

Francesca Pianosi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3121329/publications.pdf>

Version: 2024-02-01

61
papers

4,081
citations

172207

29
h-index

161609

54
g-index

97
all docs

97
docs citations

97
times ranked

4302
citing authors

#	ARTICLE	IF	CITATIONS
1	Sensitivity analysis of environmental models: A systematic review with practical workflow. <i>Environmental Modelling and Software</i> , 2016, 79, 214-232.	1.9	926
2	A Matlab toolbox for Global Sensitivity Analysis. <i>Environmental Modelling and Software</i> , 2015, 70, 80-85.	1.9	454
3	A simple and efficient method for global sensitivity analysis based on cumulative distribution functions. <i>Environmental Modelling and Software</i> , 2015, 67, 1-11.	1.9	317
4	Global Sensitivity Analysis of environmental models: Convergence and validation. <i>Environmental Modelling and Software</i> , 2016, 79, 135-152.	1.9	227
5	Water reservoir control under economic, social and environmental constraints. <i>Automatica</i> , 2008, 44, 1595-1607.	3.0	168
6	Curses, Tradeoffs, and Scalable Management: Advancing Evolutionary Multiobjective Direct Policy Search to Improve Water Reservoir Operations. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .	1.3	168
7	Value of long-term streamflow forecasts to reservoir operations for water supply in snow-dominated river catchments. <i>Water Resources Research</i> , 2016, 52, 4209-4225.	1.7	159
8	Comparison of variance-based and moment-independent global sensitivity analysis approaches by application to the SWAT model. <i>Environmental Modelling and Software</i> , 2017, 91, 210-222.	1.9	105
9	Quantifying the importance of spatial resolution and other factors through global sensitivity analysis of a flood inundation model. <i>Water Resources Research</i> , 2016, 52, 9146-9163.	1.7	92
10	A large-scale simulation model to assess karstic groundwater recharge over Europe and the Mediterranean. <i>Geoscientific Model Development</i> , 2015, 8, 1729-1746.	1.3	89
11	Distribution-based sensitivity analysis from a generic input-output sample. <i>Environmental Modelling and Software</i> , 2018, 108, 197-207.	1.9	81
12	Event-based classification for global study of river flood generating processes. <i>Hydrological Processes</i> , 2020, 34, 1514-1529.	1.1	80
13	A multiobjective reinforcement learning approach to water resources systems operation: Pareto frontier approximation in a single run. <i>Water Resources Research</i> , 2013, 49, 3476-3486.	1.7	77
14	Understanding the time-varying importance of different uncertainty sources in hydrological modelling using global sensitivity analysis. <i>Hydrological Processes</i> , 2016, 30, 3991-4003.	1.1	68
15	An argument-driven classification and comparison of reservoir operation optimization methods. <i>Advances in Water Resources</i> , 2019, 128, 74-86.	1.7	65
16	What has Global Sensitivity Analysis ever done for us? A systematic review to support scientific advancement and to inform policy-making in earth system modelling. <i>Earth-Science Reviews</i> , 2019, 194, 1-18.	4.0	65
17	Making the most of data: An information selection and assessment framework to improve water systems operations. <i>Water Resources Research</i> , 2015, 51, 9073-9093.	1.7	56
18	Optimal Operation of the Multireservoir System in the Seine River Basin Using Deterministic and Ensemble Forecasts. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .	1.3	54

#	ARTICLE	IF	CITATIONS
19	Dealing with deep uncertainties in landslide modelling for disaster risk reduction under climate change. <i>Natural Hazards and Earth System Sciences</i> , 2017, 17, 225-241.	1.5	52
20	Dynamic modeling of predictive uncertainty by regression on absolute errors. <i>Water Resources Research</i> , 2012, 48, .	1.7	47
21	Optimizing Watershed Management by Coordinated Operation of Storing Facilities. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2013, 139, 492-500.	1.3	46
22	Trend detection in seasonal data: from hydrology to water resources. <i>Journal of Hydrology</i> , 2014, 511, 171-179.	2.3	46
23	How Do Climate and Catchment Attributes Influence Flood Generating Processes? A Large-sample Study for 671 Catchments Across the Contiguous USA. <i>Water Resources Research</i> , 2021, 57, e2020WR028300.	1.7	46
24	Integration, participation and optimal control in water resources planning and management. <i>Applied Mathematics and Computation</i> , 2008, 206, 21-33.	1.4	42
25	A multiobjective response surface approach for improved water quality planning in lakes and reservoirs. <i>Water Resources Research</i> , 2010, 46, .	1.7	40
26	Real-time management of a multipurpose water reservoir with a heteroscedastic inflow model. <i>Water Resources Research</i> , 2009, 45, .	1.7	37
27	Assessing water reservoirs management and development in Northern Vietnam. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 189-199.	1.9	36
28	V2Karst V1.1: a parsimonious large-scale integrated vegetation recharge model to simulate the impact of climate and land cover change in karst regions. <i>Geoscientific Model Development</i> , 2018, 11, 4933-4964.	1.3	34
29	Valuing hydrological alteration in multi-objective water resources management. <i>Journal of Hydrology</i> , 2012, 472-473, 277-286.	2.3	32
30	Tree-based fitted Q-iteration for multi-objective Markov decision processes in water resource management. <i>Journal of Hydroinformatics</i> , 2013, 15, 258-270.	1.1	27
31	Matlab/R workflows to assess critical choices in Global Sensitivity Analysis using the SAFE toolbox. <i>MethodsX</i> , 2019, 6, 2258-2280.	0.7	26
32	On doing hydrology with dragons: Realizing the value of perceptual models and knowledge accumulation. <i>Wiley Interdisciplinary Reviews: Water</i> , 2021, 8, e1550.	2.8	26
33	A framework for the quantitative assessment of climate change impacts on water-related activities at the basin scale. <i>Hydrology and Earth System Sciences</i> , 2011, 15, 2025-2038.	1.9	25
34	Assessing rainfall runoff models for the management of Lake Verbano. <i>Hydrological Processes</i> , 2010, 24, 3195-3205.	1.1	21
35	Artificial Neural Networks and Multi Objective Genetic Algorithms for water resources management: an application to the Hoabinh reservoir in Vietnam. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 10579-10584.	0.4	19
36	Tree-based Fitted Q-iteration for Multi-Objective Markov Decision problems. , 2012, , .		19

