Li Li

List of Publications by Year
in descending order

90	4,000	36	60
papers	citations	h-index	g-index
		101543	128289

106	106	106	3159
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Upscaling geochemical reaction rates using pore-scale network modeling. Advances in Water Resources, 2006, 29, 1351-1370.	3.8	283
2	Expanding the role of reactive transport models in critical zone processes. Earth-Science Reviews, 2017, 165, 280-301.	9.1	207
3	Scale dependence of mineral dissolution rates within single pores and fractures. Geochimica Et Cosmochimica Acta, 2008, 72, 360-377.	3.9	199
4	Review: Role of chemistry, mechanics, and transport on well integrity in CO2 storage environments. International Journal of Greenhouse Gas Control, 2016, 49, 149-160.	4.6	141
5	Effects of physical and geochemical heterogeneities on mineral transformation and biomass accumulation during biostimulation experiments at Rifle, Colorado. Journal of Contaminant Hydrology, 2010, 112, 45-63.	3.3	137
6	From Hydrometeorology to River Water Quality: Can a Deep Learning Model Predict Dissolved Oxygen at the Continental Scale?. Environmental Science & Technology, 2021, 55, 2357-2368.	10.0	116
7	Magnesite dissolution rates at different spatial scales: The role of mineral spatial distribution and flow velocity. Geochimica Et Cosmochimica Acta, 2013, 108, 91-106.	3.9	103
8	Distinct Source Water Chemistry Shapes Contrasting Concentrationâ€Discharge Patterns. Water Resources Research, 2019, 55, 4233-4251.	4.2	103
9	Mineral Transformation and Biomass Accumulation Associated With Uranium Bioremediation at Rifle, Colorado. Environmental Science & Technology, 2009, 43, 5429-5435.	10.0	101
10	Effects of mineral spatial distribution on reaction rates in porous media. Water Resources Research, 2007, 43, .	4.2	82
11	Physicochemical Heterogeneity Controls on Uranium Bioreduction Rates at the Field Scale. Environmental Science & Technology, 2011, 45, 9959-9966.	10.0	79
12	Dynamic Evolution of Cement Composition and Transport Properties under Conditions Relevant to Geological Carbon Sequestration. Energy & Fuels, 2013, 27, 4208-4220.	5.1	79
13	Understanding watershed hydrogeochemistry: 2. Synchronized hydrological and geochemical processes drive stream chemostatic behavior. Water Resources Research, 2017, 53, 2346-2367.	4.2	76
14	A Mechanistic Model for Wettability Alteration by Chemically Tuned Waterflooding in Carbonate Reservoirs. SPE Journal, 2015, 20, 767-783.	3.1	73
15	Fracture opening or self-sealing: Critical residence time as a unifying parameter for cementâ€“CO2â€“brine interactions. International Journal of Greenhouse Gas Control, 2016, 47, 25-37.	4.6	73
16	Mass transfer in soils with local stratification of hydraulic conductivity. Water Resources Research, 1994, 30, 2891-2900.	4.2	68
17	Spatial zonation limits magnesite dissolution in porous media. Geochimica Et Cosmochimica Acta, 2014, 126, 555-573.	3.9	68
18	The Shallow and Deep Hypothesis: Subsurface Vertical Chemical Contrasts Shape Nitrate Export Patterns from Different Land Uses. Environmental Science & Technology, 2020, 54, 11915-11928.	10.0	67

