

Salvatore Grimaldi

List of Publications by Year in descending order

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Version: 2024-02-01

84
papers

5,333
citations

81743

39
h-index

88477

70
g-index

99
all docs

99
docs citations

99
times ranked

4752
citing authors

#	ARTICLE	IF	CITATIONS
1	Citizens AND Hydrology (CANDHY): conceptualizing a transdisciplinary framework for citizen science addressing hydrological challenges. <i>Hydrological Sciences Journal</i> , 2022, 67, 2534-2551.	1.2	33
2	Massive feature extraction for explaining and foretelling hydroclimatic time series forecastability at the global scale. <i>Geoscience Frontiers</i> , 2022, 13, 101349.	4.3	10
3	Continuous hydrologic modelling for small and ungauged basins: A comparison of eight rainfall models for sub-daily runoff simulations. <i>Journal of Hydrology</i> , 2022, 610, 127866.	2.3	17
4	Low-cost stage-camera system for continuous water-level monitoring in ephemeral streams. <i>Hydrological Sciences Journal</i> , 2022, 67, 1439-1448.	1.2	18
5	An evidence for enhancing the design hydrograph estimation for small and ungauged basins in Ethiopia. <i>Journal of Hydrology: Regional Studies</i> , 2022, 42, 101123.	1.0	3
6	Continuous hydrologic modelling for design simulation in small and ungauged basins: A step forward and some tests for its practical use. <i>Journal of Hydrology</i> , 2021, 595, 125664.	2.3	55
7	The Use of Lamination Basins for Mitigation of the Urban Flooding Risk: The Case Study of Peschici. <i>Lecture Notes in Civil Engineering</i> , 2021, , 491-500.	0.3	2
8	Global-scale massive feature extraction from monthly hydroclimatic time series: Statistical characterizations, spatial patterns and hydrological similarity. <i>Science of the Total Environment</i> , 2021, 767, 144612.	3.9	25
9	Hillslope Erosion Mitigation: An Experimental Proof of a Nature-Based Solution. <i>Sustainability</i> , 2021, 13, 6058.	1.6	23
10	Riparian vegetation as a marker for bankfull and management discharge evaluation: The case study of Rio Torbido river basin (central Italy). <i>Journal of Agricultural Engineering</i> , 2021, 52, .	0.7	3
11	On the Deployment of Out-of-the-Box Embedded Devices for Self-Powered River Surface Flow Velocity Monitoring at the Edge. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 7027.	1.3	6
12	Towards a Transdisciplinary Theoretical Framework of Citizen Science: Results from a Meta-Review Analysis. <i>Sustainability</i> , 2021, 13, 7904.	1.6	9
13	Enabling Image-Based Streamflow Monitoring at the Edge. <i>Remote Sensing</i> , 2020, 12, 2047.	1.8	15
14	An Evaluation of Image Velocimetry Techniques under Low Flow Conditions and High Seeding Densities Using Unmanned Aerial Systems. <i>Remote Sensing</i> , 2020, 12, 232.	1.8	69
15	Brief communication: Comparing hydrological and hydrogeomorphic paradigms for global flood hazard mapping. <i>Natural Hazards and Earth System Sciences</i> , 2020, 20, 1415-1419.	1.5	24
16	UAV-DEMs for Small-Scale Flood Hazard Mapping. <i>Water (Switzerland)</i> , 2020, 12, 1717.	1.2	73
17	The Benefit of Continuous Modelling for Design Hydrograph Estimation in Small and Ungauged Basins. <i>Lecture Notes in Civil Engineering</i> , 2020, , 133-139.	0.3	1
18	Design discharge estimation in small and ungauged basins: EBA4SUB framework sensitivity analysis. <i>Journal of Agricultural Engineering</i> , 2020, 51, 107-118.	0.7	9

