Thomas Meisel

List of Publications by Year
in descending order

97 papers	5,094 citations	101543 36 h-index	88630 70 g-index
104 all docs	104 docs citations	104 times ranked	3468 citing authors

#	Article	IF	Citations
1	Osmium isotopic compositions of mantle xenoliths: a global perspective. Geochimica Et Cosmochimica Acta, 2001, 65, 1311-1323.	3.9	594
2	The osmium isotopic composition of the Earth's primitive upper mantle. Nature, 1996, 383, 517-520.	27.8	348
3	Evidence for a gradual rise of oxygen between 2.6 and 2.5Ga from Mo isotopes and Re-PGE signatures in shales. Geochimica Et Cosmochimica Acta, 2007, 71, 2417-2435.	3.9	254
4	Reference materials for geochemical PGE analysis: new analytical data for Ru, Rh, Pd, Os, Ir, Pt and Re by isotope dilution ICP-MS in 11 geological reference materials. Chemical Geology, 2004, 208, 319-338.	3.3	195
5	A simple procedure for the determination of platinum group elements and rhenium (Ru, Rh, Pd, Re, Os,) Tj ETQq1 1 0.784314 rgBT /Ov environmental materials. Journal of Analytical Atomic Spectrometry, 2003, 18, 720.	3.0	166
6	Coexistence of abyssal and ultra-depleted SSZ type mantle peridotites in a Neo-Tethyan Ophiolite in SW Turkey: Constraints from mineral composition, whole-rock geochemistry (majorâ€“traceâ€“REEâ€“PGE), and Reâ€“Os isotope systematics. Lithos, 2012, 132-133, 50-69.	1.4	157
7	Petrology of Al- and Cr-rich ophiolitic chromitites from the MuÄŸla, SW Turkey: implications from composition of chromite, solid inclusions of platinum-group mineral, silicate, and base-metal mineral, and Os-isotope geochemistry. Contributions To Mineralogy and Petrology, 2009, 158, 659-674.	3.1	155
8	PGE, Re-Os, and Mo isotope systematics in Archean and early Proterozoic sedimentary systems as proxies for redox conditions of the early Earth. Geochimica Et Cosmochimica Acta, 2005, 69, 1787-1801.	3.9	134
9	Simplified method for the determination of Ru, Pd, Re, Os, Ir and Pt in chromitites and other geological materials by isotope dilution ICP-MS and acid digestion. Analyst, The, 2001, 126, 322-328.	3.5	124
10	Geochemistry and tectonomagmatic affinity of the Yungbwa ophiolite, SW Tibet. Lithos, 2003, 66, 155-172.	1.4	123
11	PGE enrichment in chromitite layers and the Merensky Reef of the western Bushveld Complex; a Reâ€“Os and Rbâ€“Sr isotope study. Earth and Planetary Science Letters, 1999, 172, 49-64.	4.4	117
12	Comparison between Nickelâ€Sulfur Fire Assay Te Coâ€precipitation and Isotope Dilution with Highâ€Pressure Asher Acid Digestion for the Determination of Platinumâ€Group Elements, Rhenium and Gold. Geostandards and Geoanalytical Research, 2010, 34, 281-291.	3.1	116
13	Reâ€“Os systematics of UB-N, a serpentinized peridotite reference material. Chemical Geology, 2003, 201, 161-179.	3.3	115
14	Re-evaluating digestion methods for highly siderophile element and 187Os isotope analysis: Evidence from geological reference materials. Chemical Geology, 2014, 384, 27-46.	3.3	111
15	Mid-ocean ridge and supra-subduction geochemical signatures in spinelâ€“peridotites from the Neotethyan ophiolites in SW Turkey: Implications for upper mantle melting processes. Lithos, 2009, 113, 691-708.	1.4	110
16	Determination of anthropogenic input of Ru, Rh, Pd, Re, Os, Ir and Pt in soils along Austrian motorways by isotope dilution ICP-MS. Science of the Total Environment, 2004, 325, 145-154.	8.0	107
17	Synthesis of PGE sulfide standards for laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS). Contributions To Mineralogy and Petrology, 2007, 154, 607-617.	3.1	102
