

# Gualbert H P Oude Essink

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Effects of climate change on coastal groundwater systems: A modeling study in the Netherlands. <i>Water Resources Research</i> , 2010, 46, .	1.7	262
2	Improving fresh groundwater supplyâ€”problems and solutions. <i>Ocean and Coastal Management</i> , 2001, 44, 429-449.	2.0	188
3	Saltwater intrusion in the unconfined coastal aquifer of Ravenna (Italy): A numerical model. <i>Journal of Hydrology</i> , 2007, 340, 91-104.	2.3	145
4	Title is missing!. , 2001, 43, 137-158.		129
5	Paleo-modeling of coastal saltwater intrusion during the Holocene: an application to the Netherlands. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 3891-3905.	1.9	86
6	An operational, multi-scale, multi-model system for consensus-based, integrated water management and policy analysis: The Netherlands Hydrological Instrument. <i>Environmental Modelling and Software</i> , 2014, 59, 98-108.	1.9	86
7	Upward groundwater flow in boils as the dominant mechanism of salinization in deep polders, The Netherlands. <i>Journal of Hydrology</i> , 2010, 394, 494-506.	2.3	75
8	Adaptation to uncertain sea-level rise; how uncertainty in Antarctic mass-loss impacts the coastal adaptation strategy of the Netherlands. <i>Environmental Research Letters</i> , 2020, 15, 034007.	2.2	72
9	Shallow rainwater lenses in deltaic areas with saline seepage. <i>Hydrology and Earth System Sciences</i> , 2011, 15, 3659-3678.	1.9	67
10	Common irrigation drivers of freshwater salinisation in river basins worldwide. <i>Nature Communications</i> , 2021, 12, 4232.	5.8	63
11	Uncertainty estimation of endâ€”member mixing using generalized likelihood uncertainty estimation (GLUE), applied in a lowland catchment. <i>Water Resources Research</i> , 2013, 49, 4792-4806.	1.7	54
12	The rotating movement of three immiscible fluidsâ€”a benchmark problem. <i>Journal of Hydrology</i> , 2004, 287, 270-278.	2.3	47
13	Monitoring and simulation of salinity changes in response to tide and storm surges in a sandy coastal aquifer system. <i>Water Resources Research</i> , 2017, 53, 6487-6509.	1.7	45
14	Large-scale, probabilistic salinity mapping using airborne electromagnetics for groundwater management in Zeeland, the Netherlands. <i>Environmental Research Letters</i> , 2018, 13, 084011.	2.2	44
15	Modelling climate change effects on a Dutch coastal groundwater system using airborne electromagnetic measurements. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 4499-4516.	1.9	39
16	Rainwater lens dynamics and mixing between infiltrating rainwater and upward saline groundwater seepage beneath a tile-drained agricultural field. <i>Journal of Hydrology</i> , 2013, 501, 133-145.	2.3	39
17	Natural saltwater upconing by preferential groundwater discharge through boils. <i>Journal of Hydrology</i> , 2013, 490, 74-87.	2.3	39
18	Saltwater intrusion in 3D large-scale aquifers: a dutch case. <i>Physics and Chemistry of the Earth</i> , 2001, 26, 337-344.	0.3	32

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19	On the origins of hypersaline groundwater in the Nile Delta aquifer. <i>Journal of Hydrology</i> , 2018, 560, 301-317.	2.3	31
20	Impacts of Sea Level Rise and Groundwater Extraction Scenarios on Fresh Groundwater Resources in the Nile Delta Governorates, Egypt. <i>Water (Switzerland)</i> , 2018, 10, 1690.	1.2	31
21	Estimating the depth of fresh and brackish groundwater in a predominantly saline region using geophysical and hydrological methods, Zeeland, the Netherlands. <i>Near Surface Geophysics</i> , 2009, 7, 401-412.	0.6	29
22	A three-dimensional palaeohydrogeological reconstruction of the groundwater salinity distribution in the Nile Delta Aquifer. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 5175-5198.	1.9	28
23	Geological Heterogeneity of Coastal Unconsolidated Groundwater Systems Worldwide and Its Influence on Offshore Fresh Groundwater Occurrence. <i>Frontiers in Earth Science</i> , 2020, 7, .	0.8	28
24	Impact of Sea Level Rise in the Netherlands. <i>Theory and Applications of Transport in Porous Media</i> , 1999, , 507-530.	0.4	27
25	Integrated assessment of variable density viscosity groundwater flow for a high temperature mono-well aquifer thermal energy storage (HT-ATES) system in a geothermal reservoir. <i>Geothermics</i> , 2015, 55, 58-68.	1.5	27
26	Estimating the thickness of unconsolidated coastal aquifers along the global coastline. <i>Earth System Science Data</i> , 2018, 10, 1591-1603.	3.7	22
27	Celebrating 50 years of SWIMs (Salt Water Intrusion Meetings). <i>Hydrogeology Journal</i> , 2018, 26, 1767-1770.	0.9	20
28	Assessing the Fresh Saline Groundwater Distribution in the Nile Delta Aquifer Using a 3D Variable-Density Groundwater Flow Model. <i>Water (Switzerland)</i> , 2019, 11, 1946.	1.2	20
29	Paleo-hydrogeological reconstruction of the fresh-saline groundwater distribution in the Vietnamese Mekong Delta since the late Pleistocene. <i>Journal of Hydrology: Regional Studies</i> , 2019, 23, 100594.	1.0	20
30	Impact of coastal forcing and groundwater recharge on the growth of a fresh groundwater lens in a mega-scale beach nourishment. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 1065-1080.	1.9	17
31	Quantifying Geophysical Inversion Uncertainty Using Airborne Frequency Domain Electromagnetic Data Applied at the Province of Zeeland, the Netherlands. <i>Water Resources Research</i> , 2018, 54, 8420-8441.	1.7	15
32	Fresh groundwater resources in a large sand replenishment. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 3149-3166.	1.9	14
33	Saltwater Upconing Due to Cyclic Pumping by Horizontal Wells in Freshwater Lenses. <i>Ground Water</i> , 2016, 54, 521-531.	0.7	13
34	Fresh Water Lens Persistence and Root Zone Salinization Hazard Under Temperate Climate. <i>Water Resources Management</i> , 2017, 31, 689-702.	1.9	13
35	Determining the Relation between Groundwater Flow Velocities and Measured Temperature Differences Using Active Heating-Distributed Temperature Sensing. <i>Water (Switzerland)</i> , 2019, 11, 1619.	1.2	13
36	Regional scale impact of tidal forcing on groundwater flow in unconfined coastal aquifers. <i>Journal of Hydrology</i> , 2014, 517, 269-283.	2.3	11

