

Thomas H Harter

List of Publications by Year in descending order

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Version: 2024-02-01

115
papers

5,135
citations

76326

40
h-index

98798

67
g-index

132
all docs

132
docs citations

132
times ranked

5427
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Minimizing N-losses at the orchard scale. <i>Acta Horticulturae</i> , 2022, , 25-34. | 0.2 | 0 |
| 2 | Potential effects on groundwater quality associated with infiltrating stormwater through dry wells for aquifer recharge. <i>Journal of Contaminant Hydrology</i> , 2022, 246, 103964. | 3.3 | 8 |
| 3 | Denitrification in heterogeneous aquifers: Relevance of spatial variability and performance of homogenized parameters. <i>Advances in Water Resources</i> , 2022, , 104168. | 3.8 | 3 |
| 4 | Stochastic assessment of the effect of land-use change on nonpoint source-driven groundwater quality using an efficient scaling approach. <i>Stochastic Environmental Research and Risk Assessment</i> , 2021, 35, 959-970. | 4.0 | 7 |
| 5 | Measuring nitrate leaching across the critical zone at the field to farm scale. <i>Vadose Zone Journal</i> , 2021, 20, e20094. | 2.2 | 9 |
| 6 | Transdisciplinary contributions and opportunities in soil physical hydrology. <i>Vadose Zone Journal</i> , 2021, 20, e20114. | 2.2 | 1 |
| 7 | Anthropogenic basin closure and groundwater salinization (ABCSAL). <i>Journal of Hydrology</i> , 2021, 593, 125787. | 5.4 | 19 |
| 8 | Machine learning predictions of mean ages of shallow well samples in the Great Lakes Basin, USA. <i>Journal of Hydrology</i> , 2021, 603, 126908. | 5.4 | 11 |
| 9 | Effect of Groundwater Age and Recharge Source on Nitrate Concentrations in Domestic Wells in the San Joaquin Valley. <i>Environmental Science & Technology</i> , 2021, 55, 2265-2275. | 10.0 | 29 |
| 10 | Simulation of Unconfined Aquifer Flow Based on Parallel Adaptive Mesh Refinement. <i>Water Resources Research</i> , 2021, 57, . | 4.2 | 1 |
| 11 | Comment on "Groundwater "Durability"™ Not "Sustainability"™". <i>Ground Water</i> , 2020, 58, 861-862. | 1.3 | 1 |
| 12 | Quantifying the uncertainty in nitrogen application and groundwater nitrate leaching in manure based cropping systems. <i>Agricultural Systems</i> , 2020, 184, 102877. | 6.1 | 16 |
| 13 | Effects of upscaling temporal resolution of groundwater flow and transport boundary conditions on the performance of nitrate-transport models at the regional management scale. <i>Hydrogeology Journal</i> , 2020, 28, 1299-1322. | 2.1 | 8 |
| 14 | Planning for groundwater sustainability accounting for uncertainty and costs: An application to California's Central Valley. <i>Journal of Environmental Management</i> , 2020, 264, 110426. | 7.8 | 16 |
| 15 | On the conceptual complexity of non-point source management: impact of spatial variability. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 1189-1209. | 4.9 | 11 |
| 16 | California's 2014 Sustainable Groundwater Management Act "From the Back Seat to the Driver Seat in the (Inter)National Groundwater Sustainability Movement. <i>Global Issues in Water Policy</i> , 2020, , 511-536. | 0.1 | 3 |
| 17 | UV light and temperature induced fluridone degradation in water and sediment and potential transport into aquifer. <i>Environmental Pollution</i> , 2020, 265, 114750. | 7.5 | 5 |
| 18 | Increasing Groundwater Availability and Seasonal Base Flow Through Agricultural Managed Aquifer Recharge in an Irrigated Basin. <i>Water Resources Research</i> , 2019, 55, 7464-7492. | 4.2 | 45 |

