## Ina Reiche

## List of Publications by Year in descending order

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93 papers

2,296 citations

236925 25 h-index 254184 43 g-index

98 all docs 98 docs citations 98 times ranked 1892 citing authors

#	Article	IF	CITATIONS
1	A new 3D micro X-ray fluorescence analysis set-up $\hat{a} \in \text{``First archaeometric applications. Nuclear Instruments \& Methods in Physics Research B, 2003, 211, 259-264.}$	1.4	240
2	New parameters for the characterization of diagenetic alterations and heat-induced changes of fossil bone mineral using Fourier transform infrared spectrometry. Journal of Archaeological Science, 2010, 37, 2265-2276.	2.4	140
3	Three-dimensional micro-XRF investigations of paint layers with a tabletop setup. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 41-47.	2.9	131
4	A multi-analytical study of bone diagenesis: the Neolithic site of Bercy (Paris, France). Measurement Science and Technology, 2003, 14, 1608-1619.	2.6	89
5	Rapid Quantification of Bone Collagen Content by ATR-FTIR Spectroscopy. Radiocarbon, 2016, 58, 131-145.	1.8	85
6	The crystallinity of ancient bone and dentine: new insights by transmission electron microscopy. Archaeometry, 2002, 44, 447-459.	1.3	73
7	The first <i>in situ</i> microâ€Raman spectroscopic analysis of prehistoric cave art of Rouffignac Stâ€Cernin, France. Journal of Raman Spectroscopy, 2012, 43, 1637-1643.	2.5	73
8	Characterization of archaeological burnt bones: contribution of a new analytical protocol based on derivative FTIR spectroscopy and curve fitting of the $\hat{l}\frac{1}{2}$ 1 $\hat{l}\frac{1}{2}$ 3 PO4 domain. Analytical and Bioanalytical Chemistry, 2008, 392, 1479-1488.	3.7	70
9	Trace element composition of archaeological bones and post-mortem alteration in the burial environment. Nuclear Instruments & Methods in Physics Research B, 1999, 150, 656-662.	1.4	65
10	Microbial attack of archaeological bones versus high concentrations of heavy metals in the burial environment. A case study of animal bones from a mediaeval copper workshop in Paris. Palaeogeography, Palaeoclimatology, Palaeoecology, 2011, 310, 39-51.	2.3	53
11	Microscale imaging of the preservation state of 5,000-year-old archaeological bones by synchrotron infrared microspectroscopy. Analytical and Bioanalytical Chemistry, 2010, 397, 2491-2499.	3.7	43
12	Screening in situ bone and teeth preservation by ATR-FTIR mapping. Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 416, 110-119.	2.3	43
13	In situ Raman spectroscopic investigations of the adorning gemstones on the reliquaryHeinrich's Cross from the treasury of Basel Cathedral. Journal of Raman Spectroscopy, 2004, 35, 719-725.	2.5	42
14	Differentiation of archaeological ivory and bone materials by micro-PIXE/PIGE with emphasis on two Upper Palaeolithic key sites: Abri Pataud and Isturitz, France. Journal of Archaeological Science, 2011, 38, 3234-3243.	2.4	41
15	Analysis of trace elements in gold alloys by SR-XRF at high energy at the BAMline. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2334-2338.	1.4	40
16	Imaging fossil bone alterations at the microscale by SR-FTIR microspectroscopy. Journal of Analytical Atomic Spectrometry, 2011, 26, 922.	3.0	39
17	New insights into the colour origin of archaeological Egyptian blue and green by XAFS at the Cu K-edge. X-Ray Spectrometry, 2006, 35, 141-145.	1.4	38
18	Oneâ€Step Synthesis of Collagen Hybrid Gold Nanoparticles and Formation on Egyptianâ€like Goldâ€Plated Archaeological Ivory. Angewandte Chemie - International Edition, 2014, 53, 8363-8366.	13.8	34

