

Reiner Dohrmann

List of Publications by Year in descending order

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127
papers

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citations

117453

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128
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128
docs citations

128
times ranked

3564
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative phase analysis of bentonites by the Rietveld method. <i>Clays and Clay Minerals</i> , 2008, 56, 272-282.	0.6	207
2	Moisture expansion as a deterioration factor for sandstone used in buildings. <i>Environmental Earth Sciences</i> , 2011, 63, 1545-1564.	1.3	139
3	Traditional and novel methods for estimating the layer charge of smectites. <i>Applied Clay Science</i> , 2006, 34, 2-13.	2.6	130
4	Description of X-ray powder pattern of turbostratically disordered layer structures with a Rietveld compatible approach. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2004, 219, .	0.4	120
5	N2-BET specific surface area of bentonites. <i>Journal of Colloid and Interface Science</i> , 2010, 349, 275-282.	5.0	110
6	Three New, Quick CEC Methods for Determining the Amounts of Exchangeable Calcium Cations in Calcareous Clays. <i>Clays and Clay Minerals</i> , 2009, 57, 338-352.	0.6	88
7	Quantification of the mineralogical composition of clays using FTIR spectroscopy. <i>Vibrational Spectroscopy</i> , 2012, 59, 29-39.	1.2	85
8	Cation exchange capacity methodology II: A modified silver-thiourea method. <i>Applied Clay Science</i> , 2006, 34, 38-46.	2.6	84
9	Weathering of volcanic tuff rocks caused by moisture expansion. <i>Environmental Earth Sciences</i> , 2013, 69, 1203-1224.	1.3	83
10	The pH of aqueous bentonite suspensions. <i>Clays and Clay Minerals</i> , 2008, 56, 338-343.	0.6	76
11	Comparison of methods for the quantification of montmorillonite in bentonites. <i>Applied Clay Science</i> , 2002, 22, 145-151.	2.6	75
12	Chemical and Mineralogical Characterization of Blast-Furnace Sludge from an Abandoned Landfill. <i>Environmental Science & Technology</i> , 2004, 38, 5977-5984.	4.6	72
13	Stability of bentonites in salt solutionsII. Potassium chloride solution - Initial step of illitization?. <i>Applied Clay Science</i> , 2010, 49, 98-107.	2.6	68
14	Cation exchange capacity methodology I: An efficient model for the detection of incorrect cation exchange capacity and exchangeable cation results. <i>Applied Clay Science</i> , 2006, 34, 31-37.	2.6	67
15	Detachment of colloidal particles from bentonites in water. <i>Applied Clay Science</i> , 2008, 39, 50-59.	2.6	66
16	Influence of carbonate microfabrics on the failure strength of claystones. <i>Engineering Geology</i> , 2009, 107, 42-54.	2.9	62
17	The Fe-Mg-saponite solid solution series - a hydrothermal synthesis study. <i>Clay Minerals</i> , 2014, 49, 391-415.	0.2	62
18	Mineralogical characterization of individual growth structures of Mn-nodules with different Ni+Cu content from the central Pacific Ocean. <i>American Mineralogist</i> , 2015, 100, 2497-2508.	0.9	61