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|----|---|-----|-----------|
| 19 | Source area management practices as remediation tool to address groundwater nitrate pollution in drinking supply wells. <i>Journal of Contaminant Hydrology</i> , 2019, 226, 103521. | 3.3 | 35 |
| 20 | Stochastic Assessment of Nonpoint Source Contamination: Joint Impact of Aquifer Heterogeneity and Well Characteristics on Management Metrics. <i>Water Resources Research</i> , 2019, 55, 6773-6794. | 4.2 | 22 |
| 21 | Sensitivity Analysis and Calibration of an Integrated Hydrologic Model in an Irrigated Agricultural Basin With a Groundwater-Dependent Ecosystem. <i>Water Resources Research</i> , 2019, 55, 7876-7901. | 4.2 | 21 |
| 22 | California groundwater management, science-policy interfaces, and the legacies of artificial legal distinctions. <i>Environmental Research Letters</i> , 2019, 14, 045016. | 5.2 | 24 |
| 23 | An Integrated Approach Toward Sustainability via Groundwater Banking in the Southern Central Valley, California. <i>Water Resources Research</i> , 2019, 55, 2742-2759. | 4.2 | 37 |
| 24 | Cryptosporidium oocyst persistence in agricultural streams – a mobile-immobile model framework assessment. <i>Scientific Reports</i> , 2018, 8, 4603. | 3.3 | 7 |
| 25 | A Bayesian approach to infer nitrogen loading rates from crop and land-use types surrounding private wells in the Central Valley, California. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 2739-2758. | 4.9 | 14 |
| 26 | Modeling guides groundwater management in a basin with river-aquifer interactions. <i>California Agriculture</i> , 2018, 72, 84-95. | 0.8 | 8 |
| 27 | A hybrid machine learning model to predict and visualize nitrate concentration throughout the Central Valley aquifer, California, USA. <i>Science of the Total Environment</i> , 2017, 601-602, 1160-1172. | 8.0 | 124 |
| 28 | Effects of solid-liquid separation and storage on monensin attenuation in dairy waste management systems. <i>Journal of Environmental Management</i> , 2017, 190, 28-34. | 7.8 | 4 |
| 29 | Assessing biosynthetic potential of agricultural groundwater through metagenomic sequencing: A diverse anammox community dominates nitrate-rich groundwater. <i>PLoS ONE</i> , 2017, 12, e0174930. | 2.5 | 26 |
| 30 | Assessing the Potential Exposure of Groundwater to Pesticides: A Model Comparison. <i>Vadose Zone Journal</i> , 2017, 16, 1-13. | 2.2 | 10 |
| 31 | Evaluation of Monensin Transport to Shallow Groundwater after Irrigation with Dairy Lagoon Water. <i>Journal of Environmental Quality</i> , 2016, 45, 480-487. | 2.0 | 11 |
| 32 | Estimating Nitrate Leaching to Groundwater from Orchards: Comparing Crop Nitrogen Excess, Deep Vadose Zone Data-Driven Estimates, and HYDRUS Modeling. <i>Vadose Zone Journal</i> , 2016, 15, 1-13. | 2.2 | 55 |
| 33 | Prediction of capillary air-liquid interfacial area vs. saturation function from relationship between capillary pressure and water saturation. <i>Advances in Water Resources</i> , 2016, 97, 219-223. | 3.8 | 9 |
| 34 | Bayesian nitrate source apportionment to individual groundwater wells in the Central Valley by use of elemental and isotopic tracers. <i>Water Resources Research</i> , 2016, 52, 5577-5597. | 4.2 | 16 |
| 35 | Assessing the effectiveness of drywells as tools for stormwater management and aquifer recharge and their groundwater contamination potential. <i>Journal of Hydrology</i> , 2016, 539, 539-553. | 5.4 | 57 |
| 36 | Assessment of orchard N losses to groundwater with a vadose zone monitoring network. <i>Agricultural Water Management</i> , 2016, 172, 83-95. | 5.6 | 32 |

