# Kristine Walraevens

List of Publications by Year
in descending order



| 86 | 1,858 | 279487 23 | 301761 39 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 89 | 89 | 89 | 1692 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Groundwater Overexploitation and Seawater Intrusion in Coastal Areas of Arid and Semi-Arid Regions. Water (Switzerland), 2018, 10, 143. | 1.2 | 200 |
| 2 | Impact of soil and water conservation measures on catchment hydrological responseâ€"a case in north Ethiopia. Hydrological Processes, 2010, 24, 1880-1895. | 1.1 | 167 |
| 3 | Application of a spatially distributed water balance model for assessing surface water and groundwater resources in the Geba basin, Tigray, Ethiopia. Journal of Hydrology, 2013, 499, 110-123. | 2.3 | 87 |
| 4 | Saltwater intrusion and nitrate pollution in the coastal aquifer of Dar es Salaam, Tanzania. Environmental Earth Sciences, 2013, 70, 1091-1111. | 1.3 | 86 |
| 5 | Chemical characterization of the Neogene Aquifer, Belgium. Hydrogeology Journal, 2006, 14, 1556-1568. | 0.9 | 81 |
| 6 | Investigating seawater intrusion due to groundwater pumping with schematic model simulations: The example of the Dar es Salaam coastal aquifer in Tanzania. Journal of African Earth Sciences, 2014, 96, 71-78. | 0.9 | 55 |
| 7 | Evaluation and Application of Multi-Source Satellite Rainfall Product CHIRPS to Assess Spatio-Temporal Rainfall Variability on Data-Sparse Western Margins of Ethiopian Highlands. Remote Sensing, 2019, 11, 2688. | 1.8 | 51 |
| 8 | Reaction transport modelling of a freshening aquifer (Tertiary Ledo-Paniselian Aquifer,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (Fla | 1.4 | 48 |
| 9 | A new correction model for 14C ages in aquifers with complex geochemistry â€“ Application to the Neogene Aquifer, Belgium. Applied Geochemistry, 2009, 24, 768-776. | 1.4 | 44 |
| 10 | Groundwater recharge and flow in a small mountain catchment in northern Ethiopia. Hydrological Sciences Journal, 2009, 54, 739-753. | 1.2 | 43 |
| 11 | Groundwater exploitation and hydraulic parameter estimation for a Quaternary aquifer in Dar-es-Salaam Tanzania. Journal of African Earth Sciences, 2009, 55, 134-146. | 0.9 | 43 |
| 12 | Natural background levels and threshold values for groundwater in fluvial Pleistocene and Tertiary marine aquifers in Flanders, Belgium. Environmental Geology, 2009, 57, 1155-1168. | 1.2 | 41 |
| 13 | Water leakage investigation of micro-dam reservoirs in Mesozoic sedimentary sequences in Northern Ethiopia. Journal of African Earth Sciences, 2013, 79, 98-110. | 0.9 | 41 |
| 14 | Overview of micro-dam reservoirs (MDR) in Tigray (northern Ethiopia): Challenges and benefits. Journal of African Earth Sciences, 2016, 123, 210-222. | 0.9 | 38 |
| 15 | Using stable water isotopes to identify spatio-temporal controls on groundwater recharge in two contrasting East African aquifer systems. Hydrological Sciences Journal, 2018, 63, 862-877. | 1.2 | 37 |
| 16 | Sources of salinity and urban pollution in the Quaternary sand aquifers of Dar es Salaam, Tanzania. Journal of African Earth Sciences, 2015, 102, 149-165. | 0.9 | 31 |
| 17 | Water Balance Components for Sustainability Assessment of Groundwaterâ€Dependent Agriculture: Example of the Mendae Plain (Tigray, Ethiopia). Land Degradation and Development, 2015, 26, 725-736. | 1.8 | 30 |
