Guy Delrieu

List of Publications by Year
in descending order

59 papers	3,117 citations	159358 30 h-index	161609 54 g-index
65 all docs	65 docs citations	65 times ranked	2720 citing authors

#	Article	IF	Citations
1	Temporal and spatial resolution of rainfall measurements required for urban hydrology. Journal of Hydrology, 2004, 299, 166-179.	2.3	347
2	The Catastrophic Flash-Flood Event of 8â€“9 September 2002 in the Gard Region, France: A First Case Study for the CÃ©vennesâ€“Vivarais Mediterranean Hydrometeorological Observatory. Journal of Hydrometeorology, 2005, 6, 34-52.	0.7	333
3	HyMeX: A 10-Year Multidisciplinary Program on the Mediterranean Water Cycle. Bulletin of the American Meteorological Society, 2014, 95, 1063-1082.	1.7	288
4	Multiregional Satellite Precipitation Products Evaluation over Complex Terrain. Journal of Hydrometeorology, 2016, 17, 1817-1836.	0.7	123
5	Hydrologic Visibility of Weather Radar Systems Operating in Mountainous Regions: Case Study for the ArdÃ¨che Catchment (France). Journal of Hydrometeorology, 2002, 3, 539-555.	0.7	114
6	Use of a weather radar for the hydrology of a mountainous area. Part I: radar measurement interpretation. Journal of Hydrology, 1997, 193, 1-25.	2.3	107
7	Rain Measurement by Raingage-Radar Combination: A Geostatistical Approach. Journal of Atmospheric and Oceanic Technology, 1988, 5, 102-115.	0.5	100
8	Analysis of flash flood regimes in the North-Western and South-Eastern Mediterranean regions. Natural Hazards and Earth System Sciences, 2012, 12, 1255-1265.	1.5	96
9	Variability of rain drop size distribution and its effect on the Zâ€“R relationship: A case study for intense Mediterranean rainfall. Atmospheric Research, 2008, 87, 52-65.	1.8	78
10	Geostatistical radarâ€“raingauge merging: A novel method for the quantification of rain estimation accuracy. Advances in Water Resources, 2014, 71, 110-124.	1.7	77
11	Evaluation of GPM-era Global Satellite Precipitation Products over Multiple Complex Terrain Regions. Remote Sensing, 2019, 11, 2936.	1.8	74
12	Social and Hydrological Responses to Extreme Precipitations: An Interdisciplinary Strategy for Postflood Investigation. Weather, Climate, and Society, 2014, 6, 135-153.	0.5	66
13	Toward an error model for radar quantitative precipitation estimation in the CÃ©vennesâ€“Vivarais region, France. Journal of Hydrology, 2010, 394, 28-41.	2.3	63
14	Integrated high-resolution dataset of high-intensity European and Mediterranean flash floods. Earth System Science Data, 2018, 10, 1783-1794.	3.7	62
15	Distributed hydrologic and hydraulic modelling with radar rainfall input: Reconstruction of the 8â€“9 September 2002 catastrophic flood event in the Gard region, France. Advances in Water Resources, 2009, 32, 1077-1089.	1.7	61
16	Multi-scale hydrometeorological observation and modelling for flash flood understanding. Hydrology and Earth System Sciences, 2014, 18, 3733-3761.	1.9	61
17	Simulation of Radar Mountain Returns Using a Digitized Terrain Model. Journal of Atmospheric and Oceanic Technology, 1995, 12, 1038-1049.	0.5	60
18	Feasibility of Using Mountain Return for the Correction of Ground-Based X-Band Weather Radar Data. Journal of Atmospheric and Oceanic Technology, 1997, 14, 368-385.	0.5	58