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|----|---|-----|-----------|
| 37 | Microbial Transport and Fate in the Subsurface Environment: Introduction to the Special Section. <i>Journal of Environmental Quality</i> , 2015, 44, 1333-1337. | 2.0 | 18 |
| 38 | Fecal Indicator and Pathogenic Bacteria and Their Antibiotic Resistance in Alluvial Groundwater of an Irrigated Agricultural Region with Dairies. <i>Journal of Environmental Quality</i> , 2015, 44, 1435-1447. | 2.0 | 41 |
| 39 | Economic Feasibility of Irrigated Agricultural Land Use Buffers to Reduce Groundwater Nitrate in Rural Drinking Water Sources. <i>Water (Switzerland)</i> , 2015, 7, 12-37. | 2.7 | 15 |
| 40 | Hydro-economic analysis of groundwater pumping for irrigated agriculture in California's Central Valley, USA. <i>Hydrogeology Journal</i> , 2015, 23, 1205-1216. | 2.1 | 64 |
| 41 | Potential to assess nitrate leaching vulnerability of irrigated cropland. <i>Journal of Soils and Water Conservation</i> , 2015, 70, 63-72. | 1.6 | 14 |
| 42 | Investigation of the geochemical evolution of groundwater under agricultural land: A case study in northeastern Mexico. <i>Journal of Hydrology</i> , 2015, 521, 410-423. | 5.4 | 137 |
| 43 | California's agricultural regions gear up to actively manage groundwater use and protection. <i>California Agriculture</i> , 2015, 69, 193-201. | 0.8 | 21 |
| 44 | Soil suitability index identifies potential areas for groundwater banking on agricultural lands. <i>California Agriculture</i> , 2015, 69, 75-84. | 0.8 | 73 |
| 45 | Agriculture's Contribution to Nitrate Contamination of Californian Groundwater (1945-2005). <i>Journal of Environmental Quality</i> , 2014, 43, 895-907. | 2.0 | 51 |
| 46 | Microbial Groundwater Sampling Protocol for Fecal-Rich Environments. <i>Ground Water</i> , 2014, 52, 126-136. | 1.3 | 13 |
| 47 | Antibiotic-resistant E. coli in surface water and groundwater in dairy operations in Northern California. <i>Environmental Monitoring and Assessment</i> , 2014, 186, 1253-1260. | 2.7 | 57 |
| 48 | Vectorized simulation of groundwater flow and streamline transport. <i>Environmental Modelling and Software</i> , 2014, 52, 207-221. | 4.5 | 15 |
| 49 | Parallel simulation of groundwater non-point source pollution using algebraic multigrid preconditioners. <i>Computational Geosciences</i> , 2014, 18, 851-867. | 2.4 | 12 |
| 50 | Assessment of sources and fate of nitrate in shallow groundwater of an agricultural area by using a multi-tracer approach. <i>Science of the Total Environment</i> , 2014, 470-471, 855-864. | 8.0 | 204 |
| 51 | Nitrate Leaching in Californian Rice Fields: A Field- and Regional-Scale Assessment. <i>Journal of Environmental Quality</i> , 2014, 43, 881-894. | 2.0 | 27 |
| 52 | Out of sight but not out of mind: California refocuses on groundwater. <i>California Agriculture</i> , 2014, 68, 54-55. | 0.8 | 26 |
| 53 | Identifying sources of groundwater nitrate contamination in a large alluvial groundwater basin with highly diversified intensive agricultural production. <i>Journal of Contaminant Hydrology</i> , 2013, 151, 140-154. | 3.3 | 146 |
| 54 | Agroeconomic Analysis of Nitrate Crop Source Reductions. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2013, 139, 501-511. | 2.6 | 6 |