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19	Towards harmonisation of image velocimetry techniques for river surface velocity observations. Earth System Science Data, 2020, 12, 1545-1559.	3.7	44
20	Investigating runoff formation dynamics: field observations at Cape Fear experimental plot. Environmental Monitoring and Assessment, 2019, 191, 642.	1.3	2
21	Challenges, Opportunities, and Pitfalls for Global Coupled Hydrologic-Hydraulic Modeling of Floods. Water Resources Research, 2019, 55, 5277-5300.	1.7	52
22	Twenty-three unsolved problems in hydrology (UPH) – a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	1.2	474
23	PTV-Stream: A simplified particle tracking velocimetry framework for stream surface flow monitoring. Catena, 2019, 172, 378-386.	2.2	38
24	GFPLAIN250m, a global high-resolution dataset of Earth's floodplains. Scientific Data, 2019, 6, 180309.	2.4	92
25	Description and preliminary results of a 100 square meter rain gauge. Journal of Hydrology, 2018, 556, 827-834.	2.3	18
26	Effective Representation of River Geometry in Hydraulic Flood Forecast Models. Water Resources Research, 2018, 54, 1031-1057.	1.7	44
27	Measurements and Observations in the XXI century (MOXXI): innovation and multi-disciplinarity to sense the hydrological cycle. Hydrological Sciences Journal, 2018, 63, 169-196.	1.2	151
28	Design hydrograph estimation in small and fully ungauged basins: a preliminary assessment of the EBA4SUB framework. Journal of Flood Risk Management, 2018, 11, .	1.6	50
29	Optical Tracking Velocimetry (OTV): Leveraging Optical Flow and Trajectory-Based Filtering for Surface Streamflow Observations. Remote Sensing, 2018, 10, 2010.	1.8	49
30	Optical sensing for stream flow observations: A review. Journal of Agricultural Engineering, 2018, 49, 199-206.	0.7	19
31	Field studies on the soil loss reduction effectiveness of three biodegradable geotextiles. Journal of Agricultural Engineering, 2018, 49, 117-123.	0.7	7
32	Ice dices for monitoring stream surface velocity. Journal of Hydro-Environment Research, 2017, 14, 143-149.	1.0	21
33	“Cape Fear” A Hybrid Hillslope Plot for Monitoring Hydrological Processes. Hydrology, 2017, 4, 35.	1.3	7
34	Optimized glcm-based texture features for improved SAR-based flood mapping. , 2017, , .		4
35	Streamflow Observations From Cameras: Large-scale Particle Image Velocimetry or Particle Tracking Velocimetry?. Water Resources Research, 2017, 53, 10374-10394.	1.7	63
36	A novel permanent gauge-cam station for surface-flow observations on the Tiber River. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 241-251.	0.6	34

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37	Catchment compatibility via copulas: A non-parametric study of the dependence structures of hydrological responses. <i>Advances in Water Resources</i> , 2016, 90, 116-133.	1.7	49
38	Surface flow measurements from drones. <i>Journal of Hydrology</i> , 2016, 540, 240-245.	2.3	99
39	Flow monitoring with a camera: a case study on a flood event in the Tiber River. <i>Environmental Monitoring and Assessment</i> , 2016, 188, 118.	1.3	38
40	One hundred years of return period: Strengths and limitations. <i>Water Resources Research</i> , 2015, 51, 8570-8585.	1.7	61
41	A software package for predicting design-flood hydrographs in small and ungauged basins. <i>Journal of Agricultural Engineering</i> , 2015, 46, 74.	0.7	28
42	Large-Scale Particle Image Velocimetry From an Unmanned Aerial Vehicle. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015, 20, 3269-3275.	3.7	70
43	Do we still need the Rational Formula? An alternative empirical procedure for peak discharge estimation in small and ungauged basins. <i>Hydrological Sciences Journal</i> , 2015, 60, 67-77.	1.2	77
44	Unraveling Flow Patterns through Nonlinear Manifold Learning. <i>PLoS ONE</i> , 2014, 9, e91131.	1.1	17
45	Orienting the camera and firing lasers to enhance large scale particle image velocimetry for streamflow monitoring. <i>Water Resources Research</i> , 2014, 50, 7470-7483.	1.7	60
46	Investigation on the use of geomorphic approaches for the delineation of flood prone areas. <i>Journal of Hydrology</i> , 2014, 517, 863-876.	2.3	110
47	Development and Testing of an Unmanned Aerial Vehicle for Large Scale Particle Image Velocimetry. , 2014, , .		5
48	A Topological Framework for Flow Characterization and Identification. , 2014, , .		1
49	Green-Ampt Curve-Number mixed procedure as an empirical tool for rainfall-runoff modelling in small and ungauged basins. <i>Hydrological Processes</i> , 2013, 27, 1253-1264.	1.1	106
50	Curve-Number/Green-Ampt Mixed Procedure for Net Rainfall Estimation: A Case Study of the Mignone Watershed, IT. <i>Procedia Environmental Sciences</i> , 2013, 19, 113-121.	1.3	15
51	Characterization of eco-friendly fluorescent nanoparticle-doped tracers for environmental sensing. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	9
52	Fluorescent Particles for Non-intrusive Surface Flow Observations. <i>Procedia Environmental Sciences</i> , 2013, 19, 895-903.	1.3	1
53	Flood mapping in ungauged basins using fully continuous hydrologic-hydraulic modeling. <i>Journal of Hydrology</i> , 2013, 487, 39-47.	2.3	137
54	“Panta Rhei” Everything Flows: Change in hydrology and society” The IAHS Scientific Decade 2013-2022. <i>Hydrological Sciences Journal</i> , 2013, 58, 1256-1275.	1.2	569

