Daniel Schertzer

List of Publications by Year
in descending order

48	2,648	516710 16	243625 44
papers	citations	h-index	g-index

101	101	101	1544
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Physical modeling and analysis of rain and clouds by anisotropic scaling multiplicative processes. Journal of Geophysical Research, 1987, 92, 9693-9714.	3.3	942
2	Multifractal analysis and modeling of rainfall and river flows and scaling, causal transfer functions. Journal of Geophysical Research, 1996, 101, 26427-26440.	3.3	263
3	Multifractals, universality classes and satellite and radar measurements of cloud and rain fields. Journal of Geophysical Research, 1990, 95, 2021-2034.	3.3	220
4	Impact of spatial and temporal resolution of rainfall inputs on urban hydrodynamic modelling outputs: A multi-catchment investigation. Journal of Hydrology, 2015, 531, 389-407.	5.4	206
5	Causal space-time multifractal processes: Predictability and forecasting of rain fields. Journal of Geophysical Research, 1996, 101, 26333-26346.	3.3	137
6	MULTIFRACTALS, GENERALIZED SCALE INVARIANCE AND COMPLEXITY IN GEOPHYSICS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2011, 21, 3417-3456.	1.7	81
7	Multifractal analysis of the Greenland Iceâ€Core Project climate data. Geophysical Research Letters, 1995, 22, 1689-1692.	4.0	79
8	Fractals, Raindrops and Resolution Dependence of Rain Measurements. Journal of Applied Meteorology and Climatology, 1990, 29, 1167-1170.	1.7	57
9	Multifractal analysis of the evolution of simulated precipitation over France in a climate scenario. Comptes Rendus - Geoscience, 2008, 340, 431-440.	1.2	46
10	Scale effect challenges in urban hydrology highlighted with a distributed hydrological model. Hydrology and Earth System Sciences, 2018, 22, 331-350.	4.9	39
11	Do GCMs predict the climate ... or macroweather?. Earth System Dynamics, 2013, 4, 439-454.	7.1	35
12	Development and analysis of a simple model to represent the zero rainfall in a universal multifractal framework. Nonlinear Processes in Geophysics, 2013, 20, 343-356.	1.3	35
13	Impacts of small scale rainfall variability in urban areas: a case study with 1D and 1D/2D hydrological models in a multifractal framework. Urban Water Journal, 2015, 12, 607-617.	2.1	33
14	Spaceâ€“time complexity and multifractal predictability. Physica A: Statistical Mechanics and Its Applications, 2004, 338, 173-186.	2.6	23
15	Toward an operational tool to simulate green roof hydrological impact at the basin scale: a new version of the distributed rainfallâ€“runoff model Multi-Hydro. Water Science and Technology, 2016, 74, 1845-1854.	2.5	20
16	Fractal analysis of urban catchments and their representation in semi-distributed models: imperviousness and sewer system. Hydrology and Earth System Sciences, 2017, 21, 2361-2375.	4.9	17
17	2DVD Data Revisited: Multifractal Insights into Cuts of the Spatiotemporal Rainfall Process. Journal of Hydrometeorology, 2015, 16, 548-562.	1.9	15
18	Rain gauge networksâ€™ limitations and the implications to hydrological modelling highlighted with a X-band radar. Journal of Hydrology, 2020, 583, 124615.	5.4	15