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|----|---|------|-----------|
| 55 | Advancing water resource management in agricultural, rural, and urbanizing watersheds: Why land-grant universities matter. <i>Journal of Soils and Water Conservation</i> , 2013, 68, 337-348. | 1.6 | 11 |
| 56 | Coupling a spatiotemporally distributed soil water budget with stream depletion functions to inform stakeholder-driven management of groundwater-dependent ecosystems. <i>Water Resources Research</i> , 2013, 49, 7292-7310. | 4.2 | 18 |
| 57 | Domestic wells have high probability of pumping septic tank leachate. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 2453-2467. | 4.9 | 37 |
| 58 | Richards Equation-Based Modeling to Estimate Flow and Nitrate Transport in a Deep Alluvial Vadose Zone. <i>Vadose Zone Journal</i> , 2012, 11, vzj2011.0145. | 2.2 | 35 |
| 59 | Deposition of <i>Cryptosporidium parvum</i> Oocysts in Porous Media: A Synthesis of Attachment Efficiencies Measured under Varying Environmental Conditions. <i>Environmental Science & Technology</i> , 2012, 46, 9491-9500. | 10.0 | 20 |
| 60 | Occurrence of Trenbolone Acetate Metabolites in Simulated Confined Animal Feeding Operation (CAFO) Runoff. <i>Environmental Science & Technology</i> , 2012, 46, 3803-3810. | 10.0 | 39 |
| 61 | Analysis of matrix effects critical to microbial transport in organic waste-affected soils across laboratory and field scales. <i>Water Resources Research</i> , 2012, 48, . | 4.2 | 16 |
| 62 | A groundwater nonpoint source pollution modeling framework to evaluate long-term dynamics of pollutant exceedance probabilities in wells and other discharge locations. <i>Water Resources Research</i> , 2012, 48, . | 4.2 | 48 |
| 63 | Fate of Endogenous Steroid Hormones in Steer Feedlots Under Simulated Rainfall-Induced Runoff. <i>Environmental Science & Technology</i> , 2011, 45, 8811-8818. | 10.0 | 70 |
| 64 | Effects of pH and Manure on Transport of Sulfonamide Antibiotics in Soil. <i>Journal of Environmental Quality</i> , 2011, 40, 1652-1660. | 2.0 | 45 |
| 65 | Effect of sulfonamide antibiotics on microbial diversity and activity in a Californian Mollic Haploxeralf. <i>Journal of Soils and Sediments</i> , 2010, 10, 537-544. | 3.0 | 83 |
| 66 | Use and Environmental Occurrence of Antibiotics in Freestall Dairy Farms with Manured Forage Fields. <i>Environmental Science & Technology</i> , 2010, 44, 6591-6600. | 10.0 | 180 |
| 67 | Characterizing sources of nitrate leaching from an irrigated dairy farm in Merced County, California. <i>Journal of Contaminant Hydrology</i> , 2009, 110, 9-21. | 3.3 | 30 |
| 68 | Domestic Well Capture Zone and Influence of the Gravel Pack Length. <i>Ground Water</i> , 2009, 47, 277-286. | 1.3 | 21 |
| 69 | Spatial Variability of Hydraulic Properties and Sediment Characteristics in a Deep Alluvial Unsaturated Zone. <i>Vadose Zone Journal</i> , 2009, 8, 276-289. | 2.2 | 45 |
| 70 | Geological control of physical and chemical hydrology in California vernal pools. <i>Wetlands</i> , 2008, 28, 347-362. | 1.5 | 39 |
| 71 | Comment on "Field observations of soil moisture variability across scales" by James S. Famiglietti et al.. <i>Water Resources Research</i> , 2008, 44, . | 4.2 | 9 |
| 72 | Environmental Occurrence and Shallow Ground Water Detection of the Antibiotic Monensin from Dairy Farms. <i>Journal of Environmental Quality</i> , 2008, 37, S78-85. | 2.0 | 84 |