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37	Increasing a freshwater lens below a creek ridge using a controlled artificial recharge and drainage system: a case study in the Netherlands. <i>Hydrogeology Journal</i> , 2015, 23, 1415-1430.	0.9	11
38	Global sampling to assess the value of diverse observations in conditioning a real-world groundwater flow and transport model. <i>Water Resources Research</i> , 2016, 52, 1652-1672.	1.7	11
39	Factors Determining the Natural Fresh-Salt Groundwater Distribution in Deltas. <i>Water Resources Research</i> , 2021, 57, e2020WR027290.	1.7	11
40	Fast calculation of groundwater exfiltration salinity in a lowland catchment using a lumped celerity/velocity approach. <i>Environmental Modelling and Software</i> , 2017, 96, 323-334.	1.9	9
41	Optimal salinity and water level control of water courses using Model Predictive Control. <i>Environmental Modelling and Software</i> , 2019, 112, 36-45.	1.9	9
42	A risk-based groundwater modeling framework in coastal aquifers: a case study on Long Island, New York, USA. <i>Hydrogeology Journal</i> , 2020, 28, 2519-2541.	0.9	9
43	Water supply network model for sustainable industrial resource use a case study of Zeeuws-Vlaanderen in the Netherlands. <i>Water Resources and Industry</i> , 2020, 24, 100131.	1.9	9
44	WaterROUTE: A model for cost optimization of industrial water supply networks when using water resources with varying salinity. <i>Water Research</i> , 2021, 202, 117390.	5.3	9
45	A Greedy Algorithm for Optimal Sensor Placement to Estimate Salinity in Polder Networks. <i>Water (Switzerland)</i> , 2019, 11, 1101.	1.2	8
46	Distributed memory parallel computing of three-dimensional variable-density groundwater flow and salt transport. <i>Advances in Water Resources</i> , 2021, 154, 103976.	1.7	8
47	Offshore fresh groundwater in coastal unconsolidated sediment systems as a potential fresh water source in the 21st century. <i>Environmental Research Letters</i> , 2022, 17, 014021.	2.2	8
48	Joint estimation of groundwater salinity and hydrogeological parameters using variable-density groundwater flow, salt transport modelling and airborne electromagnetic surveys. <i>Advances in Water Resources</i> , 2022, 160, 104118.	1.7	6
49	Global potential for the growth of fresh groundwater resources with large beach nourishments. <i>Scientific Reports</i> , 2019, 9, 12451.	1.6	5
50	The three-dimensional groundwater salinity distribution and fresh groundwater volumes in the Mekong Delta, Vietnam, inferred from geostatistical analyses. <i>Earth System Science Data</i> , 2021, 13, 3297-3319.	3.7	5
51	Nonlinear model predictive control of salinity and water level in polder networks: Case study of Lissertocht catchment. <i>Agricultural Water Management</i> , 2022, 264, 107502.	2.4	5
52	Low-Resolution Modeling of Dense Drainage Networks in Confining Layers. <i>Ground Water</i> , 2015, 53, 771-781.	0.7	4
53	Model Predictive Control of Salinity in a Polder Ditch Under High Saline Groundwater Exfiltration Conditions: A Test Case. <i>IFAC-PapersOnLine</i> , 2017, 50, 3160-3164.	0.5	2
54	A practical quantification of error sources in regional-scale airborne groundwater salinity mapping. <i>Environmental Research Letters</i> , 2020, 15, 074002.	2.2	2

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55	Development of a freshwater lens in the inverted Broad Fourteens Basin, Netherlands offshore. <i>Journal of Geochemical Exploration</i> , 2003, 78-79, 321-325.	1.5	1
56	Polder Flushing: Model Predictive Control of Flushing Operations to Effective and Real Time Control of Salinity in Polders. <i>Procedia Engineering</i> , 2016, 154, 94-98.	1.2	1
57	Groundwater salinity mapping of the Belgian coastal zone to improve local freshwater storage availability. <i>E3S Web of Conferences</i> , 2018, 54, 00040.	0.2	1
58	Groundwater Salinity Monitoring Using a New Fiber Optic Sensor. <i>Ground Water Monitoring and Remediation</i> , 2022, 42, 123-124.	0.6	1