiked with $^{232}\text{U}$ . <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1990, 295, 450-452.	1.6	5
68	Optimal parameters for the electrodeposition of uranium. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1992, 164, 23-28.	1.5	5
69	Application of atomic and nuclear techniques to the study of inhomogeneities in electrodeposited $\hat{\alpha}$ -particle sources. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2002, 190, 747-750.	1.4	5
70	The effect of energy losses in $\hat{\alpha}$ -particle sources on the shape of peaks in spectra obtained with wide-angle geometry. <i>Applied Radiation and Isotopes</i> , 2002, 56, 51-55.	1.5	5
71	Design and construction of a new chamber for measuring the thickness of alpha-particle sources. <i>Applied Radiation and Isotopes</i> , 2008, 66, 804-807.	1.5	5
72	Seasonal variation of activity ratios for natural uranium in surface waters. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1989, 134, 73-86.	1.5	4

#	ARTICLE	IF	CITATIONS
73	A direct measurement of <sup>228</sup> Th activity by alpha-beta coincidence counting. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 286, 375-378.	1.6	4
74	An observed correlation between alpha-particle peak-fitting parameters. International Journal of Radiation Applications and Instrumentation Part A, Applied Radiation and Isotopes, 1992, 43, 223-227.	0.5	4
75	GASP: a general-purpose program for environmental alpha spectra. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 312, 211-216.	1.6	4
76	Optimizing the results in alpha-spectrometry of very low-level activity samples when the spike used is present in the sample. Journal of Radioanalytical and Nuclear Chemistry, 1995, 196, 345-351.	1.5	4
77	Characterization of alpha sources prepared by direct evaporation using Rutherford backscattering spectrometry. Nuclear Instruments & Methods in Physics Research B, 1997, 132, 501-506.	1.4	4
78	Experimental studies about the ratio between <sup>210</sup> Po deposited on surfaces and retrospective indoor <sup>222</sup> Rn concentrations. Radiation Protection Dosimetry, 2014, 160, 206-209.	0.8	4
79	Estimating retrospective indoor radon concentrations with a new device. Applied Radiation and Isotopes, 2012, 70, 2742-2745.	1.5	3
80	Influence of source composition and particle energy on the determination of gross alpha activity. Applied Radiation and Isotopes, 2013, 82, 376-381.	1.5	3
81	Measurements of alpha-gamma coincidences with an optimized dual-parameter multichannel system. Applied Radiation and Isotopes, 2013, 82, 308-313.	1.5	3
82	Gross alpha and beta indices in water samples revisited. Applied Radiation and Isotopes, 2013, 81, 136-139.	1.5	3
83	Sample quality index to preselect suitable carbonate samples for alpha spectrometry U/Th dating. Applied Radiation and Isotopes, 2013, 73, 32-43.	1.5	3
84	Determination of alpha activity in solid samples by leaching or digestion. Applied Radiation and Isotopes, 2013, 81, 49-52.	1.5	3
85	Measuring radon concentrations and estimating dose in tourist caves. Radiation Protection Dosimetry, 2015, 167, 279-283.	0.8	3
86	Actions for remediation in cases with large concentration of radon indoor. Journal of Radioanalytical and Nuclear Chemistry, 2017, 311, 1219-1225.	1.5	3
87	Analytical techniques applied to the study of mortars and coatings from the Tartessic archaeological site "El Turu" (Spain). Radiation Physics and Chemistry, 2020, 167, 108341.	2.8	3
88	Recent measurements of <sup>228</sup> Th activity by alpha-beta coincidence counting. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 295, 273-275.	1.6	2
89	Uranium Contamination due to Nuclear Power Plants. Radiochimica Acta, 1992, 58-59, 311-314.	1.2	2
90	A simple proof for a simple rule. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 355, 663-664.	1.6	2

#	ARTICLE	IF	CITATIONS
91	210Pb and 210Po determination in environmental samples using liquid scintillation counting and alpha spectrometry. European Physical Journal D, 2003, 53, A25-A30.	0.4	2
92	On the use of different scintillation cocktails for determining gross alpha and beta activities in water samples. Applied Radiation and Isotopes, 2013, 81, 175-178.	1.5	2
93	Study about the radionuclides implanted on glass surfaces for the estimation of retrospective indoor radon concentrations. Applied Radiation and Isotopes, 2017, 126, 13-15.	1.5	2
94	Spectroscopic analysis of polychromic sculptures belonging to the cultural heritage of Extremadura (Spain). X-Ray Spectrometry, 2019, 48, 490-498.	1.4	2
95	Radon: Risks and Applications. Nuclear Physics News, 2011, 21, 17-22.	0.4	1
96	Techniques and applications for the study and preservation of the cultural heritage of Extremadura (Spain). Rendiconti Lincei, 2020, 31, 761-772.	2.2	1
97	Pigments Used in Rock Paintings from the East and West of the Iberian Peninsula Analysed by X-ray Fluorescence:., 2016, , 31-40.		1
98	Monte Carlo Simulation as an Aid to Alpha-Particle Spectrometry. , 2001, , 1145-1150.		1
99	Comment on "General relativistic perihelia precession and the anharmonic oscillator," by M. G. Olsson [Am. J. Phys. 56, 89 (1988)]. American Journal of Physics, 1989, 57, 1151-1152.	0.7	0
100	Some educational applications of alpha spectrometry. European Journal of Physics, 1992, 13, 257-263.	0.6	0
101	ALFITeX: A code introducing improvements in the analysis of alpha spectra. , 2013, , .		0
102	Radon in underground waters as a natural analogue to study the escape of CO2 in geological repositories. Radiation Protection Dosimetry, 2015, 167, 143-146.	0.8	0
103	Study of the 243 Am decay. Applied Radiation and Isotopes, 2018, 134, 410-415.	1.5	0
104	Análisis espectroscópicos de restos arqueológicos provenientes de yacimientos romanos de medellán (badajoz) y su entorno. DigitAR - Revista Digital De Arqueología Arquitectura E Artes, 2018, , 103-110.	0.0	0
105	Radioanalytical method for the determination of Sr in soil samples by yttrium solvent extraction and cerenkov counting. Special Publication - Royal Society of Chemistry, 0, , 307-312.	0.0	0