

# Enric Vazquez-Suñe

## List of Publications by Year in descending order

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101  
papers

4,660  
citations

101384

36  
h-index

110170

64  
g-index

115  
all docs

115  
docs citations

115  
times ranked

4545  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fertilizer Characterization: Isotopic Data (N, S, O, C, and Sr). Environmental Science & Technology, 2004, 38, 3254-3262.	4.6	347
2	Occurrence of 95 pharmaceuticals and transformation products in urban groundwaters underlying the metropolis of Barcelona, Spain. Environmental Pollution, 2013, 174, 305-315.	3.7	347
3	Emerging organic contaminants in groundwater in Spain: A review of sources, recent occurrence and fate in a European context. Science of the Total Environment, 2012, 440, 82-94.	3.9	321
4	Introductory review of specific factors influencing urban groundwater, an emerging branch of hydrogeology, with reference to Barcelona, Spain. Hydrogeology Journal, 2005, 13, 522-533.	0.9	183
5	Reactive transport modeling of calcite dissolution in the fresh-salt water mixing zone. Journal of Hydrology, 2005, 311, 282-298.	2.3	132
6	Optimal design of measures to correct seawater intrusion. Water Resources Research, 2006, 42, .	1.7	126
7	A methodology to compute mixing ratios with uncertain end-members. Water Resources Research, 2004, 40, .	1.7	110
8	Urban groundwater contamination by residues of UV filters. Journal of Hazardous Materials, 2014, 271, 141-149.	6.5	109
9	Dewatering of a deep excavation undertaken in a layered soil. Engineering Geology, 2014, 178, 15-27.	2.9	98
10	Barrier effect of underground structures on aquifers. Engineering Geology, 2012, 145-146, 41-49.	2.9	92
11	Computational and conceptual issues in the calibration of seawater intrusion models. Hydrogeology Journal, 2010, 18, 131-145.	0.9	90
12	An approach to identify urban groundwater recharge. Hydrology and Earth System Sciences, 2010, 14, 2085-2097.	1.9	90
13	Controls of $\delta^{34}\text{S}$ and $\delta^{18}\text{O}$ in dissolved sulphate: Learning from a detailed survey in the Llobregat River (Spain). Applied Geochemistry, 2008, 23, 1166-1185.	1.4	86
14	Characterizing sources and natural attenuation of nitrate contamination in the Baix Ter aquifer system (NE Spain) using a multi-isotope approach. Science of the Total Environment, 2017, 580, 518-532.	3.9	85
15	Hydraulic characterization of diaphragm walls for cut and cover tunnelling. Engineering Geology, 2012, 125, 1-10.	2.9	68
16	A methodology for characterizing the hydraulic effectiveness of an annular low-permeability barrier. Engineering Geology, 2011, 120, 68-80.	2.9	67
17	Integrating free and open source tools and distributed modelling codes in GIS environment for data-based groundwater management. Environmental Modelling and Software, 2018, 107, 210-230.	1.9	67
18	Drugs of abuse in urban groundwater. A case study: Barcelona. Science of the Total Environment, 2012, 424, 280-288.	3.9	66

