Gualbert H P Oude Essink

List of Publications by Year
in descending order

58 papers	2,040 citations	257357 24 h-index	265120 42 g-index
73 all docs	73 docs citations	73 times ranked	1706 citing authors

#	Article	IF	Citations
1	Joint estimation of groundwater salinity and hydrogeological parameters using variable-density groundwater flow, salt transport modelling and airborne electromagnetic surveys. Advances in Water Resources, 2022, 160, 104118.	1.7	6
2	Nonlinear model predictive control of salinity and water level in polder networks: Case study of Lissertocht catchment. Agricultural Water Management, 2022, 264, 107502.	2.4	5
3	Offshore fresh groundwater in coastal unconsolidated sediment systems as a potential fresh water source in the 21st century. Environmental Research Letters, 2022, 17, 014021.	2.2	8
4	Groundwater Salinity Monitoring Using a New Fiber Optic Sensor. Ground Water Monitoring and Remediation, 2022, 42, 123-124.	0.6	1
5	Factors Determining the Natural Freshâ€Salt Groundwater Distribution in Deltas. Water Resources Research, 2021, 57, e2020WR027290.	1.7	11
6	The three-dimensional groundwater salinity distribution and fresh groundwater volumes in the Mekong Delta, Vietnam, inferred from geostatistical analyses. Earth System Science Data, 2021, 13, 3297-3319.	3.7	5
7	Common irrigation drivers of freshwater salinisation in river basins worldwide. Nature Communications, 2021, 12, 4232.	5.8	63
8	Distributed memory parallel computing of three-dimensional variable-density groundwater flow and salt transport. Advances in Water Resources, 2021, 154, 103976.	1.7	8
9	WaterROUTE: A model for cost optimization of industrial water supply networks when using water resources with varying salinity. Water Research, 2021, 202, 117390.	5.3	9
10	Adaptation to uncertain sea-level rise; how uncertainty in Antarctic mass-loss impacts the coastal adaptation strategy of the Netherlands. Environmental Research Letters, 2020, 15, 034007.	2.2	72
11	A risk-based groundwater modeling framework in coastal aquifers: a case study on Long Island, New York, USA. Hydrogeology Journal, 2020, 28, 2519-2541.	0.9	9
12	Water supply network model for sustainable industrial resource use a case study of Zeeuws-Vlaanderen in the Netherlands. Water Resources and Industry, 2020, 24, 100131.	1.9	9
13	Geological Heterogeneity of Coastal Unconsolidated Groundwater Systems Worldwide and Its Influence on Offshore Fresh Groundwater Occurrence. Frontiers in Earth Science, 2020, 7, .	0.8	28
14	A practical quantification of error sources in regional-scale airborne groundwater salinity mapping. Environmental Research Letters, 2020, 15, 074002.	2.2	2
15	Determining the Relation between Groundwater Flow Velocities and Measured Temperature Differences Using Active Heating-Distributed Temperature Sensing. Water (Switzerland), 2019, 11, 1619.	1.2	13
16	Global potential for the growth of fresh groundwater resources with large beach nourishments. Scientific Reports, 2019, 9, 12451.	1.6	5
17	Assessing the Freshâ€“Saline Groundwater Distribution in the Nile Delta Aquifer Using a 3D Variable-Density Groundwater Flow Model. Water (Switzerland), 2019, 11, 1946.	1.2	20
18	A Greedy Algorithm for Optimal Sensor Placement to Estimate Salinity in Polder Networks. Water (Switzerland), 2019, 11, 1101.	1.2	8

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19	Paleo-hydrogeological reconstruction of the fresh-saline groundwater distribution in the Vietnamese Mekong Delta since the late Pleistocene. Journal of Hydrology: Regional Studies, 2019, 23, 100594.	1.0	20
20	A three-dimensional palaeohydrogeological reconstruction of the groundwater salinity distribution in the Nile Delta Aquifer. Hydrology and Earth System Sciences, 2019, 23, 5175-5198.	1.9	28
21	Optimal salinity and water level control of water courses using Model Predictive Control. Environmental Modelling and Software, 2019, 112, 36-45.	1.9	9
22	On the origins of hypersaline groundwater in the Nile Delta aquifer. Journal of Hydrology, 2018, 560, 301-317.	2.3	31
23	Impacts of Sea Level Rise and Groundwater Extraction Scenarios on Fresh Groundwater Resources in the Nile Delta Governorates, Egypt. Water (Switzerland), 2018, 10, 1690.	1.2	31
24	Groundwater salinity mapping of the Belgian coastal zone to improve local freshwater storage availability. E3S Web of Conferences, 2018, 54, 00040.	0.2	1
25	Quantifying Geophysical Inversion Uncertainty Using Airborne Frequency Domain Electromagnetic Dataâ€"Applied at the Province of Zeeland, the Netherlands. Water Resources Research, 2018, 54, 8420-8441.	1.7	15
26	Impact of coastal forcing and groundwater recharge on the growth of a fresh groundwater lens in a mega-scale beach nourishment. Hydrology and Earth System Sciences, 2018, 22, 1065-1080.	1.9	17
27	Celebrating 50Âyears of SWIMs (Salt Water Intrusion Meetings). Hydrogeology Journal, 2018, 26, 1767-1770.	0.9	20
28	Large-scale, probabilistic salinity mapping using airborne electromagnetics for groundwater management in Zeeland, the Netherlands. Environmental Research Letters, 2018, 13, 084011.	2.2	44
29	Estimating the thickness of unconsolidated coastal aquifers along the global coastline. Earth System Science Data, 2018, 10, 1591-1603.	3.7	22
30	Fresh Water Lens Persistence and Root Zone Salinization Hazard Under Temperate Climate. Water Resources Management, 2017, 31, 689-702.	1.9	13
31	Monitoring and simulation of salinity changes in response to tide and storm surges in a sandy coastal aquifer system. Water Resources Research, 2017, 53, 6487-6509.	1.7	45
32	Model Predictive Control of Salinity in a Polder Ditch Under High Saline Groundwater Exfiltration Conditions: A Test Case. IFAC-PapersOnLine, 2017, 50, 3160-3164.	0.5	2
33	Fast calculation of groundwater exfiltration salinity in a lowland catchment using a lumped celerity/velocity approach. Environmental Modelling and Software, 2017, 96, 323-334.	1.9	9
34	Fresh groundwater resources in a large sand replenishment. Hydrology and Earth System Sciences, 2016, 20, 3149-3166.	1.9	14
35	Saltwater Upconing Due to Cyclic Pumping by Horizontal Wells in Freshwater Lenses. Ground Water, 2016, 54, 521-531.	0.7	13
36	Global sampling to assess the value of diverse observations in conditioning a realâ€world groundwater flow and transport model. Water Resources Research, 2016, 52, 1652-1672.	1.7	11

