Katherine L Bouman

List of Publications by Year
in descending order

47	9,381	156536	274796
papers	citations	32 h-index	44 g-index

47	47	47	3755
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole. Astrophysical Journal Letters, 2019, 875, L1.	3.0	2,264
2	First M87 Event Horizon Telescope Results. VI. The Shadow and Mass of the Central Black Hole. Astrophysical Journal Letters, 2019, 875, L6.	3.0	897
3	First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring. Astrophysical Journal Letters, 2019, 875, L5.	3.0	814
4	First M87 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole. Astrophysical Journal Letters, 2019, 875, L4.	3.0	806
5	First M87 Event Horizon Telescope Results. II. Array and Instrumentation. Astrophysical Journal Letters, 2019, 875, L2.	3.0	618
6	First Sagittarius A* Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole in the Center of the Milky Way. Astrophysical Journal Letters, 2022, 930, L12.	3.0	568
7	First M87 Event Horizon Telescope Results. III. Data Processing and Calibration. Astrophysical Journal Letters, 2019, 875, L3.	3.0	519
8	First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon. Astrophysical Journal Letters, 2021, 910, L13.	3.0	297
9	First M87 Event Horizon Telescope Results. VII. Polarization of the Ring. Astrophysical Journal Letters, 2021, 910, L12.	3.0	215
10	First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric. Astrophysical Journal Letters, 2022, 930, L17.	3.0	215
11	First Sagittarius A* Event Horizon Telescope Results. V. Testing Astrophysical Models of the Galactic Center Black Hole. Astrophysical Journal Letters, 2022, 930, L16.	3.0	187
12	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. Astrophysical Journal, Supplement Series, 2019, 243, 26.	3.0	175
13	First Sagittarius A* Event Horizon Telescope Results. III. Imaging of the Galactic Center Supermassive Black Hole. Astrophysical Journal Letters, 2022, 930, L14.	3.0	163
14	HIGH-RESOLUTION LINEAR POLARIMETRIC IMAGING FOR THE EVENT HORIZON TELESCOPE. Astrophysical Journal, 2016, 829, 11.	1.6	159
15	Interferometric Imaging Directly with Closure Phases and Closure Amplitudes. Astrophysical Journal, 2018, 857, 23.	1.6	159
16	First Sagittarius A* Event Horizon Telescope Results. II. EHT and Multiwavelength Observations, Data Processing, and Calibration. Astrophysical Journal Letters, 2022, 930, L13.	3.0	142
17	First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass. Astrophysical Journal Letters, 2022, 930, L15.	3.0	137
18	Imaging the Schwarzschild-radius-scale Structure of M87 with the Event Horizon Telescope Using Sparse Modeling. Astrophysical Journal, 2017, 838, 1.	1.6	111

#	Article	IF	Citations
19	IMAGING AN EVENT HORIZON: MITIGATION OF SCATTERING TOWARD SAGITTARIUS A*. Astrophysical Journal, 2014, 795, 134.	1.6	67
20	Polarimetric Properties of Event Horizon Telescope Targets from ALMA. Astrophysical Journal Letters, 2021, 910, L14.	3.0	67
21	Event Horizon Telescope observations of the jet launching and collimation in Centaurus A. Nature Astronomy, 2021, 5, 1017-1028.	4.2	65
22	Observingâ€"and Imagingâ€"Active Galactic Nuclei with the Event Horizon Telescope. Galaxies, 2016, 4, 54.	1.1	63
23	Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign. Astrophysical Journal Letters, 2021, 911, L11.	3.0	56
24	Event Horizon Telescope imaging of the archetypal blazar 3C 279 at an extreme 20 microarcsecond resolution. Astronomy and Astrophysics, 2020, 640, A69.	2.1	54
25	Dynamical Imaging with Interferometry. Astrophysical Journal, 2017, 850, 172.	1.6	52
26	Monitoring the Morphology of M87* in 2009â€"2017 with the Event Horizon Telescope. Astrophysical Journal, 2020, 901, 67.	1.6	51
27	THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope. Astrophysical Journal, 2020, 897, 139.	1.6	47
28	Verification of Radiative Transfer Schemes for the EHT. Astrophysical Journal, 2020, 897, 148.	1.6	44
29	The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole. Astrophysical Journal, 2021, 912, 35.	1.6	43
30	Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign. Astrophysical Journal Letters, 2022, 930, L19.	3.0	43
31	Metrics and Motivations for Earthâ€"Space VLBI: Time-resolving Sgr A* with the Event Horizon Telescope. Astrophysical Journal, 2019, 881, 62.	1.6	36
32	EHT-HOPS Pipeline for Millimeter VLBI Data Reduction. Astrophysical Journal, 2019, 882, 23.	1.6	34
33	Medical Image Imputation From Image Collections. IEEE Transactions on Medical Imaging, 2019, 38, 504-514.	5.4	33
34	Computational Imaging for VLBI Image Reconstruction. , 2016, , .		27
35	Reconstructing Video of Time-Varying Sources From Radio Interferometric Measurements. IEEE Transactions on Computational Imaging, 2018, 4, 512-527.	2.6	22
36	Selective Dynamical Imaging of Interferometric Data. Astrophysical Journal Letters, 2022, 930, L18.	3.0	21

#	Article	IF	Citations
37	Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI. Astrophysical Journal Letters, 2022, 930, L21.	3.0	20
38	A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows. Astrophysical Journal Letters, 2022, 930, L20.	3.0	20
39	Population Based Image Imputation. Lecture Notes in Computer Science, 2017, 10265, 659-671.	1.0	17
40	Visual Dynamics: Stochastic Future Generation via Layered Cross Convolutional Networks. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 2236-2250.	9.7	15
41	Deep radio-interferometric imaging with POLISH: DSA-2000 and weak lensing. Monthly Notices of the Royal Astronomical Society, 2022, 514, 2614-2626.	1.6	9
42	MeqSilhouette v2: spectrally resolved polarimetric synthetic data generation for the event horizon telescope. Monthly Notices of the Royal Astronomical Society, 2022, 512, 490-504.	1.6	7
43	The Variability of the Black Hole Image in M87 at the Dynamical Timescale. Astrophysical Journal, 2022, 925, 13.	1.6	6
44	Î±-deep Probabilistic Inference (Î±-DPI): Efficient Uncertainty Quantification from Exoplanet Astrometry to Black Hole Feature Extraction. Astrophysical Journal, 2022, 932, 99.	1.6	6
45	Learning a Probabilistic Strategy for Computational Imaging Sensor Selection. , 2020, , .		5
46	Wind speed inference from environmental flowâ€“structure interactions. Flow, 2021, 1, .	1.0	4
47	Inference of Black Hole Fluid-Dynamics from Sparse Interferometric Measurements. , 2021, , .		1