

Albert Folch

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

5,363
citations

159585

30
h-index

82547

72
g-index

82
all docs

82
docs citations

82
times ranked

6901
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	5.4	19
2	Identification and quantification of chemical reactions in a coastal aquifer to assess submarine groundwater discharge composition. <i>Science of the Total Environment</i> , 2022, 838, 155978.	8.0	5
3	Heat Dissipation Test With Fiber-Optic Distributed Temperature Sensing to Estimate Groundwater Flux. <i>Water Resources Research</i> , 2021, 57, e2020WR027228.	4.2	23
4	Organotypic platform for studying cancer cell metastasis. <i>Experimental Cell Research</i> , 2021, 401, 112527.	2.6	9
5	New perspectives on the use of ²²⁴ Ra/ ²²⁸ Ra and ²²² Rn/ ²²⁶ Ra activity ratios in groundwater studies. <i>Journal of Hydrology</i> , 2021, 596, 126043.	5.4	13
6	Applicability of Landsat-8 thermal infrared sensor for identifying submarine groundwater discharge springs in the Mediterranean Sea basin. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 4789-4805.	4.9	12
7	What are the main factors influencing the presence of faecal bacteria pollution in groundwater systems in developing countries?. <i>Journal of Contaminant Hydrology</i> , 2020, 228, 103556.	3.3	25
8	Microfluidics for interrogating live intact tissues. <i>Microsystems and Nanoengineering</i> , 2020, 6, 69.	7.0	25
9	Coupling Flow, Heat, and Reactive Transport Modeling to Reproduce <i>In Situ</i> Redox Potential Evolution: Application to an Infiltration Pond. <i>Environmental Science & Technology</i> , 2020, 54, 12092-12101.	10.0	15
10	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.	5.4	30
11	Time-lapse cross-hole electrical resistivity tomography (CHERT) for monitoring seawater intrusion dynamics in a Mediterranean aquifer. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 2121-2139.	4.9	45
12	Evidence of groundwater vulnerability to climate variability and economic growth in coastal Kenya. <i>Journal of Hydrology</i> , 2020, 586, 124920.	5.4	3
13	Multiplexed drug testing of tumor slices using a microfluidic platform. <i>Npj Precision Oncology</i> , 2020, 4, 12.	5.4	41
14	Partitioning of hydrogels in 3D-printed microchannels. <i>Lab on A Chip</i> , 2019, 19, 3086-3093.	6.0	30
15	“Chip-on-a-Transwell” Devices for User-Friendly Control of the Microenvironment of Cultured Cells. <i>ACS Applied Bio Materials</i> , 2019, 2, 4998-5011.	4.6	1
16	How does water-reliant industry affect groundwater systems in coastal Kenya?. <i>Science of the Total Environment</i> , 2019, 694, 133634.	8.0	8
17	Groundwater hydrodynamics of an Eastern Africa coastal aquifer, including La Niña 2016–17 drought. <i>Science of the Total Environment</i> , 2019, 661, 575-597.	8.0	22
18	Digital Manufacturing for Microfluidics. <i>Annual Review of Biomedical Engineering</i> , 2019, 21, 325-364.	12.3	70