18	Abundance and distribution of platinum-group elements in orogenic lherzolites; a case study in a Fontete Rouge lherzolite (French PyrÃ©nÃ©es). Chemical Geology, 2008, 248, 174-194.	3.3	101

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19	Petrogenesis and geotectonic setting of ultramafic rocks in the Eastern Alps: constraints from geochemistry. Lithos, 2002, 65, 69-112.	1.4	91
20	Platinum-Group Element and Rhenium Concentrations in Low Abundance Reference Materials. Geostandards and Geoanalytical Research, 2004, 28, 233-250.	1.9	89
21	The Jurassic South Albanian ophiolites: MOR- vs. SSZ-type ophiolites. Lithos, 2002, 65, 143-164.	1.4	80
22	Solid residues from Italian municipal solid waste incinerators: A source for â€œcriticalâ€•raw materials. Waste Management, 2015, 45, 206-216.	7.4	80
23	Determination of Rare Earth Elements, Y, Th, Zr, Hf, Nb and Ta in Geological Reference Materials G-2, G-3, SCo-1 and WGB-1 by Sodium Peroxide Sintering and Inductively Coupled Plasma-Mass Spectrometry. Geostandards and Geoanalytical Research, 2002, 26, 53-61.	3.1	75
24	The Re-Os Isotopic System: A Review of Analytical Techniques. Geostandards and Geoanalytical Research, 2002, 26, 249-267.	3.1	68
25	Identification of the geographical origin of pumpkin seed oil by the use of rare earth elements and discriminant analysis. Food Chemistry, 2010, 123, 1303-1309.	8.2	66
26	Recognizing heterogeneous distribution of platinum group elements (PGE) in geological materials by means of the Re-Os isotope system. Fresenius' Journal of Analytical Chemistry, 2001, 370, 566-572.	1.5	59
27	The rare earth elements in municipal solid waste incinerators ash and promising tools for their prospecting. Journal of Hazardous Materials, 2016, 301, 471-479.	12.4	56
28	Combined Chemical Separation of Lu, Hf, Sm, Nd, and REEs from a Single Rock Digest:Â Precise and Accurate Isotope Determinations of Luâ^'Hf and Smâ^'Nd Using Multicollector-ICPMS. Analytical Chemistry, 2002, 74, 67-73.	6.5	53
29	Origin and evolution of Cenozoic magmatism of Sardinia (Italy). A combined isotopic (Srâ€“Ndâ€“Pbâ€“Oâ€“Hfâ€“Os) and petrological view. Lithos, 2013, 180-181, 138-158.	1.4	51
30	Highly Refractory Peridotites on Macquarie Island and the Case for Anciently Depleted Domains in the Earthâ€™s Mantle. Journal of Petrology, 2010, 51, 469-493.	2.8	45
31	Antimony speciation in soil samples along two Austrian motorways by HPLC-ID-ICP-MS. Journal of Environmental Monitoring, 2005, 7, 1200.	2.1	44
32	A Metamorphosed Early Cambrian Crust-Mantle Transition in the Eastern Alps, Austria. Journal of Petrology, 2004, 45, 1689-1723.	2.8	41
33	Multi-element analysis of crude oils using ICP-QQQ-MS. Organic Geochemistry, 2017, 103, 22-30.	1.8	41
34	An uncertainty budget for trace analysis by isotope-dilution ICP-MS with proper consideration of correlation. Analytical and Bioanalytical Chemistry, 2003, 377, 97-110.	3.7	38
35	Suitability of elemental fingerprinting for assessing the geographic origin of pumpkin (Cucurbita pepo) Tj ETQq1 1 0.784314 rgBT /Ov	8.2	38
36	ReOs isotopes in orogenic peridotite massifs in the Eastern Alps, Austria. Chemical Geology, 1997, 143, 217-229.	3.3	37

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37	To Waste or Not to Waste: Questioning Potential Health Risks of Micro- and Nanoplastics with a Focus on Their Ingestion and Potential Carcinogenicity. Exposure and Health, 2023, 15, 33-51.	4.9	37