| 18 | A 40â€‰ka record of temperature and permafrost conditions in northwestern Europe from noble gases in the Ledoâ€Paniselian Aquifer (Belgium). Journal of Quaternary Science, 2010, 25, 1038-1044. | 1.1 | 29 |

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|---|---|---|---|
| 19 | Hydrochemistry and source of high fluoride in groundwater of the Nairobi area, Kenya / Hydrochimie et origine des fortes concentrations en fluorure dans l'eau souterraine de la rÃ©gion de Nairobi, au Kenya. Hydrological Sciences Journal, 2008, 53, 1230-1240. | 1.2 | 28 |
| 20 | Understanding the hydrogeochemical evolution of groundwater in Precambrian basement aquifers: A case study of Bugesera region in Burundi. Journal of Geochemical Exploration, 2018, 188, 24-42. | 1.5 | 28 |
| 21 | Modeling approaches and strategies for data-scarce aquifers: example of the Dar es Salaam aquifer in Tanzania. Hydrogeology Journal, 2013, 21, 341-356. | 0.9 | 26 |
| 22 | Hydrochemistry in coastal aquifer of southwest Bangladesh: origin of salinity. Environmental Earth Sciences, 2018, 77, 1. | 1.3 | 26 |
| 23 | Groundwater salinization and freshening processes in coastal aquifers from southwest Bangladesh. Science of the Total Environment, 2021, 779, 146339. | 3.9 | 25 |
| 24 | Groundwater recharge and water table response to changing conditions for aquifers at different physiography: The case of a semi-humid river catchment, northwestern highlands of Ethiopia. Science of the Total Environment, 2020, 748, 142243. | 3.9 | 24 |
| 25 | Groundwater exploitation and recharge rate estimation of a quaternary sand aquifer in Dar-es-Salaam area, Tanzania. Environmental Earth Sciences, 2011, 63, 559-569. | 1.3 | 23 |
| 26 | Naturally occurring potentially toxic elements in groundwater from the volcanic landscape around Mount Meru, Arusha, Tanzania and their potential health hazard. Science of the Total Environment, 2022, 807, 150487. | 3.9 | 22 |
| 27 | Hydrologic interconnection between the volcanic aquifer and springs, Lake Tana basin on the Upper Blue Nile. Journal of African Earth Sciences, 2016, 121, 154-167. | 0.9 | 21 |
| 28 | Regional groundwater flow modeling of the Geba basin, northern Ethiopia. Hydrogeology Journal, 2017, 25, 639-655. | 0.9 | 21 |
| 29 | Spatial and temporal variability of groundwater recharge in Geba basin, Northern Ethiopia. Journal of African Earth Sciences, 2017, 134, 198-212. | 0.9 | 21 |
| 30 | Hydrological Foundation as a Basis for a Holistic Environmental Flow Assessment of Tropical Highland Rivers in Ethiopia. Water (Switzerland), 2020, 12, 547. | 1.2 | 21 |
| 31 | Geological and geotechnical constraints for urban planning and natural environment protection: a case study from Mekelle City, Northern Ethiopia. Environmental Earth Sciences, 2013, 69, 783-798. | 1.3 | 20 |
| 32 | Understanding spatial patterns of soils for sustainable agriculture in northern Ethiopiaâ€™s tropical mountains. PLoS ONE, 2019, 14, e0224041. | 1.1 | 19 |
| 33 | Combining resistivity and frequency domain electromagnetic methods to investigate submarine groundwater discharge in the littoral zone. Hydrology and Earth System Sciences, 2020, 24, 3539-3555. | 1.9 | 17 |
| 34 | Persistence and changes in the peripheral Beles basin of Ethiopia. Regional Environmental Change, 2018, 18, 2089-2104. | 1.4 | 16 |