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19	Hydrological analysis of a flash flood across a climatic and geologic gradient: The September 18, 2007 event in Western Slovenia. Journal of Hydrology, 2010, 394, 182-197.	2.3	57
20	BollÃ¨ne-2002 Experiment: Radar Quantitative Precipitation Estimation in the CÃ©vennesâ€“Vivarais Region, France. Journal of Applied Meteorology and Climatology, 2009, 48, 1422-1447.	0.6	56
21	Comprehensive postâ€event survey of a flash flood in Western Slovenia: observation strategy and lessons learned. Hydrological Processes, 2009, 23, 3761-3770.	1.1	47
22	Radar rainfall estimation in the context of post-event analysis of flash-flood events. Journal of Hydrology, 2010, 394, 17-27.	2.3	46
23	The CÃ©vennesâ€Vivarais Mediterranean Hydrometeorological Observatory database. Water Resources Research, 2011, 47, .	1.7	45
24	Quantification of Path-Integrated Attenuation for X- and C-Band Weather Radar Systems Operating in Mediterranean Heavy Rainfall. Journal of Applied Meteorology and Climatology, 2000, 39, 840-850.	1.7	44
25	A Radar Simulator for High-Resolution Nonhydrostatic Models. Journal of Atmospheric and Oceanic Technology, 2006, 23, 1049-1067.	0.5	44
26	Attenuation in Rain for X- and C-Band Weather Radar Systems: Sensitivity with respect to the Drop Size Distribution. Journal of Applied Meteorology and Climatology, 1999, 38, 57-68.	1.7	37
27	Rain Measurement in Hilly Terrain with X-Band Weather Radar Systems: Accuracy of Path-Integrated Attenuation Estimates Derived from Mountain Returns. Journal of Atmospheric and Oceanic Technology, 1999, 16, 405-416.	0.5	35
28	Scaling of raindrop size distributions and classification of radar reflectivityâ€“rain rate relations in intense Mediterranean precipitation. Journal of Hydrology, 2011, 402, 179-192.	2.3	33
29	A Physically Based Identification of Vertical Profiles of Reflectivity from Volume Scan Radar Data. Journal of Applied Meteorology and Climatology, 2013, 52, 1645-1663.	0.6	33
30	A high-resolution rainfall re-analysis based on radarâ€“raingauge merging in the CÃ©vennes-Vivarais region, France. Journal of Hydrology, 2016, 541, 14-23.	2.3	31
31	Identification of Vertical Profiles of Reflectivity for Correction of Volumetric Radar Data Using Rainfall Classification. Journal of Applied Meteorology and Climatology, 2010, 49, 2167-2180.	0.6	30
32	Variability of the spatial structure of intense Mediterranean precipitation. Advances in Water Resources, 2009, 32, 1031-1042.	1.7	28
33	Radar and multisensor rainfall estimation for hydrologic applications. Geophysical Monograph Series, 2010, , 79-104.	0.1	27
34	Assessment of gridded observations used for climate model validation in the Mediterranean region: the HyMeX and MED-CORDEX framework. Environmental Research Letters, 2012, 7, 024017.	2.2	26
35	Radar rainfall estimation for the post-event analysis of a Slovenian flash-flood case: application of the Mountain Reference Technique at C-band frequency. Hydrology and Earth System Sciences, 2009, 13, 1349-1360.	1.9	26
36	Mountain reference technique: Use of mountain returns to calibrate weather radars operating at attenuating wavelengths. Journal of Geophysical Research, 2000, 105, 2281-2290.	3.3	24

