# Josh Viers

List of Publications by Year
in descending order

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|---|---|---|---|
| 94 papers | 4,878 citations | 109137 35 h-index | 106150 65 g-index |
| 99 all docs | 99 docs citations | 99 times ranked | 6463 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Simulating Polyculture Farming to Learn Automation Policies for Plant Diversity and Precision Irrigation. IEEE Transactions on Automation Science and Engineering, 2022, 19, 1352-1364. | 3.4 | 6 |
| 2 | Assessing Hydrological Alteration Caused by Climate Change and Reservoir Operations in the San Joaquin River Basin, California. Frontiers in Environmental Science, 2022, 10, . | 1.5 | 11 |
| 3 | Special report: The AgAID AI institute for transforming workforce and decision support in agriculture. Computers and Electronics in Agriculture, 2022, 197, 106944. | 3.7 | 8 |
| 4 | Energy and water co-benefits from covering canals with solar panels. Nature Sustainability, 2021, 4, 609-617. | 11.5 | 54 |
| 5 | Advances in soil moisture retrieval from multispectral remote sensing using unoccupied aircraft systems and machine learning techniques. Hydrology and Earth System Sciences, 2021, 25, 2739-2758. | 1.9 | 18 |
| 6 | Flowing from East to West: A bibliometric analysis of recent advances in environmental flow science in China. Ecological Indicators, 2021, 125, 107358. | 2.6 | 12 |
| 7 | Learning Seed Placements and Automation Policies for Polyculture Farming with Companion Plants. , 2021, , . | | 6 |
| 8 | Exploring the multiscale hydrologic regulation of multipond systems in a humid agricultural catchment. Water Research, 2020, 184, 115987. | 5.3 | 18 |
| 9 | Ecosystem services in vineyard landscapes: a focus on aboveground carbon storage and accumulation. Carbon Balance and Management, 2020, 15, 23. | 1.4 | 7 |
| 10 | sUAS Remote Sensing of Vineyard Evapotranspiration Quantifies Spatiotemporal Uncertainty in Satellite-Borne ET Estimates. Remote Sensing, 2020, 12, 3251. | 1.8 | 6 |
| 11 | Dynamic river processes drive variability in particulate organic matter over fine spatiotemporal scales. Freshwater Biology, 2020, 65, 1569-1584. | 1.2 | 4 |
| 12 | Interaction of restored hydrological connectivity and herbicide suppresses dominance of a floodplain invasive species. Restoration Ecology, 2020, 28, 1551-1560. | 1.4 | 1 |
| 13 | A glass half empty: Limited voices, limited groundwater security for California. Science of the Total Environment, 2020, 738, 139529. | 3.9 | 13 |
| 14 | Machine Learning Based Soil Moisture Retrieval from Unmanned Aircraft System Multispectral Remote Sensing. , 2020, , . | | 1 |
| 15 | Coupling landscapes and river flows to restore highly modified rivers. Water Resources Research, 2019, 55, 4512-4532. | 1.7 | 35 |
| 16 | Does More Storage Give California More Water?. Journal of the American Water Resources Association, 2019, 55, 759-771. | 1.0 | 11 |
| 17 | RAPID-MOLT: A Meso-scale, Open-source, Low-cost Testbed for Robot Assisted Precision Irrigation and Delivery. , 2019, , . | | 3 |
| 18 | Human-induced and natural carbon storage in floodplains of the Central Valley of California. Science of the Total Environment, 2019, 651, 851-858. | 3.9 | 20 |

