Craig Simmons

List of Publications by Year in descending order

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240 papers

10,728 citations

54 h-index 43889 91 g-index

247 all docs

247 docs citations

times ranked

247

7921 citing authors

#	Article	IF	CITATIONS
1	Seawater intrusion processes, investigation and management: Recent advances and future challenges. Advances in Water Resources, 2013, 51, 3-26.	3.8	1,046
2	Impact of Sea‣evel Rise on Sea Water Intrusion in Coastal Aquifers. Ground Water, 2009, 47, 197-204.	1.3	447
3	HydroGeoSphere: A Fully Integrated, Physically Based Hydrological Model. Ground Water, 2012, 50, 170-176.	1.3	365
4	Variable-density groundwater flow and solute transport in heterogeneous porous media: approaches, resolutions and future challenges. Journal of Contaminant Hydrology, 2001, 52, 245-275.	3.3	301
5	Is Decoupling GDP Growth from Environmental Impact Possible?. PLoS ONE, 2016, 11, e0164733.	2.5	292
6	Contrasting responses of water use efficiency to drought across global terrestrial ecosystems. Scientific Reports, 2016, 6, 23284.	3.3	227
7	Sea-level rise impacts on seawater intrusion in coastal aquifers: Review and integration. Journal of Hydrology, 2016, 535, 235-255.	5.4	219
8	Hydrogeologic controls on disconnection between surface water and groundwater. Water Resources Research, 2009, 45, .	4.2	160
9	Vulnerability Indicators of Sea Water Intrusion. Ground Water, 2012, 50, 48-58.	1.3	159
10	Advances in understanding riverâ€groundwater interactions. Reviews of Geophysics, 2017, 55, 818-854.	23.0	158
11	Using Hydraulic Head Measurements in Variable-Density Ground Water Flow Analyses. Ground Water, 2007, 45, 664-671.	1.3	132
12	GRACE satellite observed hydrological controls on interannual and seasonal variability in surface greenness over mainland Australia. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 2245-2260.	3.0	118
13	Evaluation of outputs from automated baseflow separation methods against simulated baseflow from a physically based, surface water-groundwater flow model. Journal of Hydrology, 2012, 458-459, 28-39.	5.4	111
14	Transience of seawater intrusion in response to sea level rise. Water Resources Research, 2010, 46, .	4.2	107
15	On a test case for density-dependent groundwater flow and solute transport models: The Salt Lake Problem. Water Resources Research, 1999, 35, 3607-3620.	4.2	106
16	Experimental observations of saltwater up-coning. Journal of Hydrology, 2009, 373, 230-241.	5.4	103
17	Polynomial chaos expansions for uncertainty propagation and moment independent sensitivity analysis of seawater intrusion simulations. Journal of Hydrology, 2015, 520, 101-122.	5.4	101
18	Spatial and temporal aspects of the transition from connection to disconnection between rivers, lakes and groundwater. Journal of Hydrology, 2009, 376, 159-169.	5.4	97