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19	Rietveld Refinement of Disordered Illite-Smectite Mixed-Layer Structures by a Recursive Algorithm. II: Powder-Pattern Refinement and Quantitative Phase Analysis. <i>Clays and Clay Minerals</i> , 2012, 60, 535-552.	0.6	60
20	Stability of bentonites in salt solutions sodium chloride. <i>Applied Clay Science</i> , 2009, 45, 171-177.	2.6	56
21	Distinguishing between more and less suitable bentonites for storage of high-level radioactive waste. <i>Clay Minerals</i> , 2016, 51, 289-302.	0.2	54
22	Impact of natural organic matter coatings on the microbial reduction of iron oxides. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 224, 223-248.	1.6	54
23	About differences of swelling pressure " dry density relations of compacted bentonites. <i>Applied Clay Science</i> , 2015, 107, 52-61.	2.6	52
24	About the possible upgrade of bentonite with respect to iodide retention capacity. <i>Applied Clay Science</i> , 2007, 35, 39-46.	2.6	45
25	Water-Uptake Capacity of Bentonites. <i>Clays and Clay Minerals</i> , 2010, 58, 37-43.	0.6	44
26	Microbial reduction of ferrihydrite-organic matter coprecipitates by <i>Shewanella putrefaciens</i> and <i>Geobacter metallireducens</i> in comparison to mediated electrochemical reduction. <i>Chemical Geology</i> , 2016, 447, 133-147.	1.4	43
27	A New Massive Deposit of Allophane Raw Material in Ecuador. <i>Clays and Clay Minerals</i> , 2009, 57, 72-81.	0.6	41
28	Microbial Community Dynamics in Soil Depth Profiles Over 120,000 Years of Ecosystem Development. <i>Frontiers in Microbiology</i> , 2017, 8, 874.	1.5	40
29	Quantification of Allophane from Ecuador. <i>Clays and Clay Minerals</i> , 2010, 58, 707-716.	0.6	39
30	Interlaboratory CEC and Exchangeable Cation Study of Bentonite Buffer Materials: I. Cu(II)-Triethylenetetramine Method. <i>Clays and Clay Minerals</i> , 2012, 60, 162-175.	0.6	39
31	Rietveld Refinement of Disordered Illite-Smectite Mixed-Layer Structures by a Recursive Algorithm. I: One-Dimensional Patterns. <i>Clays and Clay Minerals</i> , 2012, 60, 507-534.	0.6	39
32	Comparison of two procedures for particle size analysis: KÅrhn pipette and XÅray granulometry. <i>Journal of Plant Nutrition and Soil Science</i> , 2009, 172, 172-179.	1.1	38
33	Cation exchange capacity methodology III: Correct exchangeable calcium determination of calcareous clays using a new silver"thiourea method. <i>Applied Clay Science</i> , 2006, 34, 47-57.	2.6	37
34	Traffic-related distribution of antimony in roadside soils. <i>Environmental Pollution</i> , 2018, 237, 704-712.	3.7	37
35	Moisture expansion associated to secondary porosity: an example of the Loseros Tuff of Guanajuato, Mexico. <i>Environmental Earth Sciences</i> , 2013, 69, 1189-1201.	1.3	36
36	The variable charge of dioctahedral smectites. <i>Journal of Colloid and Interface Science</i> , 2013, 390, 225-233.	5.0	36

