Florent G Mertens

List of Publications by Year
in descending order

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29 papers	1,477 citations	516710 16 h-index	526287 27 g-index
29 all docs	29 docs citations	29 times ranked	1677 citing authors

#	Article	IF	Citations
1	Transiting exoplanets from the CoRoT space mission. Astronomy and Astrophysics, 2009, 506, 287-302.	5.1	460
2	Improved upper limits on the 21â€‰cm signal power spectrum of neutral hydrogen at z â‰ˆ 9.1 from LOFAR. Monthly Notices of the Royal Astronomical Society, 2020, 493, 1662-1685.	4.4	185
3	Kinematics of the jet in Mâ€‰87 on scales of 100â€“1000 Schwarzschild radii. Astronomy and Astrophysics, 2016, 595, A54.	5.1	167
4	The first power spectrum limit on the 21-cm signal of neutral hydrogen during the Cosmic Dawn at zÂ= 20â€“25 from LOFAR. Monthly Notices of the Royal Astronomical Society, 2019, 488, 4271-4287.	4.4	77
5	The stratified two-sided jet of Cygnusâ€‰A. Astronomy and Astrophysics, 2016, 585, A33.	5.1	72
6	Constraining the intergalactic medium at z â‰ˆ 9.1 using LOFAR Epoch of Reionization observations. Monthly Notices of the Royal Astronomical Society, 2020, 493, 4728-4747.	4.4	69
7	Statistical 21-cm Signal Separation via Gaussian Process Regression Analysis. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	63
8	Tight constraints on the excess radio background at zÂ= 9.1 from LOFAR. Monthly Notices of the Royal Astronomical Society, 2020, 498, 4178-4191.	4.4	55
9	Interpreting LOFAR 21-cm signal upper limits at z â‰ˆ 9.1 in the context of high-z galaxy and reionization observations. Monthly Notices of the Royal Astronomical Society, 2020, 501, 1-13.	4.4	46
10	The impact of interference excision on 21-cm epoch of reionization power spectrum analyses. Monthly Notices of the Royal Astronomical Society, 2019, 484, 2866-2875.	4.4	36
11	Comparing foreground removal techniques for recovery of the LOFAR-EoR 21â€‰cm power spectrum. Monthly Notices of the Royal Astronomical Society, 2020, 500, 2264-2277.	4.4	34
12	Wavelet-based decomposition and analysis of structural patterns in astronomical images. Astronomy and Astrophysics, 2015, 574, A67.	5.1	27
13	The AARTFAAC Cosmic Explorer: observations of the 21-cm power spectrum in the EDGES absorption trough. Monthly Notices of the Royal Astronomical Society, 2020, 499, 4158-4173.	4.4	23
14	Global millimeter VLBI array survey of ultracompact extragalactic radio sources at 86 GHz. Astronomy and Astrophysics, 2019, 622, A92.	5.1	21
15	Foreground modelling via Gaussian process regression: an application to HERA data. Monthly Notices of the Royal Astronomical Society, 2020, 495, 2813-2826.	4.4	19
16	Observations of the Structure and Dynamics of the Inner M87 Jet. Galaxies, 2016, 4, 46.	3.0	17
17	Precision requirements for interferometric gridding in the analysis of a 21 cm power spectrum. Astronomy and Astrophysics, 2019, 631, A12.	5.1	17
18	A numerical study of 21-cm signal suppression and noise increase in direction-dependent calibration of LOFAR data. Monthly Notices of the Royal Astronomical Society, 2021, 509, 3693-3702.	4.4	15

#	Article	IF	Citations
19	Detection of multiple velocity components in partially overlapping emitting regions. Astronomy and Astrophysics, 2016, 587, A52.	5.1	14
20	Deconvolving the wedge: maximum-likelihood power spectra via spherical-wave visibility modelling. Monthly Notices of the Royal Astronomical Society, 2018, 474, 4552-4563.	4.4	13
21	The TeV-emitting radio galaxy 3C 264. Astronomy and Astrophysics, 2019, 627, A89.	5.1	11
22	Peering into the dark (ages) with low-frequency space interferometers. Experimental Astronomy, 2021, 51, 1641-1676.	3.7	10
23	A Detailed Kinematic Study of 3C 84 and Its Connection to Î³-Rays. Astrophysical Journal, 2021, 914, 43.	4.5	7
24	SKA-low intensity mapping pathfinder updates: deeper 21Âcm power spectrum limits from improved analysis frameworks. Journal of Astronomical Telescopes, Instruments, and Systems, 2021, 8, .	1.8	7
25	Statistical analysis of the causes of excess variance in the 21 cm signal power spectra obtained with the Low-Frequency Array. Astronomy and Astrophysics, 2022, 663, A9.	5.1	6
26	Degree-scale galactic radio emission at 122 MHz around the North Celestial Pole with LOFAR-AARTFAAC. Astronomy and Astrophysics, 2022, 662, A97.	5.1	3
27	Large-scale 21â€‰cm signal predictions at cosmic dawn with calibrated subgrid galaxy formation. Monthly Notices of the Royal Astronomical Society, 2021, 507, 3179-3186.	4.4	2
28	Robust Foregrounds Removal for 21-cm Experiments. Proceedings of the International Astronomical Union, 2017, 12, 284-287.	0.0	1
29	Longitudinal and transverse velocity fields in parsec-scale jets. , 2015, , .		0