Kuo-chin Hsu

List of Publications by Year
in descending order

57 papers	**1,574** citations	361413 **20** h-index	315739 **38** g-index
59 all docs	**59** docs citations	**59** times ranked	**1388** citing authors

#	Article	IF	Citations
1	GIS for the assessment of the groundwater recharge potential zone. Environmental Geology, 2009, 58, 185-195.	1.2	231
2	Clustering spatial–temporal precipitation data using wavelet transform and self-organizing map neural network. Advances in Water Resources, 2010, 33, 190-200.	3.8	116
3	A simultaneous successive linear estimator and a guide for hydraulic tomography analysis. Water Resources Research, 2009, 45, .	4.2	114
4	Hydraulic Tomography for Detecting Fracture Zone Connectivity. Ground Water, 2008, 46, 183-192.	1.3	83
5	A comparison of estimated and calculated effective porosity. Hydrogeology Journal, 1998, 6, 156-165.	2.1	76
6	Higher-Order Effects on Flow and Transport in Randomly Heterogeneous Porous Media. Water Resources Research, 1996, 32, 571-582.	4.2	70
7	Climate-induced hydrological impacts on the groundwater system of the Pingtung Plain, Taiwan. Hydrogeology Journal, 2007, 15, 903-913.	2.1	59
8	Oxygen and hydrogen isotopes for the characteristics of groundwater recharge: a case study from the Chih-Pen Creek basin, Taiwan. Environmental Earth Sciences, 2011, 62, 393-402.	2.7	59
9	Identifying Seasonal Groundwater Recharge Using Environmental Stable Isotopes. Water (Switzerland), 2014, 6, 2849-2861.	2.7	55
10	Uniqueness, scale, and resolution issues in groundwater model parameter identification. Water Science and Engineering, 2015, 8, 175-194.	3.2	50
11	A view toward the future of subsurface characterization: CAT scanning groundwater basins. Water Resources Research, 2008, 44, .	4.2	44
12	Necessary conditions for inverse modeling of flow through variably saturated porous media. Advances in Water Resources, 2013, 52, 50-61.	3.8	44
13	The application of the first-order second-moment method to analyze poroelastic problems in heterogeneous porous media. Journal of Hydrology, 2009, 369, 209-221.	5.4	41
14	Groundwater recharge and exploitative potential zone mapping using GIS and GOD techniques. Environmental Earth Sciences, 2013, 68, 267-280.	2.7	39
15	Cross–correlation analysis and information content of observed heads during pumping in unconfined aquifers. Water Resources Research, 2013, 49, 713-731.	4.2	39
16	A revisit of drawdown behavior during pumping in unconfined aquifers. Water Resources Research, 2011, 47, .	4.2	37
17	Joint interpretation of sequential pumping tests in unconfined aquifers. Water Resources Research, 2013, 49, 1782-1796.	4.2	35
18	River stage tomography: A new approach for characterizing groundwater basins. Water Resources Research, 2009, 45, .	4.2	30

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19	GIS and SBF for estimating groundwater recharge of a mountainous basin in the Wu River watershed, Taiwan. Journal of Earth System Science, 2014, 123, 503-516.	1.3	26
20	Second-order expressions for velocity moments in two- and three-dimensional statistically anisotropic media. Water Resources Research, 1997, 33, 625-637.	4.2	22
21	Dynamics of deformation and water flow in heterogeneous porous media and its impact on soil properties. Hydrological Processes, 2009, 23, 3569-3582.	2.6	21
22	The use of the Levy-stable distribution for geophysical data analysis. Hydrogeology Journal, 2009, 17, 1265-1273.	2.1	21
23	Why Hydraulic Tomography Works?. Ground Water, 2014, 52, 168-172.	1.3	19
24	Evaluation of the effects of ground shaking and static volumetric strain change on earthquake-related groundwater level changes in Taiwan. Earth, Planets and Space, 2010, 62, 391-400.	2.5	17
25	Electrical resistivity tomography applied to groundwater aquifer at downstream of Chih-Ben Creek basin, Taiwan. Environmental Earth Sciences, 2015, 73, 4681-4687.	2.7	17
26	Fusion of hydrologic and geophysical tomographic surveys. Geosciences Journal, 2008, 12, 159-167.	1.2	16
27	A general fractal model of flow and solute transport in randomly heterogeneous porous media. Water Resources Research, 2007, 43, .	4.2	15
28	The influence of the log-conductivity autocovariance structure on macrodispersion coefficients. Journal of Contaminant Hydrology, 2003, 65, 65-77.	3.3	13
29	Basin-scale groundwater response to precipitation variation and anthropogenic pumping in Chih-Ben watershed, Taiwan. Hydrogeology Journal, 2012, 20, 499-517.	2.1	13
30	Fusion of active and passive hydrologic and geophysical tomographic surveys: The future of subsurface characterization. Geophysical Monograph Series, 2007, , 109-120.	0.1	12
31	Dynamic interactions of groundwater flow and soil deformation in randomly heterogeneous porous media. Journal of Hydrology, 2013, 499, 50-60.	5.4	12
32	A technique for quantifying groundwater pumping and land subsidence using a nonlinear stochastic poroelastic model. Environmental Earth Sciences, 2015, 73, 8111-8124.	2.7	12
33	Modeling compaction of multi-layer-aquifer system due to groundwater withdrawal. Engineering Geology, 2015, 187, 143-155.	6.3	12
34	A general method for obtaining analytical expressions for the first-order velocity covariance in heterogeneous porous media. Water Resources Research, 1999, 35, 2273-2277.	4.2	10
35	Multiscale flow and transport model in three-dimensional fractal porous media. Stochastic Environmental Research and Risk Assessment, 2010, 24, 1053-1065.	4.0	10
36	Improvement of generalized finite difference method for stochastic subsurface flow modeling. Journal of Computational Physics, 2021, 429, 110002.	3.8	10

