

Richard I Acworth

List of Publications by Year in descending order

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Version: 2024-02-01

66
papers

3,045
citations

201674

27
h-index

161849

54
g-index

67
all docs

67
docs citations

67
times ranked

2749
citing authors

#	ARTICLE	IF	CITATIONS
1	Runoff and focused groundwater-recharge response to flooding rains in the arid zone of Australia. <i>Hydrogeology Journal</i> , 2021, 29, 737-764.	2.1	11
2	Future-proofing hydrogeology by revising groundwater monitoring practice. <i>Hydrogeology Journal</i> , 2020, 28, 2963-2969.	2.1	14
3	An investigation of the spatial and temporal variability of the saline interface in a sandy aquifer subject to storm wave runup and rainfall recharge. <i>Hydrogeology Journal</i> , 2020, 28, 1695-1719.	2.1	1
4	Technical note: Disentangling the groundwater response to Earth and atmospheric tides to improve subsurface characterisation. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 6033-6046.	4.9	14
5	The Influence of Syndepositional Macropores on the Hydraulic Integrity of Thick Alluvial Clay Aquitards. <i>Water Resources Research</i> , 2018, 54, 3122-3138.	4.2	8
6	Quantifying Compressible Groundwater Storage by Combining Cross-Hole Seismic Surveys and Head Response to Atmospheric Tides. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018, 123, 1910-1930.	2.8	19
7	Vertical groundwater storage properties and changes in confinement determined using hydraulic head response to atmospheric tides. <i>Water Resources Research</i> , 2017, 53, 2983-2997.	4.2	24
8	Characterising the dynamics of surface water-groundwater interactions in intermittent and ephemeral streams using streambed thermal signatures. <i>Advances in Water Resources</i> , 2017, 107, 354-369.	3.8	37
9	Accelerated gravity testing of aquitard core permeability and implications at formation and regional scale. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 39-54.	4.9	5
10	An objective frequency domain method for quantifying confined aquifer compressible storage using Earth and atmospheric tides. <i>Geophysical Research Letters</i> , 2016, 43, 11,671.	4.0	30
11	Investigation of the kinetics of water uptake into partially saturated shales. <i>Water Resources Research</i> , 2016, 52, 2420-2438.	4.2	50
12	Understanding and quantifying focused, indirect groundwater recharge from ephemeral streams using water table fluctuations. <i>Water Resources Research</i> , 2016, 52, 827-840.	4.2	61
13	Improved spatial delineation of streambed properties and water fluxes using distributed temperature sensing. <i>Hydrological Processes</i> , 2016, 30, 2686-2702.	2.6	16
14	Long-term spatio-temporal precipitation variability in arid-zone Australia and implications for groundwater recharge. <i>Hydrogeology Journal</i> , 2016, 24, 905-921.	2.1	23
15	Controls on cave drip water temperature and implications for speleothem-based paleoclimate reconstructions. <i>Quaternary Science Reviews</i> , 2015, 127, 19-36.	3.0	31
16	Effect of solid-fluid thermal expansion on thermo-osmotic tests: An experimental and analytical study. <i>Journal of Petroleum Science and Engineering</i> , 2015, 126, 222-230.	4.2	19
17	Mechanisms of water adsorption into partially saturated fractured shales: An experimental study. <i>Fuel</i> , 2015, 159, 628-637.	6.4	139
18	... Hydrogeology Jour		