| 35 | Geophysical exploration of an old dumpsite in the perspective of enhanced landfill mining in Kermt area, Belgium. Bulletin of Engineering Geology and the Environment, 2019, 78, 55-67. | 1.6 | 16 |
| 36 | Rechargeâ€“Discharge Relations of Groundwater in Volcanic Terrain of Semi-Humid Tropical Highlands of Ethiopia: The Case of Infranz Springs, in the Upper Blue Nile. Water (Switzerland), 2020, 12, 853. | 1.2 | 15 |

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|---|---|---|---|
| 37 | Geological challenges in constructing the proposed Geba dam site, northern Ethiopia. Bulletin of Engineering Geology and the Environment, 2013, 72, 339-352. | 1.6 | 14 |
| 38 | An integrated approach for detection and delineation of leakage path from Micro-Dam Reservoir (MDR): a case study from Arato MDR, Northern Ethiopia. Bulletin of Engineering Geology and the Environment, 2016, 75, 193-210. | 1.6 | 13 |
| 39 | Impacts of Large-Scale Groundwater Exploitation Based on Long-Term Evolution of Hydraulic Heads in Dhaka City, Bangladesh. Water (Switzerland), 2021, 13, 1357. | 1.2 | 13 |
| 40 | Hydrochemical Characterisation of High-Fluoride Groundwater and Development of a Conceptual Groundwater Flow Model Using a Combined Hydrogeological and Hydrochemical Approach on an Active Volcano: Mount Meru, Northern Tanzania. Water (Switzerland), 2021, 13, 2159. | 1.2 | 13 |
| 41 | Pumping test interpretation by combination of Latin hypercube parameter sampling and analytical models. Computers and Geosciences, 2009, 35, 2065-2073. | 2.0 | 12 |
| 42 | Deducing transmissivity from specific capacity in the heterogeneous upper aquifer system of Jifarah Plain, NW-Libya. Journal of African Earth Sciences, 2013, 85, 12-21. | 0.9 | 12 |
| 43 | Poor understanding of the hydrogeological structure is a main cause of hand-dug wells failure in developing countries: A case study of a Precambrian basement aquifer in Bugesera region (Burundi). Journal of African Earth Sciences, 2016, 121, 180-199. | 0.9 | 12 |
| 44 | Geological and geophysical investigation of water leakage from two micro-dam reservoirs: Implications for future site selection, northern Ethiopia. Journal of African Earth Sciences, 2017, 129, 82-93. | 0.9 | 12 |
| 45 | Redox zonation and organic matter oxidation in palaeogroundwater of glacial origin from the Baltic Artesian Basin. Chemical Geology, 2018, 488, 149-161. | 1.4 | 12 |
| 46 | Quantification of Recharge and Runoff from Rainfall Using New GIS Tool: Example of the Gaza Strip Aquifer. Water (Switzerland), 2019, 11, 84. | 1.2 | 12 |
| 47 | Hydrogeology and groundwater flow in a basalt-capped Mesozoic sedimentary series of the Ethiopian highlands. Hydrogeology Journal, 2011, 19, 641-650. | 0.9 | 11 |
| 48 | Recent Research Results on Groundwater Resources and Saltwater Intrusion in a Changing Environment. Water (Switzerland), 2019, 11, 1118. | 1.2 | 11 |
| 49 | Quantification of Groundwater Exploitation and Assessment of Water Quality Risk Perception in the Dar Es Salaam Quaternary Aquifer, Tanzania. Water (Switzerland), 2019, 11, 2552. | 1.2 | 9 |
| 50 | Effect of Groundwater Extraction and Artificial Recharge on the Geophysical Footprints of Fresh Submarine Groundwater Discharge in the Western Belgian Coastal Area. Water (Switzerland), 2022, 14, 1040. | 1.2 | 9 |
| 51 | Drought impacts on long-term hydrodynamic behavior of groundwater in the tertiaryâ€“quaternary aquifer system of Shahrekord Plain, Iran. Environmental Earth Sciences, 2013, 70, 927-942. | 1.3 | 8 |