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37	Identifying poromechanism and spatially varying parameters of aquifer compaction in Choushui River alluvial fan, Taiwan. Engineering Geology, 2018, 245, 20-32.	6.3	9
38	Novel method for analyzing transport parameters in through-diffusion tests. Journal of Environmental Radioactivity, 2019, 196, 125-132.	1.7	9
39	Combining gray system and poroelastic models to investigate subsidence problems in Tainan, Taiwan. Environmental Earth Sciences, 2015, 73, 7237-7253.	2.7	8
40	On estimating the earthquake-induced changes in hydrogeological properties of the Choshuishi Alluvial Fan, Taiwan. Hydrogeology Journal, 2005, 13, 467-480.	2.1	7
41	Well spacing of the doublet at the Huangtsuishan geothermal site, Taiwan. Geothermics, 2021, 89, 101968.	3.4	7
42	Estimating the extent of stress influence by using earthquake triggering groundwater level variations in Taiwan. Journal of Asian Earth Sciences, 2015, 111, 373-383.	2.3	5
43	General first-order expressions for solute transport in two- and three-dimensional randomly heterogeneous porous media. , 2000, , .		4
44	On the second-order correction to velocity covariance for two-dimensional statistically isotropic porous media. Water Resources Research, 2000, 36, 349-353.	4.2	4
45	Current monsoon conditions of river runoff and groundwater formation in west pacific regions: Kamchatka Peninsula and Taiwan Island. Water Resources, 2012, 39, 610-621.	0.9	4
46	Estimating Poromechanical Properties Using a Nonlinear Poroelastic Model. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 1396-1401.	3.0	3
47	Bayesian Integration Using Resistivity and Lithology for Improving Estimation of Hydraulic Conductivity. Water Resources Research, 2021, 57, e2020WR027346.	4.2	3
48	Flow and Solute Transport in Strongly Heterogeneous Porous Media. Practice Periodical of Hazardous, Toxic and Radioactive Waste Management, 2004, 8, 148-154.	0.4	2
49	Stochastic analysis of groundwater flow in a two‐dimensional generalized fractal field. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2008, 31, 551-563.	1.1	2
50	Evaluation of Hydraulic Properties of Aquitards Using Earthquake‐Triggered Groundwater Variation. Ground Water, 2017, 55, 747-756.	1.3	2
51	Analytical expressions for macrodispersion coefficients in three‐dimensional randomly heterogeneous porous media. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2003, 26, 375-380.	1.1	1
52	Use of Falling-Head Infiltration to Estimate Hydraulic Conductivity at Various Depths. Soil Science, 2012, 177, 543-553.	0.9	1
53	Stochastic Analysis of a Thermal Uncoupled Thermal-Hydraulic-Mechanical Model. , 2017, , .		1
54	The responses of precipitation and streamflow to recent climate variations in the frigid and subtropical zones. Journal of Water and Climate Change, 2020, 11, 54-73.	2.9	1

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55	Impact of Time-Varying Cement Degradation on the Borehole Cement Sheath Integrity in a Supercritical CO_2 Environment. International Journal of Geomechanics, 2022, 22, .	2.7	1
56	Probabilistic assessment of contamination using the two-phase flow model. Waste Management and Research, 2003, 21, 367-376.	3.9	0
57	Investigation of cross-interactions of coupled thermal-hydraulic-mechanical model using stochastic simulations. Computers and Geotechnics, 2021, 133, 104020.	4.7	0