Mauro Sulis

List of Publications by Year
in descending order

33 papers	1,799 citations	361413 20 h-index	414414 32 g-index
46 all docs	46 docs citations	46 times ranked	2247 citing authors

#	Article	IF	Citations
1	An overview of current applications, challenges, and future trends in distributed process-based models in hydrology. Journal of Hydrology, 2016, 537, 45-60.	5.4	349
2	Surfaceâ€subsurface model intercomparison: A first set of benchmark results to diagnose integrated hydrology and feedbacks. Water Resources Research, 2014, 50, 1531-1549.	4.2	222
3	A Scale-Consistent Terrestrial Systems Modeling Platform Based on COSMO, CLM, and ParFlow. Monthly Weather Review, 2014, 142, 3466-3483.	1.4	140
4	The integrated hydrologic model intercomparison project, <scp>IHâ€MIP2</scp>: A second set of benchmark results to diagnose integrated hydrology and feedbacks. Water Resources Research, 2017, 53, 867-890.	4.2	113
5	A comparison of two physics-based numerical models for simulating surface waterâ€“groundwater interactions. Advances in Water Resources, 2010, 33, 456-467.	3.8	108
6	Assessment of climate change impacts at the catchment scale with a detailed hydrological model of surfaceâ€subsurface interactions and comparison with a land surface model. Water Resources Research, 2011, 47, .	4.2	85
7	Monitoring and Modeling the Terrestrial System from Pores to Catchments: The Transregional Collaborative Research Center on Patterns in the Soilâ€“Vegetationâ€“Atmosphere System. Bulletin of the American Meteorological Society, 2015, 96, 1765-1787.	3.3	80
8	Studying the influence of groundwater representations on land surfaceâ€atmosphere feedbacks during the European heat wave in 2003. Journal of Geophysical Research D: Atmospheres, 2016, 121, 13,301.	3.3	74
9	Hydrologic response to multimodel climate output using a physically based model of groundwater/surface water interactions. Water Resources Research, 2012, 48, .	4.2	62
10	Global Groundwater Modeling and Monitoring: Opportunities and Challenges. Water Resources Research, 2021, 57, .	4.2	62
11	Implementation and scaling of the fully coupled Terrestrial Systems Modeling Platform (TerrSysMP) Tj ETQq1 1 0.784314 rgBT /Overlock Geoscientific Model Development, 2014, 7, 2531-2543.	3.6	54
12	Impact of grid resolution on the integrated and distributed response of a coupled surfaceâ€subsurface hydrological model for the des Anglais catchment, Quebec. Hydrological Processes, 2011, 25, 1853-1865.	2.6	50
13	Human Water Use Impacts on the Strength of the Continental Sink for Atmospheric Water. Geophysical Research Letters, 2018, 45, 4068-4076.	4.0	36
14	Impacts of grid resolution on surface energy fluxes simulated with an integrated surface-groundwater flow model. Hydrology and Earth System Sciences, 2015, 19, 4317-4326.	4.9	35
15	The subsurfaceâ€land surfaceâ€atmosphere connection under convective conditions. Advances in Water Resources, 2015, 83, 240-249.	3.8	32
16	Comparison of two modeling approaches for groundwaterâ€surface water interactions. Hydrological Processes, 2013, 27, 2258-2270.	2.6	29
17	Incorporating a root water uptake model based on the hydraulic architecture approach in terrestrial systems simulations. Agricultural and Forest Meteorology, 2019, 269-270, 28-45.	4.8	28
18	Coupling Groundwater, Vegetation, and Atmospheric Processes: A Comparison of Two Integrated Models. Journal of Hydrometeorology, 2017, 18, 1489-1511.	1.9	26

#	Article	IF	Citations
19	Evaluating the Influence of Plant-Specific Physiological Parameterizations on the Partitioning of Land Surface Energy Fluxes. Journal of Hydrometeorology, 2015, 16, 517-533.	1.9	24
20	The concept of dualâ€boundary forcing in land surfaceâ€subsurface interactions of the terrestrial hydrologic and energy cycles. Water Resources Research, 2014, 50, 8531-8548.	4.2	22
21	The role of aerodynamic resistance in thermal remote sensing-based evapotranspiration models. Remote Sensing of Environment, 2021, 264, 112602.	11.0	22
22	Effects of horizontal grid resolution on evapotranspiration partitioning using TerrSysMP. Journal of Hydrology, 2018, 557, 910-915.	5.4	20
23	Connection Between Root Zone Soil Moisture and Surface Energy Flux Partitioning Using Modeling, Observations, and Data Assimilation for a Temperate Grassland Site in Germany. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2839-2862.	3.0	20
24	Quantifying the Impact of Subsurfaceâ€Land Surface Physical Processes on the Predictive Skill of Subseasonal Mesoscale Atmospheric Simulations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9131-9151.	3.3	18
25	Introduction of an Experimental Terrestrial Forecasting/Monitoring System at Regional to Continental Scales Based on the Terrestrial Systems Modeling Platform (v1.1.0). Water (Switzerland), 2018, 10, 1697.	2.7	17
26	Conjunctive Use of a Hydrological Model and a Multicriteria Decision Support System for a Case Study on the Caia Catchment, Portugal. Journal of Hydrologic Engineering - ASCE, 2009, 14, 141-152.	1.9	14
27	Analysis of coupling errors in a physically-based integrated surface waterâ€“groundwater model. Advances in Water Resources, 2012, 49, 86-96.	3.8	14
28	Evaluating the dualâ€boundary forcing concept in subsurfaceâ€“land surface interactions of the hydrological cycle. Hydrological Processes, 2016, 30, 1563-1573.	2.6	12
29	Insights Into the Aerodynamic Versus Radiometric Surface Temperature Debate in Thermalâ€Based Evaporation Modeling. Geophysical Research Letters, 2022, 49, .	4.0	11
30	An assessment of recharge estimates from stream and well data and from a coupled surface-water/groundwater model for the des Anglais catchment, Quebec (Canada). Hydrogeology Journal, 2015, 23, 1731-1743.	2.1	10
31	Potential Added Value of Incorporating Human Water Use on the Simulation of Evapotranspiration and Precipitation in a Continentalâ€Scale Bedrockâ€toâ€Atmosphere Modeling System: A Validation Study Considering Observational Uncertainty. Journal of Advances in Modeling Earth Systems, 2019, 11, 1959-1980.	3.8	3
32	Downwelling longwave radiation and sensible heat flux observations are critical for surface temperature and emissivity estimation from flux tower data. Scientific Reports, 2022, 12, .	3.3	3
33	Advances in Catchment Science through Integrated Hydrological Modelling and Monitoring. Water (Switzerland), 2021, 13, 2013.	2.7	0