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|---|---|---|---|
| 19 | A freshwater conservation blueprint for California: prioritizing watersheds for freshwater biodiversity. Freshwater Science, 2018, 37, 417-431. | 0.9 | 25 |
| 20 | Towards Automating Precision Irrigation: Deep Learning to Infer Local Soil Moisture Conditions from Synthetic Aerial Agricultural Images. , 2018, , . | | 21 |
| 21 | A detailed study on accuracy of uncooled thermal cameras by exploring the data collection workflow. , 2018, , . | | 2 |
| 22 | Nanotechnology for sustainable food production: promising opportunities and scientific challenges. Environmental Science: Nano, 2017, 4, 767-781. | 2.2 | 202 |
| 23 | From berries to blocks: carbon stock quantification of a California vineyard. Carbon Balance and Management, 2017, 12, 5. | 1.4 | 18 |
| 24 | More Pop per Drop: Functional Environmental Flows to Meet Ecosystem Needs and Human Demands. , 2017, , . | | 2 |
| 25 | Not all breaks are equal: Variable hydrologic and geomorphic responses to intentional levee breaches along the lower Cosumnes River, California. River Research and Applications, 2017, 33, 1143-1155. | 0.7 | 34 |
| 26 | Flood regime typology for floodplain ecosystem management as applied to the unregulated Cosumnes River of California, United States. Ecohydrology, 2017, 10, e1817. | 1.1 | 22 |
| 27 | Precision Counting of Sandhill Cranes in Staten Island by FAA Approved Small Unmanned Aerial System Night Missions. , 2017, , . | | 1 |
| 28 | Economic and policy drivers of agricultural water desalination in Californiaâ€™s central valley. Agricultural Water Management, 2017, 194, 192-203. | 2.4 | 20 |
| 29 | Meeting ecosystem needs while satisfying human demands. Environmental Research Letters, 2017, 12, 061001. | 2.2 | 4 |
| 30 | Deep carbon storage potential of buried floodplain soils. Scientific Reports, 2017, 7, 8181. | 1.6 | 32 |
| 31 | Missing the Boat on Freshwater Fish Conservation in California. Conservation Letters, 2017, 10, 77-85. | 2.8 | 47 |
| 32 | Patterns of bird diversity and habitat use in mixed vineyard-matorral landscapes of Central Chile. Ecological Indicators, 2017, 73, 345-357. | 2.6 | 28 |
| 33 | Invasive Aquatic Vegetation Management in the Sacramentoâ€“San Joaquin River Delta: Status and Recommendations. San Francisco Estuary and Watershed Science, 2017, 15, . | 0.2 | 11 |
| 34 | Assessing Ecosystem Services and Multifunctionality for Vineyard Systems. Frontiers in Environmental Science, 2017, 5, . | 1.5 | 47 |
| 35 | DATE: A handheld co-robotic device for automated tuning of emitters to enable precision irrigation. , 2016, , . | | 7 |
| 36 | Valuing yearâ€toâ€go hydrologic forecast improvements for a peaking hydropower system in the Sierra Nevada. Water Resources Research, 2016, 52, 3815-3828. | 1.7 | 15 |

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|---|---|---|---|
| 37 | Climate-Adaptive Water Year Typing for Instream Flow Requirements in Californiaâ€™s Sierra Nevada. Journal of Water Resources Planning and Management - ASCE, 2016, 142, . | 1.3 | 13 |
| 38 | Simulation Modeling to Secure Environmental Flows in a Diversion Modified Flow Regime. Journal of Water Resources Planning and Management - ASCE, 2016, 142, . | 1.3 | 4 |
| 39 | Pulsed Flow Wave Attenuation on a Regulated Montane River. River Research and Applications, 2016, 32, 1047-1058. | 0.7 | 6 |
| 40 | Combined Effects of Reservoir Operations and Climate Warming on the Flow Regime of Hydropower Bypass Reaches of California's Sierra Nevada. River Research and Applications, 2015, 31, 269-279. | 0.7 | 22 |
| 41 | Economic Feasibility of Irrigated Agricultural Land Use Buffers to Reduce Groundwater Nitrate in Rural Drinking Water Sources. Water (Switzerland), 2015, 7, 12-37. | 1.2 | 15 |
| 42 | Patterns of Freshwater Species Richness, Endemism, and Vulnerability in California. PLoS ONE, 2015, 10, e0130710. | 1.1 | 26 |
| 43 | The fire frequencyâ€severity relationship and the legacy of fire suppression in California forests. Ecosphere, 2015, 6, 1-23. | 1.0 | 206 |
| 44 | Functional Flows in Modified Riverscapes: Hydrographs, Habitats and Opportunities. BioScience, 2015, 65, 963-972. | 2.2 | 177 |
| 45 | Agriculture's Contribution to Nitrate Contamination of Californian Groundwater (1945-2005). Journal of Environmental Quality, 2014, 43, 895-907. | 1.0 | 51 |
| 46 | 100 years of Californiaâ€™s water rights system: patterns, trends and uncertainty. Environmental Research Letters, 2014, 9, 084012. | 2.2 | 91 |
| 47 | Simulating High-Elevation Hydropower with Regional Climate Warming in the West Slope, Sierra Nevada. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 714-723. | 1.3 | 15 |
| 48 | Systematic Screening of Dams for Environmental Flow Assessment and Implementation. BioScience, 2014, 64, 1006-1018. | 2.2 | 41 |
| 49 | A programmable information system for management and analysis of aquatic species range data in California. Environmental Modelling and Software, 2014, 53, 13-26. | 1.9 | 15 |
| 50 | Stream temperature sensitivity to climate warming in Californiaâ€™s Sierra Nevada: impacts to coldwater habitat. Climatic Change, 2013, 116, 149-170. | 1.7 | 75 |
| 51 | In bad waters: Water year classification in nonstationary climates. Water Resources Research, 2013, 49, 1137-1148. | 1.7 | 50 |
| 52 | A Method to Consider Whether Dams Mitigate Climate Change Effects on Stream Temperatures. Journal of the American Water Resources Association, 2013, 49, 1456-1472. | 1.0 | 87 |
| 53 | HYDROPOWER COSTS OF ENVIRONMENTAL FLOWS AND CLIMATE WARMING IN CALIFORNIA'S UPPER YUBA RIVER WATERSHED. River Research and Applications, 2013, 29, 1291-1305. | 0.7 | 37 |
| 54 | Vinecology: pairing wine with nature. Conservation Letters, 2013, 6, 287-299. | 2.8 | 98 |

