# Jiamin Wan

List of Publications by Year
in descending order

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|---|---|---|---|
| 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 | Water film flow along fracture surfaces of porous rock. Water Resources Research, 1997, 33, 1287-1295. | 4.2 | 232 |
| 2 | 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 |
| 3 | Film Straining of Colloids in Unsaturated Porous Media:Â Conceptual Model and Experimental Testing. Environmental Science & Technology, 1997, 31, 2413-2420. | 10.0 | 211 |
| 4 | Dewetting of Silica Surfaces upon Reactions with Supercritical CO<sub>2</sub> and Brine: Pore-Scale Studies in Micromodels. Environmental Science & Technology, 2012, 46, 4228-4235. | 10.0 | 196 |
| 5 | Supercritical CO<sub>2</sub> and Ionic Strength Effects on Wettability of Silica Surfaces: Equilibrium Contact Angle Measurements. Energy & Fuels, 2012, 26, 6053-6059. | 5.1 | 183 |
| 6 | Reoxidation of Bioreduced Uranium under Reducing Conditions. Environmental Science & Technology, 2005, 39, 6162-6169. | 10.0 | 157 |
| 7 | 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 |
| 8 | Partitioning of Clay Colloids at Airâ€“Water Interfaces. Journal of Colloid and Interface Science, 2002, 247, 54-61. | 9.4 | 115 |
| 9 | Influence of Calcium Carbonate on U(VI) Sorption to Soils. Environmental Science & Technology, 2003, 37, 5603-5608. | 10.0 | 110 |
| 10 | 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 |
| 11 | Wettability and Flow Rate Impacts on Immiscible Displacement: A Theoretical Model. Geophysical Research Letters, 2018, 45, 3077-3086. | 4.0 | 97 |
| 12 | Improved Glass Micromodel Methods for Studies of Flow and Transport in Fractured Porous Media. Water Resources Research, 1996, 32, 1955-1964. | 4.2 | 96 |
| 13 | Influence of wettability and permeability heterogeneity on miscible CO2 flooding efficiency. Fuel, 2016, 166, 219-226. | 6.4 | 94 |
| 14 | 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 |
| 15 | 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 |
| 16 | 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 |
| 17 | Influence of hydrological, biogeochemical and temperature transients on subsurface carbon fluxes in a flood plain environment. Biogeochemistry, 2016, 127, 367-396. | 3.5 | 76 |
| 18 | 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 |

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|---|---|---|---|
| 19 | Wettability impact on supercritical CO<sub>2</sub> capillary trapping: Poreâ€scale visualization and quantification. Water Resources Research, 2017, 53, 6377-6394. | 4.2 | 74 |
| 20 | Capillary pressure and saturation relations for supercritical CO<sub>2</sub> and brine in sand: Highâ€pressure P<sub>c</sub>(S<sub>w</sub>) controller/meter measurements and capillary scaling predictions. Water Resources Research, 2013, 49, 4566-4579. | 4.2 | 67 |
| 21 | 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 |
| 22 | 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 |
| 23 | Moisture Characteristics of Hanford Gravels: Bulk, Grainâ€Surface, and Intragranular Components. Vadose Zone Journal, 2003, 2, 322-329. | 2.2 | 46 |
| 24 | Additive Surface Complexation Modeling of Uranium(VI) Adsorption onto Quartz-Sand Dominated Sediments. Environmental Science & Technology, 2014, 48, 6569-6577. | 10.0 | 41 |
| 25 | 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 |
| 26 | Aqueous Uranium(VI) Concentrations Controlled by Calcium Uranyl Vanadate Precipitates. Environmental Science & Technology, 2012, 46, 7471-7477. | 10.0 | 37 |
| 27 | Supercritical CO <sub>2</sub> uptake by nonswelling phyllosilicates. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 873-878. | 7.1 | 37 |
| 28 | 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 |
| 29 | 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 |
| 30 | Surface-zone flow along unsaturated rock fractures. Water Resources Research, 2001, 37, 287-296. | 4.2 | 31 |
| 31 | Predicting sedimentary bedrock subsurface weathering fronts and weathering rates. Scientific Reports, 2019, 9, 17198. | 3.3 | 31 |
| 32 | Approximate boundaries between different flow regimes in fractured rocks. Water Resources Research, 2001, 37, 2103-2111. | 4.2 | 30 |
| 33 | pH Neutralization and Zonation in Alkaline-Saline Tank Waste Plumes. Environmental Science & Technology, 2004, 38, 1321-1329. | 10.0 | 29 |
| 34 | 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 |
| 35 | Capillary pressureâ€saturation relations in quartz and carbonate sands: Limitations for correlating capillary and wettability influences on air, oil, and supercritical CO<sub>2</sub> trapping. Water Resources Research, 2016, 52, 6671-6690. | 4.2 | 27 |
| 36 | Potential Remediation Approach for Uranium-Contaminated Groundwaters Through Potassium Uranyl Vanadate Precipitation. Environmental Science & Technology, 2009, 43, 5467-5471. | 10.0 | 26 |

