Josep M Soler

List of Publications by Year
in descending order

74 papers	2,729 citations	201674 27 h-index	182427 51 g-index
78 all docs	78 docs citations	78 times ranked	1936 citing authors

#	Article	IF	Citations
1	Chemical weathering rate laws and global geochemical cycles. Geochimica Et Cosmochimica Acta, 1994, 58, 2361-2386.	3.9	630
2	Diffusion of HTO, 36Clâˆ' and 125Iâˆ' in Opalinus Clay samples from Mont Terri. Journal of Contaminant Hydrology, 2003, 61, 73-83.	3.3	170
3	Anisotropic Diffusion in Layered Argillaceous Rocks:Â A Case Study with Opalinus Clay. Environmental Science & Technology, 2004, 38, 5721-5728.	10.0	150
4	Effect of confining pressure on the diffusion of HTO, 36Clâˆ' and 125Iâˆ' in a layered argillaceous rock (Opalinus Clay): diffusion perpendicular to the fabric. Applied Geochemistry, 2003, 18, 1653-1662.	3.0	105
5	Long-term diffusion experiment at Mont Terri: first results from field and laboratory data. Applied Clay Science, 2004, 26, 123-135.	5.2	95
6	In-situ diffusion of HTO, 22Na+, Cs+ and I- in Opalinus Clay at the Mont Terri underground rock laboratory. Radiochimica Acta, 2004, 92, 757-763.	1.2	88
7	Diffusion of HTO, Brâˆ', Iâˆ', Cs+, 85Sr2+ and 60Co2+ in a clay formation: Results and modelling from an in situ experiment in Opalinus Clay. Applied Geochemistry, 2008, 23, 678-691.	3.0	80
8	The effect of coupled transport phenomena in the Opalinus Clay and implications for radionuclide transport. Journal of Contaminant Hydrology, 2001, 53, 63-84.	3.3	74
9	Influence of the flow rate on dissolution and precipitation features during percolation of CO2-rich sulfate solutions through fractured limestone samples. Chemical Geology, 2015, 414, 95-108.	3.3	71
10	Reactive transport modeling of the interaction between a high-pH plume and a fractured marl: the case of Wellenberg. Applied Geochemistry, 2003, 18, 1555-1571.	3.0	56
11	Interaction between a fractured marl caprock and CO2-rich sulfate solution under supercritical CO2 conditions. International Journal of Greenhouse Gas Control, 2016, 48, 105-119.	4.6	56
12	Interaction between CO2-rich sulfate solutions and carbonate reservoir rocks from atmospheric to supercritical CO2 conditions: Experiments and modeling. Chemical Geology, 2014, 383, 107-122.	3.3	45
13	Dissolution kinetics of Câ€"Sâ€"H gel: Flow-through experiments. Physics and Chemistry of the Earth, 2014, 70-71, 17-31.	2.9	45
14	Dissolution kinetics of synthetic Na-smectite. An integrated experimental approach. Geochimica Et Cosmochimica Acta, 2011, 75, 5849-5864.	3.9	44
15	Composition and dissolution kinetics of garnierite from the Loma de Hierro Ni-laterite deposit, Venezuela. Chemical Geology, 2008, 249, 191-202.	3.3	41
16	Comparative modeling of an in situ diffusion experiment in granite at the Grimsel Test Site. Journal of Contaminant Hydrology, 2015, 179, 89-101.	3.3	41
17	Comparison betweenin situand laboratory diffusion studies of HTO and halides in Opalinus Clay from the Mont Terri. Radiochimica Acta, 2004, 92, 781-786.	1.2	40
18	DI-B experiment: planning, design and performance of an in situ diffusion experiment in the Opalinus Clay formation. Applied Clay Science, 2004, 26, 181-196.	5.2	37

