

Bart Baeyens

List of Publications by Year in descending order

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32
papers

2,797
citations

257450

24
h-index

377865

34
g-index

34
all docs

34
docs citations

34
times ranked

1606
citing authors

#	ARTICLE	IF	CITATIONS
1	A mechanistic description of Ni and Zn sorption on Na-montmorillonite Part I: Titration and sorption measurements. <i>Journal of Contaminant Hydrology</i> , 1997, 27, 199-222.	3.3	330
2	A mechanistic description of Ni and Zn sorption on Na-montmorillonite Part II: modelling. <i>Journal of Contaminant Hydrology</i> , 1997, 27, 223-248.	3.3	278
3	Experimental and modelling studies of caesium sorption on illite. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 3217-3227.	3.9	267
4	Modelling the sorption of Mn(II), Co(II), Ni(II), Zn(II), Cd(II), Eu(III), Am(III), Sn(IV), Th(IV), Np(V) and U(VI) on montmorillonite: Linear free energy relationships and estimates of surface binding constants for some selected heavy metals and actinides. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 875-892.	3.9	245
5	A generalised sorption model for the concentration dependent uptake of caesium by argillaceous rocks. <i>Journal of Contaminant Hydrology</i> , 2000, 42, 141-163.	3.3	213
6	Porewater chemistry in compacted re-saturated MX-80 bentonite. <i>Journal of Contaminant Hydrology</i> , 2003, 61, 329-338.	3.3	157
7	Redox Properties of Structural Fe in Clay Minerals. 1. Electrochemical Quantification of Electron-Donating and -Accepting Capacities of Smectites. <i>Environmental Science & Technology</i> , 2012, 46, 9360-9368.	10.0	125
8	Modelling the sorption of Zn and Ni on Ca-montmorillonite. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 325-336.	3.9	116
9	Structural evidence for the sorption of Ni(II) atoms on the edges of montmorillonite clay minerals: a polarized X-ray absorption fine structure study. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 1-15.	3.9	109
10	Thallium Adsorption onto Illite. <i>Environmental Science & Technology</i> , 2018, 52, 571-580.	10.0	98
11	A Physicochemical Characterisation and Geochemical Modelling Approach for Determining Porewater Chemistries in Argillaceous Rocks. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 783-795.	3.9	93
12	Neoformation of Ni phyllosilicate upon Ni uptake on montmorillonite: A kinetics study by powder and polarized extended X-ray absorption fine structure spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 2335-2347.	3.9	93
13	Experimental measurements and modeling of sorption competition on montmorillonite. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 4187-4197.	3.9	89
14	Cation exchange capacity measurements on illite using the sodium and cesium isotope dilution technique: effects of the index cation, electrolyte concentration and competition: modeling. <i>Clays and Clay Minerals</i> , 2004, 52, 421-431.	1.3	67
15	Predictive sorption modelling of Ni(II), Co(II), Eu(III), Th(IV) and U(VI) on MX-80 bentonite and Opalinus Clay: A bottom-up approach. <i>Applied Clay Science</i> , 2011, 52, 27-33.	5.2	65
16	Th Uptake on Montmorillonite: A Powder and Polarized Extended X-Ray Absorption Fine Structure (EXAFS) Study. <i>Journal of Colloid and Interface Science</i> , 2002, 249, 8-21.	9.4	51
17	Predicting the uptake of Cs, Co, Ni, Eu, Th and U on argillaceous rocks using sorption models for illite. <i>Applied Geochemistry</i> , 2015, 59, 189-199.	3.0	50
18	Investigation of the different binding edge sites for Zn on montmorillonite using P-EXAFS – The strong/weak site concept in the ZSPNE SC/CE sorption model. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 5154-5168.	3.9	49

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19	Fe(II) Uptake on Natural Montmorillonites. I. Macroscopic and Spectroscopic Characterization. <i>Environmental Science & Technology</i> , 2014, 48, 8688-8697.	10.0	41
20	Thallium sorption and speciation in soils: Role of micaceous clay minerals and manganese oxides. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 288, 83-100.	3.9	36
21	Fe(II) Uptake on Natural Montmorillonites. II. Surface Complexation Modeling. <i>Environmental Science & Technology</i> , 2014, 48, 8698-8705.	10.0	33
22	Fe(II) Sorption on a Synthetic Montmorillonite. A Combined Macroscopic and Spectroscopic Study. <i>Environmental Science & Technology</i> , 2013, 47, 6978-6986.	10.0	30
23	A Spectroscopic Characterization and Quantification of M(III)/Clay Mineral Outer-Sphere Complexes. <i>Environmental Science & Technology</i> , 2008, 42, 7601-7606.	10.0	25
24	A General Application of Surface Complexation to Modeling Radionuclide Sorption in Natural Systems. <i>Journal of Colloid and Interface Science</i> , 1993, 158, 364-371.	9.4	24
25	Ni clay neoformation on montmorillonite surface. <i>Journal of Synchrotron Radiation</i> , 2001, 8, 533-535.	2.4	18
26	Competitive Fe(II)â€“Zn(II) Uptake on a Synthetic Montmorillonite. <i>Environmental Science & Technology</i> , 2014, 48, 190-198.	10.0	18
27	Identification of Neoformed Ni-Phyllosilicates Upon Ni Uptake in Montmorillonite: A Transmission Electron Microscopy and Extended X-Ray Absorption Fine Structure Study. <i>Clays and Clay Minerals</i> , 2006, 54, 209-219.	1.3	15
28	Adsorption of barium and radium on montmorillonite: A comparative experimental and modelling study. <i>Applied Geochemistry</i> , 2021, 135, 105117.	3.0	14
29	The influence of Fe(II) competition on the sorption and migration of Ni(II) in MX-80 bentonite. <i>Applied Geochemistry</i> , 2011, 26, 1414-1422.	3.0	11
30	N ₂ -BET Surface Area Measurements on Crushed and Intact Minerals and Rocks: A Proposal for Estimating Sorption Transfer Factors. <i>Nuclear Technology</i> , 1998, 122, 250-253.	1.2	10
31	Zn uptake by illite and argillaceous rocks. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 312, 180-193.	3.9	4
32	Thallium adsorption onto phyllosilicate minerals. <i>Environmental Sciences: Processes and Impacts</i> , 2022, 24, 1343-1359.	3.5	4