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19	Comparison of three dualâ€source remote sensing evapotranspiration models during the MUSOEXEâ€12 campaign: Revisit of model physics. Water Resources Research, 2015, 51, 3145-3165.	4.2	97
20	Variable density groundwater flow: From current challenges to future possibilities. Hydrogeology Journal, 2005, 13, 116-119.	2.1	96
21	Modeling Surface Waterâ€Groundwater Interaction with MODFLOW: Some Considerations. Ground Water, 2010, 48, 174-180.	1.3	95
22	Seaâ€kevel rise impact on fresh groundwater lenses in twoâ€kayer small islands. Hydrological Processes, 2014, 28, 5938-5953.	2.6	94
23	Title is missing!. Transport in Porous Media, 2002, 47, 215-244.	2.6	91
24	Variation in performance of surfactant loading and resulting nitrate removal among four selected natural zeolites. Journal of Hazardous Materials, 2010, 183, 616-621.	12.4	91
25	Disconnected Surface Water and Groundwater: From Theory to Practice. Ground Water, 2011, 49, 460-467.	1.3	91
26	Process-Based Reactive Transport Model To Quantify Arsenic Mobility during Aquifer Storage and Recovery of Potable Water. Environmental Science & Envi	10.0	90
27	Assessing spatial and temporal connectivity between surface water and groundwater in a regional catchment: Implications for regional scale water quantity and quality. Journal of Hydrology, 2011, 404, 30-49.	5.4	90
28	Unstable density-driven flow in heterogeneous porous media: A stochastic study of the Elder [1967b] "short heater―problem. Water Resources Research, 2003, 39, SBH 4-1-SBH 4-21.	4.2	89
29	Heterogeneous or homogeneous? Implications of simplifying heterogeneous streambeds in models of losing streams. Journal of Hydrology, 2012, 424-425, 16-23.	5.4	89
30	Mixed convection processes below a saline disposal basin. Journal of Hydrology, 1997, 194, 263-285.	5.4	86
31	Season-of-birth bias in association football. Journal of Sports Sciences, 2001, 19, 677-686.	2.0	86
32	Groundwater inflow to a shallow, poorly-mixed wetland estimated from a mass balance of radon. Journal of Hydrology, 2008, 354, 213-226.	5.4	86
33	Fractured bedrock and saprolite hydrogeologic controls on groundwater/surface-water interaction: a conceptual model (Australia). Hydrogeology Journal, 2009, 17, 1969-1989.	2.1	83
34	Integrated assessment of lateral flow, density effects and dispersion in aquifer storage and recovery. Journal of Hydrology, 2009, 370, 83-99.	5.4	80
35	Groundwater ages in fractured rock aquifers. Journal of Hydrology, 2005, 308, 284-301.	5.4	77
36	Limitations of the Use of Environmental Tracers to Infer Groundwater Age. Ground Water, 2015, 53, 56-70.	1.3	76

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37	The compleat Darcy: New lessons learned from the first English translation of les fontaines publiques de la Ville de Dijon. Ground Water, 2005, 43, 457-460.	1.3	74
38	Time to reach near-steady state in large aquifers. Water Resources Research, 2013, 49, 6893-6908.	4.2	73
39	Geochemical and 222Rn constraints on baseflow to the Murray River, Australia, and timescales for the decay of low-salinity groundwater lenses. Journal of Hydrology, 2011, 405, 333-343.	5.4	72
40	How important is the impact of land-surface inundation on seawater intrusion caused by sea-level rise?. Hydrogeology Journal, 2013, 21, 1673-1677.	2.1	72
41	Effects of tidal fluctuations and spatial heterogeneity on mixing and spreading in spatially heterogeneous coastal aquifers. Water Resources Research, 2015, 51, 1570-1585.	4.2	72
42	Natural free convection in porous media: First field documentation in groundwater. Geophysical Research Letters, 2009, 36, .	4.0	71
43	Spatial relationships between vegetation cover and irrigation-induced groundwater discharge on a semi-arid floodplain, Australia. Journal of Hydrology, 2006, 329, 75-97.	5.4	68
44	Current Practice and Future Challenges in Coastal Aquifer Management: Flux-Based and Trigger-Level Approaches with Application to an Australian Case Study. Water Resources Management, 2011, 25, 1831-1853.	3.9	68
45	Vulnerability mapping of coastal aquifers to seawater intrusion: Review, development and application. Journal of Hydrology, 2019, 570, 555-573.	5.4	68
46	A theoretical analysis of mixed convection in aquifer storage and recovery: How important are density effects?. Journal of Hydrology, 2007, 343, 169-186.	5.4	66
47	A discussion on the effect of heterogeneity on the onset of convection in a porous medium. Transport in Porous Media, 2007, 68, 413-421.	2.6	63
48	Evaluation of Conceptual and Numerical Models for Arsenic Mobilization and Attenuation during Managed Aquifer Recharge. Environmental Science & Environmental Environmen	10.0	63
49	Uncertainty assessment and implications for data acquisition in support of integrated hydrologic models. Water Resources Research, 2012, 48, .	4.2	63
50	Numerical modelling of saltwater up-coning: Comparison with experimental laboratory observations. Journal of Hydrology, 2011, 402, 261-273.	5.4	61
51	Groundwater modelling in decision support: reflections on a unified conceptual framework. Hydrogeology Journal, 2013, 21, 1531-1537.	2.1	60
52	Physical hydrogeology and environmental isotopes to constrain the age, origins, and stability of a low-salinity groundwater lens formed by periodic river recharge: Murray Basin, Australia. Journal of Hydrology, 2010, 380, 203-221.	5.4	58
53	The effect of streambed heterogeneity on groundwater-surface water exchange fluxes inferred from temperature time series. Water Resources Research, 2015, 51, 198-212.	4.2	57
54	Interpreting streamflow generation mechanisms from integrated surface-subsurface flow models of a riparian wetland and catchment. Water Resources Research, 2013, 49, 5501-5519.	4.2	56