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19	Local thermal non-equilibrium in sediments: Implications for temperature dynamics and the use of heat as a tracer. <i>Advances in Water Resources</i> , 2014, 73, 176-184.	3.8	19
20	A New Method for Estimating Recharge to Unconfined Aquifers Using Differential River Gauging. <i>Ground Water</i> , 2014, 52, 291-297.	1.3	11
21	Drip water isotopes in semi-arid karst: Implications for speleothem paleoclimatology. <i>Earth and Planetary Science Letters</i> , 2014, 395, 194-204.	4.4	66
22	Heat as a tracer to quantify water flow in near-surface sediments. <i>Earth-Science Reviews</i> , 2014, 129, 40-58.	9.1	161
23	A reassessment of the Lower Namoi Catchment aquifer architecture and hydraulic connectivity with reference to climate drivers. <i>Australian Journal of Earth Sciences</i> , 2014, 61, 501-511.	1.0	19
24	River-aquifer interactions in a semiarid environment investigated using point and reach measurements. <i>Water Resources Research</i> , 2014, 50, 2815-2829.	4.2	37
25	Evaporative cooling of speleothem drip water. <i>Scientific Reports</i> , 2014, 4, 5162.	3.3	29
26	River-aquifer interactions in a semi-arid environment stressed by groundwater abstraction. <i>Hydrological Processes</i> , 2013, 27, 1072-1085.	2.6	63
27	Electrical conductivity of partially saturated porous media containing clay: An improved formulation. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 3297-3303.	3.4	11
28	Aquifer heterogeneity and response time: the challenge for groundwater management. <i>Crop and Pasture Science</i> , 2013, 64, 1141.	1.5	24
29	Spatially dense drip hydrological monitoring and infiltration behaviour at the Wellington Caves, South East Australia. <i>International Journal of Speleology</i> , 2012, 41, 283-296.	1.0	33
30	Comprensi3n de los procesos de agua subterr3nea mediante la representaci3n de la heterogeneidad del acu3fero en la cuenca del arroyo Maules, Namoi Valley (Nueva Gales del Sur, Australia). <i>Hydrogeology Journal</i> , 2012, 20, 1027-1044.	2.1	22
31	Monitoring the transition from preferential to matrix flow in cracking clay soil through changes in electrical anisotropy. <i>Geoderma</i> , 2012, 179-180, 46-52.	5.1	25
32	Experimental investigation of the thermal dispersivity term and its significance in the heat transport equation for flow in sediments. <i>Water Resources Research</i> , 2012, 48, .	4.2	128
33	Experimental investigation of the thermal time-series method for surface water-groundwater interactions. <i>Water Resources Research</i> , 2012, 48, .	4.2	36
34	Use of heat as tracer to quantify vertical streambed flow in a two-dimensional flow field. <i>Water Resources Research</i> , 2012, 48, .	4.2	38
35	A 1D analytical method for estimating surface water-groundwater interactions and effective thermal diffusivity using temperature time series. <i>Water Resources Research</i> , 2012, 48, .	4.2	84
36	Better placement of soil moisture point measurements guided by 2D resistivity tomography for improved irrigation scheduling. <i>Soil Research</i> , 2011, 49, 504.	1.1	18

