

Mark Cave

List of Publications by Year in descending order

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127
papers

4,063
citations

117625
34
h-index

133252
59
g-index

133
all docs

133
docs citations

133
times ranked

3715
citing authors

#	ARTICLE	IF	CITATIONS
1	In Vivo Validation of the Unified BARGE Method to Assess the Bioaccessibility of Arsenic, Antimony, Cadmium, and Lead in Soils. <i>Environmental Science & Technology</i> , 2012, 46, 6252-6260.	10.0	293
2	An inter-laboratory trial of the unified BARGE bioaccessibility method for arsenic, cadmium and lead in soil. <i>Science of the Total Environment</i> , 2011, 409, 4016-30.	8.0	255
3	Polycyclic aromatic hydrocarbons (PAH) and polychlorinated biphenyls (PCB) in urban soils of Greater London, UK. <i>Applied Geochemistry</i> , 2014, 51, 303-314.	3.0	174
4	Comparison of five in vitro digestion models to in vivo experimental results: Lead bioaccessibility in the human gastrointestinal tract. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2007, 42, 1203-1211.	1.7	154
5	Methodology for the determination of normal background concentrations of contaminants in English soil. <i>Science of the Total Environment</i> , 2013, 454-455, 604-618.	8.0	132
6	Determination of the bioaccessibility of chromium in Glasgow soil and the implications for human health risk assessment. <i>Science of the Total Environment</i> , 2010, 409, 267-277.	8.0	122
7	Lead bioaccessibility in 12 contaminated soils from China: Correlation to lead relative bioavailability and lead in different fractions. <i>Journal of Hazardous Materials</i> , 2015, 295, 55-62.	12.4	114
8	Determination of polycyclic aromatic hydrocarbons in urban street dust: Implications for human health. <i>Chemosphere</i> , 2011, 83, 970-977.	8.2	104
9	A machine learning approach to geochemical mapping. <i>Journal of Geochemical Exploration</i> , 2016, 167, 49-61.	3.2	94
10	In Vitro Investigations of Human Bioaccessibility from Reference Materials Using Simulated Lung Fluids. <i>International Journal of Environmental Research and Public Health</i> , 2017, 14, 112.	2.6	94
11	A lead isotopic study of the human bioaccessibility of lead in urban soils from Glasgow, Scotland. <i>Science of the Total Environment</i> , 2011, 409, 4958-4965.	8.0	89
12	A study of pneumatic nebulisation systems for inductively coupled plasma emission spectrometry. <i>Analyst</i> , 1982, 107, 172.	3.5	81
13	Using Local Moran's I to identify contamination hotspots of rare earth elements in urban soils of London. <i>Applied Geochemistry</i> , 2018, 88, 167-178.	3.0	74
14	A natural analogue of high pH cement pore waters from the Maqarin area of northern Jordan. I: introduction to the site. <i>Journal of Geochemical Exploration</i> , 1992, 46, 117-132.	3.2	72
15	Bedrock detection beneath river terrace deposits using three-dimensional electrical resistivity tomography. <i>Geomorphology</i> , 2012, 177-178, 17-25.	2.6	72
16	Comparison of Batch Mode and Dynamic Physiologically Based Bioaccessibility Tests for PAHs in Soil Samples. <i>Environmental Science & Technology</i> , 2010, 44, 2654-2660.	10.0	70
17	Bioaccessibility of trace elements in soils in Northern Ireland. <i>Science of the Total Environment</i> , 2012, 433, 398-417.	8.0	64
18	Simplex optimisation of inductively coupled plasmas. <i>Analytica Chimica Acta</i> , 1980, 115, 179-187.	5.4	63