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55	Factors influencing chloride deposition in a coastal hilly area and application to chloride deposition mapping. Hydrology and Earth System Sciences, 2010, 14, 801-813.	4.9	53
56	Vegetation controls on variably saturated processes between surface water and groundwater and their impact on the state of connection. Water Resources Research, 2011, 47, .	4.2	53
57	A hydraulic mixing-cell method to quantify the groundwater component of streamflow within spatially distributed fully integrated surface water–groundwater flow models. Environmental Modelling and Software, 2011, 26, 886-898.	4.5	53
58	Blueprint for a coupled model of sedimentology, hydrology, and hydrogeology in streambeds. Reviews of Geophysics, 2017, 55, 287-309.	23.0	52
59	Model-data interaction in groundwater studies: Review of methods, applications and future directions. Journal of Hydrology, 2018, 567, 457-477.	5.4	50
60	Conceptualization of a fresh groundwater lens influenced by climate change: A modeling study of an arid-region island in the Persian Gulf, Iran. Journal of Hydrology, 2014, 519, 399-413.	5.4	49
61	Multiscale Characterization of a Heterogeneous Aquifer Using an ASR Operation. Ground Water, 2006, 44, 155-164.	1.3	48
62	Henry Darcy (1803–1858): Immortalised by his scientific legacy. Hydrogeology Journal, 2008, 16, 1023.	2.1	48
63	Bias of Apparent Tracer Ages in Heterogeneous Environments. Ground Water, 2014, 52, 239-250.	1.3	48
64	Uncertainty analysis for seawater intrusion in fractured coastal aquifers: Effects of fracture location, aperture, density and hydrodynamic parameters. Journal of Hydrology, 2019, 571, 159-177.	5.4	48
65	A waveletâ€based multiple linear regression model for forecasting monthly rainfall. International Journal of Climatology, 2014, 34, 1898-1912.	3.5	46
66	Variable-density modelling of multiple-cycle aquifer storage and recovery (ASR): Importance of anisotropy and layered heterogeneity in brackish aquifers. Journal of Hydrology, 2008, 356, 93-105.	5.4	45
67	Free convective controls on sequestration of salts into low-permeability strata: insights from sand tank laboratory experiments and numerical modelling. Hydrogeology Journal, 2010, 18, 39-54.	2.1	45
68	Effects of tidal fluctuations on mixing and spreading in coastal aquifers: Homogeneous case. Water Resources Research, 2014, 50, 6910-6926.	4.2	45
69	Discretizing the Fractureâ€Matrix Interface to Simulate Solute Transport. Ground Water, 2008, 46, 606-615.	1.3	44
70	Influence of the first-order exchange coefficient on simulation of coupled surface–subsurface flow. Journal of Hydrology, 2012, 414-415, 503-515.	5.4	44
71	Examination of water budget using satellite products over Australia. Journal of Hydrology, 2014, 511, 546-554.	5.4	44
72	Optimization of canopy conductance models from concurrent measurements of sap flow and stem water potential on Drooping Sheoak in South Australia. Water Resources Research, 2014, 50, 6154-6167.	4.2	44

