Jiamin Wan

List of Publications by Year
in descending order

67 papers	3,588 citations	159585 30 h-index	133252 59 g-index
70 all docs	70 docs citations	70 times ranked	3432 citing authors

#	Article	IF	Citations
1	Bedrock weathering contributes to subsurface reactive nitrogen and nitrous oxide emissions. Nature Geoscience, 2021, 14, 217-224.	12.9	18
2	Surfactants are Ineffective for Reducing Imbibition of Water-Based Fracturing Fluids in Deep Gas Reservoirs. Energy & Fuels, 2021, 35, 11239-11245.	5.1	4
3	Impacts of Pore Networkâ€Scale Wettability Heterogeneity on Immiscible Fluid Displacement: A Micromodel Study. Water Resources Research, 2021, 57, e2021WR030302.	4.2	7
4	Impacts of Mixedâ€Wettability on Brine Drainage and Supercritical CO₂ Storage Efficiency in a 2.5â€D Heterogeneous Micromodel. Water Resources Research, 2020, 56, e2019WR026789.	4.2	20
5	Depthâ€•and Timeâ€Resolved Distributions of Snowmeltâ€Driven Hillslope Subsurface Flow and Transport and Their Contributions to Surface Waters. Water Resources Research, 2019, 55, 9474-9499.	4.2	25
6	Impact of CO2 injection on wettability of coal at elevated pressure and temperature. International Journal of Greenhouse Gas Control, 2019, 91, 102840.	4.6	15
7	Microbial communities across a hillslopeâ€riparian transect shaped by proximity to the stream, groundwater table, and weathered bedrock. Ecology and Evolution, 2019, 9, 6869-6900.	1.9	24
8	Predicting sedimentary bedrock subsurface weathering fronts and weathering rates. Scientific Reports, 2019, 9, 17198.	3.3	31
9	Dilution destabilizes engineered ligandâ€coated nanoparticles in aqueous suspensions. Environmental Toxicology and Chemistry, 2018, 37, 1301-1308.	4.3	16
10	Supercritical CO ₂ uptake by nonswelling phyllosilicates. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 873-878.	7.1	37
11	Methane Diffusion and Adsorption in Shale Rocks: A Numerical Study Using the Dusty Gas Model in TOUGH2/EOS7C-ECBM. Transport in Porous Media, 2018, 123, 521-531.	2.6	34
12	Wettability and Flow Rate Impacts on Immiscible Displacement: A Theoretical Model. Geophysical Research Letters, 2018, 45, 3077-3086.	4.0	97
13	Method for Controlling Temperature Profiles and Water Table Depths in Laboratory Sediment Columns. Vadose Zone Journal, 2018, 17, 1-7.	2.2	2
14	Deep Unsaturated Zone Contributions to Carbon Cycling in Semiarid Environments. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3045-3054.	3.0	15
15	Using strontium isotopes to evaluate the spatial variation of groundwater recharge. Science of the Total Environment, 2018, 637-638, 672-685.	8.0	23
16	Experimental and Modeling Study of Methane Adsorption onto Partially Saturated Shales. Water Resources Research, 2018, 54, 5017-5029.	4.2	26
17	Transport and humification of dissolved organic matter within a semi-arid floodplain. Journal of Environmental Sciences, 2017, 57, 24-32.	6.1	24
18	Wettability effects on supercritical CO2â€“brine immiscible displacement during drainage: Pore-scale observation and 3D simulation. International Journal of Greenhouse Gas Control, 2017, 60, 129-139.	4.6	65

