

# Victor Bense

## List of Publications by Year in descending order

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67  
papers

2,955  
citations

172457

29  
h-index

168389

53  
g-index

86  
all docs

86  
docs citations

86  
times ranked

3183  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fault zone hydrogeology. <i>Earth-Science Reviews</i> , 2013, 127, 171-192.	9.1	484
2	Faults as conduit-barrier systems to fluid flow in siliciclastic sedimentary aquifers. <i>Water Resources Research</i> , 2006, 42, .	4.2	172
3	Evolution of shallow groundwater flow systems in areas of degrading permafrost. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	169
4	Pleistocene hydrology of North America: The role of ice sheets in reorganizing groundwater flow systems. <i>Reviews of Geophysics</i> , 2007, 45, .	23.0	127
5	Permafrost degradation as a control on hydrogeological regime shifts in a warming climate. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	113
6	Characterizing groundwater flow and heat transport in fractured rock using fiber-optic distributed temperature sensing. <i>Geophysical Research Letters</i> , 2013, 40, 2055-2059.	4.0	110
7	Deformation mechanisms and hydraulic properties of fault zones in unconsolidated sediments; the Roer Valley Rift System, The Netherlands. <i>Hydrogeology Journal</i> , 2003, 11, 319-332.	2.1	108
8	Thermal regime of warm-dry permafrost in relation to ground surface temperature in the Source Areas of the Yangtze and Yellow rivers on the Qinghai-Tibet Plateau, SW China. <i>Science of the Total Environment</i> , 2018, 618, 1033-1045.	8.0	100
9	Distributed temperature sensing as a downhole tool in hydrogeology. <i>Water Resources Research</i> , 2016, 52, 9259-9273.	4.2	91
10	Groundwater flow and heat transport for systems undergoing freeze-thaw: Intercomparison of numerical simulators for 2D test cases. <i>Advances in Water Resources</i> , 2018, 114, 196-218.	3.8	91
11	Assessment of basin-scale hydrologic impacts of CO2 sequestration, Illinois basin. <i>International Journal of Greenhouse Gas Control</i> , 2010, 4, 840-854.	4.6	75
12	Transient hydrodynamics within intercratonic sedimentary basins during glacial cycles. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	71
13	Temporal and spatial variations of shallow subsurface temperature as a record of lateral variations in groundwater flow. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	67
14	The effect of fault relay and clay smearing on groundwater flow patterns in the Lower Rhine Embayment. <i>Basin Research</i> , 2004, 16, 397-411.	2.7	61
15	Active-distributed temperature sensing to continuously quantify vertical flow in boreholes. <i>Water Resources Research</i> , 2014, 50, 3706-3713.	4.2	59
16	Uncertainty in 1D Heat-Flow Analysis to Estimate Groundwater Discharge to a Stream. <i>Ground Water</i> , 2011, 49, 336-347.	1.3	56
17	Thermal anomalies indicate preferential flow along faults in unconsolidated sedimentary aquifers. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	50
18	Theory, tools, and multidisciplinary applications for tracing groundwater fluxes from temperature profiles. <i>Wiley Interdisciplinary Reviews: Water</i> , 2019, 6, e1329.	6.5	50

