

# Miguel Angel Respaldiza

## List of Publications by Year in descending order

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73  
papers

1,008  
citations

430874

18  
h-index

526287

27  
g-index

74  
all docs

74  
docs citations

74  
times ranked

1054  
citing authors

#	ARTICLE	IF	CITATIONS
1	CNA: The first accelerator-based IBA facility in Spain. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 1137-1142.	1.4	58
2	Cadmium localization and quantification in the plant Arabidopsis thaliana using micro-PIXE. Nuclear Instruments & Methods in Physics Research B, 2002, 189, 494-498.	1.4	56
3	Influence of oxygen and argon on the crystal quality and piezoelectric response of AlN sputtered thin films. Diamond and Related Materials, 2004, 13, 839-842.	3.9	49
4	X-ray Fluorescence analytical criteria to assess the fineness of ancient silver coins: Application on Ptolemaic coinage. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 681-690.	2.9	44
5	Study of the stoichiometry transfer in pulsed laser deposition of bioactive silica-based glasses. Thin Solid Films, 2004, 453-454, 219-223.	1.8	32
6	Comparative study of c-axis AlN films sputtered on metallic surfaces. Diamond and Related Materials, 2005, 14, 1198-1202.	3.9	29
7	Silver surface enrichment in ancient coins studied by micro-PIXE. Nuclear Instruments & Methods in Physics Research B, 2013, 306, 241-244.	1.4	29
8	Combining XRF and GRT for the analysis of ancient silver coins. Microchemical Journal, 2016, 126, 149-154.	4.5	26
9	Thermal and photochemical methods for the preparation of thin films of cermet materials. Journal of Materials Science, 1996, 31, 2325-2332.	3.7	25
10	External microbeam set-up at the CNA (Sevilla) and its application to the study of Tartessian jewellery. Nuclear Instruments & Methods in Physics Research B, 2001, 181, 664-669.	1.4	25
11	Title is missing!. Oxidation of Metals, 2002, 57, 33-51.	2.1	25
12	Identification of soldering and welding processes in ancient gold jewelry by micro-XRF spectroscopy. X-Ray Spectrometry, 2013, 42, 251-255.	1.4	25
13	PIXE and SEM studies of Tartessian gold artefacts. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 851-857.	1.4	22
14	TPPIXE analysis of phosphate rocks and phosphogypsum. Applied Radiation and Isotopes, 1999, 50, 445-449.	1.5	22
15	PIXE and PIGE analysis of late roman glass fragments. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 616-621.	1.4	22
16	First attempt to obtain the bulk composition of ancient silver-copper coins by using XRF and GRT. Nuclear Instruments & Methods in Physics Research B, 2015, 358, 93-97.	1.4	21
17	Reconsidering the accuracy of X-ray fluorescence and ion beam based methods when used to measure the thickness of ancient gildings. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 135, 42-47.	2.9	20
18	Influence of the target and working gas on the composition of silicon nitride thin films prepared by reactive RF-sputtering. Nuclear Instruments & Methods in Physics Research B, 2003, 211, 199-205.	1.4	19

