

Robert P Chapuis

List of Publications by Year in descending order

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122
papers

3,926
citations

136740

32
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133063

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125
all docs

125
docs citations

125
times ranked

2291
citing authors

#	ARTICLE	IF	CITATIONS
1	On the use of the Kozeny–Carman equation to predict the hydraulic conductivity of soils. Canadian Geotechnical Journal, 2003, 40, 616-628.	1.4	397
2	Predicting the saturated hydraulic conductivity of sand and gravel using effective diameter and void ratio. Canadian Geotechnical Journal, 2004, 41, 787-795.	1.4	312
3	Predicting the saturated hydraulic conductivity of soils: a review. Bulletin of Engineering Geology and the Environment, 2012, 71, 401-434.	1.6	269
4	Phosphorus removal by electric arc furnace steel slag and serpentinite. Water Research, 2006, 40, 1547-1554.	5.3	217
5	Phosphorus Saturation Potential: A Parameter for Estimating the Longevity of Constructed Wetland Systems. Environmental Science & Technology, 2002, 36, 4642-4648.	4.6	212
6	Sand–bentonite liners: predicting permeability from laboratory tests. Canadian Geotechnical Journal, 1990, 27, 47-57.	1.4	151
7	The behavior of inclined covers used as oxygen barriers. Canadian Geotechnical Journal, 2003, 40, 512-535.	1.4	129
8	Hydraulic conductivity of homogenized tailings from hard rock mines. Canadian Geotechnical Journal, 1996, 33, 470-482.	1.4	116
9	A predictive model for the water retention curve: application to tailings from hard-rock mines. Canadian Geotechnical Journal, 1998, 35, 55-69.	1.4	92
10	Similarity of internal stability criteria for granular soils. Canadian Geotechnical Journal, 1992, 29, 711-713.	1.4	85
11	The 2000 R.M. Hardy Lecture: Full-scale hydraulic performance of soil–bentonite and compacted clay liners. Canadian Geotechnical Journal, 2002, 39, 417-439.	1.4	75
12	Laboratory permeability tests on sand: influence of the compaction method on anisotropy. Canadian Geotechnical Journal, 1989, 26, 614-622.	1.4	70
13	Estimation of hydraulic conductivity of an unconfined aquifer using cokriging of GPR and hydrostratigraphic data. Journal of Applied Geophysics, 2001, 47, 135-152.	0.9	70
14	Overdamped slug test in monitoring wells: review of interpretation methods with mathematical, physical, and numerical analysis of storativity influence. Canadian Geotechnical Journal, 1998, 35, 697-719.	1.4	68
15	Granular soils in rigid-wall permeameters: method for determining the degree of saturation. Canadian Geotechnical Journal, 1989, 26, 71-79.	1.4	67
16	Shape Factors for Permeability Tests in Boreholes and Piezometers. Ground Water, 1989, 27, 647-654.	0.7	61
17	Lung bioaccessibility of As, Cu, Fe, Mn, Ni, Pb, and Zn in fine fraction (<math> < 20 \mu\text{m}</math>) from contaminated soils and mine tailings. Science of the Total Environment, 2017, 579, 378-386.	3.9	59
18	Field experimental cells to evaluate the hydrogeological behaviour of oxygen barriers made of silty materials. Canadian Geotechnical Journal, 2007, 44, 245-265.	1.4	55