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19	From mastodon ivory to gemstone: The origin of turquoise color in odontolite. American Mineralogist, 2001, 86, 1519-1524.	1.9	33
20	Can we Use Calcined Bones for <sup>14</sup> C Dating the Paleolithic?. Radiocarbon, 2013, 55, 1409-1421.	1.8	32
21	Development of a nondestructive method for underglaze painted tilesâ€"demonstrated by the analysis of Persian objects from the nineteenth century. Analytical and Bioanalytical Chemistry, 2009, 393, 1025-1041.	3.7	30
22	Fingerprinting ancient gold by measuring Pt with spatially resolved high energy Sy-XRF. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 505-511.	1.4	29
23	Depth profiling reveals multiple paint layers of Louvre Renaissance paintings using non-invasive compact confocal micro-X-ray fluorescence. Journal of Analytical Atomic Spectrometry, 2012, 27, 1715.	3.0	29
24	Discovering Vanished Paints and Naturally Formed Gold Nanoparticles on 2800 Years Old Phoenician Ivories Using SR-FF-MicroXRF with the Color X-ray Camera. Analytical Chemistry, 2013, 85, 5857-5866.	6.5	28
25	Synchrotron radiation and laboratory micro X-ray computed tomographyâ€"useful tools for the material identification of prehistoric objects made of ivory, bone or antler. Journal of Analytical Atomic Spectrometry, 2011, 26, 1802.	3.0	27
26	Confocal micro-X-ray fluorescence analysis as a new tool for the non-destructive study of the elemental distributions in pharmaceutical tablets. Talanta, 2011, 85, 556-561.	5 <b>.</b> 5	27
27	Palaeolithic paint palettes used at La Garma Cave (Cantabria, Spain) investigated by means of combined in situ and synchrotron X-ray analytical methods. Journal of Analytical Atomic Spectrometry, 2015, 30, 767-776.	3.0	26
28	Synchrotron radiation and cultural heritage: combined XANES/XRF study at Mn K-edge of blue, grey or black coloured palaeontological and archaeological bone material. Journal of Analytical Atomic Spectrometry, 2008, 23, 799.	3.0	25
29	The three-dimensional arrangement of the mineralized collagen fibers in elephant ivory and its relation to mechanical and optical properties. Acta Biomaterialia, 2018, 72, 342-351.	8.3	24
30	Color origin and heat evidence of paleontological bones: Case study of blue and gray bones from San Josecito Cave, Mexico. American Mineralogist, 2009, 94, 27-33.	1.9	23
31	Direct Dating and Physico-Chemical Analyses Cast Doubts on the Coexistence of Humans and Dwarf Hippos in Cyprus. PLoS ONE, 2015, 10, e0134429.	2.5	23
32	Spatially resolved synchrotron-induced X-ray fluorescence analyses of metal point drawings and their mysterious inscriptions. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2004, 59, 1657-1662.	2.9	22
33	Heat induced transformation of fossil mastodon ivory into turquoise â€~odontolite'. Structural and elemental characterisation. Solid State Sciences, 2000, 2, 625-636.	3.2	21
34	3D Micro-PIXE at atmospheric pressure: A new tool for the investigation of art and archaeological objects. Nuclear Instruments & Methods in Physics Research B, 2007, 264, 383-388.	1.4	21
35	MULTIANALYTICAL STUDY OF PALAEOLITHIC REINDEER ANTLER. DISCOVERY OF ANTLER TRACES IN LASCAUX PIGMENTS BY TEM. Archaeometry, 2008, 50, 516-534.	1.3	21
36	Relation between the Macroscopic Pattern of Elephant Ivory and Its Three-Dimensional Micro-Tubular Network. PLoS ONE, 2017, 12, e0166671.	2.5	20

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37	PIXE measurements of Renaissance silverpoint drawings at VERA. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2279-2285.	1.4	18
38	Spatially resolved synchrotron radiation induced X-ray fluorescence analyses of rare Rembrandt silverpoint drawings. Applied Physics A: Materials Science and Processing, 2006, 83, 169-173.	2.3	17
39	Beyond the Great Wall: Gold of the Silk Roads and the First Empire of the Steppes. Analytical Chemistry, 2013, 85, 1650-1656.	6.5	17
40	Non-Destructive Portable Analytical Techniques for Carbon <i>In Situ</i> Screening Before Sampling for Dating Prehistoric Rock Paintings. Radiocarbon, 2013, 55, 436-444.	1.8	17
41	Emerging Approaches in Synchrotron Studies of Materials from Cultural and Natural History Collections. Topics in Current Chemistry, 2016, 374, 7.	5.8	17
42	Microanalysis and synthesis of calcite. Growth mechanisms on prehistoric paintings in theLarge Cave, Arcy-sur-Cure (Yonne, France). X-Ray Spectrometry, 2008, 37, 424-434.	1.4	16
43	Archaeological Bone from Macro- to Nanoscale: Heat-Induced Modifications at Low Temperatures. Journal of Nano Research, 0, 8, 157-172.	0.8	16
44	Early diagenesis of elephant tusk in marine environment. Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 416, 120-132.	2.3	16
45	New insights into the painting stratigraphy of L'Homme blessé by Gustave Courbet combining scanning macro-XRF and confocal micro-XRF. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	16
46	Following the traces of Albrecht DÃ $\frac{1}{4}$ rer: analysis of silverpoint drawings by spatially resolved synchrotron-induced X-ray fluorescence analysis. Nuclear Instruments & Methods in Physics Research B, 2004, 226, 83-91.	1.4	15
47	Micro-PIXE/PIGE analysis of Palaeolithic mammoth ivory: Potential chemical markers of provenance and relative dating. Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 416, 133-141.	2.3	15
48	Toward a three-dimensional vision of the different compositions and the stratigraphy of the painting L'Homme blessé by G. Courbet: coupling SEM–EDX and confocal micro-XRF. Applied Physics A: Materials Science and Processing, 2015, 121, 903-913.	2.3	14
49	Non-invasive quantitative micro-PIXE–RBS/EBS/EBS imaging reveals the lost polychromy and gilding of the Neo-Assyrian ivories from the Louvre collection. Talanta, 2015, 137, 100-108.	5.5	14
50	F-content variation in mammoth ivory from Aurignacian contexts: Preservation, alteration, and implications for ivory-procurement strategies. Quaternary International, 2016, 403, 40-50.	1.5	14
51	Analyses of hydrogen in quartz and in sapphire using depth profiling by ERDA at atmospheric pressure: Comparison with resonant NRA and SIMS. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 608-611.	1.4	13
52	Dating study of two rock crystal carvings byÂsurface microtopography andÂbyÂion beam analyses ofÂhydrogen. Applied Physics A: Materials Science and Processing, 2009, 94, 871-878.	2.3	13
53	The surface layer of pharmaceutical compacts: The role of the punch surface and its impact on the mechanical properties of the compacts. International Journal of Pharmaceutics, 2013, 442, 42-48.	5.2	13
54	Comparative analysis of odontolite, heated fossil ivory and blue fluorapatite by PIXE/PIGE and TEM. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 737-742.	1.4	12