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73	Testing density-dependent groundwater models: two-dimensional steady state unstable convection in infinite, finite and inclined porous layers. Advances in Water Resources, 2004, 27, 547-562.	3.8	43
74	Speed of free convective fingering in porous media. Water Resources Research, 2011, 47, .	4.2	43
75	Orographic controls on rain water isotope distribution in the Mount Lofty Ranges of South Australia. Journal of Hydrology, 2009, 374, 255-264.	5.4	42
76	Performance assessment and improvement of recursive digital baseflow filters for catchments with different physical characteristics and hydrological inputs. Environmental Modelling and Software, 2014, 54, 39-52.	4.5	42
77	Radium and radon radioisotopes in regional groundwater, intertidal groundwater, and seawater in the Adelaide Coastal Waters Study area: Implications for the evaluation of submarine groundwater discharge. Marine Chemistry, 2008, 109, 318-336.	2.3	40
78	On the testing of fully integrated surface–subsurface hydrological models. Hydrological Processes, 2013, 27, 1276-1285.	2.6	40
79	Heat and Solute Tracers: How Do They Compare in Heterogeneous Aquifers?. Ground Water, 2015, 53, 10-20.	1.3	40
80	A vegetationâ€focused soilâ€plantâ€atmospheric continuum model to study hydrodynamic soilâ€plant water relations. Water Resources Research, 2017, 53, 4965-4983.	4.2	39
81	Assessment of sustainable groundwater resources management using integrated environmental index: Case studies across Iran. Science of the Total Environment, 2019, 676, 792-810.	8.0	39
82	On the evolution of salt lakes: Episodic convection beneath an evaporating salt lake. Water Resources Research, 2008, 44, .	4.2	37
83	Effectiveness of artificial watering of a semiâ€arid saline wetland for managing riparian vegetation health. Hydrological Processes, 2009, 23, 3474-3484.	2.6	36
84	Groundwater recharge to a sedimentary aquifer in the topographically closed Uley South Basin, South Australia. Hydrogeology Journal, 2012, 20, 61-72.	2.1	36
85	The <scp>H</scp> enry problem: New semianalytical solution for velocityâ€dependent dispersion. Water Resources Research, 2016, 52, 7382-7407.	4.2	36
86	Uncertainty of groundwater recharge estimated from a water and energy balance model. Journal of Hydrology, 2018, 561, 1081-1093.	5.4	36
87	Evidence of free convection in groundwater: Field-based measurements beneath wind-tidal flats. Journal of Hydrology, 2009, 375, 394-409.	5.4	35
88	Estimating Flow Using Tracers and Hydraulics in Synthetic Heterogeneous Aquifers. Ground Water, 2009, 47, 786-796.	1.3	35
89	Estándar de comparación tridimensional para la simulación de flujo de densidad variable y transporte: coincidencia de modo de estabilidad semianalÃŧica para una convección estacionaria inestable en una caja porosa inclinada. Hydrogeology Journal, 2010, 18, 5-23.	2.1	35
90	Catchment conceptualisation for examining applicability of chloride mass balance method in an area with historical forest clearance. Hydrology and Earth System Sciences, 2010, 14, 1233-1245.	4.9	34

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91	Uncertainty of natural tracer methods for quantifying river–aquifer interaction in a large river. Journal of Hydrology, 2016, 535, 135-147.	5.4	34
92	Interaction of lake-groundwater levels using cross-correlation analysis: A case study of Lake Urmia Basin, Iran. Science of the Total Environment, 2020, 729, 138822.	8.0	34
93	A breakthrough curve analysis of unstable density-driven flow and transport in homogeneous porous media. Water Resources Research, 2004, 40, .	4.2	33
94	Insights from a pseudospectral approach to the Elder problem. Water Resources Research, 2009, 45, .	4.2	33
95	Modeling the environmental controls on tree water use at different temporal scales. Agricultural and Forest Meteorology, 2016, 225, 24-35.	4.8	33
96	A Brief Introduction to Convection in Porous Media. Transport in Porous Media, 2019, 130, 237-250.	2.6	33
97	Groundwater flow and solute transport at the Mourquong saline-water disposal basin, Murray Basin, southeastern Australia. Hydrogeology Journal, 2002, 10, 278-295.	2.1	32
98	Modes of free convection in fractured lowâ€permeability media. Water Resources Research, 2008, 44, .	4.2	32
99	Prediction and uncertainty of free convection phenomena in porous media. Water Resources Research, 2012, 48, .	4.2	31
100	Normalized difference vegetation index as the dominant predicting factor of groundwater recharge in phreatic aquifers: case studies across Iran. Scientific Reports, 2020, 10, 17473.	3.3	31
101	Numerical error in groundwater flow and solute transport simulation. Water Resources Research, 2003, 39, .	4.2	30
102	Uncertainties in vertical groundwater fluxes from $1\hat{a}\in\mathbb{D}$ steady state heat transport analyses caused by heterogeneity, multidimensional flow, and climate change. Water Resources Research, 2016, 52, 813-826.	4.2	30
103	Quantifying sapwood width for three Australian native species using electrical resistivity tomography. Ecohydrology, 2016, 9, 83-92.	2.4	30
104	Effect of strong heterogeneity on the onset of convection in a porous medium: Importance of spatial dimensionality and geologic controls. Water Resources Research, 2010, 46, .	4.2	29
105	Framework for assessing and improving the performance of recursive digital filters for baseflow estimation with application to the Lyne and Hollick filter. Environmental Modelling and Software, 2013, 41, 163-175.	4.5	29
106	Groundwater flow estimation using temperature-depth profiles in a complex environment and a changing climate. Science of the Total Environment, 2017, 574, 272-281.	8.0	29
107	Impact of fracture network geometry on free convective flow patterns. Advances in Water Resources, 2014, 71, 65-80.	3.8	28
108	Non-pumping reactive wells filled with mixing nano and micro zero-valent iron for nitrate removal from groundwater: Vertical, horizontal, and slanted wells. Journal of Contaminant Hydrology, 2018, 210, 50-64.	3.3	28

