

# Chunhui Lu

## List of Publications by Year in descending order

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Version: 2024-02-01

99  
papers

3,163  
citations

218677

26  
h-index

168389

53  
g-index

104  
all docs

104  
docs citations

104  
times ranked

2522  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the intrusion and recovery of ocean-sourced $^3\text{H}$ and $^{14}\text{C}$ in coastal aquifers considering ocean-surge inundation. <i>Journal of Hydrology</i> , 2022, 604, 127241.	5.4	2
2	A novel analytical model for the transit time distributions in urban groundwater systems. <i>Journal of Hydrology</i> , 2022, 605, 127379.	5.4	3
3	Approximate analytical solutions for assessing the effects of unsaturated flow on seawater extent in thin unconfined coastal aquifers. <i>Advances in Water Resources</i> , 2022, 160, 104104.	3.8	2
4	Non-point contaminant source identification in an aquifer using the ensemble smoother with multiple data assimilation. <i>Journal of Hydrology</i> , 2022, 606, 127405.	5.4	11
5	An analytical approach for urban groundwater transit time distributions accounting for the effect of stormwater infiltration system. <i>Journal of Hydrology</i> , 2022, 606, 127413.	5.4	3
6	Improving salt leaching efficiency of subsurface drainage systems using low-permeability surface mulch. <i>Advances in Water Resources</i> , 2022, 162, 104147.	3.8	4
7	Impacts of Heterogeneity on Aquifer Storage and Recovery in Saline Aquifers. <i>Water Resources Research</i> , 2022, 58, .	4.2	5
8	Hydrometeorological disasters during COVID-19: Insights from topic modeling of global aid reports. <i>Science of the Total Environment</i> , 2022, 838, 155977.	8.0	9
9	Effects of Land Reclamation on a Subterranean Estuary. <i>Water Resources Research</i> , 2022, 58, .	4.2	7
10	High-Dimensional Groundwater Flow Inverse Modeling by Upscaled Effective Model on Principal Components. <i>Water Resources Research</i> , 2022, 58, .	4.2	3
11	A comparison between ES-MDA and restart EnKF for the purpose of the simultaneous identification of a contaminant source and hydraulic conductivity. <i>Journal of Hydrology</i> , 2021, 595, 125681.	5.4	23
12	Effective Chemical Delivery Through Multi-Screen Wells to Enhance Mixing and Reaction of Solute Plumes in Porous Media. <i>Water Resources Research</i> , 2021, 57, e2020WR028551.	4.2	5
13	Assessing the contribution of groundwater to catchment travel time distributions through integrating conceptual flux tracking with explicit Lagrangian particle tracking. <i>Advances in Water Resources</i> , 2021, 149, 103849.	3.8	11
14	New Finite Volume-Multiscale Finite-Element Model for Solving Solute Transport Problems in Porous Media. <i>Journal of Hydrologic Engineering - ASCE</i> , 2021, 26, 04021002.	1.9	1
15	Temperature Influenced the Comammox Community Composition in Drinking Water and Wastewater Treatment Plants. <i>Microbial Ecology</i> , 2021, 82, 870-884.	2.8	21
16	Analytical, Experimental, and Numerical Investigation of Partially Penetrating Barriers for Expanding Island Freshwater Lenses. <i>Water Resources Research</i> , 2021, 57, e2020WR028386.	4.2	22
17	Analytical and Experimental Investigation of the Impact of Land Reclamation on Steady-State Seawater Extent in Coastal Aquifers. <i>Water Resources Research</i> , 2021, 57, e2020WR029028.	4.2	6
18	Effects of a low-permeability layer on unstable flow pattern and land-sourced solute transport in coastal aquifers. <i>Journal of Hydrology</i> , 2021, 598, 126397.	5.4	16