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19	Deep enclosures versus pumping to reduce settlements during shaft excavations. <i>Engineering Geology</i> , 2014, 169, 100-111.	2.9	65
20	Groundwater inflow prediction in urban tunneling with a tunnel boring machine (TBM). <i>Engineering Geology</i> , 2011, 121, 46-54.	2.9	62
21	GIS-supported mapping of low-temperature geothermal potential taking groundwater flow into account. <i>Renewable Energy</i> , 2015, 77, 268-278.	4.3	61
22	The thermal consequences of river-level variations in an urban groundwater body highly affected by groundwater heat pumps. <i>Science of the Total Environment</i> , 2014, 485-486, 575-587.	3.9	60
23	Occurrence, fate and risk assessment of personal care products in river-groundwater interface. <i>Science of the Total Environment</i> , 2016, 568, 829-837.	3.9	59
24	Hydrodynamics of salt flat basins: The Salar de Atacama example. <i>Science of the Total Environment</i> , 2019, 651, 668-683.	3.9	55
25	Development of concepts for the management of thermal resources in urban areas - Assessment of transferability from the Basel (Switzerland) and Zaragoza (Spain) case studies. <i>Journal of Hydrology</i> , 2017, 548, 697-715.	2.3	54
26	Hydrogeological assessment of non-linear underground enclosures. <i>Engineering Geology</i> , 2016, 207, 91-102.	2.9	53
27	Settlements around pumping wells: Analysis of influential factors and a simple calculation procedure. <i>Journal of Hydrology</i> , 2017, 548, 225-236.	2.3	53
28	Quantification of groundwater recharge in urban environments. <i>Science of the Total Environment</i> , 2017, 592, 391-402.	3.9	52
29	Occurrence and fate of alkylphenol polyethoxylate degradation products and linear alkylbenzene sulfonate surfactants in urban ground water: Barcelona case study. <i>Journal of Hydrology</i> , 2010, 383, 102-110.	2.3	49
30	High-resolution seismic characterization in an urban area: Subway tunnel construction in Barcelona, Spain. <i>Geophysics</i> , 2008, 73, B41-B50.	1.4	46
31	Groundwater modelling as a tool for the European Water Framework Directive (WFD) application: The Llobregat case. <i>Physics and Chemistry of the Earth</i> , 2006, 31, 1015-1029.	1.2	45
32	Onshore-offshore correlation of the Llobregat deltaic system, Spain: Development of deltaic geometries under different relative sea-level and growth fault influences. <i>Sedimentary Geology</i> , 2009, 217, 65-84.	1.0	44
33	Occurrence of carbamazepine and five metabolites in an urban aquifer. <i>Chemosphere</i> , 2014, 115, 47-53.	4.2	44
34	The use of GIS-based 3D geological tools to improve hydrogeological models of sedimentary media in an urban environment. <i>Environmental Earth Sciences</i> , 2013, 68, 2145-2162.	1.3	42
35	Assessment of the barrier effect caused by underground constructions on porous aquifers with low hydraulic gradient: A case study of the metro construction in Barcelona, Spain. <i>Engineering Geology</i> , 2015, 196, 238-250.	2.9	41
36	Estimation of Recharge from Floods in Disconnected Stream-Aquifer Systems. <i>Ground Water</i> , 2007, 45, 579-589.	0.7	38

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37	Relaxation factor for geothermal use development – Criteria for a more fair and sustainable geothermal use of shallow energy resources. <i>Geothermics</i> , 2015, 56, 128-137.	1.5	38
38	A city scale study on the effects of intensive groundwater heat pump systems on heavy metal contents in groundwater. <i>Science of the Total Environment</i> , 2016, 572, 1047-1058.	3.9	38
39	Advection and dispersion heat transport mechanisms in the quantification of shallow geothermal resources and associated environmental impacts. <i>Science of the Total Environment</i> , 2016, 543, 536-546.	3.9	38
40	Application of multi-isotope data (O, D, C and S) to quantify redox processes in urban groundwater. <i>Applied Geochemistry</i> , 2013, 34, 114-125.	1.4	36
41	Hydrogeological impact assessment by tunnelling at sites of high sensitivity. <i>Engineering Geology</i> , 2015, 193, 421-434.	2.9	36
42	3D mapping, hydrodynamics and modelling of the freshwater-brine mixing zone in salt flats similar to the Salar de Atacama (Chile). <i>Journal of Hydrology</i> , 2018, 561, 223-235.	2.3	36
43	Leveling vs. InSAR in urban underground construction monitoring: Pros and cons. Case of la sagrera railway station (Barcelona, Spain). <i>Engineering Geology</i> , 2017, 218, 1-11.	2.9	34
44	The origin of solutes in groundwater in a hyper-arid environment: A chemical and multi-isotope approach in the Atacama Desert, Chile. <i>Science of the Total Environment</i> , 2019, 690, 329-351.	3.9	34
45	The effect of brine pumping on the natural hydrodynamics of the Salar de Atacama: The damping capacity of salt flats. <i>Science of the Total Environment</i> , 2019, 654, 1118-1131.	3.9	34
46	Geochemical impacts of groundwater heat pump systems in an urban alluvial aquifer with evaporitic bedrock. <i>Science of the Total Environment</i> , 2016, 544, 354-368.	3.9	32
47	AkvaGIS: An open source tool for water quantity and quality management. <i>Computers and Geosciences</i> , 2019, 127, 123-132.	2.0	32
48	Towards more sustainable brine extraction in salt flats: Learning from the Salar de Atacama. <i>Science of the Total Environment</i> , 2020, 703, 135605.	3.9	32
49	Using EMMA and MIX analysis to assess mixing ratios and to identify hydrochemical reactions in groundwater. <i>Science of the Total Environment</i> , 2014, 470-471, 1120-1131.	3.9	31
50	Origin of high ammonium, arsenic and boron concentrations in the proximity of a mine: Natural vs. anthropogenic processes. <i>Science of the Total Environment</i> , 2016, 541, 655-666.	3.9	31
51	Occurrence of pharmaceuticals and personal care products in the urban aquifer of Zaragoza (Spain) and its relationship with intensive shallow geothermal energy exploitation. <i>Journal of Hydrology</i> , 2018, 566, 629-642.	2.3	31
52	Combining fiber optic DTS, cross-hole ERT and time-lapse induction logging to characterize and monitor a coastal aquifer. <i>Journal of Hydrology</i> , 2020, 588, 125050.	2.3	30
53	Origin and variability of oxygen and hydrogen isotopic composition of precipitation in the Central Andes: A review. <i>Journal of Hydrology</i> , 2020, 587, 124899.	2.3	29
54	Influence of releases from a fresh water reservoir on the hydrochemistry of the Tinto River (SW Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	3.9	28