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109	Sea breeze cooling capacity and its influencing factors in a coastal city. Building and Environment, 2019, 166, 106408.	6.9	28
110	Using quantitative indicators to evaluate results from variable-density groundwater flow models. Hydrogeology Journal, 2005, 13, 905-914.	2.1	27
111	The Effect of Strong Heterogeneity on the Onset of Convection in a Porous Medium. Transport in Porous Media, 2009, 77, 169-186.	2.6	27
112	Modelling density-dependent flow and solute transport at the Lake Tutchewop saline disposal complex, Victoria. Journal of Hydrology, 1998, 206, 219-236.	5 . 4	26
113	Aquifer response to surface water transience in disconnected streams. Water Resources Research, 2012, 48, .	4.2	26
114	When Can Inverted Water Tables Occur Beneath Streams?. Ground Water, 2014, 52, 769-774.	1.3	26
115	Identifying modern and historic recharge events from tracerâ€derived groundwater age distributions. Water Resources Research, 2017, 53, 1039-1056.	4.2	26
116	Fuzzy vulnerability mapping of urban groundwater systems to nitrate contamination. Environmental Modelling and Software, 2017, 96, 146-157.	4.5	26
117	Influence of lakebed sediment deposit on the interaction of hypersaline lake and groundwater: A simplified case of lake Urmia, Iran. Journal of Hydrology, 2020, 588, 125110.	5 . 4	26
118	Review of assimilating GRACE terrestrial water storage data into hydrological models: Advances, challenges and opportunities. Earth-Science Reviews, 2021, 213, 103487.	9.1	26
119	Effect of transient solute loading on free convection in porous media. Water Resources Research, 2010, 46, .	4.2	25
120	Can collective action address the "tragedy of the commons―in groundwater management? Insights from an Australian case study. Hydrogeology Journal, 2019, 27, 2471-2483.	2.1	25
121	The Effect of Strong Heterogeneity on the Onset of Convection in a Porous Medium: 2D/3D Localization and Spatially Correlated Random Permeability Fields. Transport in Porous Media, 2010, 83, 465-477.	2.6	24
122	Impact of kinetic mass transfer on free convection in a porous medium. Water Resources Research, 2016, 52, 3637-3653.	4.2	24
123	A conjunctive management framework for the optimal design of pumping and injection strategies to mitigate seawater intrusion. Journal of Environmental Management, 2021, 282, 111964.	7.8	24
124	Assessing catchment-scale spatial and temporal patterns of groundwater and stream salinity. Hydrogeology Journal, 2006, 14, 1339-1359.	2.1	23
125	Salinization risk in semiâ€arid floodplain wetlands subjected to engineered wetting and drying cycles. Hydrological Processes, 2009, 23, 3440-3452.	2.6	23
126	Maximizing Net Extraction Using an Injectionâ€Extraction Well Pair in a Coastal Aquifer. Ground Water, 2013, 51, 219-228.	1.3	23