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19	Are dominant microbial sub-surface communities affected by water quality and soil characteristics?. Journal of Environmental Management, 2019, 237, 332-343.	7.8	16
20	Microbial community changes induced by Managed Aquifer Recharge activities: linking hydrogeological and biological processes. Hydrology and Earth System Sciences, 2019, 23, 139-154.	4.9	18
21	High-Precision Stereolithography of Biomicrofluidic Devices. Advanced Materials Technologies, 2019, 4, 1800395.	5.8	75
22	3D-printed Quake-style microvalves and micropumps. Lab on A Chip, 2018, 18, 1207-1214.	6.0	119
23	Desktop-Stereolithography 3D-Printing of a Poly(dimethylsiloxane)-Based Material with Sylgard-184 Properties. Advanced Materials, 2018, 30, e1800001.	21.0	229
24	Monitoring induced denitrification during managed aquifer recharge in an infiltration pond. Journal of Hydrology, 2018, 561, 123-135.	5.4	28
25	Editorial for the Special Issue on 3D Printed Microfluidic Devices. Micromachines, 2018, 9, 609.	2.9	10
26	A Laser-Engraving Technique for Portable Micropneumatic Oscillators. Micromachines, 2018, 9, 426.	2.9	5
27	A risk assessment methodology to evaluate the risk failure of managed aquifer recharge in the Mediterranean Basin. Hydrology and Earth System Sciences, 2018, 22, 3213-3227.	4.9	29
28	Constraining the temporal variations of Ra isotopes and Rn in the groundwater end-member: Implications for derived SGD estimates. Science of the Total Environment, 2017, 595, 849-857.	8.0	56
29	Large-scale microfluidic gradient arrays reveal axon guidance behaviors in hippocampal neurons. Microsystems and Nanoengineering, 2017, 3, 17003.	7.0	34
30	Improving degradation of emerging organic compounds by applying chaotic advection in managed Aquifer Recharge in randomly heterogeneous porous media. Water Resources Research, 2017, 53, 4376-4392.	4.2	36
31	Stratigraphic and structural controls on groundwater flow in an outcropping fossil fan delta: the case of Sant Llorenç del Munt range (NE Spain). Hydrogeology Journal, 2017, 25, 2467-2487.	2.1	3
32	Hydrogeological and Geophysical Characterization of Fractured Aquifer of Á' dena (Barcelona), Tj ETQq0 0 0 rgBT /Overlock 1Q Tf 50 222		
33	Art on the Nanoscale and Beyond. Advanced Materials, 2016, 28, 1724-1742.	21.0	37
34	3D-Printed Microfluidics. Angewandte Chemie - International Edition, 2016, 55, 3862-3881.	13.8	616
35	An open-chamber flow-focusing device for focal stimulation of micropatterned cells. Biomicrofluidics, 2016, 10, 024122.	2.4	5
36	BaroFuse, a novel pressure-driven, adjustable-throughput perfusion system for tissue maintenance and assessment. Heliyon, 2016, 2, e00210.	3.2	10

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37	Continuous-flow multi-pulse electroporation at low DC voltages by microfluidic flipping of the voltage space topology. Applied Physics Letters, 2016, 109, 163702.	3.3	18
38	3D-printing of transparent bio-microfluidic devices in PEG-DA. Lab on A Chip, 2016, 16, 2287-2294.	6.0	216
39	The upcoming 3D-printing revolution in microfluidics. Lab on A Chip, 2016, 16, 1720-1742.	6.0	848
40	Mikrofluidik aus dem 3D-Drucker. Angewandte Chemie, 2016, 128, 3926-3946.	2.0	19
41	Modeling long term Enhanced in situ Bionitrification and induced heterogeneity in column experiments under different feeding strategies. Journal of Hydrology, 2016, 538, 127-137.	5.4	19
42	Modeling biogeochemical processes and isotope fractionation of enhanced in situ bionitrification in a fractured aquifer. Chemical Geology, 2016, 425, 52-64.	3.3	17
43	Nitrate pollution of groundwater; all right, but nothing else?. Science of the Total Environment, 2016, 539, 241-251.	8.0	205
44	Cross-hole Electrical Resistivity Tomography Characterization and Monitoring of Seawater Interface in an Alluvial Aquifer. , 2016, , .		0
45	Evaluation of Two Carbon Sources for Inducing Denitrification: Batch and Column Experiments. Procedia Earth and Planetary Science, 2015, 13, 124-128.	0.6	0
46	Microwell arrays reveal cellular heterogeneity during the clonal expansion of transformed human cells. Technology, 2015, 03, 163-171.	1.4	8
47	3D-Printed Microfluidic Device for the Detection of Pathogenic Bacteria Using Size-based Separation in Helical Channel with Trapezoid Cross-Section. Scientific Reports, 2015, 5, 7717.	3.3	227
48	3D-printed microfluidic automation. Lab on A Chip, 2015, 15, 1934-1941.	6.0	265
49	The impact of poplar tree plantations for biomass production on the aquifer water budget and base flow in a Mediterranean basin. Science of the Total Environment, 2015, 524-525, 213-224.	8.0	10
50	Emerging Organic Contaminants in Aquifers: Sources, Transport, Fate, and Attenuation. Handbook of Environmental Chemistry, 2015, , 47-75.	0.4	2
51	Stable chemical bonding of porous membranes and poly(dimethylsiloxane) devices for long-term cell culture. Biomicrofluidics, 2014, 8, 036504.	2.4	27
52	Utilization of extracellular information before ligand-receptor binding reaches equilibrium expands and shifts the input dynamic range. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3860-9.	7.1	32
53	Integrated modeling of biogeochemical reactions and associated isotope fractionations at batch scale: A tool to monitor enhanced bionitrification applications. Chemical Geology, 2014, 365, 20-29.	3.3	20
54	An approach to aquifer vulnerability including uncertainty in a spatial random function framework. Journal of Hydrology, 2014, 517, 889-900.	5.4	15