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37	Polder Flushing: Model Predictive Control of Flushing Operations to Effective and Real Time Control of Salinity in Polders. Procedia Engineering, 2016, 154, 94-98.	1.2	1
38	Lowâ€Resolution Modeling of Dense Drainage Networks in Confining Layers. Ground Water, 2015, 53, 771-781.	0.7	4
39	Integrated assessment of variable densityâ€“viscosity groundwater flow for a high temperature mono-well aquifer thermal energy storage (HT-ATES) system in a geothermal reservoir. Geothermics, 2015, 55, 58-68.	1.5	27
40	Increasing a freshwater lens below a creek ridge using a controlled artificial recharge and drainage system: a case study in the Netherlands. Hydrogeology Journal, 2015, 23, 1415-1430.	0.9	11
41	Paleo-modeling of coastal saltwater intrusion during the Holocene: an application to the Netherlands. Hydrology and Earth System Sciences, 2014, 18, 3891-3905.	1.9	86
42	An operational, multi-scale, multi-model system for consensus-based, integrated water management and policy analysis: The Netherlands Hydrological Instrument. Environmental Modelling and Software, 2014, 59, 98-108.	1.9	86
43	Regional scale impact of tidal forcing on groundwater flow in unconfined coastal aquifers. Journal of Hydrology, 2014, 517, 269-283.	2.3	11
44	Rainwater lens dynamics and mixing between infiltrating rainwater and upward saline groundwater seepage beneath a tile-drained agricultural field. Journal of Hydrology, 2013, 501, 133-145.	2.3	39
45	Uncertainty estimation of endâ€member mixing using generalized likelihood uncertainty estimation (GLUE), applied in a lowland catchment. Water Resources Research, 2013, 49, 4792-4806.	1.7	54
46	Natural saltwater upconing by preferential groundwater discharge through boils. Journal of Hydrology, 2013, 490, 74-87.	2.3	39
47	Modelling climate change effects on a Dutch coastal groundwater system using airborne electromagnetic measurements. Hydrology and Earth System Sciences, 2012, 16, 4499-4516.	1.9	39
48	Shallow rainwater lenses in deltaic areas with saline seepage. Hydrology and Earth System Sciences, 2011, 15, 3659-3678.	1.9	67
49	Upward groundwater flow in boils as the dominant mechanism of salinization in deep polders, The Netherlands. Journal of Hydrology, 2010, 394, 494-506.	2.3	75
50	Effects of climate change on coastal groundwater systems: A modeling study in the Netherlands. Water Resources Research, 2010, 46, .	1.7	262
51	Estimating the depth of fresh and brackish groundwater in a predominantly saline region using geophysical and hydrological methods, Zeeland, the Netherlands. Near Surface Geophysics, 2009, 7, 401-412.	0.6	29
52	Saltwater intrusion in the unconfined coastal aquifer of Ravenna (Italy): A numerical model. Journal of Hydrology, 2007, 340, 91-104.	2.3	145
53	The rotating movement of three immiscible fluidsâ€”a benchmark problem. Journal of Hydrology, 2004, 287, 270-278.	2.3	47
54	Development of a freshwater lens in the inverted Broad Fourteens Basin, Netherlands offshore. Journal of Geochemical Exploration, 2003, 78-79, 321-325.	1.5	1

#	Article	IF	Citations
55	Improving fresh groundwater supplyâ€"problems and solutions. Ocean and Coastal Management, 2001, 44, 429-449.	2.0	188
56	Title is missing!. , 2001, 43, 137-158.		129
57	Saltwater intrusion in 3D large-scale aquifers: a dutch case. Physics and Chemistry of the Earth, 2001, 26, 337-344.	0.3	32
58	Impact of Sea Level Rise in the Netherlands. Theory and Applications of Transport in Porous Media, 1999, , 507-530.	0.4	27