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127	On the interpretation of coastal aquifer water level trends and water balances: A precautionary note. Journal of Hydrology, 2012, 470-471, 280-288.	5.4	23
128	Threats to coastal aquifers. Nature Climate Change, 2013, 3, 605-605.	18.8	23
129	On variable density surface water–groundwater interaction: A theoretical analysis of mixed convection in a stably-stratified fresh surface water – saline groundwater discharge zone. Journal of Hydrology, 2006, 329, 390-402.	5.4	22
130	Examination and parameterization of the root water uptake model from stem water potential and sap flow measurements. Hydrological Processes, 2013, 27, 2857-2863.	2.6	22
131	Spring hydrograph simulation of karstic aquifers: Impacts of variable recharge area, intermediate storage and memory effects. Journal of Hydrology, 2017, 552, 225-240.	5.4	22
132	Doubleâ€diffusive convection in groundwater wells. Water Resources Research, 2007, 43, .	4.2	21
133	Is in situ stress important to groundwater flow in shallow fractured rock aquifers?. Journal of Hydrology, 2011, 399, 185-200.	5.4	21
134	Canopy enhanced chloride deposition in coastal South Australia and its application for the chloride mass balance method. Journal of Hydrology, 2013, 497, 62-70.	5.4	21
135	Finite volume coupling strategies for the solution of a Biot consolidation model. Computers and Geotechnics, 2014, 55, 494-505.	4.7	21
136	Rootâ€zone moisture replenishment in a native vegetated catchment under Mediterranean climate. Hydrological Processes, 2019, 33, 2394-2407.	2.6	21
137	Toward the Use of the MODIS ET Product to Estimate Terrestrial GPP for Nonforest Ecosystems. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1624-1628.	3.1	20
138	Beyond hydrogeologic evidence: challenging the current assumptions about salinity processes in the Corangamite region, Australia. Hydrogeology Journal, 2008, 16, 1283-1298.	2.1	19
139	Fully integrated modeling of surfaceâ€subsurface solute transport and the effect of dispersion in tracer hydrograph separation. Water Resources Research, 2014, 50, 7750-7765.	4.2	19
140	Electrical imaging and fluid modeling of convective fingering in a shallow water-table aquifer. Water Resources Research, 2014, 50, 954-968.	4.2	19
141	Numerical investigation of coupled densityâ€driven flow and hydrogeochemical processes below playas. Water Resources Research, 2015, 51, 9338-9352.	4.2	19
142	On the limits of heat as a tracer to estimate reach-scale river-aquifer exchange flux. Water Resources Research, 2015, 51, 7401-7416.	4.2	19
143	An exploration of coupled surface–subsurface solute transport in a fully integrated catchment model. Journal of Hydrology, 2015, 529, 969-979.	5.4	19
144	Uncertainty quantification and global sensitivity analysis of double-diffusive natural convection in a porous enclosure. International Journal of Heat and Mass Transfer, 2020, 162, 120291.	4.8	19

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145	Worth of hydraulic and water chemistry observation data in terms of the reliability of surface water-groundwater exchange flux predictions under varied flow conditions. Journal of Hydrology, 2020, 590, 125441.	5.4	18
146	Variableâ€density groundwater flow and solute transport in fractured rock: Applicability of the <i>Tang et al.</i> [1981] analytical solution. Water Resources Research, 2009, 45, .	4.2	17
147	Salinity dynamics of discharge lakes in dune environments: Conceptual model. Water Resources Research, 2010, 46, .	4.2	17
148	Tracer adsorption in sand-tank experiments of saltwater up-coning. Journal of Hydrology, 2012, 414-415, 476-481.	5.4	17
149	A Correction on Coastal Heads for Groundwater Flow Models. Ground Water, 2015, 53, 164-170.	1.3	17
150	A Generalized Semi-Analytical Solution for the Dispersive Henry Problem: Effect of Stratification and Anisotropy on Seawater Intrusion. Water (Switzerland), 2018, 10, 230.	2.7	17
151	Lessons from 10 Years of Experience with Australia's Risk-Based Guidelines for Managed Aquifer Recharge. Water (Switzerland), 2020, 12, 537.	2.7	17
152	The Effect of Strong Heterogeneity on the Onset of Convection in a Porous Medium: Periodic and Localized Variation. Transport in Porous Media, 2010, 81, 123-139.	2.6	16
153	Validity and slopes of the linear equation of state for natural brines in salt lake systems. Journal of Hydrology, 2015, 523, 190-195.	5.4	16
154	Assessment of the internal dynamics of the Australian Water Balance Model under different calibration regimes. Environmental Modelling and Software, 2015, 66, 57-68.	4.5	16
155	Controls on Interactions Between Surface Water, Groundwater, and Riverine Vegetation Along Intermittent Rivers and Ephemeral Streams in Arid Regions. Water Resources Research, 2021, 57, e2020WR028429.	4.2	16
156	Convective-reactive transport of dissolved CO2 in fractured-geological formations. International Journal of Greenhouse Gas Control, 2021, 109, 103365.	4.6	16
157	Updating the Debate on Model Complexity. GSA Today, 2012, 22, 28-29.	2.0	16
158	Impacts of groundwater depth on regional scale soil gleyization under changing climate in the Poyang Lake Basin, China. Journal of Hydrology, 2019, 568, 501-516.	5.4	15
159	A probabilistic framework for water budget estimation in low runoff regions: A case study of the central Basin of Iran. Journal of Hydrology, 2020, 586, 124898.	5.4	15
160	Variable density groundwater flow: from modelling to applications. , 2010, , 87-118.		14
161	The Onset of Convection in a Strongly Heterogeneous Porous Medium with Transient Temperature Profile. Transport in Porous Media, 2011, 86, 851-865.	2.6	14
162	The role of in situ stress in determining hydraulic connectivity in a fractured rock aquifer (Australia). Hydrogeology Journal, 2011, 19, 1293-1312.	2.1	14