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37	Influence of the Vertical Profile of Reflectivity on Radar-Estimated Rain Rates at Short Time Steps. Journal of Hydrometeorology, 2004, 5, 296-310.	0.7	22
38	Multifrequency Radar Observations Collected in Southern France during HyMeX-SOP1. Bulletin of the American Meteorological Society, 2015, 96, 267-282.	1.7	22
39	Modeling flash floods in southern France for road management purposes. Journal of Hydrology, 2016, 541, 190-205.	2.3	22
40	A high spaceâ€“time resolution dataset linking meteorological forcing and hydro-sedimentary responseÂinÂa mesoscale Mediterranean catchment (Auzon) ofÂtheÂArdÃ¨che region, France. Earth System Science Data, 2017, 9, 221-249.	3.7	20
41	Dependence of radar quantitative precipitation estimation error on the rain intensity in the CÃ©vennes region, France. Hydrological Sciences Journal, 2014, 59, 1308-1319.	1.2	19
42	Drop Size Distribution Climatology in CÃ©vennes-Vivarais Region, France. Atmosphere, 2017, 8, 233.	1.0	18
43	Estimating the Vertical Structure of Intense Mediterranean Precipitation Using Two X-Band Weather Radar Systems. Journal of Atmospheric and Oceanic Technology, 2005, 22, 1656-1675.	0.5	16
44	Unified Formulation of Single- and Multimoment Normalizations of the Raindrop Size Distribution Based on the Gamma Probability Density Function. Journal of Applied Meteorology and Climatology, 2014, 53, 166-179.	0.6	13
45	Weather radar and urban hydrology: advantages and limitations of X-band light configuration systems. Atmospheric Research, 1991, 27, 159-168.	1.8	12
46	Radar Remote Sensing of Precipitation in High Mountains: Detection and Characterization of Melting Layer in the Grenoble Valley, French Alps. Atmosphere, 2019, 10, 784.	1.0	10
47	L'Observatoire Hydro-mÃ©tÃ©orologique MÃ©diterranÃ©en CÃ©vennes-Vivarais. Houille Blanche, 2003, 89, 83-88.	0.3	6
48	Estimation of rain kinetic energy from radar reflectivity and/or rain rate based on a scaling formulation of the raindrop size distribution. Water Resources Research, 2012, 48, .	1.7	6
49	Advances in flash floods understanding and modelling derived from the FloodScale project in South-East France. E3S Web of Conferences, 2016, 7, 04005.	0.2	5
50	Distributed hydrological modeling of floods in the CÃ©vennes-Vivarais region, France: Impact of uncertainties related to precipitation estimation and model parameterization. Journal of Hydrology, 2018, 565, 276-288.	2.3	5
51	Impact of the Altitudinal Gradients of Precipitation on the Radar QPE Bias in the French Alps. Atmosphere, 2019, 10, 306.	1.0	5
52	Application of the hydrologic visibility concept to estimate rainfall measurement quality of two planned weather radars. Atmospheric Research, 2005, 77, 232-246.	1.8	4
53	Estimation quantitative des prÃ©cipitations par radar mÃ©tÃ©orologique: infÃ©rence de la structure verticale des pluies, modÃ©lisation des erreurs radar-pluviomÃ¨tres. Houille Blanche, 2009, 95, 150-156.	0.3	4
54	Lâ€™Ã©vÃ©nement pluvieux des 8-9 septembre 2002 dans le GardÂ: estimation des prÃ©cipitations par radars et pluviomÃ¨tres. Houille Blanche, 2004, 90, 93-98.	0.3	3

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55	Preliminary investigation of the relationship between differential phase shift and path-integrated attenuation at the X band frequency in an Alpine environment. Atmospheric Measurement Techniques, 2020, 13, 3731-3749.	1.2	3
56	La mesure de pluie par radar : " visibilitÃ© hydrologique " en rÃ©gion montagneuse. Houille Blanche, 2002, 88, 42-45.	0.3	2
57	Analyse hydrologique de la crue-Ã©clair catastrophique du 15â€‰juin 2010 dans la rÃ©gion de Draguignan (VAR, France). Houille Blanche, 2019, 105, 140-148.	0.3	2
58	Vers un modÃ¨le dâ€™erreur pour la mesuredes pluies par radar mÃ©tÃ©orologique en rÃ©gion CÃ©vennes-Vivarais. Houille Blanche, 2006, 92, 27-32.	0.3	1
59	Sensitivity analysis of attenuation in convective rainfall at X-band frequency using the mountain reference technique. Atmospheric Measurement Techniques, 2022, 15, 3297-3314.	1.2	0