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19	Characterization of the new mobile confocal micro X-ray fluorescence (CXRF) system for in situ non-destructive cultural heritage analysis at the CNA: $\frac{1}{4}$ XRF-CONCHA. Microchemical Journal, 2016, 125, 62-68.	4.5	18
20	Compositional and microstructural study of joining methods in archaeological gold objects. X-Ray Spectrometry, 2017, 46, 123-130.	1.4	18
21	Accelerator-based research activities at "Centro Nacional de Aceleradores", Seville (Spain). Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2105-2109.	1.4	17
22	Environmental impact of fertilizer industries evaluated by PIXE. Nuclear Instruments & Methods in Physics Research B, 1995, 103, 477-481.	1.4	15
23	Gold and electrum jewellery in the strategic area of Gadir in Phoenician period. Nuclear Instruments & Methods in Physics Research B, 2007, 260, 329-335.	1.4	15
24	Non-destructive micro-analytical system for the study of the manufacturing processes of a group of gold jewels from "El Carambolo" treasure. Radiation Physics and Chemistry, 2017, 130, 133-141.	2.8	15
25	TTPIXE analysis of Guadiamar river sediments collected before the environmental disaster of 1998. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 825-829.	1.4	14
26	The response of several luminescent materials to keV and MeV ions. Journal of Nuclear Materials, 2005, 340, 291-298.	2.7	14
27	A comparative study of PIXE and XRF corrected by Gamma-Ray Transmission for the non-destructive characterization of a gilded roman railing. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 1920-1923.	1.4	14
28	The use of a portable energy dispersive x-ray fluorescence spectrometer for the characterization of patinas from the architectural heritage of the Iberian peninsula. X-Ray Spectrometry, 2008, 37, 399-409.	1.4	13
29	Effect of the substrate heterostructure on the texture of lanthanum modified lead titanate thin films. Journal of the European Ceramic Society, 2001, 21, 1529-1533.	5.7	12
30	The response of a chromium doped alumina screen to keV and MeV ions. Journal of Nuclear Materials, 2003, 321, 78-83.	2.7	12
31	Chemical Solution Deposition of (Pb <sub>1-x</sub> Cax)TiO <sub>3</sub> Thin Films with x~0.5 as New Dielectrics for Tunable Components and Dynamic Random Access Memories. Journal of the American Ceramic Society, 2005, 88, 3388-3396.	3.8	12
32	XRF analysis of two terracotta polychrome sculptures by Pietro Torrigiano. X-Ray Spectrometry, 2009, 38, 169-174.	1.4	12
33	Portable XRF study of pigments applied in Juan Hispalense's 15th century panel painting. X-Ray Spectrometry, 2011, 40, 96-100.	1.4	12
34	Anthropogenic contamination of an estuarine system evaluated by PIXE. Nuclear Instruments & Methods in Physics Research B, 1996, 109-110, 506-510.	1.4	11
35	Pigment identification using x-ray fluorescence in a polychromated sculpture by Pedro Millán. X-Ray Spectrometry, 2008, 37, 355-359.	1.4	11
36	IBA characterisation of glasses from the archaeological site of "La Alcazaba", Almería (Spain). Nuclear Instruments & Methods in Physics Research B, 2008, 266, 1587-1590.	1.4	11

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37	Environmental control of Tinto and Odiel river basins by PIXE. Nuclear Instruments & Methods in Physics Research B, 1993, 75, 334-337.	1.4	10
38	Rutherford backscattering spectrometry (RBS) characterization of oxide scale formed on (AISI-304) steel after surface deposition of lanthanum. Acta Materialia, 1996, 44, 675-681.	7.9	10
39	Influence of the mining activity on sediments from the Odiel river (sw of Spain) analyzed by TTPIXE. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 1000-1004.	1.4	10
40	External-beam PIXE spectrometry for the study of Punic jewellery (SW Spain): The geographical provenance of the palladium-bearing gold. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 622-627.	1.4	10
41	Combining PIXE and XRF with gamma-ray transmission to get accurate analysis of archaeological bronzes. Nuclear Instruments & Methods in Physics Research B, 1990, 50, 226-230.	1.4	9
42	The state of the Guadiana riverbed after the environmental disaster of 1998 analysed by TTPIXE. Nuclear Instruments & Methods in Physics Research B, 2002, 188, 102-105.	1.4	9
43	Compositional characterization of silicon nitride thin films prepared by RF-sputtering. Vacuum, 2002, 67, 513-518.	3.5	9
44	PIXE analysis of a Visigothic gold cross. Nuclear Instruments & Methods in Physics Research B, 2004, 226, 199-207.	1.4	9
45	Multi-technique characterization of gold electroplating on silver substrates for cultural heritage applications. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 318-323.	1.4	9
46	Determination of nitrogen in metallic phases using the $(d, p)^{15}\text{N}$ nuclear reaction. Nuclear Instruments & Methods in Physics Research B, 2002, 188, 96-101.	1.4	8
47	Historical impact in an estuary of some mining and industrial activities evaluated through the analysis by TTPIXE of a dated sediment core. Nuclear Instruments & Methods in Physics Research B, 2002, 189, 153-157.	1.4	8
48	Compositional and structural study of ferroelectric multilayer $(\text{Pb},\text{La})\text{TiO}_3/(\text{Pb},\text{Ca})\text{TiO}_3$ sol-gel thin films. Journal of the European Ceramic Society, 2004, 24, 1615-1619.	5.7	8
49	X-ray and gamma-ray based spectroscopic analysis of a millefiori Roman glass fragment: degradation of sunken glass from a shipwreck. Journal of Analytical Atomic Spectrometry, 2016, 31, 773-779.	3.0	8
50	Non-destructive analysis of archaeological bronzes by nuclear techniques. Nuclear Instruments & Methods in Physics Research B, 1994, 89, 109-113.	1.4	7
51	High energy ion characterization of sputtered AlN thin films. Diamond and Related Materials, 2003, 12, 1157-1161.	3.9	7
52	Feasibility of different cleaning methods for silver-copper alloys by X-ray fluorescence: Application to ancient Greek silver coins. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 116, 85-91.	2.9	7
53	Technical characterization of the necklace of El Carambolo hoard (Camas, Seville, Spain). Microchemical Journal, 2018, 139, 401-409.	4.5	7
54	Elemental composition of sediments determined by TTPIXE. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 175-179.	1.4	6