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37	Corrosion of high-level radioactive waste iron-canisters in contact with bentonite. <i>Journal of Hazardous Materials</i> , 2015, 285, 464-473.	6.5	35
38	Identification of a Crystalline Cyanide-Containing Compound in Blast Furnace Sludge Deposits. <i>Journal of Environmental Quality</i> , 2001, 30, 1927-1932.	1.0	34
39	Allophane compared with other sorbent minerals for the removal of fluoride from water with particular focus on a mineable Ecuadorian allophane. <i>Applied Clay Science</i> , 2010, 50, 25-33.	2.6	34
40	Variation of Preferred Orientation in Oriented Clay Mounts as a Result of Sample Preparation and Composition. <i>Clays and Clay Minerals</i> , 2009, 57, 686-694.	0.6	33
41	Characterization of chromium-containing wastes and soils affected by the production of chromium tanning agents. <i>Journal of Soils and Sediments</i> , 2013, 13, 1170-1179.	1.5	32
42	A novel Zn ²⁺ -bentonite nanocomposite to remove trichloroethene (TCE) from solution. <i>Chemosphere</i> , 2021, 282, 131018.	4.2	31
43	Layer Charge Density of Smectites – Closing the Gap Between the Structural Formula Method and the Alkyl Ammonium Method. <i>Clays and Clay Minerals</i> , 2011, 59, 200-211.	0.6	30
44	Mineralogical investigations of the first package of the alternative buffer material test – I. Alteration of bentonites. <i>Clay Minerals</i> , 2013, 48, 199-213.	0.2	30
45	Microbial utilization of mineral-associated nitrogen in soils. <i>Soil Biology and Biochemistry</i> , 2017, 104, 185-196.	4.2	30
46	Effect of extensive drying on the cation exchange capacity of bentonites. <i>Clay Minerals</i> , 2010, 45, 441-448.	0.2	29
47	Mineralogical impact on long-term patterns of soil nitrogen and phosphorus enzyme activities. <i>Soil Biology and Biochemistry</i> , 2014, 68, 31-43.	4.2	29
48	Stability of bentonites in salt solutions III – Calcium hydroxide. <i>Applied Clay Science</i> , 2011, 51, 300-307.	2.6	28
49	A new method for identifying Wyoming bentonite by ATR-FTIR. <i>Applied Clay Science</i> , 2006, 33, 195-206.	2.6	27
50	Smectite stability in acid salt solutions and the fate of Eu, Th and U in solution. <i>Clay Minerals</i> , 2001, 36, 93-103.	0.2	26
51	Problems in CEC determination of calcareous clayey sediments using the ammonium acetate method. <i>Journal of Plant Nutrition and Soil Science</i> , 2006, 169, 330-334.	1.1	26
52	A comparative study of the luminescence characteristics of polymineral fine grains and coarse-grained K- and Na-rich feldspars. <i>Radiation Measurements</i> , 2012, 47, 903-908.	0.7	26
53	Hydro-mechanical, geochemical and mineralogical characteristics of the bentonite buffer in a heater experiment: The HE-B project at the Mont Terri Rock Laboratory. <i>Physics and Chemistry of the Earth</i> , 2007, 32, 730-740.	1.2	25
54	Influence of carbonate content and micro fabrics on the failure strength of the sandy facies of the Opalinus Clay from Mont Terri (Underground Rock Laboratory). <i>Engineering Geology</i> , 2013, 156, 111-118.	2.9	25

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55	Mineralogical investigations of the first package of the alternative buffer material test â€“ II. Exchangeable cation population rearrangement. <i>Clay Minerals</i> , 2013, 48, 215-233.	0.2	25
56	Determination of Exchangeable Calcium of Calcareous and Gypsiferous Bentonites. <i>Clays and Clay Minerals</i> , 2010, 58, 79-88.	0.6	23
57	Organic matter dynamics along a salinity gradient in Siberian steppe soils. <i>Biogeosciences</i> , 2018, 15, 13-29.	1.3	23
58	Clay swelling mechanism in tuff stones: an example of the Hilbersdorf Tuff from Chemnitz, Germany. <i>Environmental Earth Sciences</i> , 2018, 77, 1.	1.3	22
59	Comparison of methods for distinguishing sodium carbonate activated from natural sodium bentonites. <i>Applied Clay Science</i> , 2013, 86, 23-37.	2.6	21
60	Deterioration of volcanic tuff rocks from Armenia: constraints on salt crystallization and hydric expansion. <i>Environmental Earth Sciences</i> , 2018, 77, 1.	1.3	21
61	Dioxins in Primary Kaolin and Secondary Kaolinitic Clays. <i>Environmental Science & Technology</i> , 2011, 45, 461-467.	4.6	20
62	Relating the Cation Exchange Properties of the Boom Clay (Belgium) to Mineralogy and Pore-Water Chemistry. <i>Clays and Clay Minerals</i> , 2018, 66, 449-465.	0.6	19
63	Review Article. What are the nature and formation conditions of hydroxyâ€“interlayered minerals (HIMs) in soil?. <i>Journal of Plant Nutrition and Soil Science</i> , 2020, 183, 12-26.	1.1	19
64	Termination of swelling capacity of smectites by Cu_{trien} exchange. <i>Clay Minerals</i> , 2011, 46, 411-420.	0.2	18
65	Joint clayâ€“heavyâ€“light mineral analysis: a tool to investigate the hydrographicâ€“hydraulic regime of Late Cenozoic deltaic inland fans under changing climatic conditions (Cuvêlai-Etoshâ€“ Basin, Namibia). <i>International Journal of Earth Sciences</i> , 2013, 102, 265-304.	0.9	18
66	Density and porosity of bentonites. <i>Journal of Porous Materials</i> , 2013, 20, 191-208.	1.3	18
67	Altered volcanic ashes in Palaeocene and Eocene sediments of the Eureka Sound Group (Ellesmere) Tj ETQq1 1 0.784314 rgBT /Overlo 164, 131-147.	0.1	18
68	Mercury in dumped blast furnace sludge. <i>Chemosphere</i> , 2014, 99, 248-253.	4.2	18
69	Kaolinization â€“ a tool to unravel the formation and unroofing of the Pleystein pegmatiteâ€“aplite system (SE Germany). <i>Ore Geology Reviews</i> , 2015, 69, 33-56.	1.1	17
70	Supergene and hypogene alteration in the dual-use kaolin-bearing coal deposit Angren, SE Uzbekistan. <i>International Journal of Coal Geology</i> , 2008, 75, 225-240.	1.9	16
71	Cation Exchange and Mineral Reactions Observed in Mx 80 Buffer Samples of the Prototype Repository <I>in Situ</I> Experiment in Å„spÅ†, Sweden. <i>Clays and Clay Minerals</i> , 2014, 62, 357-373.	0.6	16
72	Disseminated and faultbound autohydrothermal ferroan saponite in Late Paleozoic andesites of the Saar-Nahe Basin, SW Germany: Implications for the economic geology of intermediate (sub)volcanic rocks. <i>Applied Clay Science</i> , 2011, 51, 226-240.	2.6	15