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|----|--|------|-----------|
| 73 | Developing Risk Models of <i>Cryptosporidium</i> Transport in Soils from Vegetated, Tilted Soilbox Experiments. <i>Journal of Environmental Quality</i> , 2008, 37, 245-258. | 2.0 | 19 |
| 74 | Land Management Impacts on Dairy-Derived Dissolved Organic Carbon in Ground Water. <i>Journal of Environmental Quality</i> , 2008, 37, 333-343. | 2.0 | 24 |
| 75 | Saturated Zone Denitrification: A Potential for Natural Attenuation of Nitrate Contamination in Shallow Groundwater Under Dairy Operations. <i>Environmental Science & Technology</i> , 2007, 41, 759-765. | 10.0 | 104 |
| 76 | Explaining soil moisture variability as a function of mean soil moisture: A stochastic unsaturated flow perspective. <i>Geophysical Research Letters</i> , 2007, 34, . | 4.0 | 177 |
| 77 | Upscaling Hydraulic Properties and Soil Water Flow Processes in Heterogeneous Soils: A Review. <i>Vadose Zone Journal</i> , 2007, 6, 1-28. | 2.2 | 215 |
| 78 | Modeling shallow water table evaporation in irrigated regions. <i>Irrigation and Drainage Systems</i> , 2007, 21, 119-132. | 0.5 | 17 |
| 79 | Transport of <i>Cryptosporidium parvum</i> in porous media: Long-term elution experiments and continuous time random walk filtration modeling. <i>Water Resources Research</i> , 2006, 42, . | 4.2 | 78 |
| 80 | Nonpoint source solute transport normal to aquifer bedding in heterogeneous, Markov chain random fields. <i>Water Resources Research</i> , 2006, 42, . | 4.2 | 22 |
| 81 | The role of perched aquifers in hydrological connectivity and biogeochemical processes in vernal pool landscapes, Central Valley, California. <i>Hydrological Processes</i> , 2006, 20, 1157-1175. | 2.6 | 84 |
| 82 | Deposition of <i>Cryptosporidium</i> Oocysts in Streambeds. <i>Applied and Environmental Microbiology</i> , 2006, 72, 1810-1816. | 3.1 | 54 |
| 83 | Economically Driven Simulation of Regional Water Systems: Friant-Kern, California. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2006, 132, 468-479. | 2.6 | 36 |
| 84 | Capture and Retention of <i>Cryptosporidium parvum</i> Oocysts by <i>Pseudomonas aeruginosa</i> Biofilms. <i>Applied and Environmental Microbiology</i> , 2006, 72, 6242-6247. | 3.1 | 61 |
| 85 | Spatial Variability and Transport of Nitrate in a Deep Alluvial Vadose Zone. <i>Vadose Zone Journal</i> , 2005, 4, 41-54. | 2.2 | 54 |
| 86 | A fractal investigation of solute travel time in a heterogeneous aquifer: transition probability/Markov chain representation. <i>Ecological Modelling</i> , 2005, 182, 355-370. | 2.5 | 12 |
| 87 | Solute transport in a heterogeneous aquifer: a search for nonlinear deterministic dynamics. <i>Nonlinear Processes in Geophysics</i> , 2005, 12, 211-218. | 1.3 | 14 |
| 88 | Association of <i>Cryptosporidium parvum</i> with Suspended Particles: Impact on Oocyst Sedimentation. <i>Applied and Environmental Microbiology</i> , 2005, 71, 1072-1078. | 3.1 | 82 |
| 89 | Finite-size scaling analysis of percolation in three-dimensional correlated binary Markov chain random fields. <i>Physical Review E</i> , 2005, 72, 026120. | 2.1 | 59 |
| 90 | Deep vadose zone hydrology demonstrates fate of nitrate in eastern San Joaquin Valley. <i>California Agriculture</i> , 2005, 59, 124-132. | 0.8 | 38 |