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19	Ion Diffusion Within Water Films in Unsaturated Porous Media. Environmental Science & Technology, 2017, 51, 4338-4346.	10.0	24
20	Extracting Natural Biosurfactants from Humus Deposits for Subsurface Engineering Applications. Energy & Fuels, 2017, 31, 11902-11910.	5.1	2
21	Effects of phosphate on biotite dissolution and secondary precipitation under conditions relevant to engineered subsurface processes. Physical Chemistry Chemical Physics, 2017, 19, 29895-29904.	2.8	11
22	Wettability impact on supercritical CO₂ capillary trapping: Poreâ€scale visualization and quantification. Water Resources Research, 2017, 53, 6377-6394.	4.2	74
23	Water Saturation Relations and Their Diffusionâ€Limited Equilibration in Gas Shale: Implications for Gas Flow in Unconventional Reservoirs. Water Resources Research, 2017, 53, 9757-9770.	4.2	41
24	Deep Vadose Zone Respiration Contributions to Carbon Dioxide Fluxes from a Semiarid Floodplain. Vadose Zone Journal, 2016, 15, 1-14.	2.2	24
25	Capillary pressureâ€saturation relations in quartz and carbonate sands: Limitations for correlating capillary and wettability influences on air, oil, and supercritical CO₂ trapping. Water Resources Research, 2016, 52, 6671-6690.	4.2	27
26	Effects of Salinity-Induced Chemical Reactions on Biotite Wettability Changes under Geologic CO₂ Sequestration Conditions. Environmental Science and Technology Letters, 2016, 3, 92-97.	8.7	23
27	Influence of hydrological, biogeochemical and temperature transients on subsurface carbon fluxes in a flood plain environment. Biogeochemistry, 2016, 127, 367-396.	3.5	76
28	Influence of wettability and permeability heterogeneity on miscible CO2 flooding efficiency. Fuel, 2016, 166, 219-226.	6.4	94
29	Water contact angles on quartz surfaces under supercritical CO2 sequestration conditions: Experimental and molecular dynamics simulation studies. International Journal of Greenhouse Gas Control, 2015, 42, 655-665.	4.6	81
30	Contact angle measurement ambiguity in supercritical CO2â€“waterâ€“mineral systems: Mica as an example. International Journal of Greenhouse Gas Control, 2014, 31, 128-137.	4.6	76
31	Additive Surface Complexation Modeling of Uranium(VI) Adsorption onto Quartz-Sand Dominated Sediments. Environmental Science & Technology, 2014, 48, 6569-6577.	10.0	41
32	Capillary pressure and saturation relations for supercritical CO₂ and brine in sand: Highâ€pressure <i>P_c</i>(<i>S_w</i>) controller/meter measurements and capillary scaling predictions. Water Resources Research, 2013, 49, 4566-4579.	4.2	67
33	14. Capillary Pressure and Mineral Wettability Influences on Reservoir C02 Capacity. , 2013, , 481-504.		7
34	Aqueous Uranium(VI) Concentrations Controlled by Calcium Uranyl Vanadate Precipitates. Environmental Science & Technology, 2012, 46, 7471-7477.	10.0	37
35	Supercritical CO₂ and Ionic Strength Effects on Wettability of Silica Surfaces: Equilibrium Contact Angle Measurements. Energy & Fuels, 2012, 26, 6053-6059.	5.1	183
36	Persistent Source Influences on the Trailing Edge of a Groundwater Plume, and Natural Attenuation Timeframes: The F-Area Savannah River Site. Environmental Science & Technology, 2012, 46, 4490-4497.	10.0	10