#	ARTICLE	IF	CITATIONS
37	Universal approximators for direct policy search in multi-purpose water reservoir management: A comparative analysis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6234-6239.	0.4	16
38	Sensitivity analysis of data-driven groundwater forecasts to hydroclimatic controls in irrigated croplands. Journal of Hydrology, 2020, 587, 124957.	2.3	16
39	How Important Are Model Structural and Contextual Uncertainties when Estimating the Optimized Performance of Water Resource Systems?. Water Resources Research, 2019, 55, 2170-2193.	1.7	15
40	How successfully is open-source research software adopted? Results and implications of surveying the users of a sensitivity analysis toolbox. Environmental Modelling and Software, 2020, 124, 104579.	1.9	15
41	Assessing the value of seasonal hydrological forecasts for improving water resource management: insights from a pilot application in the UK. Hydrology and Earth System Sciences, 2020, 24, 6059-6073.	1.9	15
42	Receding horizon control for water resources management. Applied Mathematics and Computation, 2008, 204, 621-631.	1.4	14
43	On the evaluation of climate change impact models. Wiley Interdisciplinary Reviews: Climate Change, 2022, 13, .	3.6	14
44	Stochastic and Robust Control of Water Resource Systems: Concepts, Methods and Applications. , 2012, , 383-401.		11
45	Multi-objective fitted Q-iteration: Pareto frontier approximation in one single run. , 2011, , .		10
46	An open-source package with interactive Jupyter Notebooks to enhance the accessibility of reservoir operations simulation and optimisation. Environmental Modelling and Software, 2021, 145, 105188.	1.9	9
47	The data-based mechanistic approach in hydrological modelling. , 2007, , 27-48.		9
48	Including informal housing in slope stability analysis – an application to a data-scarce location in the humid tropics. Natural Hazards and Earth System Sciences, 2020, 20, 3161-3177.	1.5	9
49	Use of Reservoir Operation Optimization Methods in Practice: Insights from a Survey of Water Resource Managers. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	8
50	ANN-based representation of parametric and residual uncertainty of models. , 2010, , .		7
51	Improving flow forecasting by error correction modelling in altered catchment conditions. Hydrological Processes, 2014, 28, 2524-2534.	1.1	7
52	Identification of a flow-routing model for the Red River network. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1037-1042.	0.4	5
53	Technical Report – Methods: A Diagnostic Approach to Analyze the Direction of Change in Model Outputs Based on Global Variations in the Model Inputs. Water Resources Research, 2020, 56, e2020WR027153.	1.7	4
54	Meta-model of an irrigation district distributed-parameter model. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15523-15528.	0.4	3

#	ARTICLE	IF	CITATIONS
55	An Introduction to the SAFE Matlab Toolbox With Practical Examples and Guidelines. , 2017, , 363-378.		3
56	Sensitivity Analysis of Environmental Models: A Systematic Review with Practical Workflow. , 2014, , .		2
57	A Multimethod Global Sensitivity Analysis Approach to Support the Calibration and Evaluation of Land Surface Models. , 2017, , 125-144.		2
58	DATA-BASED MECHANISTIC MODELLING OF A SNOW AFFECTED BASIN. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 1-6.	0.4	1
59	Flood forecasting for heteroscedastic streamflow processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14534-14539.	0.4	1
60	Extended Ritz method for reservoir management over an infinite horizon. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14546-14551.	0.4	1
61	Erratum for "Optimal Operation of the Multireservoir System in the Seine River Basin Using Deterministic and Ensemble Forecasts" by A. Ficchì, L. Raso, D. Dorchies, F. Pianosi, P.-O. Malaterre, P.-J. Van Overloop, and M. Jay-Allemand. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	1