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|-----|--|------|-----------|
| 91 | Neural Networks Prediction of Soil Hydraulic Functions for Alluvial Soils Using Multistep Outflow Data. Soil Science Society of America Journal, 2004, 68, 417-429. | 2.2 | 94 |
| 92 | Assessment of Root Zone Nitrogen Leaching as Affected by Irrigation and Nutrient Management Practices. Vadose Zone Journal, 2004, 3, 1353-1366. | 2.2 | 48 |
| 93 | Evaluation of a Simple, Inexpensive Dialysis Sampler for Small Diameter Monitoring Wells. Ground Water Monitoring and Remediation, 2004, 24, 97-105. | 0.8 | 10 |
| 94 | Effective conductivity of periodic media with cuboid inclusions. Advances in Water Resources, 2004, 27, 1017-1032. | 3.8 | 8 |
| 95 | Inverse modeling of large-scale spatially distributed vadose zone properties using global optimization. Water Resources Research, 2004, 40, . | 4.2 | 77 |
| 96 | Estimation of groundwater pumping as closure to the water balance of a semi-arid, irrigated agricultural basin. Journal of Hydrology, 2004, 297, 51-73. | 5.4 | 71 |
| 97 | Dairy Wastewater, Aquaculture, and Spawning Fish as Sources of Steroid Hormones in the Aquatic Environment. Environmental Science & Technology, 2004, 38, 6377-6384. | 10.0 | 262 |
| 98 | Assessment of Root Zone Nitrogen Leaching as Affected by Irrigation and Nutrient Management Practices. Vadose Zone Journal, 2004, 3, 1353-1366. | 2.2 | 11 |
| 99 | A field study of unstable preferential flow during soil water redistribution. Water Resources Research, 2003, 39, . | 4.2 | 36 |
| 100 | Transport of <i>Cryptosporidium parvum</i> Oocysts through Vegetated Buffer Strips and Estimated Filtration Efficiency. Applied and Environmental Microbiology, 2002, 68, 5517-5527. | 3.1 | 74 |
| 101 | Stochastic Analysis of Reactive Transport Processes in Heterogeneous Porous Media. , 2002, , 89-167. | | 2 |
| 102 | Visualizing Preferential Flow Paths using Ammonium Carbonate and a pH Indicator. Soil Science Society of America Journal, 2002, 66, 347-351. | 2.2 | 10 |
| 103 | Shallow groundwater quality on dairy farms with irrigated forage crops. Journal of Contaminant Hydrology, 2002, 55, 287-315. | 3.3 | 147 |
| 104 | Visualizing Preferential Flow Paths using Ammonium Carbonate and a pH Indicator. Soil Science Society of America Journal, 2002, 66, 347. | 2.2 | 10 |
| 105 | Land Retirement Option and Retired Land Management. , 2001, , 1. | | 0 |
| 106 | Application of stochastic theory in groundwater contamination risk analysis: Suggestions for the consulting geologist and/or engineer. , 2000, , . | | 2 |
| 107 | Colloid Transport and Filtration of <i>Cryptosporidium parvum</i> in Sandy Soils and Aquifer Sediments. Environmental Science & Technology, 2000, 34, 62-70. | 10.0 | 214 |
| 108 | Water flow and solute spreading in heterogeneous soils with spatially variable water content. Water Resources Research, 1999, 35, 415-426. | 4.2 | 51 |

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|-----|--|-----|-----------|
| 109 | Flow in unsaturated random porous media, nonlinear numerical analysis and comparison to analytical stochastic models. <i>Advances in Water Resources</i> , 1998, 22, 257-272. | 3.8 | 34 |
| 110 | Stochastic analysis of solute transport in heterogeneous, variably saturated soils. <i>Water Resources Research</i> , 1996, 32, 1585-1595. | 4.2 | 63 |
| 111 | Conditional stochastic analysis of solute transport in heterogeneous, variably saturated soils. <i>Water Resources Research</i> , 1996, 32, 1597-1609. | 4.2 | 51 |
| 112 | Linearized cosimulation of hydraulic conductivity, pressure head, and flux in saturated and unsaturated, heterogeneous porous media. <i>Journal of Hydrology</i> , 1996, 183, 169-190. | 5.4 | 6 |
| 113 | A Numerical Model for Water Flow and Chemical Transport in Variably Saturated Porous Media. <i>Ground Water</i> , 1993, 31, 634-644. | 1.3 | 114 |
| 114 | An efficient method for simulating steady unsaturated flow in random porous media: Using an analytical perturbation solution as initial guess to a numerical model. <i>Water Resources Research</i> , 1993, 29, 4139-4149. | 4.2 | 17 |
| 115 | Raising the voice of science in complex socio-political contexts: an assessment of contested water decisions. <i>Journal of Environmental Policy and Planning</i> , 0, , 1-19. | 2.8 | 1 |