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|---|---|---|---|
| 55 | Modern departures in fire severity and area vary by forest type, Sierra Nevada and southern Cascades, California, USA. Ecosphere, 2013, 4, 1-28. | 1.0 | 150 |
| 56 | NONâ€UNIFORM CHANGES TO WHITEWATER RECREATION IN CALIFORNIA'S SIERRA NEVADA FROM REGIONAL CLIMATE WARMING. River Research and Applications, 2012, 28, 1299-1311. | 0.7 | 10 |
| 57 | Multiscale Patterns of Riparian Plant Diversity and Implications for Restoration. Restoration Ecology, 2012, 20, 160-169. | 1.4 | 23 |
| 58 | Tarping as an Alternative for Perennial Pepperweed (Lepidium latifolium) Control. Invasive Plant Science and Management, 2011, 4, 66-72. | 0.5 | 11 |
| 59 | Potential impacts on hydrology and hydropower production under climate warming of the Sierra Nevada. Journal of Water and Climate Change, 2011, 2, 29-43. | 1.2 | 38 |
| 60 | Freshwater conservation options for a changing climate in California's Sierra Nevada. Marine and Freshwater Research, 2011, 62, 266. | 0.7 | 28 |
| 61 | Hydropower Relicensing and Climate Change1. Journal of the American Water Resources Association, 2011, 47, 655-661. | 1.0 | 72 |
| 62 | Environmental heterogeneity and community structure of the Kobuk River, Alaska, in response to climate change. Ecosphere, 2011, 2, art44. | 1.0 | 7 |
| 63 | Using Topography to Meet Wildlife and Fuels Treatment Objectives in Fire-Suppressed Landscapes. Environmental Management, 2010, 46, 809-819. | 1.2 | 26 |
| 64 | Tropical dry forest trees and the relationship between local abundance and geographic range. Journal of Biogeography, 2010, 37, 951-959. | 1.4 | 24 |
| 65 | Ecology and Management of the Spring Snowmelt Recession. BioScience, 2010, 60, 114-127. | 2.2 | 96 |
| 66 | Hydrologic Response and Watershed Sensitivity to Climate Warming in California's Sierra Nevada. PLoS ONE, 2010, 5, e9932. | 1.1 | 104 |
| 67 | Riparian bird response to vegetation structure: a multiscale analysis using LiDAR measurements of canopy height. Ecological Applications, 2009, 19, 1848-1857. | 1.8 | 88 |
| 68 | Why Climate Change Makes Riparian Restoration More Important than Ever: Recommendations for Practice and Research. Ecological Restoration, 2009, 27, 330-338. | 0.6 | 166 |
| 69 | Progress and challenges in freshwater conservation planning. Aquatic Conservation: Marine and Freshwater Ecosystems, 2009, 19, 474-485. | 0.9 | 169 |
| 70 | Modeling the Hydrology of Climate Change in Californiaâ€™s Sierra Nevada for Subwatershed Scale Adaptation<sup>1</sup>. Journal of the American Water Resources Association, 2009, 45, 1409-1423. | 1.0 | 65 |
| 71 | Threats and biodiversity in the mediterranean biome. Diversity and Distributions, 2009, 15, 188-197. | 1.9 | 300 |
| 72 | Spatial Patterns of Endemic Plants in California. Natural Areas Journal, 2009, 29, 344-366. | 0.2 | 32 |

