Changbing Yang

List of Publications by Year
in descending order

58 papers	1,996 citations	257450 24 h-index	254184 43 g-index
59 all docs	59 docs citations	59 times ranked	1720 citing authors

#	Article	IF	Citations
1	CO₂ Accounting and Risk Analysis for CO₂ Sequestration at Enhanced Oil Recovery Sites. Environmental Science & Technology, 2016, 50, 7546-7554.	10.0	228
2	Processâ€based approach to CO₂ leakage detection by vadose zone gas monitoring at geologic CO₂ storage sites. Geophysical Research Letters, 2012, 39, .	4.0	128
3	Heterogeneity-assisted carbon dioxide storage in marine sediments. Applied Energy, 2018, 225, 876-883.	10.1	89
4	Assessing risk to fresh water resources from long term CO2 injectionâ€“laboratory and field studies. Energy Procedia, 2009, 1, 1957-1964.	1.8	86
5	Reactive chemical transport simulations of geologic carbon sequestration: Methods and applications. Earth-Science Reviews, 2020, 208, 103265.	9.1	86
6	Monitoring a large volume CO2 injection: Year two results from SECARB project at Denburyâ€™s Cranfield, Mississippi, USA. Energy Procedia, 2011, 4, 3478-3485.	1.8	84
7	Dynamic projection of ecological risk in the Manas River basin based on terrain gradients. Science of the Total Environment, 2019, 653, 283-293.	8.0	81
8	Single-well pushâ€“pull test for assessing potential impacts of CO2 leakage on groundwater quality in a shallow Gulf Coast aquifer in Cranfield, Mississippi. International Journal of Greenhouse Gas Control, 2013, 18, 375-387.	4.6	70
9	Inverse Modeling of Water-Rock-CO₂ Batch Experiments: Potential Impacts on Groundwater Resources at Carbon Sequestration Sites. Environmental Science & Technology, 2014, 48, 2798-2806.	10.0	69
10	Complex fluid flow revealed by monitoring CO₂ injection in a fluvial formation. Journal of Geophysical Research, 2012, 117, .	3.3	64
11	Identification of potential impacts of climate change and anthropogenic activities on streamflow alterations in the Tarim River Basin, China. Scientific Reports, 2017, 7, 8254.	3.3	59
12	A coupled non-isothermal reactive transport model for long-term geochemical evolution of a HLW repository in clay. Environmental Geology, 2008, 53, 1627-1638.	1.2	53
13	Modelling geochemical and microbial consumption of dissolved oxygen after backfilling a high level radiactive waste repository. Journal of Contaminant Hydrology, 2007, 93, 130-148.	3.3	49
14	A sequential partly iterative approach for multicomponent reactive transport with CORE2D. Computational Geosciences, 2009, 13, 301-316.	2.4	48
15	Thermochemical sulphate reduction can improve carbonate petroleum reservoir quality. Geochimica Et Cosmochimica Acta, 2018, 223, 127-140.	3.9	41
16	Sources and distribution of isoprenoid glycerol dialkyl glycerol tetraethers (GDGTs) in sediments from the east coastal sea of China: Application of GDGT-based paleothermometry to a shallow marginal sea. Organic Geochemistry, 2014, 75, 24-35.	1.8	40
17	Assessment of Alleged CO2 Leakage at the Kerr Farm using a Simple Process-based Soil Gas Technique: Implications for Carbon Capture, Utilization, and Storage (CCUS) Monitoring. Energy Procedia, 2013, 37, 4242-4248.	1.8	36
18	Integrated Framework for Assessing Impacts of CO₂ Leakage on Groundwater Quality and Monitoring-Network Efficiency: Case Study at a CO₂ Enhanced Oil Recovery Site. Environmental Science & Technology, 2015, 49, 8887-8898.	10.0	35

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19	Biogeochemical Reactive Transport Model of the Redox Zone Experiment of the Ã„spÃ¶ Hard Rock Laboratory in Sweden. Nuclear Technology, 2004, 148, 151-165.	1.2	34
20	Quantitative Assessment of Hydrological Alteration Caused by Irrigation Projects in the Tarim River basin, China. Scientific Reports, 2017, 7, 4291.	3.3	34
21	Hydrological simulation and uncertainty analysis using the improved TOPMODEL in the arid Manas River basin, China. Scientific Reports, 2018, 8, 452.	3.3	34
22	Probabilistic assessment of shale gas production and water demand at Xiuwu Basin in China. Applied Energy, 2016, 180, 185-195.	10.1	33
23	Stochastic analysis of transport and multicomponent competitive monovalent cation exchange in aquifers. , 2006, 2, 102.		32
24	Inverse microbial and geochemical reactive transport models in porous media. Physics and Chemistry of the Earth, 2008, 33, 1026-1034.	2.9	32
25	Process-based soil gas leakage assessment at the Kerr Farm: Comparison of results to leakage proxies at ZERT and Mt. Etna. International Journal of Greenhouse Gas Control, 2014, 30, 42-57.	4.6	32
26	Geochemical sensitivity to CO2leakage: detection in potable aquifers at carbon sequestration sites. , 2014, 4, 384-399.		30
27	Field Demonstration of CO2Leakage Detection in Potable Aquifers with a Pulselike CO2-Release Test. Environmental Science & Technology, 2014, 48, 14031-14040.	10.0	23
28	CO2 Sequestration and Enhanced Oil Recovery at Depleted Oil/Gas Reservoirs. Energy Procedia, 2017, 114, 6957-6967.	1.8	23
29	Geochemical impact of oxygen on siliciclastic carbon storage reservoirs. International Journal of Greenhouse Gas Control, 2014, 21, 214-231.	4.6	21
30	Near-Surface Monitoring of Large-Volume CO2 Injection at Cranfield: Early Field Test of SECARB Phase III. SPE Journal, 2013, 18, 486-494.	3.1	20
31	Potential Subsurface Impacts of CO2 Stream Impurities on Geologic Carbon Storage. Energy Procedia, 2013, 37, 4552-4559.	1.8	19
32	Geochemical impact of O 2 impurity in CO 2 stream on carbonate carbon-storage reservoirs. International Journal of Greenhouse Gas Control, 2016, 47, 159-175.	4.6	19
33	Inverse method for simultaneous determination of soil water flux density and thermal properties with a penta-needle heat pulse probe. Water Resources Research, 2013, 49, 5851-5864.	4.2	18
34	Reactive Transport Modeling of the Enhancement of Density-Driven CO2 Convective Mixing in Carbonate Aquifers and its Potential Implication on Geological Carbon Sequestration. Scientific Reports, 2016, 6, 24768.	3.3	18
35	Regional Assessment of CO₂â€“Solubility Trapping Potential: A Case Study of the Coastal and Offshore Texas Miocene Interval. Environmental Science & Technology, 2014, 48, 8275-8282.	10.0	17
36	Study on the characteristics of future precipitation in response to external changes over arid and humid basins. Scientific Reports, 2017, 7, 15148.	3.3	17