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19	Bioaccessibility of arsenic in soils developed over Jurassic ironstones in eastern England. <i>Environmental Geochemistry and Health</i> , 2005, 27, 121-130.	3.4	63
20	A Study of the relationship between arsenic bioaccessibility and its solid-phase distribution in soils from Wellingborough, UK. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2007, 42, 1303-1315.	1.7	60
21	Variability of bioaccessibility results using seventeen different methods on a standard reference material, NIST 2710. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2013, 48, 641-655.	1.7	54
22	Modelling lead bioaccessibility in urban topsoils based on data from Glasgow, London, Northampton and Swansea, UK. <i>Environmental Pollution</i> , 2012, 171, 265-272.	7.5	51
23	A review of the current state of the art of physiologically-based tests for measuring human dermal in vitro bioavailability of polycyclic aromatic hydrocarbons (PAH) in soil. <i>Journal of Hazardous Materials</i> , 2016, 305, 240-259.	12.4	50
24	Evaluation of a method for identification of host physico-chemical phases for trace metals and measurement of their solid-phase partitioning in soil samples by nitric acid extraction and chemometric mixture resolution. <i>Geochemistry: Exploration, Environment, Analysis</i> , 2004, 4, 71-86.	0.9	48
25	Hydrothermal alteration of granite by meteoric fluid: an example from the Carnmenellis Granite, United Kingdom. <i>Contributions To Mineralogy and Petrology</i> , 1987, 96, 391-405.	3.1	47
26	China's soil and groundwater management challenges: Lessons from the UK's experience and opportunities for China. <i>Environment International</i> , 2016, 91, 196-200.	10.0	47
27	The relationship between historical development and potentially toxic element concentrations in urban soils. <i>Environmental Pollution</i> , 2017, 220, 1036-1049.	7.5	46
28	Environmental analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2000, 15, 181-235.	3.0	42
29	Atomic Spectrometry Update. Environmental analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2001, 16, 194-235.	3.0	41
30	A structured approach to the measurement of uncertainty in 3D geological models. <i>Quarterly Journal of Engineering Geology and Hydrogeology</i> , 2009, 42, 95-105.	1.4	40
31	Measurement of Trace Element Distributions in Soils and Sediments Using Sequential Leach Data and a Non-specific Extraction System With Chemometric Data Processing. <i>Analyst</i> , 1997, 122, 1211-1221.	3.5	39
32	Determination of chlorine and bromine in rocks by alkaline fusion with ion chromatography detection. <i>Journal of Chromatography A</i> , 1997, 770, 93-98.	3.7	37
33	The mobility and human oral bioaccessibility of Zn and Pb in urban dusts of Estarreja (N Portugal). <i>Environmental Geochemistry and Health</i> , 2015, 37, 115-131.	3.4	37
34	Urban geochemistry of lead in gardens, playgrounds and schoolyards of Lisbon, Portugal: Assessing exposure and risk to human health. <i>Applied Geochemistry</i> , 2014, 44, 45-53.	3.0	35
35	The importance of solid-phase distribution on the oral bioaccessibility of Ni and Cr in soils overlying Palaeogene basalt lavas, Northern Ireland. <i>Environmental Geochemistry and Health</i> , 2013, 35, 553-567.	3.4	34
36	Incorporating oral bioaccessibility into human health risk assessment due to potentially toxic elements in extractive waste and contaminated soils from an abandoned mine site. <i>Chemosphere</i> , 2020, 255, 126927.	8.2	34