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37	3D Cross-hole resistivity tomography to monitor water percolation during irrigation on cracking soil. <i>Soil Research</i> , 2011, 49, 661.	1.1	23
38	Analytical methods that use natural heat as a tracer to quantify surface water–groundwater exchange, evaluated using field temperature records. <i>Hydrogeology Journal</i> , 2010, 18, 1093-1110.	2.1	116
39	Investigations of soil cracking and preferential flow in a weighing lysimeter filled with cracking clay soil. <i>Journal of Hydrology</i> , 2010, 393, 105-113.	5.4	109
40	Detection of subsurface soil cracks by vertical anisotropy profiles of apparent electrical resistivity. <i>Geophysics</i> , 2010, 75, WA85-WA93.	2.6	32
41	Surface water and groundwater: understanding the importance of their connections. <i>Australian Journal of Earth Sciences</i> , 2009, 56, 1-2.	1.0	3
42	Stream-aquifer interactions in the Maules Creek catchment, Namoi Valley, New South Wales, Australia. <i>Hydrogeology Journal</i> , 2009, 17, 2005-2021.	2.1	58
43	Evidence for connected water processes through smectite-dominated clays at Breeza, New South Wales. <i>Australian Journal of Earth Sciences</i> , 2009, 56, 81-96.	1.0	19
44	Calculation of barometric efficiency in shallow piezometers using water levels, atmospheric and earth tide data. <i>Hydrogeology Journal</i> , 2008, 16, 1469-1481.	2.1	34
45	A radioisotope tracer investigation to determine the direction of groundwater movement adjacent to a tidal creek during spring and neap tides. <i>Hydrogeology Journal</i> , 2007, 15, 281-296.	2.1	10
46	Measurement of vertical environmental-head profiles in unconfined sand aquifers using a multi-channel manometer board. <i>Hydrogeology Journal</i> , 2007, 15, 1279-1289.	2.1	10
47	Integration of multi-channel piezometry and electrical tomography to better define chemical heterogeneity in a landfill leachate plume within a sand aquifer. <i>Journal of Contaminant Hydrology</i> , 2006, 83, 200-220.	3.3	31
48	Propagation of pressure change through thick clay sequences: an example from Liverpool Plains, NSW, Australia. <i>Hydrogeology Journal</i> , 2005, 13, 858-870.	2.1	53
49	Monitoring soil moisture status in a Black Vertosol on the Liverpool Plains, NSW, using a combination of neutron scattering and electrical image methods. <i>Soil Research</i> , 2005, 43, 105.	1.1	7
50	Field Measurements of Beachface Salinity Structure using Cross-Borehole Resistivity Imaging. <i>Journal of Coastal Research</i> , 2004, 203, 753-760.	0.3	33
51	Hydrogeological investigation of mud-mound springs developed over a weathered basalt aquifer on the Liverpool Plains, New South Wales, Australia. <i>Hydrogeology Journal</i> , 2003, 11, 659-672.	2.1	19
52	Mapping of the hyporheic zone around a tidal creek using a combination of borehole logging, borehole electrical tomography and cross-creek electrical imaging, New South Wales, Australia. <i>Hydrogeology Journal</i> , 2003, 11, 368-377.	2.1	57
53	A comparison of smooth and blocky inversion methods in 2D electrical imaging surveys. <i>Exploration Geophysics</i> , 2003, 34, 182-187.	1.1	703
54	Intrinsic Negative Chargeability of Soft Clays. <i>ASEG Extended Abstracts</i> , 2003, 2003, 1-4.	0.1	1

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55	Origin, lithology and weathering characteristics of Upper Tertiary & Quaternary clay aquitard units on the Lower Murrumbidgee alluvial fan. Australian Journal of Earth Sciences, 2002, 49, 525-537.	1.0	9
56	Shallow groundwater dynamics in smectite dominated clay on the Liverpool Plains of New South Wales. Soil Research, 2001, 39, 203.	1.1	13
57	The Electrical Image Method Compared with Resistivity Sounding and Electromagnetic Profiling for Investigation in Areas of Complex Geology: A Case Study from Groundwater Investigation in a Weathered Crystalline Rock Environment. Exploration Geophysics, 2001, 32, 119-128.	1.1	18
58	Salt source for dryland salinity - evidence from an upland catchment on the Southern Tablelands of New South Wales. Soil Research, 2001, 39, 39.	1.1	28
59	Physical and chemical properties of a DNAPL contaminated zone in a sand aquifer. Quarterly Journal of Engineering Geology and Hydrogeology, 2001, 34, 85-98.	1.4	12
60	An aeolian component in Pleistocene and Holocene valley aggradation: evidence from Dicks Creek catchment, Yass, New South Wales. Soil Research, 2001, 39, 13.	1.1	8
61	Investigation of dryland salinity using the electrical image method. Soil Research, 1999, 37, 623.	1.1	29
62	Modification of substratum physicochemistry by material adsorbed from groundwater - analysis by contact angles and relevance to microbial adhesion. Geomicrobiology Journal, 1997, 14, 151-172.	2.0	11
63	The Relationship Between Bulk Electrical Conductivity and Dryland Salinity in the Narrabri Formation at Breeza, Liverpool Plains, New South Wales, Australia. Hydrogeology Journal, 1997, 5, 109-123.	2.1	11
64	Determination of physicochemical parameters of solids covered with conditioning films from groundwaters using contact angles. Comparative analysis of different thermodynamic approaches utilizing a range of diagnostic liquids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 126, 1-23.	4.7	12
65	Retention of the Gram-negative bacterium SW8 on surfaces under conditions relevant to the subsurface environment: Effects of conditioning films and substratum nature. FEMS Microbiology Ecology, 1994, 14, 243-254.	2.7	33
66	The development of crystalline basement aquifers in a tropical environment. Quarterly Journal of Engineering Geology and Hydrogeology, 1987, 20, 265-272.	1.4	187