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73	Interlaboratory CEC and Exchangeable Cation Study of Bentonite Buffer Materials: II. Alternative Methods. <i>Clays and Clay Minerals</i> , 2012, 60, 176-185.	0.6	15
74	Porosity and distribution of water in perlite from the island of Milos, Greece. <i>SpringerPlus</i> , 2014, 3, 598.	1.2	15
75	Mineralogical, chemical and micromorphological studies of the argillic alteration zone of the epithermal gold deposit Ovacik, Western Turkey: Tools for applied and genetic economic geology. <i>Journal of Geochemical Exploration</i> , 2015, 148, 105-127.	1.5	15
76	Tetrahedral charge and Fe content in dioctahedral smectites. <i>Clay Minerals</i> , 2017, 52, 51-65.	0.2	15
77	Key parameters of volcanic tuffs used as building stone: a statistical approach. <i>Environmental Earth Sciences</i> , 2022, 81, 1.	1.3	15
78	Mechanisms of acid buffering and formation of secondary minerals in vitric Andosols. <i>European Journal of Soil Science</i> , 2007, 58, 431-444.	1.8	14
79	Electrical conductivity of bentonites. <i>Applied Clay Science</i> , 2015, 114, 375-385.	2.6	14
80	Crystal structure model development for soil clay minerals â€” II. Quantification and characterization of hydroxy-interlayered smectite (HIS) using the Rietveld refinement technique. <i>Geoderma</i> , 2019, 347, 1-12.	2.3	14
81	Characterization of the Second Parcel of the Alternative Buffer Material (ABM) Experiment â€” I Mineralogical Reactions. <i>Clays and Clay Minerals</i> , 2017, 65, 27-41.	0.6	13
82	Cement-bentonite-iron interactions on small scale tests for testing performance of bentonites as a barrier in high-level radioactive waste repository concepts. <i>Applied Clay Science</i> , 2017, 135, 427-436.	2.6	13
83	Characterization of the Second Package of the Alternative Buffer Material (ABM) Experiment â€” II Exchangeable Cation Population Rearrangement. <i>Clays and Clay Minerals</i> , 2017, 65, 104-121.	0.6	12
84	Crystal structure model development for soil clay minerals â€” I. Hydroxy-interlayered smectite (HIS) synthesized from bentonite. A multi-analytical study. <i>Geoderma</i> , 2019, 347, 135-149.	2.3	12
85	Assessing poorly crystalline and mineral-organic species by extracting Al, Fe, Mn, and Si using (citrate-) ascorbate and oxalate. <i>Geoderma</i> , 2021, 397, 115095.	2.3	12
86	Determining the extent of bentonite alteration at the bentonite/cement interface. <i>Applied Clay Science</i> , 2020, 186, 105446.	2.6	12
87	Effect of mineralogy on Co and Ni extraction from Brazilian limonitic laterites via bioleaching and chemical leaching. <i>Minerals Engineering</i> , 2022, 184, 107604.	1.8	12
88	Reactive transport modelling of groundwater-bentonite interaction: Effects on exchangeable cations in an alternative buffer material in-situ test. <i>Applied Geochemistry</i> , 2016, 73, 59-69.	1.4	11
89	Thermal expansion on volcanic tuff rocks used as building stones: examples from Mexico. <i>Environmental Earth Sciences</i> , 2018, 77, 1.	1.3	11
90	Using high-resolution XRF analyses as a sequence stratigraphic tool in a mudstone-dominated succession (Early Cretaceous, Lower Saxony Basin, Northern Germany). <i>Depositional Record</i> , 2020, 6, 236-258.	0.8	11