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|---|---|---|---|
| 37 | Experimental and Modeling Study of Methane Adsorption onto Partially Saturated Shales. Water Resources Research, 2018, 54, 5017-5029. | 4.2 | 26 |
| 38 | Measuring Partition Coefficients of Colloids at Airâ^'Water Interfaces. Environmental Science & Technology, 1998, 32, 3293-3298. | 10.0 | 25 |
| 39 | Colloid Formation at Waste Plume Fronts. Environmental Science & Technology, 2004, 38, 6066-6073. | 10.0 | 25 |
| 40 | Modeling reactive geochemical transport of concentrated aqueous solutions. Water Resources Research, 2005, 41, . | 4.2 | 25 |
| 41 | Influences of Organic Carbon Supply Rate on Uranium Bioreduction in Initially Oxidizing, Contaminated Sediment. Environmental Science & Technology, 2008, 42, 8901-8907. | 10.0 | 25 |
| 42 | Depthâ€•and Timeâ€Resolved Distributions of Snowmeltâ€Ðriven Hillslope Subsurface Flow and Transport and Their Contributions to Surface Waters. Water Resources Research, 2019, 55, 9474-9499. | 4.2 | 25 |
| 43 | Hexavalent Uranium Diffusion into Soils from Concentrated Acidic and Alkaline Solutions. Environmental Science & Technology, 2004, 38, 3056-3062. | 10.0 | 24 |
| 44 | Method to Attenuate U(VI) Mobility in Acidic Waste Plumes Using Humic Acids. Environmental Science & Technology, 2011, 45, 2331-2337. | 10.0 | 24 |
| 45 | Deep Vadose Zone Respiration Contributions to Carbon Dioxide Fluxes from a Semiarid Floodplain. Vadose Zone Journal, 2016, 15, 1-14. | 2.2 | 24 |
| 46 | Transport and humification of dissolved organic matter within a semi-arid floodplain. Journal of Environmental Sciences, 2017, 57, 24-32. | 6.1 | 24 |
| 47 | Ion Diffusion Within Water Films in Unsaturated Porous Media. Environmental Science & Technology, 2017, 51, 4338-4346. | 10.0 | 24 |
| 48 | 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 |
| 49 | Effects of Salinity-Induced Chemical Reactions on Biotite Wettability Changes under Geologic CO<sub>2</sub> Sequestration Conditions. Environmental Science and Technology Letters, 2016, 3, 92-97. | 8.7 | 23 |
| 50 | Using strontium isotopes to evaluate the spatial variation of groundwater recharge. Science of the Total Environment, 2018, 637-638, 672-685. | 8.0 | 23 |
| 51 | 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 |
| 52 | Impacts of Mixedâ€Wettability on Brine Drainage and Supercritical CO<sub>2</sub> Storage Efficiency in a 2.5â€Ð Heterogeneous Micromodel. Water Resources Research, 2020, 56, e2019WR026789. | 4.2 | 20 |
| 53 | Bedrock weathering contributes to subsurface reactive nitrogen and nitrous oxide emissions. Nature Geoscience, 2021, 14, 217-224. | 12.9 | 18 |
| 54 | Dilution destabilizes engineered ligandâ€coated nanoparticles in aqueous suspensions. Environmental Toxicology and Chemistry, 2018, 37, 1301-1308. | 4.3 | 16 |

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|---|---|---|---|
| 55 | Deep Unsaturated Zone Contributions to Carbon Cycling in Semiarid Environments. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3045-3054. | 3.0 | 15 |
| 56 | 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 |
| 57 | 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 |
| 58 | 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 |
| 59 | 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 |
| 60 | 14. Capillary Pressure and Mineral Wettability Influences on Reservoir C02 Capacity. , 2013, , 481-504. | | 7 |
| 61 | Impacts of Pore Networkâ€Scale Wettability Heterogeneity on Immiscible Fluid Displacement: A Micromodel Study. Water Resources Research, 2021, 57, e2021WR030302. | 4.2 | 7 |
| 62 | 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 |
| 63 | 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 |
| 64 | 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 |
| 65 | Surfactants are Ineffective for Reducing Imbibition of Water-Based Fracturing Fluids in Deep Gas Reservoirs. Energy & Fuels, 2021, 35, 11239-11245. | 5.1 | 4 |
| 66 | Extracting Natural Biosurfactants from Humus Deposits for Subsurface Engineering Applications. Energy & Fuels, 2017, 31, 11902-11910. | 5.1 | 2 |
| 67 | Method for Controlling Temperature Profiles and Water Table Depths in Laboratory Sediment Columns. Vadose Zone Journal, 2018, 17, 1-7. | 2.2 | 2 |