38	Combined osmium and strontium isotopic study of the Cretaceous-Tertiary boundary at Sumbar, Turkmenistan: A test for an impact vs. a volcanic hypothesis. Geology, 1995, 23, 313.	4.4	36
39	Speciation analysis of inorganic antimony in soil using HPLC-ID-ICP-MS. Analytical and Bioanalytical Chemistry, 2005, 383, 1052-1059.	3.7	34
40	⁴⁰Arâ€“³⁹Ar ages and isotope geochemistry of Cretaceous basalts in northern Madagascar: refining eruption ages, extent of crustal contamination and parental magmas in a flood basalt province. Geological Magazine, 2013, 150, 1-17.	1.5	34
41	Relics of eclogite facies metamorphism in the Austroalpine basement, Hochgrï¿½ssen (Speik complex), Austria. Mineralogy and Petrology, 2002, 74, 49-73.	1.1	32
42	High Pressure Asher Digestion and an Isotope Dilution-ICP-MS Method for the Determination of Platinum-Group Element Concentrations in Chromitite Reference Materials CHR-Bkg, GAN Pt-1 and HHH. Geostandards and Geoanalytical Research, 2006, 30, 87-96.	1.9	32
43	Diverse contributing sources to chromitite petrogenesis in the Shebenik Ophiolitic Complex, Albania: evidence from new PGE- and Os-isotope data. Mineralogy and Petrology, 2007, 91, 139-170.	1.1	31
44	Geochemistry of Darwin impact glass and target rocks. Geochimica Et Cosmochimica Acta, 1990, 54, 1463-1474.	3.9	30
45	International Association of Geoanalysts' Protocol for the Certification of Geological and Environmental Reference Materials: A Supplement. Geostandards and Geoanalytical Research, 2007, 31, 285-288.	1.9	30
46	The chemical variation of moldavite tektites: Simple mixing of terrestrial sediments. Meteoritics and Planetary Science, 1997, 32, 493-502.	1.6	29
47	Rare earth, major and trace elements in Jurassic manganese shales of the Northern Calcareous Alps: hydrothermal versus hydrogenous origin of stratiform manganese deposits. Mineralogy and Petrology, 2003, 77, 109-127.	1.1	29
48	Analytical Methods for the Highly Siderophile Elements. Reviews in Mineralogy and Geochemistry, 2016, 81, 89-106.	4.8	29
49	Reî—¸Os, Smî—¸Nd, and rare earth element evidence for Proterozoic oceanic and possible subcontinental lithosphere in tectonized ultramafic lenses from the Swiss Alps. Geochimica Et Cosmochimica Acta, 1996, 60, 2583-2593.	3.9	28
50	U-Pb Ages, Pb-Os Isotope Ratios, and Platinum-Group Element (PGE) Composition of the West-Central Madagascar Flood Basalt Province. Journal of Geology, 2010, 118, 523-541.	1.4	28
51	Review of platinum-group element distribution and mineralogy in chromitite ores from southern Iran. Ore Geology Reviews, 2012, 48, 278-305.	2.7	28
52	Geochemistry, Reâ€“Os isotopes and highly siderophile element abundances in the Eastern Pontide peridotites (NE Turkey): Multiple episodes of melt extractionâ€“depletion, meltâ€“rock interaction and fertilization of the Rheic Ocean mantle. Gondwana Research, 2015, 27, 612-628.	6.0	28
53	Osmium isotope systematics and highly siderophile element fractionation in spinel-peridotites from the Tethyan ophiolites in SW Turkey: Implications for multi-stage evolution of oceanic upper mantle. Chemical Geology, 2012, 294-295, 152-164.	3.3	27
54	Boron metasomatism and behaviour of rare earth elements during formation of tourmaline rocks in the eastern Arunta Inlier, central Australia. Contributions To Mineralogy and Petrology, 2004, 147, 91-109.	3.1	25

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55	Source components and magmatic processes in the genesis of Miocene to Quaternary lavas in western Turkey: constraints from HSE distribution and Hfâ€“Pbâ€“Os isotopes. Contributions To Mineralogy and Petrology, 2015, 170, 1.	3.1	23