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19	Evaluating the hydraulic conductivity at three different scales within an unconfined sand aquifer at Lachenaie, Quebec. Canadian Geotechnical Journal, 2005, 42, 1212-1220.	1.4	53
20	Lung bioaccessibility of contaminants in particulate matter of geological origin. Environmental Science and Pollution Research, 2016, 23, 24422-24434.	2.7	53
21	Design, construction, performance, and repair of the soil-bentonite liners of two lagoons. Canadian Geotechnical Journal, 1992, 29, 638-649.	1.4	47
22	A user's approach to assess numerical codes for saturated and unsaturated seepage conditions. Canadian Geotechnical Journal, 2001, 38, 1113-1126.	1.4	47
23	Migration of fines in 0-20 mm crushed base during placement, compaction, and seepage under laboratory conditions. Canadian Geotechnical Journal, 1996, 33, 168-176.	1.4	46
24	An improved rotating cylinder technique for quantitative measurements of the scour resistance of clays. Canadian Geotechnical Journal, 1986, 23, 83-87.	1.4	44
25	Effects of installation of piezometers and wells on groundwater characteristics and measurements. Canadian Geotechnical Journal, 1989, 26, 604-613.	1.4	42
26	Slug tests in a confined aquifer: experimental results in a large soil tank and numerical modeling. Canadian Geotechnical Journal, 2002, 39, 14-21.	1.4	39
27	Hydraulic anisotropy of homogeneous soils and rocks: influence of the densification process. Bulletin of Engineering Geology and the Environment, 1989, 39, 75-86.	1.6	38
28	A simplified method to estimate saturated and unsaturated seepage through dikes under steady-state conditions. Canadian Geotechnical Journal, 2001, 38, 1321-1328.	1.4	38
29	Seepage Face Height, Water Table Position, and Well Efficiency at Steady State. Ground Water, 2007, 45, 168-177.	0.7	35
30	Controlling the quality of groundwater parameters: some examples. Canadian Geotechnical Journal, 1995, 32, 172-177.	1.4	34
31	Estimating the in situ porosity of sandy soils sampled in boreholes. Engineering Geology, 2012, 141-142, 57-64.	2.9	34
32	What maximum permeability can be measured with a monitoring well?. Engineering Geology, 2015, 184, 111-118.	2.9	34
33	Borehole variable-head permeability tests in compacted clay liners and covers. Canadian Geotechnical Journal, 1999, 36, 39-51.	1.4	32
34	Numerical modeling of rising-head permeability tests in monitoring wells after lowering the water level down to the screen. Canadian Geotechnical Journal, 2005, 42, 705-715.	1.4	22
35	Pumping Test in a Confined Aquifer Under Tidal Influence. Ground Water, 2006, 44, 300-305.	0.7	22
36	Practical Considerations when Using the Swedish Fall Cone. Geotechnical Testing Journal, 2012, 35, 104178.	0.5	22

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37	Getting Information from Modal Decomposition of Grain Size Distribution Curves. Geotechnical Testing Journal, 2014, 37, 20120218.	0.5	22
38	Effects of monitoring and pumping well pipe capacities during pumping tests in confined aquifers. Canadian Geotechnical Journal, 2003, 40, 1093-1103.	1.4	21
39	Numerical modeling of reservoirs or pipes in groundwater seepage. Computers and Geotechnics, 2009, 36, 895-901.	2.3	21
40	Permeability Test Results With Packed Spheres and Non-Plastic Soils. Geotechnical Testing Journal, 2015, 38, 20140124.	0.5	21
41	Using Cooper-Jacob Approximation to Take Account of Pumping Well Pipe Storage Effects in Early Drawdown Data of a Confined Aquifer. Ground Water, 1992, 30, 331-337.	0.7	19
42	Quantifying the Effects of Well Development in Unconsolidated Material. Ground Water, 1997, 35, 387-393.	0.7	19
43	Long-term persistence of a nutrient-starved biofilm in a limestone fracture. Water Research, 2006, 40, 925-934.	5.3	19
44	Quantitative measurement of the scour resistance of natural solid clays. Canadian Geotechnical Journal, 1986, 23, 132-141.	1.4	18
45	Sand-bentonite liners: field control methods. Canadian Geotechnical Journal, 1990, 27, 216-223.	1.4	18
46	Contrôle de la stabilité des remblais par la mesure des déplacements horizontaux. Canadian Geotechnical Journal, 1974, 11, 182-201.	1.4	17
47	Unusual drawdown curves for a pumping test in an unconfined aquifer at Lachenaie, Quebec: field data and numerical modeling. Canadian Geotechnical Journal, 2005, 42, 1133-1144.	1.4	17
48	Pore pressure response to barometric pressure change in Champlain clay: Prediction of the clay elastic properties. Engineering Geology, 2015, 198, 16-29.	2.9	17
49	Travel Time to a Well Pumping an Unconfined Aquifer without Recharge. Ground Water, 2006, 44, 600-603.	0.7	17
50	Monitoring wells: measurement of permeability with minimal modification of groundwater. Canadian Journal of Civil Engineering, 1991, 18, 871-875.	0.7	16
51	Overdamped Slug Tests in Aquifers: The Three Diagnostic Graphs for a User-Independent Interpretation. Geotechnical Testing Journal, 2015, 38, 20140250.	0.5	16
52	Monitoring a well in a clay layer: revisiting the time lag problem. Bulletin of Engineering Geology and the Environment, 2009, 68, 387-395.	1.6	15
53	Stress and strain fields for overdamped slug tests in aquifer materials, and resulting conservation equation. International Journal for Numerical and Analytical Methods in Geomechanics, 2017, 41, 1908-1921.	1.7	15
54	Reply to the discussion by D. Hansen on "On the use of the Kozeny-Carman equation to predict the hydraulic conductivity of soils". Canadian Geotechnical Journal, 2004, 41, 994-996.	1.4	14

