

Walter A Illman

List of Publications by Year in descending order

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papers

1,494
citations

304743

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414414

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34
all docs

34
docs citations

34
times ranked

501
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydraulic tomography in fractured granite: Mizunami Underground Research site, Japan. <i>Water Resources Research</i> , 2009, 45, .	4.2	182
2	Three-dimensional transient hydraulic tomography in a highly heterogeneous glaciofluvial aquifer-aquitard system. <i>Water Resources Research</i> , 2011, 47, .	4.2	118
3	Steady-state hydraulic tomography in a laboratory aquifer with deterministic heterogeneity: Multi-method and multiscale validation of hydraulic conductivity tomograms. <i>Journal of Hydrology</i> , 2007, 341, 222-234.	5.4	115
4	Comparison of aquifer characterization approaches through steady state groundwater model validation: A controlled laboratory sandbox study. <i>Water Resources Research</i> , 2010, 46, .	4.2	93
5	Practical Issues in Imaging Hydraulic Conductivity through Hydraulic Tomography. <i>Ground Water</i> , 2008, 46, 120-132.	1.3	84
6	Type curve interpretation of a cross-hole pneumatic injection test in unsaturated fractured tuff. <i>Water Resources Research</i> , 2001, 37, 583-603.	4.2	70
7	Comparison of Hydraulic Tomography with Traditional Methods at a Highly Heterogeneous Site. <i>Ground Water</i> , 2015, 53, 71-89.	1.3	68
8	Capturing aquifer heterogeneity: Comparison of approaches through controlled sandbox experiments. <i>Water Resources Research</i> , 2011, 47, .	4.2	67
9	What does hydraulic tomography tell us about fractured geological media? A field study and synthetic experiments. <i>Journal of Hydrology</i> , 2015, 531, 17-30.	5.4	58
10	Three-dimensional imaging of aquifer and aquitard heterogeneity via transient hydraulic tomography at a highly heterogeneous field site. <i>Journal of Hydrology</i> , 2018, 559, 392-410.	5.4	57
11	On the importance of geological data for hydraulic tomography analysis: Laboratory sandbox study. <i>Journal of Hydrology</i> , 2016, 542, 156-171.	5.4	56
12	Transient hydraulic tomography in a fractured dolostone: Laboratory rock block experiments. <i>Water Resources Research</i> , 2012, 48, .	4.2	54
13	Incorporating geologic information into hydraulic tomography: A general framework based on geostatistical approach. <i>Water Resources Research</i> , 2017, 53, 2850-2876.	4.2	53
14	An Application of Hydraulic Tomography to a Large-scale Fractured Granite Site, Mizunami, Japan. <i>Ground Water</i> , 2016, 54, 793-804.	1.3	52
15	On the importance of geological data for three-dimensional steady-state hydraulic tomography analysis at a highly heterogeneous aquifer-aquitard system. <i>Journal of Hydrology</i> , 2017, 544, 640-657.	5.4	48
16	Should hydraulic tomography data be interpreted using geostatistical inverse modeling? A laboratory sandbox investigation. <i>Water Resources Research</i> , 2015, 51, 3219-3237.	4.2	42
17	A Reduced-order Successive Linear Estimator for Geostatistical Inversion and its Application in Hydraulic Tomography. <i>Water Resources Research</i> , 2018, 54, 1616-1632.	4.2	42
18	Validation of hydraulic tomography in an unconfined aquifer: A controlled sandbox study. <i>Water Resources Research</i> , 2015, 51, 4137-4155.	4.2	32

#	ARTICLE	IF	CITATIONS
19	Comparative study of transient hydraulic tomography with varying parameterizations and zonations: Laboratory sandbox investigation. <i>Journal of Hydrology</i> , 2017, 554, 758-779.	5.4	31
20	Geostatistical reduced-order models in underdetermined inverse problems. <i>Water Resources Research</i> , 2013, 49, 6587-6600.	4.2	29
21	Exploitation of pump-and-treat remediation systems for characterization of hydraulic heterogeneity. <i>Journal of Hydrology</i> , 2019, 573, 324-340.	5.4	29
22	Asymptotic Analysis of Cross-Hole Hydraulic Tests in Fractured Granite. <i>Ground Water</i> , 2006, 44, 555-563.	1.3	28
23	Analysis of permeability scaling within single boreholes. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	17
24	Three-dimensional hydraulic tomography analysis of long-term municipal wellfield operations: Validation with synthetic flow and solute transport data. <i>Journal of Hydrology</i> , 2020, 590, 125438.	5.4	16
25	The importance of fracture geometry and matrix data on transient hydraulic tomography in fractured rocks: Analyses of synthetic and laboratory rock block experiments. <i>Journal of Hydrology</i> , 2021, 601, 126700.	5.4	14
26	Automatic estimation of aquifer parameters using long-term water supply pumping and injection records. <i>Hydrogeology Journal</i> , 2016, 24, 1443-1461.	2.1	13
27	Large-scale three-dimensional hydraulic tomography analyses of long-term municipal wellfield operations. <i>Journal of Hydrology</i> , 2022, 610, 127911.	5.4	8
28	An Analytical Method to Calculate Groundwater Released From an Aquitard Undergoing Nonlinear Consolidation. <i>Water Resources Research</i> , 2020, 56, e2020WR027320.	4.2	6
29	Interpretation of pressure recovery data from packer inflation. <i>Water Resources Research</i> , 2004, 40, .	4.2	3
30	A New Inverse Modeling Approach for Hydraulic Conductivity Estimation Based on Gaussian Mixtures. <i>Water Resources Research</i> , 2020, 56, e2019WR026531.	4.2	3
31	Hydraulic tomography analysis of municipal-well operation data with geology-based groundwater models. <i>Hydrogeology Journal</i> , 2021, 29, 1979-1997.	2.1	3
32	Accelerating Groundwater Data Assimilation with a Gradient-Free Active Subspace Method. <i>Water Resources Research</i> , 0, , e2021WR029610.	4.2	2
33	An Algorithm for Hydraulic Tomography Based on a Mixture Model. <i>Lecture Notes in Computer Science</i> , 2019, , 471-486.	1.3	1