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19	Toward catchment hydroâ€biogeochemical theories. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1495.	6.5	65
20	Temperature controls production but hydrology regulates export of dissolved organic carbon at the catchment scale. Hydrology and Earth System Sciences, 2020, 24, 945-966.	4.9	64
21	Selfâ€healing of cement fractures under dynamic flow of <scp>CO</scp>₂â€rich brine. Water Resources Research, 2015, 51, 4684-4701.	4.2	59
22	Understanding watershed hydrogeochemistry: 1. Development of RTâ€Fluxâ€PIHM. Water Resources Research, 2017, 53, 2328-2345.	4.2	58
23	Dynamic alterations in wellbore cement integrity due to geochemical reactions in CO₂â€rich environments. Water Resources Research, 2013, 49, 4465-4475.	4.2	54
24	An upscaled rate law for magnesite dissolution in heterogeneous porous media. Geochimica Et Cosmochimica Acta, 2017, 210, 289-305.	3.9	48
25	Uranium Bioreduction Rates across Scales: Biogeochemical Hot Moments and Hot Spots during a Biostimulation Experiment at Rifle, Colorado. Environmental Science & Technology, 2014, 48, 10116-10127.	10.0	47
26	Environmental Controls of Cadmium Desorption during CO₂ Leakage. Environmental Science & Technology, 2012, 46, 4388-4395.	10.0	46
27	A new model for the biodegradation kinetics of oil droplets: application to the Deepwater Horizon oil spill in the Gulf of Mexico. Geochemical Transactions, 2013, 14, 4.	0.7	46
28	Solute transport in lowâ€heterogeneity sandboxes: The role of correlation length and permeability variance. Water Resources Research, 2014, 50, 8240-8264.	4.2	46
29	The role of magnesite spatial distribution patterns in determining dissolution rates: When do they matter?. Geochimica Et Cosmochimica Acta, 2015, 155, 107-121.	3.9	46
30	Reactive Transport Model of Sulfur Cycling as Impacted by Perchlorate and Nitrate Treatments. Environmental Science & Technology, 2016, 50, 7010-7018.	10.0	45
31	An upscaled rate law for mineral dissolution in heterogeneous media: The role of time and length scales. Geochimica Et Cosmochimica Acta, 2018, 235, 1-20.	3.9	43
32	Applicability of averaged concentrations in determining geochemical reaction rates in heterogeneous porous media. Numerische Mathematik, 2007, 307, 1146-1166.	1.4	42
33	Reactive Transport Modeling of Interactions between Acid Gas (CO₂ + H₂S) and Pozzolan-Amended Wellbore Cement under Geologic Carbon Sequestration Conditions. Energy & Fuels, 2013, 27, 6921-6937.	5.1	42
34	Streams as Mirrors: Reading Subsurface Water Chemistry From Stream Chemistry. Water Resources Research, 2022, 58, e2021WR029931.	4.2	41
35	Designing a Suite of Models to Explore Critical Zone Function. Procedia Earth and Planetary Science, 2014, 10, 7-15.	0.6	40
36	A reactive transport model for Marcellus shale weathering. Geochimica Et Cosmochimica Acta, 2017, 217, 421-440.	3.9	38