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55	Steady state groundwater seepage in sloping unconfined aquifers. Bulletin of Engineering Geology and the Environment, 2011, 70, 89-99.	1.6	14
56	A coupled analysis of cavity and pore volume changes for pulse tests conducted in soft clay deposits. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 903-924.	1.7	14
57	A simple reason explains why it is so difficult to assess groundwater ages and contamination ages. Science of the Total Environment, 2017, 593-594, 109-115.	3.9	14
58	Monitoring wells in clay: the apparently static water level and its influence during variable-head permeability tests. Bulletin of Engineering Geology and the Environment, 2012, 71, 663-678.	1.6	13
59	Assessing internal erosion with the modal decomposition method for grain size distribution curves. Acta Geotechnica, 2020, 15, 1595-1605.	2.9	13
60	Disagreeing Evaluations for Slug Tests in Monitoring Wells: Importance of Standards. Geotechnical Testing Journal, 2019, 42, 20160046.	0.5	13
61	DISCUSSION OF "Estimation of Storativity from Recovery Data", by P. N. Ballukraya and K. K. Sharma. Ground Water, 1992, 30, 269-272.	0.7	12
62	Detecting a hydraulic short circuit along a monitoring well with the recovery curve of a pumping test in a confined aquifer: method and example. Canadian Geotechnical Journal, 1998, 35, 790-800.	1.4	12
63	Travel Time to a Well Pumping an Unconfined Aquifer without Recharge. Ground Water, 2006, 44, 600-603.	0.7	12
64	Recovery test after a constant-head test in a monitoring well: Interpretation methods and new findings. Engineering Geology, 2019, 259, 105150.	2.9	12
65	Analyzing grain size distributions with the modal decomposition method: literature review and procedures. Bulletin of Engineering Geology and the Environment, 2021, 80, 6649-6666.	1.6	11
66	Parasitic Head Losses During Laboratory Permeability Tests. Geotechnical Testing Journal, 2015, 38, 20130175.	0.5	11
67	Evaluating at Three Scales the Hydraulic Conductivity in an Unconfined and Stratified Alluvial Aquifer. Geotechnical Testing Journal, 2021, 44, 20180170.	0.5	11
68	Laboratory modelling of field permeability tests in cased boreholes. Canadian Geotechnical Journal, 1990, 27, 647-658.	1.4	10
69	Methods to Determine Storativity of Infinite Confined Aquifers from a Recovery Test. Ground Water, 2002, 40, 385-389.	0.7	10
70	The Lachenaie clay deposit: some geochemical and geotechnical properties in relation to the salt-leaching process. Canadian Geotechnical Journal, 2013, 50, 311-325.	1.4	10
71	Influence of seasonal hydraulic head changes on slug tests conducted in shallow low-permeability soils. Engineering Geology, 2017, 228, 385-394.	2.9	10
72	A linear graphical method to predict the effect of compaction on the hydraulic conductivity of clay liners and covers. Bulletin of Engineering Geology and the Environment, 2006, 65, 93-98.	1.6	9