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37	INV-WATFLX, a code for simultaneous estimation of soil properties and planar vector water flux from fully or partly functioning needles of a penta-needle heat-pulse probe. Computers and Geosciences, 2009, 35, 2250-2258.	4.2	16
38	Gas source attribution techniques for assessing leakage at geologic CO2 storage sites: Evaluating a CO2 and CH4 soil gas anomaly at the Cranfield CO2-EOR site. Chemical Geology, 2017, 454, 93-104.	3.3	15
39	Heterogeneity in mineral composition and its impact on the sealing capacity of caprock for a CO2 geological storage site. Computers and Geosciences, 2019, 125, 30-42.	4.2	15
40	Potential Impacts of CO₂Leakage on Groundwater Chemistry from Laboratory Batch Experiments and Field Pushâ€“pull Tests. Environmental Science & Technology, 2013, 47, 130905130052009.	10.0	14
41	Semiâ€analytical approach to reactive transport of CO₂ leakage into aquifers at carbon sequestration sites. , 2015, 5, 786-801.		13
42	Multicomponent competitive monovalent cation exchange in hierarchical porous media with multimodal reactive mineral facies. Stochastic Environmental Research and Risk Assessment, 2018, 32, 295-310.	4.0	13
43	Numerical evaluation of multicomponent cation exchange reactive transport in physically and geochemically heterogeneous porous media. Computational Geosciences, 2009, 13, 391-404.	2.4	12
44	Regional CO₂ sequestration capacity assessment for the coastal and offshore Texas Miocene interval. , 2014, 4, 53-65.		12
45	A Subgrid-Scale Stabilized Finite Element Method for Multicomponent Reactive Transport through Porous Media. Transport in Porous Media, 2009, 78, 101-126.	2.6	11
46	A semi-analytical solution for linearized multicomponent cation exchange reactive transport in groundwater. Transport in Porous Media, 2007, 69, 67-88.	2.6	10
47	Injectivity Evaluation for Offshore CO2 Sequestration in Marine Sediments. Energy Procedia, 2017, 114, 2921-2932.	1.8	10
48	Numerical modeling of the development of a preferentially leached layer on feldspar surfaces. Environmental Geology, 2009, 57, 1639.	1.2	9
49	Soil gas dynamics monitoring at a CO2-EOR site for leakage detection. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2017, 3, 351-364.	2.9	8
50	Performance comparison of physical process-based and data-driven models: a case study on the Edwards Aquifer, USA. Hydrogeology Journal, 2020, 28, 2025-2037.	2.1	8
51	Probabilistic evaluation of above-zone pressure and geochemical monitoring for leakage detection at geological carbon sequestration site. Computers and Geosciences, 2019, 125, 1-8.	4.2	6
52	Quantitative assessment of soil CO₂ concentration and stable carbon isotope for leakage detection at geological carbon sequestration sites. , 2017, 7, 680-691.		5
53	Assessing groundwater monitoring strategy for leakage detection in the Texas Gulf Coast Aquifer (USA) at a hypothetical CO2 storage site: a reactive transport modeling approach. Hydrogeology Journal, 2019, 27, 553-566.	2.1	5
54	Large Volume of CO2 Injection at the Cranfield, Early Field Test of the SECARB Phase III: Near-Surface Monitoring. , 2012, , .		3

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55	Towards a Method for Leakage Quantification and Remediation Monitoring in the Near-surface at Terrestrial CO2 Geologic Storage Sites. Energy Procedia, 2017, 114, 3855-3862.	1.8	3
56	Monitoring dissolved CO2 in groundwater for CO2 leakage detection in a shallow aquifer. Energy Procedia, 2014, 63, 4209-4215.	1.8	2
57	Laboratory Batch Experiments and Geochemical Modelling of Water-rock-super Critical CO2 Reactions in Gulf of Mexico Miocene Rocks: Implications for Future CCS Projects. Energy Procedia, 2014, 63, 5512-5521.	1.8	2
58	Model-based Assessment of the Site-specific Cost of Monitoring. Energy Procedia, 2017, 114, 5316-5319.	1.8	2