Flavia Tauro

List of Publications by Year
in descending order

45 papers	2,394 citations	331538 21 h-index	276775 41 g-index
55 all docs	55 docs citations	55 times ranked	3301 citing authors

#	Article	IF	Citations
1	Twenty-three unsolved problems in hydrology (UPH) â€“ a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	1.2	474
2	On the Use of Unmanned Aerial Systems for Environmental Monitoring. Remote Sensing, 2018, 10, 641.	1.8	433
3	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
4	UAV-Based Thermal Imaging for High-Throughput Field Phenotyping of Black Poplar Response to Drought. Frontiers in Plant Science, 2017, 8, 1681.	1.7	142
5	Time of concentration: a paradox in modern hydrology. Hydrological Sciences Journal, 2012, 57, 217-228.	1.2	118
6	Surface flow measurements from drones. Journal of Hydrology, 2016, 540, 240-245.	2.3	99
7	UAV-DEMs for Small-Scale Flood Hazard Mapping. Water (Switzerland), 2020, 12, 1717.	1.2	73
8	Large-Scale Particle Image Velocimetry From an Unmanned Aerial Vehicle. IEEE/ASME Transactions on Mechatronics, 2015, 20, 3269-3275.	3.7	70
9	An Evaluation of Image Velocimetry Techniques under Low Flow Conditions and High Seeding Densities Using Unmanned Aerial Systems. Remote Sensing, 2020, 12, 232.	1.8	69
10	Orienting the camera and firing lasers to enhance large scale particle image velocimetry for streamflow monitoring. Water Resources Research, 2014, 50, 7470-7483.	1.7	60
11	Assessment of droneâ€based surface flow observations. Hydrological Processes, 2016, 30, 1114-1130.	1.1	57
12	Optical Tracking Velocimetry (OTV): Leveraging Optical Flow and Trajectory-Based Filtering for Surface Streamflow Observations. Remote Sensing, 2018, 10, 2010.	1.8	49
13	Towards harmonisation of image velocimetry techniques for river surface velocity observations. Earth System Science Data, 2020, 12, 1545-1559.	3.7	44
14	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
15	Estimating Maximum Daily Precipitation in the Upper Vistula Basin, Poland. Atmosphere, 2019, 10, 43.	1.0	39
16	PTV-Stream: A simplified particle tracking velocimetry framework for stream surface flow monitoring. Catena, 2019, 172, 378-386.	2.2	38
17	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
18	Citizens AND HYdrology (CANDHY): conceptualizing a transdisciplinary framework for citizen science addressing hydrological challenges. Hydrological Sciences Journal, 2022, 67, 2534-2551.	1.2	33

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19	UAV-Based LiDAR for High-Throughput Determination of Plant Height and Above-Ground Biomass of the Bioenergy Grass Arundo donax. Remote Sensing, 2020, 12, 3464.	1.8	28
20	Tracing of shallow water flows through buoyant fluorescent particles. Flow Measurement and Instrumentation, 2012, 26, 93-101.	1.0	26
21	Characterization of Buoyant Fluorescent Particles for Field Observations of Water Flows. Sensors, 2010, 10, 11512-11529.	2.1	25
22	Hillslope Erosion Mitigation: An Experimental Proof of a Nature-Based Solution. Sustainability, 2021, 13, 6058.	1.6	23
23	Ice dices for monitoring stream surface velocity. Journal of Hydro-Environment Research, 2017, 14, 143-149.	1.0	21
24	Optical sensing for stream flow observations: A review. Journal of Agricultural Engineering, 2018, 49, 199-206.	0.7	19
25	Low-cost stage-camera system for continuous water-level monitoring in ephemeral streams. Hydrological Sciences Journal, 2022, 67, 1439-1448.	1.2	18
26	Unraveling Flow Patterns through Nonlinear Manifold Learning. PLoS ONE, 2014, 9, e91131.	1.1	17
27	Particle tracers and image analysis for surface flow observations. Wiley Interdisciplinary Reviews: Water, 2016, 3, 25-39.	2.8	15
28	Enabling Image-Based Streamflow Monitoring at the Edge. Remote Sensing, 2020, 12, 2047.	1.8	15
29	Assessment of Fluorescent Particles for Surface Flow Analysis. Sensors, 2012, 12, 15827-15840.	2.1	13
30	Surface flows from images: ten days of observations from the Tiber River gauge-cam station. Hydrology Research, 2017, 48, 646-655.	1.1	12
31	Latent heat flux variability and response to drought stress of black poplar: A multi-platform multi-sensor remote and proximal sensing approach to relieve the data scarcity bottleneck. Remote Sensing of Environment, 2022, 268, 112771.	4.6	10
32	Characterization of eco-friendly fluorescent nanoparticle-doped tracers for environmental sensing. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	9
33	River basins on the edge of change. Science, 2021, 372, 680-681.	6.0	9
34	Diatom percolation through soils: a proof of concept laboratory experiment. Ecohydrology, 2016, 9, 753-764.	1.1	8
35	â€œCape Fearâ€â€”A Hybrid Hillslope Plot for Monitoring Hydrological Processes. Hydrology, 2017, 4, 35.	1.3	7
36	Field studies on the soil loss reduction effectiveness of three biodegradable geotextiles. Journal of Agricultural Engineering, 2018, 49, 117-123.	0.7	7

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37	Integrating mechatronics in project-based learning of Malaysian high school students and teachers. International Journal of Mechanical Engineering Education, 2017, 45, 297-320.	0.6	7
38	On the Deployment of Out-of-the-Box Embedded Devices for Self-Powered River Surface Flow Velocity Monitoring at the Edge. Applied Sciences (Switzerland), 2021, 11, 7027.	1.3	6
39	Development and Testing of an Unmanned Aerial Vehicle for Large Scale Particle Image Velocimetry. , 2014, , .		5
40	Cape Fear: monitoring basic hydrological processes in an outdoor hillslope plot. Environmental Monitoring and Assessment, 2017, 189, 132.	1.3	5
41	Investigating runoff formation dynamics: field observations at Cape Fear experimental plot. Environmental Monitoring and Assessment, 2019, 191, 642.	1.3	2
42	Fluorescent Particles for Non-intrusive Surface Flow Observations. Procedia Environmental Sciences, 2013, 19, 895-903.	1.3	1
43	A Topological Framework for Flow Characterization and Identification. , 2014, , .		1
44	Buoyant Fluorescent Particles as a Novel Sensing Technology for Field Observations of Water Flows. , 2011, , .		1
45	Fluorescent Particle Image Tracking Procedure for Shallow Water Flow Tracing. , 2012, , .		0