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19	Analytical Solutions for Fresh Groundwater Lenses in Small Strip Islands With Spatially Variable Recharge. <i>Water Resources Research</i> , 2021, 57, e2020WR029497.	4.2	6
20	Measuring sustainability as distance to ideal position of economy, society and environment: Application to China's provincial water resources (2004â€“17). <i>Journal of Environmental Management</i> , 2021, 292, 112742.	7.8	21
21	Aquifer Storage and Recovery in Layered Saline Aquifers: Importance of Layer-Arrangements. <i>Water (Switzerland)</i> , 2021, 13, 2595.	2.7	2
22	Facile construction of dual heterojunction CoO@TiO <sub>2</sub> /MXene hybrid with efficient and stable catalytic activity for phenol degradation with peroxymonosulfate under visible light irradiation. <i>Journal of Hazardous Materials</i> , 2021, 420, 126686.	12.4	72
23	Experimental and modeling investigation of pumping from a fresh groundwater lens in an idealized strip island. <i>Journal of Hydrology</i> , 2021, 602, 126734.	5.4	8
24	Using nitrate as a tracer to constrain age selection preferences in catchments with strong seasonality. <i>Journal of Hydrology</i> , 2021, 603, 126889.	5.4	6
25	A novel two-step approach for optimal groundwater remediation by coupling extreme learning machine with evolutionary hunting strategy based metaheuristics. <i>Journal of Contaminant Hydrology</i> , 2021, 243, 103864.	3.3	8
26	Effects of River Partial Penetration on the Occurrence of Riparian Freshwater Lenses: Experimental Investigation. <i>Water Resources Research</i> , 2021, 57, e2021WR029728.	4.2	7
27	On the use of modified Boussinesq equation for studying double-layered hillslope recession characteristics. <i>Journal of Hydrology</i> , 2021, 603, 127041.	5.4	1
28	Effect of cut-off wall on freshwater storage in small islands considering ocean surge inundation. <i>Journal of Hydrology</i> , 2021, 603, 127143.	5.4	10
29	A rainfall event may produce a biased estimation of the indoor vapor intrusion risk through exterior soil-gas sampling. <i>Journal of Hydrology</i> , 2021, 603, 127117.	5.4	0
30	Effects of aquifer geometry on seawater intrusion in annulus segment island aquifers. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 6591-6602.	4.9	5
31	Novel Î±-Fe <sub>2</sub> O <sub>3</sub> /MXene nanocomposite as heterogeneous activator of peroxymonosulfate for the degradation of salicylic acid. <i>Journal of Hazardous Materials</i> , 2020, 382, 121064.	12.4	185
32	Molecular Characteristics of Dissolved Organic Nitrogen and Its Interaction with Microbial Communities in a Prechlorinated Raw Water Distribution System. <i>Environmental Science &amp; Technology</i> , 2020, 54, 1484-1492.	10.0	31
33	A simplified equation of approximate interface profile in stratified coastal aquifers. <i>Journal of Hydrology</i> , 2020, 580, 124249.	5.4	11
34	Effects of commonly used nitrification inhibitorsâ€”dicyandiamide (DCD), 3,4-dimethylpyrazole phosphate (DMPP), and nitrapyrinâ€”on soil nitrogen dynamics and nitrifiers in three typical paddy soils. <i>Geoderma</i> , 2020, 380, 114637.	5.1	65
35	Evaluation of the performance of multiple-well hydraulic barriers on enhancing groundwater extraction in a coastal aquifer. <i>Advances in Water Resources</i> , 2020, 144, 103704.	3.8	18
36	Plume deformation, mixing, and reaction kinetics: An analysis of interacting helical flows in three-dimensional porous media. <i>Physical Review E</i> , 2020, 102, 013110.	2.1	7

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37	A Semianalytical Method to Fast Delineate Seawater-Freshwater Interface in Two-Dimensional Heterogeneous Coastal Aquifers. <i>Water Resources Research</i> , 2020, 56, e2020WR027197.	4.2	3
38	Effects of River Partial Penetration on the Occurrence of Riparian Freshwater Lenses: Theoretical Development. <i>Water Resources Research</i> , 2020, 56, e2020WR027786.	4.2	7
39	Preventing Seawater Intrusion and Enhancing Safe Extraction Using Finite-Length, Impermeable Subsurface Barriers: 3D Analysis. <i>Water Resources Research</i> , 2020, 56, e2020WR027792.	4.2	27
40	Investigation of nitrogen pollutants transformation and its pathways along the long-distance prechlorinated raw water distribution system. <i>Chemosphere</i> , 2020, 255, 126833.	8.2	6
41	Water table fluctuation-induced variability in the water retention curve: Sand column experiments. <i>Journal of Hydrology</i> , 2020, 589, 125125.	5.4	7
42	Development of groundwater lens for transient recharge in strip islands. <i>Journal of Hydrology</i> , 2020, 590, 125209.	5.4	5
43	Study on the role of lateral unsaturated flow in triggering slope failure under varying boundary water level conditions. <i>Advances in Water Resources</i> , 2020, 143, 103669.	3.8	4
44	Synergistic Features of Superoxide Molecule Anchoring and Charge Transfer on Two-Dimensional Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene for Efficient Peroxymonosulfate Activation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 9209-9218.	8.0	36
45	Expanding Freshwater Lenses Adjacent to Gaining Rivers Through Vertical Low-Hydraulic Conductivity Barriers: Analytical and Experimental Validation. <i>Water Resources Research</i> , 2020, 56, e2019WR025750.	4.2	10
46	Assessment of the impact of sea-level rise on seawater intrusion in sloping confined coastal aquifers. <i>Journal of Hydrology</i> , 2020, 586, 124872.	5.4	20
47	Seawater intrusion and retreat in tidally-affected unconfined aquifers: Laboratory experiments and numerical simulations. <i>Advances in Water Resources</i> , 2019, 132, 103393.	3.8	39
48	Solute transport influenced by unstable flow in beach aquifers. <i>Advances in Water Resources</i> , 2019, 125, 68-81.	3.8	37
49	Evaluation and application of the modified van Genuchten function for unsaturated porous media. <i>Journal of Hydrology</i> , 2019, 571, 279-287.	5.4	15
50	A Proof-of-Concept Study of Using a Less Permeable Slice Along the Shoreline to Increase Fresh Groundwater Storage of Oceanic Islands: Analytical and Experimental Validation. <i>Water Resources Research</i> , 2019, 55, 6450-6463.	4.2	40
51	New finite volume multiscale finite element model for simultaneously solving groundwater flow and darcian velocity fields in porous media. <i>Journal of Hydrology</i> , 2019, 573, 592-606.	5.4	6
52	Transformation and fate of dissolved organic nitrogen in drinking water supply system: A full scale case study from Yixing, China. <i>Science of the Total Environment</i> , 2019, 673, 435-444.	8.0	21
53	Comment on "Appropriate Boundary Condition for Dupuit-Boussinesq Theory on the Steady Groundwater Flow in an Unconfined Sloping Aquifer With Uniform Recharge" by Wu et al.. <i>Water Resources Research</i> , 2019, 55, 3593-3596.	4.2	1
54	Impact of Low- or High-Permeability Inclusion on Free Convection in a Porous Medium. <i>Geofluids</i> , 2019, 2019, 1-11.	0.7	3