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73	Using a leaky swimming pool for a huge falling-head permeability test. <i>Engineering Geology</i> , 2010, 114, 65-70.	2.9	9
74	Pumping a recharged unconfined aquifer: solutions for the hydraulic head and the transfer time. <i>Bulletin of Engineering Geology and the Environment</i> , 2011, 70, 309-316.	1.6	9
75	How to Improve the Quality of Laboratory Permeability Tests in Rigid-Wall Permeameters: A Review. <i>Geotechnical Testing Journal</i> , 2020, 43, 20180350.	0.5	9
76	Field variable-head test in low-permeability materials: Assessing the effects of trapped gas pocket and cavity expansion. <i>Canadian Geotechnical Journal</i> , 2009, 46, 81-92.	1.4	8
77	Field Permeability Tests: Importance of Calibration and Synchronous Monitoring for Barometric Pressure Sensors. <i>Geotechnical Testing Journal</i> , 2019, 42, 20160306.	0.5	8
78	Two Methods to Detect Poorly Sealed Monitoring Wells Using Pumping Test Data in a Confined Aquifer. <i>Geotechnical Testing Journal</i> , 2019, 42, 20170032.	0.5	8
79	Laboratory test results on self-hardening grouts for flexible cutoffs. <i>Canadian Geotechnical Journal</i> , 1984, 21, 185-191.	1.4	7
80	Discussion of "Network model for hydraulic conductivity of sand-bentonite mixtures". <i>Canadian Geotechnical Journal</i> , 2006, 43, 110-114.	1.4	7
81	Tracer movements in a straight uniform flow: New equations for the advective part considering the distortion of flow lines around the well. <i>Journal of Contaminant Hydrology</i> , 2021, 239, 103776.	1.6	7
82	Water-Retention Curves of Coarse Soils Without Organic Matter: Improved Data for Improved Predictions. <i>Geotechnical Testing Journal</i> , 2015, 38, 20130154.	0.5	7
83	Field Permeability Tests with Inward and Outward Flow in Confined Aquifers. <i>Geotechnical Testing Journal</i> , 2019, 42, 20170417.	0.5	7
84	Assessment of Methods and Conditions to Locate Boundaries: I. One or Two Straight Impervious Boundaries. <i>Ground Water</i> , 1994, 32, 576-582.	0.7	6
85	Determination of bentonite content in soil-bentonite liners by X-ray diffraction. <i>Canadian Geotechnical Journal</i> , 1996, 33, 760-769.	1.4	6
86	Discussion of "Influence of relative compaction on the hydraulic conductivity of completely decomposed granite in Hong Kong" Appears in <i>Canadian Geotechnical Journal</i> , (10): 1229-1235.. <i>Canadian Geotechnical Journal</i> , 2010, 47, 704-707.	1.4	6
87	A Leaky Aquifer below Champlain Sea Clay: Closed-Form Solutions for Natural Seepage. <i>Ground Water</i> , 2013, 51, 960-967.	0.7	6
88	Numerical values of shape factors for field permeability tests in unconfined aquifers. <i>Acta Geotechnica</i> , 2020, 15, 1243-1257.	2.9	6
89	Analyzing grain size distributions with the modal decomposition method: potential for future research in engineering geology. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 6667-6676.	1.6	6
90	Full-Scale Evaluation of the Performance of Three Compacted Clay Liners. <i>Geotechnical Testing Journal</i> , 2013, 36, 20120198.	0.5	6