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55	Use rights markets for shallow geothermal energy management. <i>Applied Energy</i> , 2016, 172, 34-46.	5.1	26
56	Modelling of the EPB TBM shield tunnelling advance as a tool for geological characterization. <i>Tunnelling and Underground Space Technology</i> , 2016, 56, 12-21.	3.0	26
57	An upscaling procedure for the optimal implementation of open-loop geothermal energy systems into hydrogeological models. <i>Journal of Hydrology</i> , 2018, 563, 155-166.	2.3	26
58	A reactive transport model for the quantification of risks induced by groundwater heat pump systems in urban aquifers. <i>Journal of Hydrology</i> , 2016, 542, 719-730.	2.3	25
59	Cb-SAR interferometry displacement measurements during dewatering in construction works. Case of La Sagrera railway station in Barcelona, Spain. <i>Engineering Geology</i> , 2016, 205, 104-115.	2.9	25
60	Urban Groundwater Contamination by Non-Steroidal Anti-Inflammatory Drugs. <i>Water (Switzerland)</i> , 2021, 13, 720.	1.2	25
61	Time-lapse cross-hole electrical resistivity tomography monitoring effects of an urban tunnel. <i>Journal of Applied Geophysics</i> , 2012, 87, 60-70.	0.9	24
62	A geological model for the management of subsurface data in the urban environment of Barcelona and surrounding area. <i>Solid Earth</i> , 2016, 7, 1317-1329.	1.2	23
63	Recovery of energetically overexploited urban aquifers using surface water. <i>Journal of Hydrology</i> , 2015, 531, 602-611.	2.3	22
64	Fate and risk assessment of sulfonamides and metabolites in urban groundwater. <i>Environmental Pollution</i> , 2020, 267, 115480.	3.7	22
65	The propagation of complex flood-induced head wavefronts through a heterogeneous alluvial aquifer and its applicability in groundwater flood risk management. <i>Journal of Hydrology</i> , 2015, 527, 402-419.	2.3	21
66	On the meaning of the transmissivity values obtained from recovery tests. <i>Hydrogeology Journal</i> , 2007, 15, 833-842.	0.9	20
67	Analytical study of hydraulic and mechanical effects on tide-induced head fluctuation in a coastal aquifer system that extends under the sea. <i>Journal of Hydrology</i> , 2012, 450-451, 150-158.	2.3	20
68	GIS-based hydrogeochemical analysis tools (QUIMET). <i>Computers and Geosciences</i> , 2014, 70, 164-180.	2.0	19
69	FREEWAT, a Free and Open Source, GIS-Integrated, Hydrological Modeling Platform. <i>Ground Water</i> , 2018, 56, 521-523.	0.7	19
70	Hydrochemical apportioning of irrigation groundwater sources in an alluvial aquifer. <i>Science of the Total Environment</i> , 2020, 744, 140506.	3.9	19
71	Hydrogeological constraints for the genesis of the extreme lithium enrichment in the Salar de Atacama (NE Chile): A thermohaline flow modelling approach. <i>Science of the Total Environment</i> , 2020, 739, 139959.	3.9	19
72	A multidisciplinary approach to characterizing coastal alluvial aquifers to improve understanding of seawater intrusion and submarine groundwater discharge. <i>Journal of Hydrology</i> , 2022, 607, 127510.	2.3	19