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55	Manganese accommodation in fossilised mastodon ivory and heat-induced colour transformation: Evidence by EXAFS. European Journal of Mineralogy, 2002, 14, 1069-1073.	1.3	12
56	Effects and efficiency of consolidation treatments on Palaeolithic reindeer antler. Multi-analytical study by means of XRD, FT-IR microspectroscopy, SEM, TEM and $\hat{l}/4$ -PIXE/PIGE analyses. Applied Physics A: Materials Science and Processing, 2008, 92, 171-177.	2.3	10
57	Raman Investigations to Identify Corallium rubrum in Iron Age Jewelry and Ornaments. Minerals (Basel, Switzerland), 2016, 6, 56.	2.0	10
58	Combined Nonâ€invasive PIXE/PIGE Analyses of Mammoth Ivory from Aurignacian Archaeological Sites. Angewandte Chemie - International Edition, 2018, 57, 7428-7432.	13.8	10
59	FLUORINE ANALYSIS IN BIOGENIC AND GEOLOGICAL APATITE BY ANALYTICAL TRANSMISSION ELECTRON MICROSCOPY AND NUCLEAR REACTION ANALYSIS. Instrumentation Science and Technology, 2002, 20, 211-231.	0.8	9
60	Nanoscale modifications in the early heating stages of bone are heterogeneous at the microstructural scale. PLoS ONE, 2017, 12, e0176179.	2.5	9
61	Rectangular Beads from the Final Gravettian Level of the Abri Pataud: Raw Material Identification and its Archaeological Implications. ArcheoSciences, 2011, , 259-271.	0.1	9
62	Biotic versus abiotic calcite formation on prehistoric cave paintings: the Arcy-sur-Cure †Grande Grotte' (Yonne, France) case. Geological Society Special Publication, 2007, 279, 185-197.	1.3	8
63	Synchrotron X-Ray Microanalysis and Imaging of Synthetic Biological Calcium Carbonate in Comparison With Archaeological Samples Originating from the Large Cave of Arcy-sur-Cure (28000-24500 BP, Yonne, France). Microscopy and Microanalysis, 2013, 19, 1523-1534.	0.4	8
64	Diffusion in Archaeological Bone. Defect and Diffusion Forum, 2001, 194-199, 953-960.	0.4	7
65	New results with regard to the Flora bust controversy: radiocarbon dating suggests nineteenth century origin. Scientific Reports, 2021, 11, 8249.	3.3	7
66	Chapter 8 Fluorine and Its Relevance for Archaeological Studies. Advances in Fluorine Science, 2006, 2, 253-283.	0.1	6
67	SY-XRF study of Hans Baldung Grien silverpoint drawings and the silver stylus from the †Karlsruhe sketchbook'. X-Ray Spectrometry, 2007, 36, 173-177.	1.4	6
68	Confocal XRF depth profiling non-destructively reveals the original blue pigments in a Renaissance painting by Caroto. Studies in Conservation, 2016, 61, 102-112.	1,1	6
69	Approche analytique pour l'étude des ivoires archéologiques. Les défenses d'éléphant du site (1200-650ÂBC, Sichuan, Chine). ArcheoSciences, 2011, , 167-177.	de Jinsha O:1	6
70	Application des micro-spectrométries infrarouge et Raman à l'étude des processus diagénétiques altérant les ossements paléolithiques. ArcheoSciences, 2011, , 179-190.	0.1	6
71	Artificially Heated Bone at Low Temperatures: A Quantitative Scanning-small-angle X-Ray Scattering Imaging Study of the Mineral Particle Size. ArcheoSciences, 2011, , 191-199.	0.1	6
72	Proton beam irradiation induces invisible modifications under the surface of painted parchment. Scientific Reports, 2022, 12, 113.	3.3	6