56	Elimination of Interferences in the Determination of Palladium, Platinum and Rhodium Mass Fractions in Moss Samples using <scp>ICP</scp>â€<scp>MS</scp>/<scp>MS</scp>. Geostandards and Geoanalytical Research, 2016, 40, 559-569.	3.1	23
57	Rare Earth Element Labeling as a Tool for Assuring the Origin of Eggs and Poultry Products. Journal of Agricultural and Food Chemistry, 2018, 66, 11729-11738.	5.2	21
58	Use of atomic spectrometry for the investigation of ancient manuscripts. Journal of Analytical Atomic Spectrometry, 2001, 16, 417-420.	3.0	19
59	Traces of ancient mafic layers in the Tethys oceanic mantle. Earth and Planetary Science Letters, 2014, 389, 155-166.	4.4	19
60	Active biomonitoring of palladium, platinum, and rhodium emissions from road traffic using transplanted moss. Environmental Science and Pollution Research, 2016, 23, 16790-16801.	5.3	19
61	Cumulates and gabbros in southern Albanian ophiolites: their bearing on regional tectonic setting. Geological Society Special Publication, 2006, 260, 267-299.	1.3	17
62	Method Development and Optimisation of Sodium Peroxide Sintering for Geological Samples. Geostandards and Geoanalytical Research, 2017, 41, 181-195.	3.1	17
63	Origin and evolution of metamorphosed mantle peridotites of Darreh Deh (Nain Ophiolite, Central) Tj ETQq1 1 0.784314 rgBT /Overlock Palaontologie - Abhandlungen, 2014, 273, 89-120.	0.4	15
64	Effects of reactive dissolution of orthopyroxene in producing incompatible element depleted melts and refractory mantle residues during early fore-arc spreading: constraints from ophiolites in eastern Mediterranean. Lithos, 2020, 360-361, 105438.	1.4	15
65	Closed-system behaviour of the Reâ€“Os isotope system recorded in primary and secondary platinum-group mineral assemblages: Evidence from a mantle chromitite at Harold's Grave (Shetland) Tj ETQq1 1 0.784314 rgBT /Ove	2.8	13
66	The potential impact of municipal solid waste incinerators ashes on the anthropogenic osmium budget. Science of the Total Environment, 2016, 541, 1549-1555.	8.0	12
67	COST Action PRIORITY: An EU Perspective on Micro- and Nanoplastics as Global Issues. Microplastics, 2022, 1, 282-290.	4.2	12
68	A tool to assure the geographical origin of local food products (glasshouse tomatoes) using labeling with rare earth elements. Journal of the Science of Food and Agriculture, 2018, 98, 4769-4777.	3.5	11
69	Authentication of meat and dairy products using rare earth element labeling and detection by solution based and laser ablation ICP-MS. Food Research International, 2020, 132, 109106.	6.2	10
70	Low blank determination of boron in geochemical materials. Analytica Chimica Acta, 1994, 298, 267-270.	5.4	9
71	Uncertainty of dead time estimation in ICP-MS. Journal of Analytical Atomic Spectrometry, 2003, 18, 508-511.	3.0	9
72	The future demand for geological reference materials. Accreditation and Quality Assurance, 2011, 16, 407-414.	0.8	9

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73	Evolution of the archean/proterozoic crust in the southern SÃ£o Francisco craton near PerdÃµes, Minas Gerais, Brazil: petrological and geochemical constraints. Journal of South American Earth Sciences, 2002, 15, 709-723.	1.4	8
74	Efficient N-TIMS rhenium isotope measurements on outgassed tantalum filaments: very low filament blanks determined by a â€œstandard additionâ€•approach. International Journal of Mass Spectrometry and Ion Processes, 1996, 153, L7-L10.	1.8	7