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91	Comparison of the traditional Enslin-Neff method and the modified Dieng method for measuring water-uptake capacity. <i>Clays and Clay Minerals</i> , 2008, 56, 686-692.	0.6	10
92	Abrasivity by bentonite dispersions. <i>Applied Clay Science</i> , 2009, 46, 37-42.	2.6	10
93	Formation conditions and REY enrichment of the 2060ÂMa phosphorus mineralization at Schiel (South) Tj ETQq1 1,0,784314 rgBT /O	1.7	10
94	Comparison of Three Small-Scale Devices for the Investigation of the Electrical Conductivity/Resistivity of Swelling and Other Clays. <i>Clays and Clay Minerals</i> , 2014, 62, 1-12.	0.6	9
95	Origin of Bentonites and Detrital Zircons of the Paleocene Basiliika Formation, Svalbard. <i>Frontiers in Earth Science</i> , 2016, 4, .	0.8	9
96	Comparison of the Critical Coagulation Concentrations of Allophane and Smectites. <i>Colloids and Interfaces</i> , 2018, 2, 12.	0.9	9
97	Paleontological, mineralogical and chemical studies of syngenetic and epigenetic Pbâ€“Znâ€“Baâ€“P mineralizations at the stratotype of the K/P boundary (El Kef area, Tunisia). <i>International Journal of Earth Sciences</i> , 2011, 100, 805-846.	0.9	8
98	Mg and silica release in short-term dissolution tests in bentonites. <i>Applied Clay Science</i> , 2019, 172, 106-114.	2.6	8
99	Geochemical and mineralogical characterization of smectites from the Ventzia basin, western Macedonia, Greece. <i>Clay Minerals</i> , 2019, 54, 95-107.	0.2	8
100	Shelf life stability of diatomites. <i>Applied Clay Science</i> , 2008, 41, 158-164.	2.6	7
101	The acidity of surface groups of dioctahedral smectites. <i>Clay Minerals</i> , 2011, 46, 583-592.	0.2	7
102	Overview of the clay mineralogy studies presented at the â€“Clays in natural and engineered barriers for radioactive waste confinementâ€™ meeting, Montpellier, October 2012. <i>Clay Minerals</i> , 2013, 48, 149-152.	0.2	7
103	Interaction of Magnesium Cations with Dioctahedral Smectites under HLRW Repository Conditions. <i>Clays and Clay Minerals</i> , 2016, 64, 743-752.	0.6	7
104	Complexity of clay mineral formation during 120,000 years of soil development along the Franz Josef chronosequence, New Zealand. <i>New Zealand Journal of Geology, and Geophysics</i> , 2017, 60, 23-35.	1.0	7
105	SEM study of the early stages of Fe-bentonite corrosionâ€”The role of naturally present reactive silica. <i>Corrosion Science</i> , 2020, 171, 108716.	3.0	7
106	Mineralogical Analysis of Bentonite from the ABM5 Heater Experiment at Å„,spÃ¶ Hard Rock Laboratory, Sweden. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 669.	0.8	7
107	Volatilization of elemental mercury from fresh blast furnace sludge mixed with basic oxygen furnace sludge under different temperatures. <i>Environmental Sciences: Processes and Impacts</i> , 2015, 17, 1915-1922.	1.7	6
108	Crystal-Chemical Composition of Dicoctahedral Smectites: An Energy-Based Assessment of Empirical Relations. <i>ACS Earth and Space Chemistry</i> , 2017, 1, 629-636.	1.2	6