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163	Protecting groundwater levels and ecosystems with simple management approaches. Hydrogeology Journal, 2019, 27, 225-237.	2.1	14
164	Understanding topography-driven groundwater flow using fully-coupled surface-water and groundwater modeling. Journal of Hydrology, 2021, 594, 125950.	5.4	14
165	Groundwater Recharge and Mixing in Arid and Semiarid Regions: Heihe River Basin, Northwest China. Acta Geologica Sinica, 2016, 90, 971-987.	1.4	13
166	Commemorating the 50th anniversary of the Freeze and Harlan (1969) Blueprint for a physically-based, digitally-simulated hydrologic response model. Journal of Hydrology, 2020, 584, 124309.	5.4	13
167	Simulating MODFLOWâ€Based Reactive Transport Under Radially Symmetric Flow Conditions. Ground Water, 2013, 51, 398-413.	1.3	12
168	Using Every Tool in the Toolbox. Ground Water, 2012, 50, 323-323.	1.3	12
169	Representativeness of 2D models to simulate 3D unstable variable density flow in porous media. Journal of Hydrology, 2016, 542, 541-551.	5.4	12
170	The Elder Problem. Fluids, 2017, 2, 11.	1.7	12
171	Physical and Chemical Controls on the Simultaneous Occurrence of Young and Old Groundwater Inferred From Multiple Age Tracers. Water Resources Research, 2018, 54, 9514-9532.	4.2	12
172	Towards Quantifying the Likelihood of Water Resource Impacts from Unconventional Gas Development. Ground Water, 2019, 57, 547-561.	1.3	12
173	Using environmental tracers to constrain flow parameters in fractured rock aquifers; Clare Valley, South Australia. Geophysical Monograph Series, 2000, , 337-347.	0.1	11
174	Use of Stable Isotopes Deuterium and Oxygen-18 to Derive Evaporation from Flood Irrigation on the Basis of Pan Evaporation Techniques. Journal of Irrigation and Drainage Engineering - ASCE, 2011, 137, 765-778.	1.0	11
175	Particle-size effects on dissolved arsenic adsorption to an Australian laterite. Environmental Earth Sciences, 2013, 68, 2301-2312.	2.7	11
176	Solute transport processes in flow-event-driven stream–aquifer interaction. Journal of Hydrology, 2016, 538, 363-373.	5.4	11
177	On the use of COMSOL Multiphysics for seawater intrusion in fractured coastal aquifers. E3S Web of Conferences, 2018, 54, 00020.	0.5	11
178	Study of the Effect of Thermal Dispersion on Internal Natural Convection in Porous Media Using Fourier Series. Transport in Porous Media, 2020, 131, 537-568.	2.6	11
179	Using MODFLOW 2000 to Model ET and Recharge for Shallow Ground Water Problems. Ground Water, 2009, 47, 129-135.	1.3	10
180	Response of leaf stable carbon isotope composition to temporal and spatial variabilities of aridity index on two opposite hillslopes in a native vegetated catchment. Journal of Hydrology, 2017, 553, 214-223.	5.4	10

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