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55	Fungal permeable reactive barrier to remediate groundwater in an artificial aquifer. Journal of Hazardous Materials, 2013, 262, 554-560.	12.4	34
56	Granulometry and Surfactants, Key Factors in Desorption and Biodegradation (T. versicolor) of PAHs in Soil and Groundwater. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	23
57	Multi-isotopic study (15N, 34S, 18O, 13C) to identify processes affecting nitrate and sulfate in response to local and regional groundwater mixing in a large-scale flow system. Applied Geochemistry, 2013, 32, 129-141.	3.0	55
58	Isotope characterization of an in situ bionitrification pilot-test in a fractured aquifer. Applied Geochemistry, 2013, 32, 153-163.	3.0	27
59	Analyzing Groundwater Resources Availability using Multivariate Analysis in the Selva Basin (NE Tj ETQq1 1 0.784314 rgBT /Qverlock 10	0.6	2
60	A microfluidic D-subminiature connector. Lab on A Chip, 2013, 13, 2036.	6.0	20
61	Development of a stream-aquifer numerical flow model to assess river water management under water scarcity in a Mediterranean basin. Science of the Total Environment, 2012, 440, 204-218.	8.0	18
62	Identifying key parameters to differentiate groundwater flow systems using multifactorial analysis. Journal of Hydrology, 2012, 472-473, 301-313.	5.4	32
63	Influence of Soil Granulometry on Pyrene Desorption in Groundwater Using Surfactants. Water, Air, and Soil Pollution, 2012, 223, 125-133.	2.4	12
64	Design and dynamic characterization of a single-stroke peristaltic PDMS micropumps. Lab on A Chip, 2011, 11, 336-342.	6.0	54
65	Groundwater development effects on different scale hydrogeological systems using head, hydrochemical and isotopic data and implications for water resources management: The Selva basin (NE Spain). Journal of Hydrology, 2011, 403, 83-102.	5.4	47
66	Microvalves and Micropumps for BioMEMS. Micromachines, 2011, 2, 179-220.	2.9	266
67	Analyzing Hydrological Sustainability Through Water Balance. Environmental Management, 2010, 45, 1175-1190.	2.7	26
68	A neuron-benign microfluidic gradient generator for studying the growth of mammalian neurons towards axon guidance factors. , 2009, , .		1
69	A multi-purpose microfluidic perfusion system with combinatorial choice of inputs, mixtures, gradient patterns, and flow rates. Lab on A Chip, 2009, 9, 417-426.	6.0	110
70	Hydrogeological interactions between fault zones and alluvial aquifers in regional flow systems. Hydrological Processes, 2008, 22, 3476-3487.	2.6	40
71	Measurement of cell migration in response to an evolving radial chemokine gradient triggered by a microvalve. Lab on A Chip, 2006, 6, 849.	6.0	76
72	Spatio-temporally-complex concentration profiles using a tunable chaotic micromixer. Applied Physics Letters, 2006, 89, 144102.	3.3	35

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73	Microfluidic circuits with tunable flow resistances. Applied Physics Letters, 2006, 89, 164105.	3.3	32
74	Parallel mixing of photolithographically defined nanoliter volumes using elastomeric microvalve arrays. Electrophoresis, 2005, 26, 3758-3764.	2.4	42
75	Microfluidic devices with tunable microtopographies. Applied Physics Letters, 2005, 86, 023508.	3.3	21
76	Traditional analysis of aquifer tests: Comparing apples to oranges?. Water Resources Research, 2005, 41, .	4.2	144
77	Microengineering of Cellular Interactions. Annual Review of Biomedical Engineering, 2000, 2, 227-256.	12.3	565
78	"Microcanals" for modulation of the microfluidic environment of cultured cells. , 0, , .		1
79	Combinatorial microfluidic devices for cell biology. , 0, , .		2
80	Combining Isotopic and Compositional Data: A Discrimination of Regions Prone to Nitrate Pollution. , 0, , 302-317.		2