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55	Curveâ€Number/Greenâ€Ampt mixed procedure for streamflow predictions in ungauged basins: Parameter sensitivity analysis. Hydrological Processes, 2013, 27, 1265-1275.	1.1	62
56	Fluorescent eco-particles for surface flow physics analysis. AIP Advances, 2013, 3, .	0.6	15
57	The influence of the net rainfall mixed Curve Number â€ Green Ampt procedure in flood hazard mapping: a case study in Central Italy. Journal of Agricultural Engineering, 2013, 44, .	0.7	1
58	Multivariate return periods in hydrology: a critical and practical review focusing on synthetic design hydrograph estimation. Hydrology and Earth System Sciences, 2013, 17, 1281-1296.	1.9	226
59	Assessment of Fluorescent Particles for Surface Flow Analysis. Sensors, 2012, 12, 15827-15840.	2.1	13
60	Convolution of linear system using geomorphological watershed information. , 2012, , .		1
61	Tracing of shallow water flows through buoyant fluorescent particles. Flow Measurement and Instrumentation, 2012, 26, 93-101.	1.0	26
62	A continuous simulation model for design-hydrograph estimation in small and ungauged watersheds. Hydrological Sciences Journal, 2012, 57, 1035-1051.	1.2	53
63	Fluorescent particle tracers for surface flow measurements: A proof of concept in a natural stream. Water Resources Research, 2012, 48, .	1.7	37
64	A parsimonious geomorphological unit hydrograph for rainfallâ€runoff modelling in small ungauged basins. Hydrological Sciences Journal, 2012, 57, 73-83.	1.2	114
65	Time of concentration: a paradox in modern hydrology. Hydrological Sciences Journal, 2012, 57, 217-228.	1.2	118
66	Fluorescent particle tracers in surface hydrology: a proof of concept in a semi-natural hillslope. Hydrology and Earth System Sciences, 2012, 16, 2973-2983.	1.9	39
67	Design hydrograph estimation in small and ungauged watersheds: continuous simulation method versus eventâ€based approach. Hydrological Processes, 2012, 26, 3124-3134.	1.1	61
68	Statistical Hydrology. , 2011, , 479-517.		29
69	Synthetic Design Hydrographs Based on Distribution Functions with Finite Support. Journal of Hydrologic Engineering - ASCE, 2011, 16, 434-446.	0.8	60
70	Flow time estimation with spatially variable hillslope velocity in ungauged basins. Advances in Water Resources, 2010, 33, 1216-1223.	1.7	87
71	Characterization of Buoyant Fluorescent Particles for Field Observations of Water Flows. Sensors, 2010, 10, 11512-11529.	2.1	25
72	Pre-processing algorithms and landslide modelling on remotely sensed DEMs. Geomorphology, 2009, 113, 110-125.	1.1	71

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73	Probabilistic characterization of drought properties through copulas. Physics and Chemistry of the Earth, 2009, 34, 596-605.	1.2	185
74	Hydrogeomorphic properties of simulated drainage patterns using digital elevation models: the flat area issue / Propriétés hydro-géomorphologiques de réseaux de drainage simulés à partir de modèles numériques de terrain: la question des zones planes. Hydrological Sciences Journal, 2008, 53, 1176-1193.	1.2	105
75	Fully Nested 3-Copula: Procedure and Application on Hydrological Data. Journal of Hydrologic Engineering - ASCE, 2007, 12, 420-430.	0.8	104
76	A physically-based method for removing pits in digital elevation models. Advances in Water Resources, 2007, 30, 2151-2158.	1.7	98
77	Investigating a floodplain scaling relation using a hydrogeomorphic delineation method. Water Resources Research, 2006, 42, .	1.7	148
78	Design hyetograph analysis with 3-copula function. Hydrological Sciences Journal, 2006, 51, 223-238.	1.2	131
79	Asymmetric copula in multivariate flood frequency analysis. Advances in Water Resources, 2006, 29, 1155-1167.	1.7	341
80	Preserving first and second moments of the slope area relationship during the interpolation of digital elevation models. Advances in Water Resources, 2005, 28, 583-588.	1.7	25
81	Linear Parametric Models Applied to Daily Hydrological Series. Journal of Hydrologic Engineering - ASCE, 2004, 9, 383-391.	0.8	47
82	Sensitivity of a physically based method for terrain interpolation to initial conditions and its conditioning on stream location. Earth Surface Processes and Landforms, 2004, 29, 587-597.	1.2	34
83	Human-flood interactions in Rome over the past 150 years. Advances in Geosciences, 0, 44, 9-13.	12.0	22
84	An update on multivariate return periods in hydrology. Proceedings of the International Association of Hydrological Sciences, 0, 373, 175-178.	1.0	5