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91	Assessment of Methods and Conditions to Locate Boundaries: II. One Straight Recharge Boundary. Ground Water, 1994, 32, 583-590.	0.7	5
92	The Physical Reasons to Have Underdamped or Oscillating Variable-Head (Slug) Tests: A Review and a Clarification. Geotechnical Testing Journal, 2022, 45, 20210065.	0.5	5
93	Improved Curve Fitting Methods for Underdamped Slug Tests. Geotechnical Testing Journal, 2012, 35, 103092.	0.5	5
94	Examples of Variable-Head Field Permeability Tests Used in Books: Given Interpretations and Correct Interpretations. Geotechnical Testing Journal, 2021, 44, 20180210.	0.5	5
95	New stability method for embankments on clay foundations. Canadian Geotechnical Journal, 1982, 19, 44-48.	1.4	4
96	Comment on "Shape factors for constant-head double-packer permeameters" by S. A. Mathias and A. P. Butler. Water Resources Research, 2008, 44, .	1.7	4
97	Sinusoidal oscillations radiating from a cylindrical source in thermal conduction or groundwater flow: Closed-form solutions. International Journal for Numerical and Analytical Methods in Geomechanics, 2010, 34, 1743-1765.	1.7	4
98	Discussion of "Intrinsic permeability of materials ranging from sand to rock-fill using natural air convection tests" ¹ Appears in the Canadian Geotechnical Journal, 48 (5): 679-690 [doi:10.1139/t10-097].. Canadian Geotechnical Journal, 2012, 49, 1319-1322.	1.4	4
99	Uniaxial Compression Tests on Diesel-Contaminated Frozen Silty-Soil Specimens. Journal of Cold Regions Engineering - ASCE, 2013, 27, 132-154.	0.5	4
100	A mass-flux method to estimate pollutants in groundwater. Environmental Geotechnics, 2019, 6, 101-110.	1.3	4
101	Internal Erosion of a 5 Åmm Crushed Sand in a Rigid Wall-Permeameter: Experimental Methods and Results. Geotechnical Testing Journal, 2021, 44, 20190218.	0.5	4
102	Barometric Fluctuations and Duration of Variable-Head (Slug) Field Permeability Tests. Geotechnical Testing Journal, 2022, 45, 20200287.	0.5	4
103	Laboratory permeability tests on sand: influence of the compaction method on anisotropy. Reply. Canadian Geotechnical Journal, 1991, 28, 172-173.	1.4	3
104	Discussion of "Measuring the Hydraulic Conductivity of Soil Bentonite Backfill" by Jeremy P. Britton, George M. Filz, and Wayne E. Herring. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2006, 132, 809-812.	1.5	3
105	Àcoulement saturé et non saturé de l'eau souterraine vers des drains en aquifère à nappe libre. Canadian Geotechnical Journal, 2008, 45, 1210-1223.	1.4	3
106	Pumping more than 100 m ³ /min from excavations for open-air amphitheatres in the city of Québec. Canadian Journal of Civil Engineering, 1991, 18, 875-881.	0.7	2
107	Using Public Well Data Banks to Improve Field Investigations for Excavations. Geotechnical Testing Journal, 2021, 44, 20200202.	0.5	2
108	Analytical, Numerical and Experimental Studies on Steady-State Seepage Through 3D Rockfill Trapezoidal Dikes. Mine Water and the Environment, 0, , 1.	0.9	2

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109	Stabilité interne des murs en terre armée. Canadian Geotechnical Journal, 1977, 14, 389-398.	1.4	1
110	Conception et performance d'un champ d'égouttage de grandes dimensions. Canadian Journal of Civil Engineering, 1988, 15, 216-222.	0.7	1
111	Discussion of "Variations in moisture content for a soil cover over a 10 year period". Canadian Geotechnical Journal, 2007, 44, 103-106.	1.4	1
112	Comment on "Computing residence times for flow towards a pumping well: nomograph solution and validity of the small draw-down approximation". Technical Note published in Hydrogeology Journal (2005) 13:889-894, by Matthew J. Simpson. Hydrogeology Journal, 2007, 15, 429-430.	0.9	1
113	Porosity and Permeability in Sediment Mixtures. Ground Water, 2008, 46, 794-795.	0.7	1
114	Characterizing Hydraulic Conductivity with the Direct-push Permeameter. Ground Water, 2010, 48, 792-795.	0.7	1
115	New stability method for embankments on clay foundations: Reply. Canadian Geotechnical Journal, 1984, 21, 195-196.	1.4	0
116	Theoretical bearing capacity of clay under shallow footings: verifying whether it is realistic. Canadian Geotechnical Journal, 1988, 25, 62-75.	1.4	0
117	Two case histories of major frost heaving in refrigerated buildings: thermal analyses, repairs, and prevention. Canadian Geotechnical Journal, 1988, 25, 535-540.	1.4	0
118	REPLY TO the preceding Discussion by P. N. Ballukraya of "Using Cooper-Jacob Approximation to Take Account of Pumping Well Storage Effects in Early Drawdown Data of a Confined Aquifer". Ground Water, 1993, 31, 324-324.	0.7	0
119	Discussion of "Estimating Storage Coefficient and Transmissivity from Slug Test Data" by Prabhata K. Swamee and Sushil K. Singh. Journal of Irrigation and Drainage Engineering - ASCE, 2009, 135, 125-125.	0.6	0
120	Reply to the commentary of Antonis D. Koussis and Evangelos Akylas. Bulletin of Engineering Geology and the Environment, 2012, 71, 603-604.	1.6	0
121	Simplifying the calculation of equivalent diameter in sedimentation tests. Canadian Geotechnical Journal, 2015, 52, 1186-1189.	1.4	0
122	Méthode de composition modale: description quantitative de la granulométrie et autres paramètres. Revue Française De Géotechnique, 2018, , 1.	0.1	0