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19	The passivation of calcite by acid mine water. Column experiments with ferric sulfate and ferric chloride solutions at pH 2. Applied Geochemistry, 2008, 23, 3579-3588.	3.0	37
20	A fully 3-D anisotropic numerical model of the DI-B in situ diffusion experiment in the Opalinus clay formation. Physics and Chemistry of the Earth, 2006, 31, 531-540.	2.9	36
21	The DI-B in situ diffusion experiment at Mont Terri: Results and modeling. Physics and Chemistry of the Earth, 2008, 33, S196-S207.	2.9	34
22	Fluorite dissolution at acidic pH: In situ AFM and ex situ VSI experiments and Monte Carlo simulations. Geochimica Et Cosmochimica Acta, 2010, 74, 4298-4311.	3.9	33
23	Structural changes in Câ€“Sâ€“H gel during dissolution: Small-angle neutron scattering and Si-NMR characterization. Cement and Concrete Research, 2015, 72, 76-89.	11.0	32
24	Ni Enrichment and Stability of Al-Free Garnierite Solid-Solutions: A Thermodynamic Approach. Clays and Clay Minerals, 2012, 60, 121-135.	1.3	30
25	Direct nanoscale observations of the coupled dissolution of calcite and dolomite and the precipitation of gypsum. Beilstein Journal of Nanotechnology, 2014, 5, 1245-1253.	2.8	30
26	Mineralogical alteration and associated permeability changes induced by a high-pH plume: Modeling of a granite core infiltration experiment. Applied Geochemistry, 2007, 22, 17-29.	3.0	28
27	A mass transfer model of bauxite formation. Geochimica Et Cosmochimica Acta, 1996, 60, 4913-4931.	3.9	27
28	The determination of 134Cs and 22Na diffusion profiles in granodiorite using gamma spectroscopy. Journal of Radioanalytical and Nuclear Chemistry, 2013, 295, 2153-2161.	1.5	27
29	Reactive transport modeling of the interaction between water and a cementitious grout in a fractured rock. Application to ONKALO (Finland). Applied Geochemistry, 2011, 26, 1115-1129.	3.0	26
30	The role of mineral heterogeneity on the hydrogeochemical response of two fractured reservoir rocks in contact with dissolved CO2. Applied Geochemistry, 2017, 84, 202-217.	3.0	26
31	Modeling the Ionic Strength Effect on Diffusion in Clay. The DR-A Experiment at Mont Terri. ACS Earth and Space Chemistry, 2019, 3, 442-451.	2.7	25
32	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions. Chemical Geology, 2017, 448, 26-42.	3.3	24
33	Interferometric study of pyrite surface reactivity in acidic conditions. American Mineralogist, 2008, 93, 508-519.	1.9	23
34	A comparative study of the modelling of cement hydration and cementâ€“rock laboratory experiments. Applied Geochemistry, 2011, 26, 1138-1152.	3.0	22
35	Interaction Between Hyperalkaline Fluids and Rocks Hosting Repositories for Radioactive Waste: Reactive Transport Simulations. Nuclear Science and Engineering, 2005, 151, 128-133.	1.1	21
36	An advectionâ€“dispersionâ€“reaction model of bauxite formation. Journal of Hydrology, 1998, 209, 311-330.	5.4	20

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37	The Los Pijiguaos bauxite deposit (Venezuela): A compilation of field data and implications for the bauxitization process. Journal of South American Earth Sciences, 2000, 13, 47-65.	1.4	20
38	Tracer and reactive transport modelling of the interaction between high-pH fluid and fractured rock: Field and laboratory experiments. Journal of Geochemical Exploration, 2006, 90, 95-113.	3.2	20
39	Processes affecting the efficiency of limestone in passive treatments for AMD: Column experiments. Journal of Environmental Chemical Engineering, 2015, 3, 304-316.	6.7	20
40	Exploring diffusion and sorption processes at the Mont Terri rock laboratory (Switzerland): lessons learned from 20Âyears of field research. Swiss Journal of Geosciences, 2017, 110, 391-403.	1.2	19
41	Effect of dissolved H2SO4 on the interaction between CO2-rich brine solutions and limestone, sandstone and marl. Chemical Geology, 2017, 450, 31-43.	3.3	18
42	2D reactive transport modeling of the interaction between a marl and a CO 2 -rich sulfate solution under supercritical CO 2 conditions. International Journal of Greenhouse Gas Control, 2016, 54, 145-159.	4.6	17
43	Calcite interaction with acidic sulphate solutions: a vertical scanning interferometry and energy-dispersive XRF study. European Journal of Mineralogy, 2013, 25, 331-351.	1.3	15
44	Dissimilatory bioreduction of iron(III) oxides by Shewanella loihica under marine sediment conditions. Marine Environmental Research, 2019, 151, 104782.	2.5	15
45	Laboratory-Scale Interaction between CO2-Rich Brine and Reservoir Rocks (Limestone and Sandstone). Procedia Earth and Planetary Science, 2013, 7, 109-112.	0.6	12
46	Reactive transport modeling of concrete-clay interaction during 15 years at the Tournemire Underground Rock Laboratory. European Journal of Mineralogy, 2013, 25, 639-654.	1.3	12
47	Identifiability of diffusion and retention parameters of anionic tracers from the diffusion and retention (DR) experiment. Journal of Hydrology, 2012, 446-447, 70-76.	5.4	11
48	Modeling of Cs+ diffusion and retention in the DI-A2 experiment (Mont Terri). Uncertainties in sorption and diffusion parameters. Applied Geochemistry, 2013, 33, 191-198.	3.0	11
49	Two-dimensional reactive transport modeling of the alteration of a fractured limestone by hyperalkaline solutions at Maqarin (Jordan). Applied Geochemistry, 2016, 66, 162-173.	3.0	10
50	Reactive transport model of the formation of oxide-type Ni-laterite profiles (Punta Gorda, Moa Bay,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	4.1	10
51	Acid Waterâ€"Rockâ€"Cement Interaction and Multicomponent Reactive Transport Modeling. Reviews in Mineralogy and Geochemistry, 2019, 85, 459-498.	4.8	10
52	Degradation of mortar under advective flow: Column experiments and reactive transport modeling. Cement and Concrete Research, 2016, 81, 81-93.	11.0	9
53	Reactive transport modelling of cement-groundwater-rock interaction at the Grimsel Test Site. Physics and Chemistry of the Earth, 2017, 99, 64-76.	2.9	9
54	Modelling of nonreactive tracer dipole tests in a shear zone at the Grimsel test site. Journal of Contaminant Hydrology, 2003, 61, 387-403.	3.3	8