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55	A mobile-mobile transport model for simulating reactive transport in connected heterogeneous fields. <i>Journal of Hydrology</i> , 2018, 560, 97-108.	5.4	11
56	Predictability and Quantification of Complex Groundwater Table Dynamics Driven by Irregular Surface Water Fluctuations. <i>Water Resources Research</i> , 2018, 54, 2436-2451.	4.2	18
57	Engineered Photocatalytic Material Membrane Assemblies for Removing Nitrate from Water. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7042-7051.	6.7	24
58	Shifts in the community composition of methane-cycling microorganisms during lake shrinkage. <i>Geoderma</i> , 2018, 311, 9-14.	5.1	7
59	Effect of Anisotropy Structure on Plume Entropy and Reactive Mixing in Helical Flows. <i>Transport in Porous Media</i> , 2018, 121, 315-332.	2.6	14
60	Analytical analysis of the temporal asymmetry between seawater intrusion and retreat. <i>Advances in Water Resources</i> , 2018, 111, 121-131.	3.8	9
61	Niche Separation of Ammonia Oxidizers in Mudflat and Agricultural Soils Along the Yangtze River, China. <i>Frontiers in Microbiology</i> , 2018, 9, 3122.	3.5	3
62	Effects of pipe material on nitrogen transformation, microbial communities and functional genes in raw water transportation. <i>Water Research</i> , 2018, 143, 188-197.	11.3	31
63	Assessment of the impact of sea-level rise on steady-state seawater intrusion in a layered coastal aquifer. <i>Journal of Hydrology</i> , 2018, 563, 851-862.	5.4	29
64	Defining the Effect of Stratification in Coastal Aquifers Using a New Parameter. <i>Water Resources Research</i> , 2018, 54, 5948-5957.	4.2	23
65	Simultaneous removal of dissolved organic matter and nitrate from sewage treatment plant effluents using photocatalytic membranes. <i>Water Research</i> , 2018, 143, 250-259.	11.3	26
66	Combined effects of tides, evaporation and rainfall on the soil conditions in an intertidal creek-marsh system. <i>Advances in Water Resources</i> , 2017, 103, 1-15.	3.8	50
67	Variation of microbial communities and functional genes during the biofilm formation in raw water distribution systems and associated effects on the transformation of nitrogen pollutants. <i>Environmental Science and Pollution Research</i> , 2017, 24, 15347-15359.	5.3	13
68	Replenishing an unconfined coastal aquifer to control seawater intrusion: Injection or infiltration?. <i>Water Resources Research</i> , 2017, 53, 4775-4786.	4.2	34
69	Effects of episodic rainfall on a subterranean estuary. <i>Water Resources Research</i> , 2017, 53, 5774-5787.	4.2	36
70	Role of typical soil particle size distributions on the long-term corrosion behavior of pipeline steel. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2016, 67, 471-483.	1.5	9
71	Impact of kinetic mass transfer on free convection in a porous medium. <i>Water Resources Research</i> , 2016, 52, 3637-3653.	4.2	24
72	An analytical solution for predicting the transient seepage from a subsurface drainage system. <i>Advances in Water Resources</i> , 2016, 91, 1-10.	3.8	22