#	Article	IF	Citations
19	Multi-hydro hydrological modelling of a complex peri-urban catchment with storage basins comparing C-band and X-band radar rainfall data. Hydrological Sciences Journal, 2018, 63, 1619-1635.	2.6	13
20	Multifractal Comparison of Reflectivity and Polarimetric Rainfall Data from C- and X-Band Radars and Respective Hydrological Responses of a Complex Catchment Model. Water (Switzerland), 2018, 10, 269.	2.7	13
21	Multifractal characterisation of a simulated surface flow: A case study with Multi-Hydro in Jouy-en-Josas, France. Journal of Hydrology, 2018, 558, 482-495.	5.4	12
22	MÃ©thodes multifractales appliquÃ©es Ã prÃ©vision de pluie en utilisant des donnÃ©es radar. Houille Blanche, 2007, 93, 92-98.	0.3	12
23	Two months of disdrometer data in the Paris area. Earth System Science Data, 2018, 10, 941-950.	9.9	12
24	Assessing cost-effectiveness of nature-based solutions scenarios: Integrating hydrological impacts and life cycle costs. Journal of Cleaner Production, 2021, 329, 129740.	9.3	12
25	Multifractal vector fields and stochastic Clifford algebra. Chaos, 2015, 25, 123127.	2.5	10
26	Space variability impacts on hydrological responses of nature-based solutions and the resulting uncertainty: a case study of Guyancourt (France). Hydrology and Earth System Sciences, 2021, 25, 3137-3162.	4.9	10
27	Small-Scale Rainfall Variability Impacts Analyzed by Fully-Distributed Model Using C-Band and X-Band Radar Data. Water (Switzerland), 2019, 11, 1273.	2.7	9
28	Measurements of the water balance components of a large green roof in the greater Paris area. Earth System Science Data, 2020, 12, 1025-1035.	9.9	9
29	A Century of Turbulent Cascades and the Emergence of Multifractal Operators. Earth and Space Science, 2020, 7, e2019EA000608.	2.6	8
30	Toward an assessment of the hydrological components variability in green infrastructures: Pilot site of the Green Wave (Champs-sur-Marne). Houille Blanche, 2018, 104, 34-42.	0.3	7
31	Climate risks, digital media, and big data: following communication trails to investigate urban communities' resilience. Natural Hazards and Earth System Sciences, 2019, 19, 1485-1498.	3.6	7
32	A New Fractal Approach to Account for Capillary and Adsorption Phenomena in the Water Retention and Transfer Properties of Unsaturated Soils. Water Resources Research, 2020, 56, e2020WR027808.	4.2	7
33	Evaluation of the spatial variability of ecosystem services and natural capital: the urban land cover change impacts on carbon stocks. International Journal of Sustainable Development and World Ecology, 2021, 28, 339-349.	5.9	7
34	A new multifractal-based grain size distribution model. Geoderma, 2021, 404, 115294.	5.1	7
35	Multifractal evaluation of simulated precipitation intensities from the COSMO NWP model. Atmospheric Chemistry and Physics, 2017, 17, 14253-14273.	4.9	6
36	A Device for the Simultaneous Determination of the Water Retention Properties and the Hydraulic Conductivity Function of an Unsaturated Coarse Material; Application to a Green-Roof Volcanic Substrate. Geotechnical Testing Journal, 2020, 43, 547-564.	1.0	6

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37	CaractÃ©ristiques multifractales et extrÃªmes de la prÃ©cipitation Ã haute rÃ©solution, application Ã la dÃ©tection du changement climatique. Revue Des Sciences De L'Eau, 0, 27, 205-216.	0.2	5
38	Disdrometer measurements under Sense-City rainfall simulator. Earth System Science Data, 2020, 12, 835-845.	9.9	4
39	Making rainfall features fun: scientific activities for teaching children aged 5â€“12 years. Hydrology and Earth System Sciences, 2016, 20, 1751-1763.	4.9	3
40	Blunt extension of discrete universal multifractal cascades: development and application to downscaling. Hydrological Sciences Journal, 2020, 65, 1204-1220.	2.6	3
41	Infilling missing data of binary geophysical fields using scale invariant properties through an application to imperviousness in urban areas. Hydrological Sciences Journal, 0, , 1-14.	2.6	3
42	Pandora Box of Multifractals: Barely Open?. , 2018, , 543-563.		2
43	Climate resilience in Paris: A network representation of online strategic documents released by public authorities. Progress in Disaster Science, 2019, 3, 100040.	2.7	2
44	Assessing the impact of outreach strategies in cities coping with climate risks. Geoscience Communication, 2019, 2, 25-38.	0.9	2
45	Approximate multifractal correlation and products of universal multifractal fields, with application to rainfall data. Nonlinear Processes in Geophysics, 2020, 27, 133-145.	1.3	2
46	An Introduction to Multifractals and Scale Symmetry Groups. , 2017, , 1-28.		2
47	Multifractal characterisation of overland flow of nature-based solutions scenarios. Hydrological Sciences Journal, 2022, 67, 1054-1064.	2.6	2
48	Scale invariant relationship between rainfall kinetic energy and intensity in Paris region: An evaluation using universal multifractal framework. Journal of Hydrology, 2022, 609, 127715.	5.4	2