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55	In-situ non-destructive analysis of Etruscan gold jewels with the micro-XRF transportable spectrometer from CNA. Journal of Archaeological Science: Reports, 2017, 16, 185-193.	0.5	6
56	Quality control by PEEX of Al/Si alloys. Nuclear Instruments & Methods in Physics Research B, 1987, 28, 67-75.	1.4	5
57	TTPIXE analysis of Al/Si alloys. Nuclear Instruments & Methods in Physics Research B, 1987, 22, 446-449.	1.4	5
58	Determination by PIXE of the elemental distribution in a lake. Nuclear Instruments & Methods in Physics Research B, 1992, 64, 538-541.	1.4	5
59	Analysis of the elements sputtered during the lanthanum implantation in stainless steels. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 344-349.	1.4	5
60	PIXE studies of osteoporosis preventive treatments. Nuclear Instruments & Methods in Physics Research B, 2002, 189, 431-436.	1.4	5
61	Identifying elements in rocks from the Dry Valleys desert (Antarctica) by ion beam proton induced X-ray emission. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 571-574.	1.4	4
62	Combining non-destructive nuclear techniques to study Roman leaded copper coins from Ilipa (Ilâ€™I) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.4	4
63	Non-destructive XRF analysis of selected Flemish panel paintings in the Fine Arts Museum of Seville. Journal of the Institute of Conservation, 2014, 37, 136-151.	0.6	4
64	Anthropogenic contamination analyzed by TTPIXE in samples from the Odiel salt marsh at the SW Spain. Journal of Radioanalytical and Nuclear Chemistry, 1997, 223, 33-40.	1.5	3
65	Red layered medieval stained glass window characterization by means of micro-PIXE technique. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2378-2382.	1.4	3
66	Non-destructive analysis of pigments in a triptych by Marten de Vos. Spectroscopy Letters, 2016, 49, 30-36.	1.0	3
67	Sputtering studies during lanthanum implantation in stainless steels. Nuclear Instruments & Methods in Physics Research B, 1997, 127-128, 791-795.	1.4	2
68	Oxide scale depth profiling of lanthanum-deposited AISI-304: An ion beam analysis. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 1045-1051.	1.4	2
69	Use of nuclear microanalysis to study the oxygenation mechanism of Y1Ba2Cu3O7âˆ’x thin films: estimation of the oxygen diffusion coefficients. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 661-666.	1.4	2
70	Nitrogen determination in micas of metamorphic rocks. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 642-645.	1.4	2
71	Characterization of glaze ceramics from the archaeological site of La Alcazaba, AlmerÃa (Spain). Microchemical Journal, 2018, 138, 72-81.	4.5	2
72	Ion beam analysis techniques in interdisciplinary applications. , 1999, , .		0

#	ARTICLE	IF	CITATIONS
73	Noninvasive Imaging and Spectroscopic Techniques Applied In Situ in Museums. , 2022,, 641-672.		0