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73	An external PIXE study: Mughal painting pigments. X-Ray Spectrometry, 2005, 34, 42-45.	1.4	5
74	Non-Destructive Portable Analytical Techniques for Carbon In-Situ Screening Before Sampling for Dating Prehistoric Rock Paintings. Radiocarbon, 2013, 55, .	1.8	5
75	Synchrotron Methods: Color in Paints and Minerals. , 2014, , 209-239.		5
76	Efficient quantification procedures for data evaluation of portable X-ray fluorescence – Potential improvements for Palaeolithic cave art knowledge. Journal of Archaeological Science: Reports, 2016, 10, 878-886.	0.5	5
77	Sunset and moonshine: Variable blue and yellow pigments used by Caspar David Friedrich in different creative periods revealed by in situ <scp>XRF</scp> imaging. X-Ray Spectrometry, 2021, 50, 341-350.	1.4	5
78	<i>In situ</i> XRF study of black colouring matter of the Palaeolithic figures in the Font-de-Gaume cave. Journal of Analytical Atomic Spectrometry, 2021, 36, 2449-2459.	3.0	5
79	Towards a Better Understanding of Alteration Phenomena of Archaeological Bone by a Closer Look at the Organic/Mineral Association at Micro- and Nanoscale. Preliminary Results on Neolithic Samples from Chalain Lake Site 19, Jura, France. ArcheoSciences, 2011, , 143-158.	0.1	5
80	Les ivoires d'Arslan Tash (Syrie) d'aprÃ"s une étude de la collection du Musée du LouvreÂ: mise en Å' du matériau, traces de polychromie et de dorure, état de conservation. ArcheoSciences, 2011, , 283-295.	ʻuvre 0.1	5
81	Antike Cläer und versteinertes Elfenbein: Röntgenanalyse in der Kunst. Physik in Unserer Zeit, 2003, 34, 80-86.	0.0	4
82	Surface Complexation of Zinc Cation with Hydroxyapatite, Molecular Dynamics and Surface Durability. Interface Science and Technology, 2006, 11, 301-323.	3.3	4
83	Synchrotron Radiation in Art and Archaeology 2006 – a truly interdisciplinary event. Applied Physics A: Materials Science and Processing, 2007, 90, 1-1.	2.3	4
84	The use of Cobalt in 18th Dynasty Blue Glass from Amarna: the results from an on-site analysis using portable XRF technology. Science and Technology of Archaeological Research, 2019, 5, 36-52.	2.4	4
85	Relative chronology of Palaeolithic drawings of the Great Ceiling, Rouffignac cave, by chemical, stylistic and superimposition studies. Journal of Archaeological Science: Reports, 2020, 29, 102006.	0.5	4
86	Can We Use Calcined Bones for Radiocarbon Dating the Paleolithic?. Radiocarbon, 2013, 55, .	1.8	3
87	History and Surface Condition of the Lewis Chessmen in the Collection of the National Museums Scotland (Hebrides, late 12th-early 13thÂcenturies). ArcheoSciences, 2011, , 249-258.	0.1	3
88	Studying glass on metal: Raman analysis of medieval champlev $\tilde{A}$ @ enamelled objects. Journal of Raman Spectroscopy, 2021, 52, 23-34.	2.5	1
89	Analyses non invasives in situ des œuvres préhistoriques de la grotte de Font-de-Gaume pour une meilleure connaissance du décor pariétal polychrome et de son organisation. Paleo, 2020, , 262-269.	0.1	1
90	Kombinierte nichtâ€invasive PIXE/PIGEâ€Analysen von aurignacienzeitlichen Objekten aus Mammutelfenbein bedeutender archÃølogischer Fundstäten. Angewandte Chemie, 2018, 130, 7550-7554.	2.0	0

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91	Informative Potential of Multiscale Observations in Archaeological Biominerals Down to Nanoscale. , 2016, , 75-122.		0
92	New insights into the painting stratigraphy of L'Homme blessé by Gustave Courbet combining scanning macro-XRF and confocal micro-XRF. , 2017, , 191-203.		0
93	Chemie der Kunst. Materialpruefung/Materials Testing, 2022, 45, 485-503.	2.2	0