Jesus D Gomez-Velez

List of Publications by Year
in descending order

38 papers	1,484 citations	361413 20 h-index	361022 35 g-index
48 all docs	48 docs citations	48 times ranked	1739 citing authors

#	Article	IF	Citations
1	Denitrification in the Mississippi River network controlled by flow through river bedforms. Nature Geoscience, 2015, 8, 941-945.	12.9	247
2	A hydrogeomorphic river network model predicts where and why hyporheic exchange is important in large basins. Geophysical Research Letters, 2014, 41, 6403-6412.	4.0	134
3	Is the Hyporheic Zone Relevant beyond the Scientific Community?. Water (Switzerland), 2019, 11, 2230.	2.7	113
4	Residence time distributions in sinuosityâ€driven hyporheic zones and their biogeochemical effects. Water Resources Research, 2012, 48, .	4.2	87
5	How Hydrologic Connectivity Regulates Water Quality in River Corridors. Journal of the American Water Resources Association, 2019, 55, 369-381.	2.4	75
6	Effect of lowâ€permeability layers on spatial patterns of hyporheic exchange and groundwater upwelling. Water Resources Research, 2014, 50, 5196-5215.	4.2	73
7	Large Aperture Scintillometer Intercomparison Study. Boundary-Layer Meteorology, 2008, 128, 133-150.	2.3	68
8	Thresholds of lake and reservoir connectivity in river networks control nitrogen removal. Nature Communications, 2018, 9, 2779.	12.8	68
9	Age distributions and dynamically changing hydrologic systems: Exploring topographyâ€driven flow. Water Resources Research, 2013, 49, 1503-1522.	4.2	59
10	Flow and Residence Times of Dynamic River Bank Storage and Sinuosityâ€Driven Hyporheic Exchange. Water Resources Research, 2017, 53, 8572-8595.	4.2	53
11	Dynamic Hyporheic Zones: Exploring the Role of Peak Flow Events on Bedformâ€Induced Hyporheic Exchange. Water Resources Research, 2019, 55, 218-235.	4.2	50
12	Nutrient dynamics in an alpine headwater stream: use of continuous water quality sensors to examine responses to wildfire and precipitation events. Hydrological Processes, 2015, 29, 3193-3207.	2.6	49
13	Small Ponds in Headwater Catchments Are a Dominant Influence on Regional Nutrient and Sediment Budgets. Geophysical Research Letters, 2019, 46, 9669-9677.	4.0	45
14	Are we missing the tail (and the tale) of residence time distributions in watersheds?. Geophysical Research Letters, 2013, 40, 4633-4637.	4.0	43
15	Floodplain inundation spectrum across the United States. Nature Communications, 2019, 10, 5194.	12.8	36
16	Modeling the Effects of Turbulence on Hyporheic Exchange and Localâ€toâ€Global Nutrient Processing in Streams. Water Resources Research, 2018, 54, 5883-5889.	4.2	34
17	Impact of Dynamically Changing Discharge on Hyporheic Exchange Processes Under Gaining and Losing Groundwater Conditions. Water Resources Research, 2018, 54, 10,076.	4.2	32
18	Organizational Principles of Hyporheic Exchange Flow and Biogeochemical Cycling in River Networks Across Scales. Water Resources Research, 2022, 58, .	4.2	26

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19	Impact of Flow Alteration and Temperature Variability on Hyporheic Exchange. Water Resources Research, 2020, 56, e2019WR026225.	4.2	25
20	Test of Scintillometer Saturation Correction Methods Using Field Experimental Data. Boundary-Layer Meteorology, 2010, 137, 493-507.	2.3	22
21	Effects of Successive Peak Flow Events on Hyporheic Exchange and Residence Times. Water Resources Research, 2020, 56, e2020WR027113.	4.2	17
22	The Importance of Capturing Topographic Features for Modeling Groundwater Flow and Transport in Mountainous Watersheds. Water Resources Research, 2018, 54, 10,313.	4.2	16
23	A multirate mass transfer model to represent the interaction of multicomponent biogeochemical processes between surface water and hyporheic zones (SWAT-MRMT-R 1.0). Geoscientific Model Development, 2020, 13, 3553-3569.	3.6	14
24	River Dynamics Control Transit Time Distributions and Biogeochemical Reactions in a Damâ€Regulated River Corridor. Water Resources Research, 2020, 56, e2019WR026470.	4.2	12
25	Scintillometer networks for calibration and validation of energy balance and soil moisture remote sensing algorithms. , 2007, , .		9
26	Unifying Advective and Diffusive Descriptions of Bedform Pumping in the Benthic Biolayer of Streams. Water Resources Research, 2020, 56, e2020WR027967.	4.2	9
27	Understanding the relative importance of vertical and horizontal flow in ice-wedge polygons. Hydrology and Earth System Sciences, 2020, 24, 1109-1129.	4.9	9
28	Low threshold for nitrogen concentration saturation in headwaters increases regional and coastal delivery. Environmental Research Letters, 2020, 15, 044018.	5.2	9
29	Dynamic coevolution of baseflow and multiscale groundwater flow system during prolonged droughts. Journal of Hydrology, 2022, 609, 127657.	5.4	9
30	The Effect of Storm Direction on Flood Frequency Analysis. Geophysical Research Letters, 2021, 48, e2020GL091918.	4.0	8
31	A Oneâ€Dimensional Model for Turbulent Mixing in the Benthic Biolayer of Stream and Coastal Sediments. Water Resources Research, 2020, 56, e2019WR026822.	4.2	7
32	Hot Spots and Hot Moments in the Critical Zone: Identification of and Incorporation into Reactive Transport Models. , 2022, , 9-47.		7
33	Mesocosm experiments identifying hotspots of groundwater upwelling in a water column by fibre optic distributed temperature sensing. Hydrological Processes, 2018, 32, 185-199.	2.6	6
34	How daily groundwater table drawdown affects the diel rhythm of hyporheic exchange. Hydrology and Earth System Sciences, 2021, 25, 1905-1921.	4.9	5
35	Dynamic Evapotranspiration Alters Hyporheic Flow and Residence Times in the Intrameander Zone. Water (Switzerland), 2020, 12, 424.	2.7	2
36	Accounting for Temporal Variability of Streamflow in Estimates of Travel Time. Frontiers in Water, 2020, 2, .	2.3	1

#	Article	IF	Citations
37	A novel construct for scaling groundwaterâ€“river interactions based on machine-guided hydromorphic classification. Environmental Research Letters, 2021, 16, 104016.	5.2	1
38	Identification of Characteristic Spatial Scales to Improve the Performance of Analytical Spectral Solutions to the Groundwater Flow Equation. Water Resources Research, 2021, 57, .	4.2	0