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73	Potential uses of pumped urban groundwater: a case study in Sant Adrià del Besòs (Spain). <i>Hydrogeology Journal</i> , 2017, 25, 1745-1758.	0.9	18
74	Sustainability indicator for the prevention of potential thermal interferences between groundwater heat pump systems in urban aquifers. <i>Renewable Energy</i> , 2019, 134, 14-24.	4.3	18
75	Quantitative comparison of impeller-flowmeter and particle-size-distribution techniques for the characterization of hydraulic conductivity variability. <i>Hydrogeology Journal</i> , 2011, 19, 603-612.	0.9	17
76	Recent and old groundwater in the Niebla-Posadas regional aquifer (southern Spain): Implications for its management. <i>Journal of Hydrology</i> , 2015, 523, 624-635.	2.3	16
77	The T-I-G ER method: A graphical alternative to support the design and management of shallow geothermal energy exploitations at the metropolitan scale. <i>Renewable Energy</i> , 2017, 109, 213-221.	4.3	16
78	Defining the exploitation patterns of groundwater heat pump systems. <i>Science of the Total Environment</i> , 2020, 710, 136425.	3.9	16
79	Quantifying chemical reactions by using mixing analysis. <i>Science of the Total Environment</i> , 2015, 502, 448-456.	3.9	15
80	Spatial distribution of meteorological factors controlling stable isotopes in precipitation in Northern Chile. <i>Journal of Hydrology</i> , 2022, 605, 127380.	2.3	15
81	An integrated GIS-based tool for aquifer test analysis. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	14
82	Identification of Aquifer Recharge Sources as the Origin of Emerging Contaminants in Intensive Agricultural Areas. La Plana de Castellón, Spain. <i>Water (Switzerland)</i> , 2020, 12, 731.	1.2	13
83	D-InSAR monitoring of ground deformation related to the dewatering of construction sites. A case study of Glàries Square, Barcelona. <i>Engineering Geology</i> , 2021, 286, 106041.	2.9	12
84	A loosely coupled GIS and hydrogeological modeling framework. <i>Environmental Earth Sciences</i> , 2017, 76, 1.	1.3	10
85	Occurrence of pathogens in the river-groundwater interface in a losing river stretch (Besòs River) Tj ETQq1 1 0.784314 rgBT /Ove	3.9	9
86	Software tools for sustainable water resources management: the GIS-integrated FREEWAT platform. <i>Rendiconti Online Società Geologica Italiana</i> , 0, 42, 59-61.	0.3	9
87	3D GIS-based visualisation of geological, hydrogeological, hydrogeochemical and geothermal models. <i>Zeitschrift Der Deutschen Gesellschaft Fur Geowissenschaften</i> , 2016, 167, 377-388.	0.1	8
88	Quantification of proportions of different water sources in a mining operation. <i>Science of the Total Environment</i> , 2018, 619-620, 587-599.	3.9	8
89	Characterization of precipitation and recharge in the peripheral aquifer of the Salar de Atacama. <i>Science of the Total Environment</i> , 2022, 806, 150271.	3.9	8
90	Integration of groundwater by-pass facilities in the bottom slab design for large underground structures. <i>Tunnelling and Underground Space Technology</i> , 2018, 71, 231-243.	3.0	7

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91	A Persistent Scatterer Interferometry Procedure Based on Stable Areas to Filter the Atmospheric Component. <i>Remote Sensing</i> , 2018, 10, 1780.	1.8	6
92	An automatic geological 3D cross-section generator: Geopropy, an open-source library. <i>Environmental Modelling and Software</i> , 2022, 149, 105309.	1.9	5
93	An integrated approach to estimate the mixing ratios in a karst system under different hydrogeological conditions. <i>Journal of Hydrology: Regional Studies</i> , 2020, 30, 100693.	1.0	3
94	Customization, extension and reuse of outdated hydrogeological software. <i>Geologica Acta</i> , 0, 18, 1-11.	1.0	3
95	Impacts of the transient skin effect during brine extraction operations in a crystalline halite aquifer. <i>Journal of Hydrology</i> , 2019, 577, 123912.	2.3	2
96	When intensive exploitation is a blessing. , 2005, , 253-260.		1
97	GIS-Based Software Platform for Managing Hydrogeochemical Data. <i>Handbook of Environmental Chemistry</i> , 2015, , 91-115.	0.2	0
98	Spatial analysis and simulation tools for groundwater management: the FREEWAT platform. <i>Acque Sotteranee - Italian Journal of Groundwater</i> , 2017, 6, .	0.2	0
99	Groundwater-Gossan interaction and the genesis of the secondary siderite rock at Las Cruces ore deposit (SW Spain). <i>Ore Geology Reviews</i> , 2018, 102, 967-980.	1.1	0
100	La importancia de incorporar la hidrodinámica de la interfaz salina en la gestión de los recursos minerales y ecosistemas de los salares. <i>Boletín Geológico Y Minero</i> , 2021, 132, 127-139.	0.0	0
101	Hydrological modelling of the Vallcebre landslide. , 2008, , 1517-1523.		0