75	Origin of primary PGM assemblage in Ñhromitite from a mantle tectonite at Haroldâ€™s Grave (Shetland) Tj ETQq1 1 0.784314 rgBT	1.1	7
76	Analytical Methods for the Highly Siderophile Elements. , 2016, , 89-106.		7
77	Chemometric techniques to protect the traditional Austrian pumpkin seed oil. European Journal of Lipid Science and Technology, 2017, 119, 1600468.	1.5	7
78	Why Î´ is not â€° and why we should not use Îµ and Î¼ notations. Geostandards and Geoanalytical Research, 2019, 43, 527-528.	3.1	7
79	Simultaneous determination of platinum group elements and rhenium mass fractions in road dust samples using isotope dilution inductively coupled plasma-tandem mass spectrometry after cation exchange separation. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 177, 106052.	2.9	7
80	Halogens in tektites and impact glasses. Meteoritics, 1992, 27, 576-579.	1.4	6
81	Geochemistry of polymetamorphic ultramafics (Major, Trace, Noble and Rare Earth Elements): An example from the Helvetic basement, Central Alps, Switzerland. Mineralogy and Petrology, 1993, 49, 189-212.	1.1	6
82	Experimental Determination of Vaporâ"Liquid Equilibria and Excess Enthalpy Data for the Binary System 2-Methyl-1-butanol + 3-Methyl-1-butanol as a Test Mixture for Distillation Columns. Industrial & Engineering Chemistry Research, 2010, 49, 1844-1847.	3.7	5
83	Weathering and polymerization of tektites: An xâ€•ray photoelectron spectroscopy (XPS) investigation. Meteoritics and Planetary Science, 1998, 33, 89-95.	1.6	4
84	Studies on the Formation and Processing of Aluminium Dross with Particular Focus on Special Metals. Metals, 2021, 11, 1108.	2.3	3
85	Magmatic and metamorphic evolution of the Latimojong Metamorphic Complex, Indonesia. Journal of Asian Earth Sciences, 2022, 227, 105095.	2.3	3
86	Highlights from 25 Years of the Geo PT Programme: What Can be Learnt for the Advancement of Geoanalysis. Geostandards and Geoanalytical Research, 0, , .	3.1	3
87	Determination of Re, Os, Ir, Ru, Pt, Pd Mass Fractions and ¹⁸⁷Os/¹⁸⁸Os Ratios of Organicâ€Rich Geological Reference Materials. Geostandards and Geoanalytical Research, 2022, 46, 333-349.	3.1	3
88	Reply to Comment by W. von Engelhardt and J. Arndt on â€œThe chemical variation of moldavite tektites: Simple mixing of terrestrial sedimentsâ€• Meteoritics and Planetary Science, 1998, 33, 536-536.	1.6	1
89	Peer-review 2011. Geostandards and Geoanalytical Research, 2012, 36, 5-6.	3.1	1
90	The Haidbach deposit in the Central Tauern Window, Eastern Alps, Austria: a metamorphosed orthomagmatic Ni-Cu-Co-PGE mineralization in the Polymetallic Ore District Venediger Nappe System â€“ Hollersbach Complex. Austrian Journal of Earth Sciences, 2021, 114, 1-26.	0.5	1

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91	Editorial - GGR Cutting Edge Reviews. Geostandards and Geoanalytical Research, 2013, 37, 109-109.	3.1	0
92	Editorial - New GGR Editorial Board. Geostandards and Geoanalytical Research, 2013, 37, 237-242.	3.1	0
93	Editorial: Geoanalysis 2012. Geostandards and Geoanalytical Research, 2013, 37, 377-377.	3.1	0
94	Editorial: <scp>IAG</scp> Workshop papers â€“ Proficiency Testing, Certification, Reference Materials. Geostandards and Geoanalytical Research, 2015, 39, 405-406.	3.1	0
95	Iridium. Encyclopedia of Earth Sciences Series, 2016, , 1-3.	0.1	0
96	Geochemical Reference Materials. Encyclopedia of Earth Sciences Series, 2016, , 1-2.	0.1	0
97	Geochemical Reference Materials. Encyclopedia of Earth Sciences Series, 2018, , 553-554.	0.1	0