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37	Geochemistry, mineralogy, solid-phase fractionation and oral bioaccessibility of lead in urban soils of Lisbon. <i>Environmental Geochemistry and Health</i> , 2014, 36, 867-881.	3.4	33
38	Effects of drying and comminution type on the quantification of Polycyclic Aromatic Hydrocarbons (PAH) in a homogenised gasworks soil and the implications for human health risk assessment. <i>Chemosphere</i> , 2014, 111, 396-404.	8.2	33
39	Linking selective chemical extraction of iron oxyhydroxides to arsenic bioaccessibility in soil. <i>Environmental Pollution</i> , 2015, 207, 256-265.	7.5	33
40	Mapping trace element deficiency by cokriging from regional geochemical soil data: A case study on cobalt for grazing sheep in Ireland. <i>Geoderma</i> , 2014, 226-227, 64-78.	5.1	32
41	Exploration of spatially varying relationships between Pb and Al in urban soils of London at the regional scale using geographically weighted regression (GWR). <i>Journal of Hazardous Materials</i> , 2020, 393, 122377.	12.4	32
42	Lead bioaccessibility in topsoils from lead mineralisation and urban domains, UK. <i>Environmental Pollution</i> , 2013, 178, 278-287.	7.5	31
43	The application of an in vitro gastrointestinal extraction to assess the oral bioaccessibility of polycyclic aromatic hydrocarbons in soils from a former industrial site. <i>Analytica Chimica Acta</i> , 2012, 735, 54-61.	5.4	30
44	Source and pathway analysis of lead and polycyclic aromatic hydrocarbons in Lisbon urban soils. <i>Science of the Total Environment</i> , 2016, 573, 324-336.	8.0	30
45	Earthworms and in vitro physiologically-based extraction tests: complementary tools for a holistic approach towards understanding risk at arsenic-contaminated sites. <i>Environmental Geochemistry and Health</i> , 2009, 31, 273-282.	3.4	29
46	Anthropogenic and geogenic impacts on arsenic bioaccessibility in UK topsoils. <i>Science of the Total Environment</i> , 2012, 435-436, 21-29.	8.0	29
47	Feasibility study of the determination of iodide, tin, arsenic, selenium and hydrogen carbonate in groundwater by inductively coupled plasma atomic emission spectrometry using a membrane gas-liquid separator. <i>Journal of Analytical Atomic Spectrometry</i> , 1989, 4, 223.	3.0	28
48	Assessment of a geochemical extraction procedure to determine the solid phase fractionation and bioaccessibility of potentially harmful elements in soils: A case study using the NIST 2710 reference soil. <i>Analytica Chimica Acta</i> , 2012, 722, 43-54.	5.4	28
49	Comparison of simplex algorithms. <i>Analytica Chimica Acta</i> , 1985, 175, 231-237.	5.4	26
50	Atomic Spectrometry Update—Environmental analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 1998, 13, 1R.	3.0	25
51	A versatile new torch for inductively coupled plasma spectrometry. <i>Analytica Chimica Acta</i> , 1980, 115, 171-178.	5.4	24
52	Regional variations of basal cell carcinoma incidence in the U.K. using The Health Improvement Network database (2004-10). <i>British Journal of Dermatology</i> , 2013, 169, 1093-1099.	1.5	24
53	Investigating relationships between biomarkers of exposure and environmental copper and manganese levels in house dusts from a Portuguese industrial city. <i>Environmental Geochemistry and Health</i> , 2015, 37, 725-744.	3.4	23
54	An overview of research and development themes in the measurement and occurrences of polyaromatic hydrocarbons in dusts and particulates. <i>Journal of Hazardous Materials</i> , 2018, 360, 373-390.	12.4	23