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109	About the Corrosion Mechanism of Metal Iron in Contact with Bentonite. ACS Earth and Space Chemistry, 2020, 4, 711-721.	1.2	6
110	Water redistribution between bentonite and salt at elevated temperature. Applied Clay Science, 2009, 46, 245-250.	2.6	5
111	Clay mineralogy and rock strength of a mid-German diabase: implications for improved quality control. Clay Minerals, 2012, 47, 419-428.	0.2	5
112	Comparison of the dry densities of highly compacted bentonites. Clay Minerals, 2013, 48, 105-115.	0.2	5
113	Zn-rich smectite from the Silver Coin Mine, Nevada, USA. Clay Minerals, 2015, 50, 417-430.	0.2	5
114	Unusual illite-dioctahedral vermiculite interstratification with Reichweite 2 in clays from northern Hungary. European Journal of Mineralogy, 2018, 30, 747-757.	0.4	5
115	Structure, kinematics and composition of fluid-controlled brittle faults and veins in Lower Cretaceous claystones (Lower Saxony Basin, Northern Germany): Constraints from petrographic studies, microfabrics, stable isotopes and biomarker analyses. Chemical Geology, 2020, 540, 119501.	1.4	5
116	Characterisation of natural and remoulded Onsen clay with focus on the influence of mica. Engineering Geology, 2021, 295, 106378.	2.9	5
117	A combined IR and XRD study of natural well crystalline goethites (\pm -FeOOH). Acta Geochimica, 2022, 41, 794-810.	0.7	5
118	Synthesis of Zeolites from Fine-Grained Perlite and Their Application as Sorbents. Materials, 2022, 15, 4474.	1.3	5
119	A late-stage hydrothermal phosphate-bearing montmorillonite argillitization from the tourmaline-bearing pegmatite of Alto dos Quintos Mine, northeast Brazil. Clay Minerals, 2011, 46, 473-485.	0.2	4
120	Weathering of Fruchtschiefer building stones: mineral dissolution or rock disaggregation?. Environmental Earth Sciences, 2011, 63, 1665-1676.	1.3	4
121	Evolution of the pH value at the vicinity of the iron-bentonite interface. Applied Clay Science, 2021, 201, 105929.	2.6	4
122	Brilliant Blue sorption characteristics of clay-organic aggregate coatings from Bt horizons. Soil and Tillage Research, 2020, 201, 104635.	2.6	4
123	Overview of the clay-mineralogy studies presented at the "Clays in natural and engineered barriers for radioactive waste confinement" meeting, Brussels, March 2015. Clay Minerals, 2016, 51, 125-128.	0.2	3
124	Methods for Characterizing the Geochemical and Microbiological Conditions. , 2007, , 749-940.		2
125	Genetic implications of a retransported loess profile near Córdoba, Argentina. Journal of South American Earth Sciences, 2010, 29, 642-649.	0.6	1
126	Investigation of hydrated smectite microstructure through wet environmental transmission electron microscopy. Micron, 2020, 130, 102793.	1.1	1

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127	Obituary Chris Breen, 1955â€“2018. Clay Minerals, 2018, 53, 547-548.	0.2	0