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73	Analytical solutions of seawater intrusion in sloping confined and unconfined coastal aquifers. <i>Water Resources Research</i> , 2016, 52, 6989-7004.	4.2	25
74	Reply to the comments by Willem J. Zaadnoordijk on "An analytical solution for predicting the transient seepage from a subsurface drainage system" by P. Xin, H.C. Dan, T. Zhou, C. Lu, J. Kong, L. Li [ <i>Adv. Water Resour.</i> 91 (2016) 1-10]. <i>Advances in Water Resources</i> , 2016, 96, 440-442.	3.8	0
75	Effects of Rate-Limited Mass Transfer on Modeling Vapor Intrusion with Aerobic Biodegradation. <i>Environmental Science &amp; Technology</i> , 2016, 50, 9400-9406.	10.0	13
76	Dewatering of drinking water treatment sludge using the Fenton-like process induced by electro-osmosis. <i>Chemical Engineering Journal</i> , 2016, 293, 207-215.	12.7	35
77	Effects of macro-pores on water flow in coastal subsurface drainage systems. <i>Advances in Water Resources</i> , 2016, 87, 56-67.	3.8	27
78	Short-term electrochemical corrosion behavior of pipeline steel in saline sandy environments. <i>Engineering Failure Analysis</i> , 2016, 59, 410-418.	4.0	29
79	Steady state analytical solutions for pumping in a fully bounded rectangular aquifer. <i>Water Resources Research</i> , 2015, 51, 8294-8302.	4.2	17
80	Seawater intrusion in response to sea-level rise in a coastal aquifer with a general-head inland boundary. <i>Journal of Hydrology</i> , 2015, 522, 135-140.	5.4	42
81	Nonlinear interactions of waves and tides in a subterranean estuary. <i>Geophysical Research Letters</i> , 2015, 42, 2277-2284.	4.0	45
82	A Correction on Coastal Heads for Groundwater Flow Models. <i>Ground Water</i> , 2015, 53, 164-170.	1.3	17
83	Effect of soil particle size on the corrosion behavior of natural gas pipeline. <i>Engineering Failure Analysis</i> , 2015, 58, 19-30.	4.0	39
84	Groundwater pumping in head-controlled coastal systems: The role of lateral boundaries in quantifying the interface toe location and maximum pumping rate. <i>Journal of Hydrology</i> , 2014, 512, 147-156.	5.4	18
85	Maximizing Net Extraction Using an Injection-Extraction Well Pair in a Coastal Aquifer. <i>Ground Water</i> , 2013, 51, 219-228.	1.3	23
86	Timescales of seawater intrusion and retreat. <i>Advances in Water Resources</i> , 2013, 59, 39-51.	3.8	80
87	Threats to coastal aquifers. <i>Nature Climate Change</i> , 2013, 3, 605-605.	18.8	23
88	Steady-state freshwater-seawater mixing zone in stratified coastal aquifers. <i>Journal of Hydrology</i> , 2013, 505, 24-34.	5.4	124
89	Seawater intrusion processes, investigation and management: Recent advances and future challenges. <i>Advances in Water Resources</i> , 2013, 51, 3-26.	3.8	1,046
90	How important is the impact of land-surface inundation on seawater intrusion caused by sea-level rise?. <i>Hydrogeology Journal</i> , 2013, 21, 1673-1677.	2.1	72

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91	Solute transport in divergent radial flow with multistep pumping. <i>Water Resources Research</i> , 2012, 48, .	4.2	9
92	Boundary Condition Effects on Maximum Groundwater Withdrawal in Coastal Aquifers. <i>Ground Water</i> , 2012, 50, 386-393.	1.3	24
93	Recovery efficiency of aquifer storage and recovery (ASR) with mass transfer limitation. <i>Water Resources Research</i> , 2011, 47, .	4.2	23
94	Dynamics of freshwater-seawater mixing zone development in dual-domain formations. <i>Water Resources Research</i> , 2010, 46, .	4.2	40
95	Analysis of stagnation points for a pumping well in recharge areas. <i>Journal of Hydrology</i> , 2009, 373, 442-452.	5.4	11
96	Prediction of Environmental Properties in Water-Soil-Air Systems for Phthalates. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2009, 83, 168-173.	2.7	11
97	Effects of kinetic mass transfer and transient flow conditions on widening mixing zones in coastal aquifers. <i>Water Resources Research</i> , 2009, 45, .	4.2	80
98	Study on Conveyance Coefficient Influenced by Momentum Exchange Under Steady and Unsteady Flows in Compound Open Channels. <i>Water Resources Management</i> , 0, , .	3.9	2
99	Impact of a Low-Permeability Layer on the Pumping Efficiency Under Threats of Saltwater Up-Coning. <i>Frontiers in Environmental Science</i> , 0, 10, .	3.3	1