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55	Factors governing the solid phase distribution of Cr, Cu and As in contaminated soil after 40 years of ageing. <i>Science of the Total Environment</i> , 2019, 652, 744-754.	8.0	23
56	Atomic Spectrometry Update "Environmental Analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 1993, 8, 1R-44R.	3.0	22
57	An investigation into the occurrence and distribution of polycyclic aromatic hydrocarbons in two soil size fractions at a former industrial site in NE England, UK using in situ PFA-MS. <i>Environmental Geochemistry and Health</i> , 2010, 32, 553-565.	3.4	20
58	The effects of lead sources on oral bioaccessibility in soil and implications for contaminated land risk management. <i>Environmental Pollution</i> , 2015, 198, 161-171.	7.5	20
59	Results of the Oman Analogue Study. <i>Radiochimica Acta</i> , 1988, 44-45, 311-316.	1.2	19
60	Effect of weathering product assemblages on Pb bioaccessibility in mine waste: implications for risk management. <i>Environmental Science and Pollution Research</i> , 2013, 20, 7699-7710.	5.3	19
61	Measurement modelling and mapping of arsenic bioaccessibility in Northampton, United Kingdom. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2013, 48, 629-640.	1.7	19
62	Spatial distribution patterns of phosphorus in top-soils of Greater London Authority area and their natural and anthropogenic factors. <i>Applied Geochemistry</i> , 2018, 88, 213-220.	3.0	18
63	Lead and zinc concentrations in household dust and toenails of the residents (Estarreja, Portugal): a source-pathway-fate model. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 1210-1224.	3.5	18
64	Determination of Trace Metal Distributions in the Iron Oxide Phases of Red Bed Sandstones by Chemometric Analysis of Whole Rock and Selective Leachate Data. <i>Analyst</i> , The, 1997, 122, 501-512.	3.5	17
65	Trace metal distribution in the Arosa estuary (N.W. Spain): The application of a recently developed sequential extraction procedure for metal partitioning. <i>Analytica Chimica Acta</i> , 2006, 557, 344-352.	5.4	17
66	Indoor radon measurements in south west England explained by topsoil and stream sediment geochemistry, airborne gamma-ray spectroscopy and geology. <i>Journal of Environmental Radioactivity</i> , 2018, 181, 152-171.	1.7	16
67	Identifying geogenic and anthropogenic controls on different spatial distribution patterns of aluminium, calcium and lead in urban topsoil of Greater London Authority area. <i>Chemosphere</i> , 2020, 238, 124541.	8.2	16
68	The reaction kinetics of laumontite under hydrothermal conditions. <i>European Journal of Mineralogy</i> , 1993, 5, 523-536.	1.3	16
69	Determination of cadmium and lead in human urine by STAT-FAAS after enrichment on activated carbon. <i>Journal of Analytical Atomic Spectrometry</i> , 1999, 14, 279-352.	3.0	15
70	Investigating multi-element soil geochemical signatures and their potential for use in forensic studies. <i>Geological Society Special Publication</i> , 2004, 232, 197-206.	1.3	15
71	The effect of humic acids on the sequential extraction of metals in soils and sediments using ICP-AES and chemometric analysis. <i>Journal of Environmental Monitoring</i> , 2003, 5, 929-934.	2.1	14
72	Preliminary Assessment of a Unified Bioaccessibility Method for Potentially Harmful Elements in Soils. <i>Epidemiology</i> , 2006, 17, S39.	2.7	14

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73	Estimation of the bioaccessible arsenic fraction in soils using near infrared spectroscopy. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2007, 42, 1293-1301.	1.7	13
74	Comparison of methods for addressing the point-to-area data transformation to make data suitable for environmental, health and socio-economic studies. Science of the Total Environment, 2019, 689, 797-807.	8.0	13
75	New Insights into the Reliability of Automatic Dynamic Methods for Oral Bioaccessibility Testing: A Case Study for BGS102 soil. Environmental Science & Technology, 2016, 50, 9479-9486.	10.0	12
76	Predicting Polycyclic Aromatic Hydrocarbon Bioavailability to Mammals from Incidentally Ingested Soils Using Partitioning and Fugacity. Environmental Science & Technology, 2016, 50, 1338-1346.	10.0	12
77	In vitro prediction of polycyclic aromatic hydrocarbon bioavailability of 14 different incidentally ingested soils in juvenile swine. Science of the Total Environment, 2018, 618, 682-689.	8.0	12
78	Atomic Spectrometry Update—Environmental Analysis. Journal of Analytical Atomic Spectrometry, 1992, 7, 1R-51R.	3.0	11
79	Oral Bioavailability. , 2011, , 287-324.		11
80	Measurement and modelling of the ingestion bioaccessibility of polyaromatic hydrocarbons in soils. Environmental Technology and Innovation, 2015, 3, 35-45.	6.1	11
81	Naturally Occurring Potentially Harmful Elements in Groundwater in Makueni County, South-Eastern Kenya: Effects on Drinking Water Quality and Agriculture. Geosciences (Switzerland), 2020, 10, 62.	2.2	11
82	An improved skmplex algorithm for dealing with boundary conditions. Analytica Chimica Acta, 1986, 181, 107-116.	5.4	10
83	Soil radium, soil gas radon and indoor radon empirical relationships to assist in post-closure impact assessment related to near-surface radioactive waste disposal. Journal of Environmental Radioactivity, 2011, 102, 221-234.	1.7	10
84	The Solid Phase Distribution and Bioaccessibility of Arsenic, Chromium, and Nickel in Natural Ironstone Soils in the UK. Applied and Environmental Soil Science, 2014, 2014, 1-12.	1.7	10
85	Atomic Spectrometry Update—Environmental Analysis. Journal of Analytical Atomic Spectrometry, 1990, 5, 1R-55R.	3.0	9
86	Atomic Spectrometry Update—Environmental Analysis. Journal of Analytical Atomic Spectrometry, 1991, 6, 1R-40R.	3.0	9
87	Atomic Spectrometry Update—Environmental Analysis. Journal of Analytical Atomic Spectrometry, 1994, 9, 25R-71R.	3.0	9
88	Atomic Spectrometry Update—Environmental Analysis. Journal of Analytical Atomic Spectrometry, 1995, 10, 9R-48R.	3.0	9
89	Arsenic speciation and mobility in mine wastes from a copper—arsenic mine in Devon, UK: a SEM, XAS, sequential chemical extraction study. Trace Metals and Other Contaminants in the Environment, 2007, , 441-471.	0.1	9
90	Measuring the solid-phase fractionation of lead in urban and rural soils using a combination of geochemical survey data and chemical extractions. Environmental Geochemistry and Health, 2015, 37, 779-790.	3.4	8