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37	Uranium(VI) Adsorption and Surface Complexation Modeling onto Background Sediments from the F-Area Savannah River Site. Environmental Science & Technology, 2012, 46, 1565-1571.	10.0	81
38	Dewetting of Silica Surfaces upon Reactions with Supercritical CO₂ and Brine: Pore-Scale Studies in Micromodels. Environmental Science & Technology, 2012, 46, 4228-4235.	10.0	196
39	Estimates of Vadose Zone Drainage from a Capped Seepage Basin, Fâ€Area, Savannah River Site. Vadose Zone Journal, 2012, 11, vzj2011.0131.	2.2	6
40	Method to Attenuate U(VI) Mobility in Acidic Waste Plumes Using Humic Acids. Environmental Science & Technology, 2011, 45, 2331-2337.	10.0	24
41	Influence of Size, Shape, and Surface Coating on the Stability of Aqueous Suspensions of CdSe Nanoparticles. Chemistry of Materials, 2010, 22, 5251-5257.	6.7	74
42	Potential Remediation Approach for Uranium-Contaminated Groundwaters Through Potassium Uranyl Vanadate Precipitation. Environmental Science & Technology, 2009, 43, 5467-5471.	10.0	26
43	Spatially Resolved U(VI) Partitioning and Speciation: Implications for Plume Scale Behavior of Contaminant U in the Hanford Vadose Zone. Environmental Science & Technology, 2009, 43, 2247-2253.	10.0	8
44	Reactive transport modeling of column experiments on the evolution of salineâ€“alkaline waste solutions. Journal of Contaminant Hydrology, 2008, 97, 42-54.	3.3	4
45	Real-Time X-ray Absorption Spectroscopy of Uranium, Iron, and Manganese in Contaminated Sediments During Bioreduction. Environmental Science & Technology, 2008, 42, 2839-2844.	10.0	21
46	Effects of Organic Carbon Supply Rates on Uranium Mobility in a Previously Bioreduced Contaminated Sediment. Environmental Science & Technology, 2008, 42, 7573-7579.	10.0	34
47	Influences of Organic Carbon Supply Rate on Uranium Bioreduction in Initially Oxidizing, Contaminated Sediment. Environmental Science & Technology, 2008, 42, 8901-8907.	10.0	25
48	Effect of Saline Waste Solution Infiltration Rates on Uranium Retention and Spatial Distribution in Hanford Sediments. Environmental Science & Technology, 2008, 42, 1973-1978.	10.0	6
49	Organic carbon distribution, speciation, and elemental correlations within soil microaggregates: Applications of STXM and NEXAFS spectroscopy. Geochimica Et Cosmochimica Acta, 2007, 71, 5439-5449.	3.9	109
50	Geochemical Controls on Contaminant Uranium in Vadose Hanford Formation Sediments at the 200 Area and 300 Area, Hanford Site, Washington. Vadose Zone Journal, 2007, 6, 1004-1017.	2.2	50
51	Reoxidation of Bioreduced Uranium under Reducing Conditions. Environmental Science & Technology, 2005, 39, 6162-6169.	10.0	157
52	Modeling reactive geochemical transport of concentrated aqueous solutions. Water Resources Research, 2005, 41, .	4.2	25
53	Hexavalent Uranium Diffusion into Soils from Concentrated Acidic and Alkaline Solutions. Environmental Science & Technology, 2004, 38, 3056-3062.	10.0	24
54	Colloid Formation at Waste Plume Fronts. Environmental Science & Technology, 2004, 38, 6066-6073.	10.0	25

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55	pH Neutralization and Zonation in Alkaline-Saline Tank Waste Plumes. Environmental Science & Technology, 2004, 38, 1321-1329.	10.0	29
56	Geochemical evolution of highly alkaline and saline tank waste plumes during seepage through vadose zone sediments. Geochimica Et Cosmochimica Acta, 2004, 68, 491-502.	3.9	28
57	Influence of Calcium Carbonate on U(VI) Sorption to Soils. Environmental Science & Technology, 2003, 37, 5603-5608.	10.0	110
58	Moisture Characteristics of Hanford Gravels: Bulk, Grainâ€Surface, and Intragranular Components. Vadose Zone Journal, 2003, 2, 322-329.	2.2	46
59	Partitioning of Clay Colloids at Airâ€"Water Interfaces. Journal of Colloid and Interface Science, 2002, 247, 54-61.	9.4	115
60	Approximate boundaries between different flow regimes in fractured rocks. Water Resources Research, 2001, 37, 2103-2111.	4.2	30
61	Surface-zone flow along unsaturated rock fractures. Water Resources Research, 2001, 37, 287-296.	4.2	31
62	Measuring Partition Coefficients of Colloids at Airâ^'Water Interfaces. Environmental Science & Technology, 1998, 32, 3293-3298.	10.0	25
63	Film Straining of Colloids in Unsaturated Porous Media:Â Conceptual Model and Experimental Testing. Environmental Science & Technology, 1997, 31, 2413-2420.	10.0	211
64	Water film flow along fracture surfaces of porous rock. Water Resources Research, 1997, 33, 1287-1295.	4.2	232
65	Improved Glass Micromodel Methods for Studies of Flow and Transport in Fractured Porous Media. Water Resources Research, 1996, 32, 1955-1964.	4.2	96
66	Visualization of the role of the gas-water interface on the fate and transport of colloids in porous media. Water Resources Research, 1994, 30, 11-23.	4.2	213
67	Influence of the Gas-Water Interface on Transport of Microorganisms through Unsaturated Porous Media. Applied and Environmental Microbiology, 1994, 60, 509-516.	3.1	140