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55	Efficiency of magnesium hydroxide as engineering seal in the geological sequestration of CO 2. International Journal of Greenhouse Gas Control, 2016, 48, 171-185.	4.6	8
56	Simulation of remediation alternatives for a 137Cs contaminated soil. Radiochimica Acta, 2004, 92, .	1.2	6
57	Reactive Transport Modelling of the Interaction Between a High pH Plume and a Fractured Marl. Mineralogical Magazine, 1998, 62A, 1427-1428.	1.4	6
58	High-pH plume from low-alkali-cement fracture grouting: Reactive transport modeling and comparison with pH monitoring at ONKALO (Finland). Applied Geochemistry, 2012, 27, 2096-2106.	3.0	5
59	Inverse Estimation of the Effective Diffusion of the Filter in the In Situ Diffusion and Retention (DR) Experiment. Transport in Porous Media, 2012, 93, 415-429.	2.6	5
60	A single-site reactive transport model of Cs+ for the in situ diffusion and retention (DR) experiment. Environmental Earth Sciences, 2015, 74, 3589-3601.	2.7	5
61	The DR-A in-situ diffusion experiment at Mont Terri: Effects of changing salinity on diffusion and retention properties.. Materials Research Society Symposia Proceedings, 2014, 1665, 63-69.	0.1	4
62	Interaction between CO2-rich acidic water, hydrated Portland cement and sedimentary rocks: Column experiments and reactive transport modeling. Chemical Geology, 2021, 572, 120122.	3.3	4
63	Flow and reaction along the interface between hydrated Portland cement and calcareous rocks during CO2 injection. Laboratory experiments and modeling. International Journal of Greenhouse Gas Control, 2021, 108, 103331.	4.6	4
64	Exploring diffusion and sorption processes at the Mont Terri rock laboratory (Switzerland): lessons learned from 20 years of field research. Swiss Journal of Geosciences Supplement, 2018, , 393-405.	0.0	4
65	Predictive Modeling of a Simple Field Matrix Diffusion Experiment Addressing Radionuclide Transport in Fractured Rock. Is It So Straightforward?. Nuclear Technology, 2022, 208, 1059-1073.	1.2	4
66	Modeling of an in-situ diffusion experiment in granite at the Grimsel Test Site. Materials Research Society Symposia Proceedings, 2014, 1665, 85-91.	0.1	2
67	Modelling of Matrix Diffusion in a Tracer Test in Concrete. Transport in Porous Media, 2016, 111, 27-40.	2.6	2
68	Reactive transport modelling of a high-pH infiltration test in concrete. Physics and Chemistry of the Earth, 2017, 99, 131-141.	2.9	2
69	Column experiments to study the interaction between acid mine drainage and rock and Portland cement. E3S Web of Conferences, 2019, 98, 09003.	0.5	2
70	Effect of acid mine drainage (AMD) on the alteration of hydrated Portland cement and calcareous sandstone. Applied Geochemistry, 2021, 126, 104900.	3.0	2
71	Reactivity of a Marl Caprock in Contact with Acid Solutions under Different pCO2 Conditions (Atmospheric, 10 and 37 Bar). Procedia Earth and Planetary Science, 2017, 17, 528-531.	0.6	1
72	Laboratory-scale Interaction Between CO2-saturated H2SO4-rich Brine and Reservoir Rocks (Limestone) Tj ETQq0 0 0 rgBT /Overlock 10	0.6	1

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73	15. Acid Waterâ€“Rockâ€“Cement Interaction and Multicomponent Reactive Transport Modeling. , 2019, , 459-498.		0
74	Dissolution kinetics of garnierites from the Falcondo Ni-Laterite deposit (Dominican Republic) under acidic conditions. Applied Geochemistry, 2022, 143, 105357.	3.0	0