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37	Depth of Solute Generation Is a Dominant Control on Concentrationâ€Discharge Relations. Water Resources Research, 2020, 56, e2019WR026695.	4.2	38
38	Reactive Transport Modeling of Induced Selective Plugging by<i>Leuconostoc Mesenteroides</i>in Carbonate Formations. Geomicrobiology Journal, 2013, 30, 813-828.	2.0	36
39	Susquehanna Shale Hills Critical Zone Observatory: Shale Hills in the Context of Shaver's Creek Watershed. Vadose Zone Journal, 2018, 17, 1-19.	2.2	36
40	Where Lower Calcite Abundance Creates More Alteration: Enhanced Rock Matrix Diffusivity Induced by Preferential Dissolution. Energy & Fuels, 2016, 30, 4197-4208.	5.1	35
41	Predicting algal blooms: Are we overlooking groundwater?. Science of the Total Environment, 2021, 769, 144442.	8.0	35
42	Embracing the dynamic nature of soil structure: A paradigm illuminating the role of life in critical zones of the Anthropocene. Earth-Science Reviews, 2022, 225, 103873.	9.1	35
43	Feedbacks Between Hydrological Heterogeneity and Bioremediation Induced Biogeochemical Transformations. Environmental Science & Technology, 2009, 43, 5197-5204.	10.0	34
44	How landscape heterogeneity governs stream water concentration-discharge behavior in carbonate terrains (Konza Prairie, USA). Chemical Geology, 2019, 527, 118989.	3.3	34
45	Bioclogging and Permeability Alteration by <i>L. mesenteroides</i> in a Sandstone Reservoir: A Reactive Transport Modeling Study. Energy & Fuels, 2013, 27, 6538-6551.	5.1	33
46	Modeling Low-Salinity Waterflooding in Chalk and Limestone Reservoirs. Energy & Fuels, 0, , .	5.1	33
47	Watershed Reactive Transport. Reviews in Mineralogy and Geochemistry, 2019, 85, 381-418.	4.8	31
48	Signatures of Hydrologic Function Across the Critical Zone Observatory Network. Water Resources Research, 2021, 57, e2019WR026635.	4.2	31
49	Deepening roots can enhance carbonate weathering by amplifying CO₂-rich recharge. Biogeosciences, 2021, 18, 55-75.	3.3	31
50	Nitrate removal and young stream water fractions at the catchment scale. Hydrological Processes, 2020, 34, 2725-2738.	2.6	30
51	The Chesapeake Bay program modeling system: Overview and recommendations for future development. Ecological Modelling, 2021, 456, 109635.	2.5	30
52	Isotopic insights into microbial sulfur cycling in oil reservoirs. Frontiers in Microbiology, 2014, 5, 480.	3.5	29
53	Enhanced Uranium Immobilization by Phosphate Amendment under Variable Geochemical and Flow Conditions: Insights from Reactive Transport Modeling. Environmental Science & Technology, 2018, 52, 5841-5850.	10.0	29
54	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. Earth System Dynamics, 2018, 9, 593-609.	7.1	28

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55	Climate Controls on River Chemistry. Earth's Future, 2022, 10, .	6.3	28
56	Multi-scale temporal variability in meltwater contributions in a tropical glacierized watershed. Hydrology and Earth System Sciences, 2019, 23, 405-425.	4.9	27
57	Quantifying solute transport processes: Are chemically â€œconservativeâ€• tracers electrically conservative?. Geophysics, 2011, 76, F53-F63.	2.6	26
58	Streamflow Generation From Catchments of Contrasting Lithologies: The Role of Soil Properties, Topography, and Catchment Size. Water Resources Research, 2019, 55, 9234-9257.	4.2	26
59	Leveraging Environmental Research and Observation Networks to Advance Soil Carbon Science. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1047-1055.	3.0	24
60	The Effect of Lithology and Agriculture at the Susquehanna Shale Hills Critical Zone Observatory. Vadose Zone Journal, 2018, 17, 1-15.	2.2	23
61	Compositional Modeling of Dissolution-Induced Injectivity Alteration During CO2 Flooding in Carbonate Reservoirs. SPE Journal, 2016, 21, 0809-0826.	3.1	22
62	Development of a new compositional model with multi-component sorption isotherm and slip flow in tight gas reservoirs. Journal of Natural Gas Science and Engineering, 2014, 21, 1061-1072.	4.4	21
63	Illite Spatial Distribution Patterns Dictate Cr(VI) Sorption Macrocapacity and Macrokinetics. Environmental Science & Technology, 2015, 49, 1374-1383.	10.0	21
64	Next generation modeling of microbial souring â€" Parameterization through genomic information. International Biodeterioration and Biodegradation, 2018, 126, 189-203.	3.9	21
65	Vertical Connectivity Regulates Water Transit Time and Chemical Weathering at the Hillslope Scale. Water Resources Research, 2021, 57, e2020WR029207.	4.2	21
66	A stateâ€space Bayesian framework for estimating biogeochemical transformations using timeâ€lapse geophysical data. Water Resources Research, 2009, 45, .	4.2	19
67	A Mechanistic Model for Wettability Alteration by Chemically Tuned Water Flooding in Carbonate Reservoirs. , 2014, , .		17
68	Significant stream chemistry response to temperature variations in a high-elevation mountain watershed. Communications Earth & Environment, 2020, 1, .	6.8	16
69	Reply to â€œComment on upscaling geochemical reaction rates using pore-scale network modelingâ€• by Peter C. Lichtner and Qinjun Kang. Advances in Water Resources, 2007, 30, 691-695.	3.8	14
70	From Soils to Streams: Connecting Terrestrial Carbon Transformation, Chemical Weathering, and Solute Export Across Hydrological Regimes. Water Resources Research, 2022, 58, .	4.2	14
71	Mineralogy controls on reactive transport of Marcellus Shale waters. Science of the Total Environment, 2018, 630, 1573-1582.	8.0	13
72	The Limits of Homogenization: What Hydrological Dynamics can a Simple Model Represent at the Catchment Scale?. Water Resources Research, 2021, 57, e2020WR029528.	4.2	13