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91	Mineralogy, solid-phase fractionation and chemical extraction to assess the mobility and availability of arsenic in an urban environment. <i>Applied Geochemistry</i> , 2019, 100, 244-257.	3.0	8
92	Reconstruction of in situ pore-water compositions obtained by aqueous leaching of drill core: an evaluation using multivariate statistical deconvolution. <i>Analyst, The</i> , 1995, 120, 1341.	3.5	7
93	Respiratory bioaccessibility and solid phase partitioning of potentially harmful elements in urban environmental matrices. <i>Science of the Total Environment</i> , 2021, 765, 142791.	8.0	7
94	Persistent Organic Pollutants in Urban Soils of Central of London, England, UK: Measurement and Spatial Modelling of Black Carbon (BC), Petroleum Hydrocarbons (TPH), Polycyclic Aromatic Hydrocarbons (PAH) and Polychlorinated Biphenyls (PCB). <i>Advances in Environmental and Engineering Research</i> , 2021, 02, 1-1.	0.8	7
95	Atomic Spectrometry Update“Environmental Analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 1996, 11, 19R-66R.	3.0	6
96	Dialectical behavioral therapy informed treatment with Deaf mental health consumers: an Australian pilot program. <i>Australasian Psychiatry</i> , 2012, 20, 425-428.	0.7	6
97	Improvement of short-term precision in inductively coupled plasma atomic emission spectrometry by principal component analysis modelling. <i>Journal of Analytical Atomic Spectrometry</i> , 1998, 13, 125-129.	3.0	5
98	Medical Geology in Europe. , 2010, , 259-301.		5
99	Potential fluoride exposure from selected food crops grown in high fluoride soils in the Makueni County, south-eastern Kenya. <i>Environmental Geochemistry and Health</i> , 2022, 44, 4703-4717.	3.4	5
100	The Origin of Saline Groundwaters in Granitic Rocks: Evidence From Hydrothermal Experiments. <i>Materials Research Society Symposia Proceedings</i> , 1985, 50, 121.	0.1	4
101	The Link between Soil Geochemistry in South-West England and Human Exposure to Soil Arsenic. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 570.	2.0	4
102	Biogeochemistry of Household Dust Samples Collected from Private Homes of a Portuguese Industrial City. <i>Geosciences (Switzerland)</i> , 2020, 10, 392.	2.2	4
103	Research and Development Topics in Analytical Chemistry. <i>Analytical Proceedings</i> , 1981, 18, 7.	0.4	3
104	The Effect of Microbial Activity on the Near and Far Fields of a Swiss Type b Repository. <i>Materials Research Society Symposia Proceedings</i> , 1991, 257, 729.	0.1	3
105	Arsenic in UK soils: reassessing the risk. <i>Proceedings of the Institution of Civil Engineers: Civil Engineering</i> , 2002, 150, 187-190.	0.3	3
106	Is received dose from ingested soil independent of soil PAH concentrations?“Animal model results. <i>Environmental Toxicology and Chemistry</i> , 2016, 35, 2261-2269.	4.3	3
107	Mercury, n-alkane and unresolved complex mixture hydrocarbon pollution in surface sediment across the rural“urban“estuarine continuum of the River Clyde, Scotland, UK. <i>Earth and Environmental Science Transactions of the Royal Society of Edinburgh</i> , 2017, 108, 315-326.	0.3	3
108	Investigating the Geochemical Controls on Pb Bioaccessibility in Urban Agricultural Soils to Inform Sustainable Site Management. <i>Geosciences (Switzerland)</i> , 2020, 10, 398.	2.2	3