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|---|---|---|---|
| 73 | Objective classification of Navarro River salmon habitat: a watershedâ€based critical habitat case study. Aquatic Conservation: Marine and Freshwater Ecosystems, 2008, 18, 147-162. | 0.9 | 4 |
| 74 | Identification of invasive vegetation using hyperspectral remote sensing in the California Delta ecosystem. Remote Sensing of Environment, 2008, 112, 4034-4047. | 4.6 | 272 |
| 75 | Monitoring freshwater, estuarine and near-shore benthic ecosystems with multi-sensor remote sensing: An introduction to the special issue. Remote Sensing of Environment, 2008, 112, 3993-3995. | 4.6 | 41 |
| 76 | Favorable environments and the persistence of naturally rare species. Conservation Letters, 2008, 1, 65-74. | 2.8 | 30 |
| 77 | PRODUCTIVITY ALTERS THE SCALE DEPENDENCE OF THE DIVERSITYâ€"INVASIBILITY RELATIONSHIP. Ecology, 2007, 88, 1940-1947. | 1.5 | 86 |
| 78 | Use of a case-control study and geographic information systems to determine environmental and demographic risk factors for canine leptospirosis. Veterinary Research, 2007, 38, 37-50. | 1.1 | 73 |
| 79 | Serpentine Grasslands. , 2007, , 145-155. | | 3 |
| 80 | INVASION IN A DIVERSITY HOTSPOT: EXOTIC COVER AND NATIVE RICHNESS IN THE CALIFORNIAN SERPENTINE FLORA. Ecology, 2006, 87, 695-703. | 1.5 | 57 |
| 81 | REGIONAL AND LOCAL SPECIES RICHNESS IN AN INSULAR ENVIRONMENT: SERPENTINE PLANTS IN CALIFORNIA. Ecological Monographs, 2006, 76, 41-56. | 2.4 | 157 |
| 82 | Biotic homogenization of the California flora in urban and urbanizing regions. Biological Conservation, 2006, 127, 282-291. | 1.9 | 145 |
| 83 | Hydrologic Variability of the Cosumnes River Floodplain. San Francisco Estuary and Watershed Science, 2006, 4, . | 0.2 | 30 |
| 84 | HUMAN IMPACTS, PLANT INVASION, AND IMPERILED PLANT SPECIES IN CALIFORNIA. , 2006, 16, 1338-1350. | | 137 |
| 85 | Beta diversity and the scale-dependence of the productivity-diversity relationship: a test in the Californian serpentine flora. Journal of Ecology, 2006, 94, 110-117. | 1.9 | 87 |
| 86 | Priming the productivity pump: flood pulse driven trends in suspended algal biomass distribution across a restored floodplain. Freshwater Biology, 2006, 51, 1417-1433. | 1.2 | 81 |
| 87 | SERPENTINE ENDEMISM IN THE CALIFORNIA FLORA: A DATABASE OF SERPENTINE AFFINITY. MadroÃ±o, 2005, 52, 222-257. | 0.3 | 150 |
| 88 | Anthropogenic impacts upon plant species richness and net primary productivity in California. Ecology Letters, 2004, 8, 127-137. | 3.0 | 53 |
| 89 | FISH INVASIONS IN CALIFORNIA WATERSHEDS: TESTING HYPOTHESES USING LANDSCAPE PATTERNS. , 2004, 14, 1507-1525. | | 142 |
| 90 | Homogenization of Californiaâ€™s Fish Fauna Through Abiotic Change. , 2001, , 259-278. | | 62 |

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|---|---|---|---|
| 91 | Climatic and spatial patterns of diversity in the serpentine plants of California. Diversity and Distributions, 2000, 6, 153-162. | 1.9 | 48 |
| 92 | The California Water Quality Assessment Spatial Database. , 1999, , . | | 0 |
| 93 | Regional Hydrologic Classification for Sustainable Dam Operations in China: Exploratory Applications in the Yangtze River Basin. Journal of the American Water Resources Association, 0, , . | 1.0 | 2 |
| 94 | Shifting Trade-offs: Finding the Sustainable Nexus of Hydropower and Environmental Flows in the San Joaquin River Watershed, California. Frontiers in Environmental Science, 0, 10, . | 1.5 | 7 |