| 52 | Groundwater flow and chemistry of the oases of Al Wahat, NE Libya. Environmental Earth Sciences, 2016, 75, 1. | 1.3 | 8 |
| 53 | Degradation of groundwater quality in coastal aquifer of Sabratah area, NW Libya. Environmental Earth Sciences, 2017, 76, 1. | 1.3 | 8 |
| 54 | Evolution of runoff and groundwater recharge in the Gaza Strip over the last four decades. Environmental Earth Sciences, 2019, 78, 1. | 1.3 | 8 |

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| 55 | Dating of glacial palaeogroundwater in the Ordovician-Cambrian aquifer system, northern Baltic Artesian Basin. Applied Geochemistry, 2019, 102, 64-76. | 1.4 | 8 |
| 56 | Modelling spatial relationships between land cover change and its drivers in the Afroâ€alpine belt of Mount Guna (Ethiopia). Land Degradation and Development, 2021, 32, 3946-3961. | 1.8 | 8 |
| 57 | Groundwater dynamics converted to a groundwater classification as a tool for nature development programs in the dunes. Journal of Hydrology, 2013, 499, 236-246. | 2.3 | 7 |
| 58 | Estimation of depth to freshâ€“salt water interface and its implications for sustainable groundwater resource management: a case study of the Coastal strip of Dar es Salaam, Tanzania. Environmental Earth Sciences, 2015, 73, 6639-6662. | 1.3 | 6 |
| 59 | Water Resources Studies in Headwaters of the Blue Nile Basin: A Review with Emphasis on Lake Water Balance and Hydrogeological Characterization. Water (Switzerland), 2021, 13, 1469. | 1.2 | 6 |
| 60 | The Radius of Influence Myth. Water (Switzerland), 2022, 14, 149. | 1.2 | 6 |
| 61 | A palaeoclimatic record from the Ledo-Paniselian Aquifer in Belgium â€“ Indications for groundwater recharge and flow in a periglacial environment. Quaternary International, 2020, 547, 127-144. | 0.7 | 5 |
| 62 | Geophysical Delineation of Freshwaterâ€“Saline Water Interfaces in Coastal Area of Southwest Bangladesh. Water (Switzerland), 2021, 13, 2527. | 1.2 | 5 |
| 63 | Hydrogeological and hydrogeochemical investigation of the coastal area of Jifarah Plain, NW Libya. Afrika Focus, 2011, 24, . | 0.1 | 5 |
| 64 | Identification of low fluoride areas using conceptual groundwater flow model and hydrogeochemical system analysis in the aquifer system on the flanks of an active volcano: Mount Meru, Northern Tanzania. Science of the Total Environment, 2022, 814, 152682. | 3.9 | 5 |
| 65 | Different Ground Subsidence Contributions Revealed by Integrated Discussion of Sentinel-1 Datasets, Well Discharge, Stratigraphical and Geomorphological Data: The Case of the Gioia Tauro Coastal Plain (Southern Italy). Sustainability, 2022, 14, 2926. | 1.6 | 5 |
| 66 | Hydrochemical characterization and groundwater potential of the deep aquifer system in southwest coastal region of Bangladesh. Journal of Asian Earth Sciences, 2022, , 105271. | 1.0 | 5 |
| 67 | Spatial and temporal simulation of groundwater recharge and cross-validation with point estimations in volcanic aquifers with variable topography. Journal of Hydrology: Regional Studies, 2022, 42, 101142. | 1.0 | 5 |
| 68 | Effects of multi-annual climate variability on the hydrodynamic evolution (1833 to present) in a shallow aquifer system in northern Belgium. Hydrological Sciences Journal, 2010, 55, 763-779. | 1.2 | 4 |