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73	Geophysical monitoring and reactive transport simulations of bioclogging processes induced by <i>Leuconostoc mesenteroides</i>. Geophysics, 2014, 79, E61-E73.	2.6	12
74	The role of host rock properties in determining potential CO2 migration pathways. International Journal of Greenhouse Gas Control, 2016, 45, 18-26.	4.6	12
75	Maximum Removal Efficiency of Barium, Strontium, Radium, and Sulfate with Optimum AMD-Marcellus Flowback Mixing Ratios for Beneficial Use in the Northern Appalachian Basin. Environmental Science & Technology, 2020, 54, 4829-4839.	10.0	11
76	Drivers of Dissolved Organic Carbon Mobilization From Forested Headwater Catchments: A Multi Scaled Approach. Frontiers in Water, 2021, 3, .	2.3	8
77	Scale dependence of surface complexation capacity and rates in heterogeneous media. Science of the Total Environment, 2018, 635, 1547-1555.	8.0	7
78	BioRT-Flux-PIHM v1.0: a biogeochemical reactive transport model at the watershed scale. Geoscientific Model Development, 2022, 15, 315-333.	3.6	7
79	Prediction and QSAR Analysis of Toxicity to Photobacterium phosphoreum for a Group of Heterocyclic Nitrogen Compounds. Bulletin of Environmental Contamination and Toxicology, 2000, 64, 316-322.	2.7	6
80	How long do natural waters â€œrememberâ€• release incidents of Marcellus Shale waters: a first order approximation using reactive transport modeling. Geochemical Transactions, 2016, 17, .	0.7	6
81	13. Watershed Reactive Transport. , 2019, , 381-418.		6
82	Microbial Sulfate Reduction and Perchlorate Inhibition in a Novel Mesoscale Tank Experiment. Energy & Fuels, 2018, 32, 12049-12065.	5.1	5
83	PREDICTION OF LOG KW USING MCIS AND LSER METHODS FOR HETEROCYCLIC NITROGEN COMPOUNDS. Journal of Liquid Chromatography and Related Technologies, 1999, 22, 897-907.	1.0	4
84	Compositional Modeling of Reaction-Induced Injectivity Alteration During CO2 Flooding in Carbonate Reservoirs. , 2014, , .		4
85	Clay Distribution Patterns Regulate Natural Attenuation of Marcellus Shale Waters in Natural Aquifers. Energy & Fuels, 2018, 32, 9672-9682.	5.1	4
86	Spatiotemporal Drivers of Hydrochemical Variability in a Tropical Glacierized Watershed in the Andes. Water Resources Research, 2021, 57, e2020WR028722.	4.2	3
87	Guidelines for Publicly Archiving Terrestrial Model Data to Enhance Usability, Intercomparison, and Synthesis. Data Science Journal, 2022, 21, 3.	1.3	3
88	Comparison of four methods of predicting newly measured octanol/water coefficients (log) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 To Environmental Toxicology and Chemistry, 1999, 18, 2723-2728.	4.3	2
89	COMPARISON OF FOUR METHODS OF PREDICTING NEWLY MEASURED OCTANOL/WATER COEFFICIENTS (LOG) Tj ETQq1 1 0.784314 r Toxicology and Chemistry, 1999, 18, 2723.	4.3	2
90	Reactive Geochemical Flow Modeling With CT Scanned Rock Fractures. , 2014, , .		1