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109	Soil-sebum partition coefficients for high molecular weight polycyclic aromatic hydrocarbons (HMW-PAH). Journal of Hazardous Materials, 2020, 398, 122633.	12.4	3
110	Alteration of Repository Structural Materials Within the First Few Years. Materials Research Society Symposia Proceedings, 1997, 506, 503.	0.1	2
111	Assessing Fitness for Trial of Deaf Defendants. Psychiatry, Psychology and Law, 2015, 22, 145-156.	1.2	2
112	The effect of lead in soil on crime deprivation in Derby, Leicester and Nottingham. Applied Geochemistry, 2018, 88, 198-212.	3.0	2
113	Comparison of two non-specific flow-through sequential extraction approaches to identify the physico-chemical partitioning of potentially harmful elements in a certified reference material. Talanta, 2021, 223, 121685.	5.5	2
114	Application of Bioavailability Measurements in Medical Geology. , 2021, , 235-261.		2
115	Chemical Characterisation of Core Pore-Waters for Deep Borehole Investigations at Sellafield, Cumbria. Mineralogical Magazine, 1994, 58A, 158-159.	1.4	2
116	Evaluation of the containment properties of geological and engineered barriers by pore-water extraction and characterization. Geological Society Special Publication, 1999, 157, 265-273.	1.3	1
117	Geochemistry and related studies of Clyde Estuary sediments. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2017, 108, 269-288.	0.3	1
118	Linkage between solid-phase apportionment and bioaccessible arsenic, chromium and lead in soil from Glasgow, Scotland, UK. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2017, 108, 217-230.	0.3	1
119	Arsenic in UK soils: reassessing the risk. Proceedings of the Institution of Civil Engineers: Civil Engineering, 2002, 150, 187-190.	0.3	1
120	Modelling and Mapping Total and Bioaccessible Arsenic and Lead in Stoke-on-Trent and Their Relationships with Industry. Geosciences (Switzerland), 2021, 11, 515.	2.2	1
121	Simplex optimization of response-time-limited systems. Analytica Chimica Acta, 1989, 223, 403-410.	5.4	0
122	Medical geology – the European perspective. Central European Geology, 2008, 51, 133-151.	0.4	0
123	Preface. Environmental Geochemistry and Health, 2010, 32, 461-462.	3.4	0
124	Modelling the Atmospheric Concentration and Deposition of Pb and Cd in the UK. Springer Proceedings in Complexity, 2018, , 381-385.	0.3	0
125	Linkage of national soil quality measurements to primary care medical records in England and Wales: a new resource for investigating environmental impacts on human health. Population Health Metrics, 2018, 16, 12.	2.7	0
126	Arsenic speciation and mobility in mine wastes from a copper – arsenic mine in Devon, UK: a SEM, XAS, sequential chemical extraction study. , 2007, , 441-471.		0

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127	Bedrock Detection and Mineral Thickness Assessment Using 3D Electrical Resistivity Tomography (ERT). , 2011, , .		0