

# guillaume Favreau

## List of Publications by Year in descending order

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Version: 2024-02-01

36  
papers

1,709  
citations

304743

22  
h-index

315739

38  
g-index

39  
all docs

39  
docs citations

39  
times ranked

2075  
citing authors

#	ARTICLE	IF	CITATIONS
1	Determining natural groundwater influx to a tropical river using radon, chlorofluorocarbons and ionic environmental tracers. <i>Journal of Hydrology</i> , 2003, 277, 74-88.	5.4	212
2	Land clearance and hydrological change in the Sahel: SW Niger. <i>Global and Planetary Change</i> , 2008, 61, 135-150.	3.5	174
3	Observed controls on resilience of groundwater to climate variability in sub-Saharan Africa. <i>Nature</i> , 2019, 572, 230-234.	27.8	168
4	Arid zone groundwater recharge and salinisation processes; an example from the Lake Eyre Basin, Australia. <i>Journal of Hydrology</i> , 2011, 408, 257-275.	5.4	95
5	Reconstruction of Megalake Chad using Shuttle Radar Topographic Mission data. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2006, 239, 16-27.	2.3	91
6	Simulated impacts of climate change and land-clearing on runoff from a small Sahelian catchment. <i>Hydrological Processes</i> , 2004, 18, 3401-3413.	2.6	84
7	A 18-year long $\delta^{18}\text{O}$ record of water vapor in Niamey (Niger) reveals insightful atmospheric processes at different timescales. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	70
8	Remote sensing for groundwater modelling in large semiarid areas: Lake Chad Basin, Africa. <i>Hydrogeology Journal</i> , 2007, 15, 97-100.	2.1	68
9	Estimate of Recharge of a Rising Water Table in Semiarid Niger from 3H and 14C Modeling. <i>Ground Water</i> , 2002, 40, 144-151.	1.3	59
10	Mapping groundwater recharge in Africa from ground observations and implications for water security. <i>Environmental Research Letters</i> , 2021, 16, 034012.	5.2	55
11	Measurements of water vapor isotope ratios with wavelength-scanned cavity ring-down spectroscopy technology: new insights and important caveats for deuterium excess measurements in tropical areas in comparison with isotope-ratio mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 3469-3480.	1.5	53
12	Deep infiltration through a sandy alluvial fan in semiarid Niger inferred from electrical conductivity survey, vadose zone chemistry and hydrological modelling. <i>Catena</i> , 2006, 67, 105-118.	5.0	52
13	Evidence for Megalake Chad, north-central Africa, during the late Quaternary from satellite data. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2006, 230, 230-242.	2.3	52
14	Clustering mesoscale convective systems with laser-based water vapor $\delta^{18}\text{O}$ monitoring in Niamey (Niger). <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 5079-5103.	3.3	44
15	Assessment of Digital Elevation Model (DEM) aggregation methods for hydrological modeling: Lake Chad basin, Africa. <i>Computers and Geosciences</i> , 2009, 35, 1661-1670.	4.2	43
16	Contribution of geophysical surveys to groundwater modelling of a porous aquifer in semiarid Niger: An overview. <i>Comptes Rendus - Geoscience</i> , 2009, 341, 800-809.	1.2	38
17	Local and global hydrological contributions to time-variable gravity in Southwest Niger. <i>Geophysical Journal International</i> , 2011, 184, 661-672.	2.4	32
18	Evaluating surface and subsurface water storage variations at small time and space scales from relative gravity measurements in semiarid Niger. <i>Water Resources Research</i> , 2013, 49, 3276-3291.	4.2	30

#	ARTICLE	IF	CITATIONS
19	Long-term increase in diffuse groundwater recharge following expansion of rainfed cultivation in the Sahel, West Africa. <i>Hydrogeology Journal</i> , 2014, 22, 1293-1305.	2.1	29
20	Major ion chemistry of groundwaters in the Continental Terminal water table of southwestern Niger (Africa). <i>Applied Geochemistry</i> , 2002, 17, 1343-1349.	3.0	25
21	Une d'pression pi'om'rique naturelle en hausse au Sahel (Sud-Ouest du Niger). <i>Comptes Rendus - Geoscience</i> , 2002, 334, 395-401.	1.2	23
22	Building a field- and model-based climatology of local water and energy cycles in the cultivated Sahel " annual budgets and seasonality. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 5001-5024.	4.9	23
23	Impacts of a large Sahelian city on groundwater hydrodynamics and quality: example of Niamey (Niger). <i>Hydrogeology Journal</i> , 2016, 24, 407-423.	2.1	19
24	Characterization of recharge mechanisms in a Precambrian basement aquifer in semi-arid south-west Niger. <i>Hydrogeology Journal</i> , 2019, 27, 475-491.	2.1	17
25	Water table variations in the hyperarid Atacama Desert: Role of the increasing groundwater extraction in the pampa del tamarugal (Northern Chile). <i>Journal of Arid Environments</i> , 2019, 168, 9-16.	2.4	17
26	Groundwater recharge from heavy rainfall in the southwestern Lake Chad Basin: evidence from isotopic observations. <i>Hydrological Sciences Journal</i> , 2021, 66, 1359-1371.	2.6	17
27	Constraining Groundwater Modeling with Magnetic Resonance Soundings. <i>Ground Water</i> , 2012, 50, 775-784.	1.3	15
28	Occurrence of 1,1'-dimethyl-4,4'-bipyridinium (Paraquat) in irrigated soil of the Lake Chad Basin, Niger. <i>Environmental Science and Pollution Research</i> , 2014, 21, 10601-10613.	5.3	14
29	Modeling Increased Groundwater Recharge due to Change from Rainfed to Irrigated Cropping in a Semiarid Region. <i>Vadose Zone Journal</i> , 2013, 12, 2-12.	2.2	12
30	Constraints and opportunities for groundwater irrigation arising from hydrologic shifts in the lullemeden Basin, south-western Niger. <i>Water International</i> , 2013, 38, 465-479.	1.0	8
31	La petite irrigation par les eaux souterraines, une solution durable contre la pauvret' et les crises alimentaires au Niger?. <i>Cahiers Agricultures</i> , 2016, 25, 15003.	0.9	8
32	'volution de la recharge de la nappe phratique de la plaine de Kairouan (Tunisie centrale) d'uite de l'analyse g'ochimique. <i>S'cheresse</i> , 2009, 20, 087-095.	0.1	6
33	Investigation of <sup>36</sup> Cl Distribution: Towards a New Estimation of Groundwater Residence Times in the Confined Aquifer of the LCB?. <i>Procedia Earth and Planetary Science</i> , 2015, 13, 147-150.	0.6	4
34	Comment on "Improving noble gas based paleoclimate reconstruction and groundwater dating using 20 Ne/ 22 Ne ratios," by F. Peeters et al. (2003) <i>Geochim. Cosmochim. Acta</i> , 67, 587-600 1 Associate editor: B. Marty. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 1433-1435.	3.9	2
35	Comment on "Estimating groundwater mixing ratios and their uncertainties using a statistical multi parameter approach" by Rueedi, J., Purtschert, R., Beyerle, U., Alberich, C., Kipfer, R. J. <i>Hydrol.</i> , 2005, 305: 1-14. <i>Journal of Hydrology</i> , 2006, 318, 3-6.	5.4	2
36	Fonctionnement hydrologique de la grande mare de Kokorou dans le socle cristallin du Liptako Gourma (Niger). <i>International Journal of Biological and Chemical Sciences</i> , 2019, 12, 2951.	0.2	0