| 69 | Quantification of water table dynamics as a reference for impact assessment of ecohydrological enhancement measures in a dune area in Belgium. Environmental Earth Sciences, 2015, 73, 2223-2240. | 1.3 | 4 |
| 70 | Sinkholes Due to Groundwater Withdrawal in Tazerbo Wellfield, <scp>SE</scp> Libya. Ground Water, 2017, 55, 593-601. | 0.7 | 4 |
| 71 | Occurrences of evaporitic salts in Bugesera region (Burundi) and relation to hydrogeochemical evolution of groundwater. Environmental Earth Sciences, 2018, 77, 1. | 1.3 | 4 |
| 72 | Tectonic link between the Neoproterozoic dextral shear fabrics and Cenozoic extension structures of the Mekelle basin, Northern Ethiopia. International Journal of Earth Sciences, 2020, 109, 1957-1974. | 0.9 | 4 |

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|---|---|---|---|
| 73 | Application of multi-hydrochemical indices for spatial groundwater quality assessment: Ziway Lake Basin of the Ethiopian Rift Valley. Environmental Earth Sciences, 2022, 81, 1. | 1.3 | 4 |
| 74 | Hydrogeochemical investigation of groundwater in Jericho area in the Jordan Valley, West Bank, Palestine. Journal of African Earth Sciences, 2013, 82, 15-32. | 0.9 | 3 |
| 75 | Quantification of Submarine Groundwater Discharge in the Gaza Strip. Water (Switzerland), 2018, 10, 1818. | 1.2 | 3 |
| 76 | Identifying the Major Hydrogeochemical Factors Governing Groundwater Chemistry in the Coastal Aquifers of Southwest Bangladesh Using Statistical Analysis. Hydrology, 2022, 9, 20. | 1.3 | 3 |
| 77 | Soil and Irrigation Water Management: Farmerâ€™s Practice, Insight, and Major Constraints in Upper Blue Nile Basin, Ethiopia. Agriculture (Switzerland), 2021, 11, 383. | 1.4 | 2 |
| 78 | Groundwater inflow in rivers as a controlling factor to surface water nitrate concentrations and impact of groundwater age distribution on response times for remediation strategies. Journal of Contaminant Hydrology, 2021, 241, 103820. | 1.6 | 2 |
| 79 | Topography Impacts Hydrology in the Sub-Humid Ethiopian Highlands. Water (Switzerland), 2022, 14, 196. | 1.2 | 2 |
| 80 | Hydrochemical characteristics and flow of the Nubian Aquifer System in Tazerbo Wellfield, SE Libya. Environmental Earth Sciences, 2017, 76, 1. | 1.3 | 1 |
| 81 | Exploring the hydrological effects of normal faults at the boundary of the Roer Valley Graben in Belgium using a catchment-scale groundwater flow model. Hydrogeology Journal, 0, , 1. | 0.9 | 1 |
| 82 | The origin of high sulfate concentrations and hydrochemistry of the Upper Mioceneâ€“Plioceneâ€“Quaternary aquifer complex of Jifarah Plain, NW Libya. Environmental Earth Sciences, 2016, 75, 1. | 1.3 | 0 |
| 83 | Hydrodynamical and hydrochemical groundwater controls on abiotic environmental gradients in a nature reserve in Flanders (Belgium). Environmental Earth Sciences, 2017, 76, 1. | 1.3 | 0 |
| 84 | Understanding the mechanisms of groundwater recharge and flow in periglacial environments: New insights from the Ledo-Paniselian aquifer in Belgium. Journal of Contaminant Hydrology, 2021, 241, 103819. | 1.6 | 0 |
| 85 | Hydrogeological and hydrogeochemical investigation of the coastal area of Jifarah Plain, NW Libya. Afrika Focus, 2011, 24, 95-99. | 0.1 | 0 |
| 86 | Hydrogeochemical processes and groundwater quality of over-exploited Dupi Tila aquifer in Dhaka city, Bangladesh. Environmental Science and Pollution Research, 0, , . | 2.7 | 0 |