#	ARTICLE	IF	CITATIONS
19	Influences of Frozen Ground and Climate Change on Hydrological Processes in an Alpine Watershed: A Case Study in the Upstream Area of the Heihe River, Northwest China. <i>Permafrost and Periglacial Processes</i> , 2017, 28, 420-432.	3.4	47
20	Impacts of degrading permafrost on streamflow in the source area of Yellow River on the Qinghai-Tibet Plateau, China. <i>Advances in Climate Change Research</i> , 2019, 10, 225-239.	5.1	47
21	Fault architecture and deformation processes within poorly lithified rift sediments, Central Greece. <i>Journal of Structural Geology</i> , 2011, 33, 1554-1568.	2.3	43
22	Dissolved organic carbon in permafrost regions: A review. <i>Science China Earth Sciences</i> , 2019, 62, 349-364.	5.2	41
23	Models of ice-sheet hydrogeologic interactions: a review. <i>Geofluids</i> , 2012, 12, 58-78.	0.7	39
24	Hydrothermal processes of near-surface warm permafrost in response to strong precipitation events in the Headwater Area of the Yellow River, Tibetan Plateau. <i>Geoderma</i> , 2020, 376, 114531.	5.1	38
25	Combined Geophysical Measurements Provide Evidence for Unfrozen Water in Permafrost in the Adventdalen Valley in Svalbard. <i>Geophysical Research Letters</i> , 2018, 45, 7606-7614.	4.0	34
26	Ground surface temperature and the detection of permafrost in the rugged topography on NE Qinghai-Tibet Plateau. <i>Geoderma</i> , 2019, 333, 57-68.	5.1	34
27	Impact of horizontal groundwater flow and localized deforestation on the development of shallow temperature anomalies. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	33
28	Permafrost Degradation and Its Hydrogeological Impacts. <i>Water (Switzerland)</i> , 2022, 14, 372.	2.7	33
29	Invited perspective: What lies beneath a changing Arctic?. <i>Cryosphere</i> , 2021, 15, 479-484.	3.9	32
30	Using distributed temperature sensing to monitor field scale dynamics of ground surface temperature and related substrate heat flux. <i>Agricultural and Forest Meteorology</i> , 2016, 220, 207-215.	4.8	28
31	Terrestrial water load and groundwater fluctuation in the Bengal Basin. <i>Scientific Reports</i> , 2017, 7, 3872.	3.3	25
32	Impacts of glacially recharged groundwater flow systems on talik evolution. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014, 119, 758-778.	2.8	23
33	Tracking the Subsurface Signal of Decadal Climate Warming to Quantify Vertical Groundwater Flow Rates. <i>Geophysical Research Letters</i> , 2017, 44, 12,244.	4.0	22
34	Sulfuric Acid Speleogenesis Associated with a Glacially Driven Groundwater System—Paleo-spring at Borup Fiord Pass, Nunavut. <i>Astrobiology</i> , 2012, 12, 19-28.	3.0	21
35	Interpreting Repeated Temperature-Depth Profiles for Groundwater Flow. <i>Water Resources Research</i> , 2017, 53, 8639-8647.	4.2	21
36	Using Heat to Trace Vertical Water Fluxes in Sediment Experiencing Concurrent Tidal Pumping and Groundwater Discharge. <i>Water Resources Research</i> , 2021, 57, e2020WR027904.	4.2	20

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37	Transient nature of Arctic spring systems driven by subglacial meltwater. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	19
38	Modeling Reactive Solute Transport in Permafrost-Affected Groundwater Systems. <i>Water Resources Research</i> , 2021, 57, e2020WR028771.	4.2	19
39	Assessing Textural Variation in Laminated Sands Using Digital Image Analysis of Thin Sections. <i>Journal of Sedimentary Research</i> , 2003, 73, 133-143.	1.6	17
40	Thermal-plume fibre optic tracking (T-POT) test for flow velocity measurement in groundwater boreholes. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2015, 4, 197-202.	1.6	17
41	Dissolved noble gases and stable isotopes as tracers of preferential fluid flow along faults in the Lower Rhine Embayment, Germany. <i>Hydrogeology Journal</i> , 2016, 24, 99-108.	2.1	17
42	Potential controls on cold-season river flow behavior in subarctic river basins of Siberia. <i>Journal of Hydrology</i> , 2013, 489, 214-226.	5.4	16
43	Application of electrical resistivity tomography for delineating permafrost hydrogeology in the headwater area of Yellow River on Qinghai-Tibet Plateau, SW China. <i>Hydrogeology Journal</i> , 2019, 27, 1725-1737.	2.1	15
44	3D hydro-mechanically coupled groundwater flow modelling of Pleistocene glaciation effects. <i>Computers and Geosciences</i> , 2014, 67, 89-99.	4.2	14
45	Rethinking the Use of Seabed Sediment Temperature Profiles to Trace Submarine Groundwater Flow. <i>Water Resources Research</i> , 2018, 54, 4595-4614.	4.2	14
46	Saltwater Intrusion Intensifies Coastal Permafrost Thaw. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094776.	4.0	14
47	Hydrogeological aspects of fault zones on various scales in the Roer Valley Rift System. <i>Journal of Geochemical Exploration</i> , 2003, 78-79, 317-320.	3.2	13
48	Determining the Relation between Groundwater Flow Velocities and Measured Temperature Differences Using Active Heating-Distributed Temperature Sensing. <i>Water (Switzerland)</i> , 2019, 11, 1619.	2.7	13
49	Impacts of progressive urban expansion on subsurface temperatures in the city of Amsterdam (The Netherlands). <i>Journal of Hydrology</i> , 2021, 591, 277-291.	2.1	12
50	Fault zone hydrogeology: introduction to the special issue. <i>Geofluids</i> , 2016, 16, 655-657.	0.7	11
51	Comparison of three types of fiber optic sensors for temperature monitoring in a groundwater flow simulator. <i>Sensors and Actuators A: Physical</i> , 2021, 331, 112682.	4.1	11
52	Parameter sensitivity analysis of a two-dimensional cryo-hydrogeological numerical model of degrading permafrost near Umiujaq (Nunavik, Canada). <i>Hydrogeology Journal</i> , 2020, 28, 905-919.	2.1	10
53	Repeated Subsurface Thermal Profiling to Reveal Temporal Variability in Deep Groundwater Flow Conditions. <i>Water Resources Research</i> , 2020, 56, e2019WR026913.	4.2	10
54	Estimating water balance components and their uncertainty bounds in highly groundwater-dependent and data-scarce area: An example for the Upper Citarum basin. <i>Journal of Hydrology: Regional Studies</i> , 2021, 37, 100911.	2.4	10

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55	Numerical modelling of permafrost spring discharge and open-system pingo formation induced by basal permafrost aggradation. <i>Cryosphere</i> , 2020, 14, 4627-4651.	3.9	9
56	Effects of fire history on thermal regimes of permafrost in the northern Da Xingâ€™anling Mountains, NE China. <i>Geoderma</i> , 2022, 410, 115670.	5.1	9
57	Sea-level rise and warming mediate coastal groundwater discharge in the Arctic. <i>Environmental Research Letters</i> , 2022, 17, 045027.	5.2	9
58	Inferring Permafrost Active Layer Thermal Properties From Numerical Model Optimization. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093306.	4.0	7
59	Geologic isolation of nuclear waste at high latitudes: the role of ice sheets. <i>Geofluids</i> , 2012, 12, 1-6.	0.7	4
60	Streamflow Changes in the Headwater Area of Yellow River, NE Qinghai-Tibet Plateau during 1955â€™2040 and Their Implications. <i>Water (Switzerland)</i> , 2021, 13, 1360.	2.7	4
61	Using transient temperatureâ€™depth profiles to assess vertical groundwater flow across semi-confining layers in the Chianan coastal plain aquifer system, southern Taiwan. <i>Hydrogeology Journal</i> , 2019, 27, 2155-2166.	2.1	3
62	An overview of fault zone permeabilities and groundwater level steps in the Roer Valley Rift System. <i>Geologie En Mijnbouw/Netherlands Journal of Geosciences</i> , 2019, 98, .	0.9	3
63	Inferring Suspended Sediment Carbon Content and Particle Size at High Frequency From the Optical Response of a Submerged Spectrometer. <i>Water Resources Research</i> , 2022, 58, .	4.2	3
64	Hydrogeological evaluation of managed aquifer recharge in a glacial moraine complex using long-term groundwater data analysis. <i>Hydrogeology Journal</i> , 2020, 28, 1787-1807.	2.1	2
65	Inferring Aquitard Hydraulic Conductivity Using Transient Temperatureâ€™Depth Profiles Impacted by Ground Surface Warming. <i>Water Resources Research</i> , 2022, 58, .	4.2	2
66	Dynamics of rare earth elements and associated major and trace elements during Douglas-fir ( <i>Pseudotsuga menziesii</i> ) and European beech ( <i>Fagus sylvatica</i> L.) litter degradation. <i>Biogeosciences</i> , 2022, 19, 3111-3129.	3.3	2
67	Temporal and spatial variability of cross-fault groundwater-level differences: the impact of fault-induced permeability reduction, precipitation and evapotranspiration. <i>Hydrogeology Journal</i> , 0, , 1.	2.1	0