Michael D Johnson

List of Publications by Citations

99 papers	5,828 citations	33 h-index	75 g-index
100 ext. papers	8,972 ext. citations	6 avg, IF	5.47 L-index

#	Paper	IF	Citations
99	First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L1	7.9	1110
98	First M87 Event Horizon Telescope Results. VI. The Shadow and Mass of the Central Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L6	7.9	466
97	First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring. *Astrophysical Journal Letters*, **2019**, 875, L5	7.9	429
96	First M87 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L4	7.9	411
95	First M87 Event Horizon Telescope Results. II. Array and Instrumentation. *Astrophysical Journal Letters*, **2019**, 875, L2	7.9	325
94	First M87 Event Horizon Telescope Results. III. Data Processing and Calibration. *Astrophysical Journal Letters*, **2019**, 875, L3	7.9	267
93	Resolved magnetic-field structure and variability near the event horizon of Sagittarius A. *Science*, **2015**, 350, 1242-5	33.3	144
92	Testing General Relativity with the Shadow Size of Sgr A(*). *Physical Review Letters*, **2016**, 116, 031101	7.4	108
91	ARCONS: A 2024 Pixel Optical through Near-IR Cryogenic Imaging Spectrophotometer. *Publications of the Astronomical Society of the Pacific*, **2013**, 125, 1348-1361	5	106
90	HIGH-RESOLUTION LINEAR POLARIMETRIC IMAGING FOR THE EVENT HORIZON TELESCOPE. *Astrophysical Journal*, **2016**, 829, 11	4.7	105
89	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. *Astrophysical Journal, Supplement Series*, **2019**, 243, 26	8	96
88	Interferometric Imaging Directly with Closure Phases and Closure Amplitudes. *Astrophysical Journal* , **2018**, 857, 23	4.7	92
87	230 GHz VLBI OBSERVATIONS OF M87: EVENT-HORIZON-SCALE STRUCTURE DURING AN ENHANCED VERY-HIGH-ENERGY $gamma $-RAY STATE IN 2012. *Astrophysical Journal*, **2015**, 807, 150	4.7	85
86	Gravitational Test beyond the First Post-Newtonian Order with the Shadow of the M87 Black Hole. *Physical Review Letters*, **2020**, 125, 141104	7.4	74
85	First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon. *Astrophysical Journal Letters*, **2021**, 910, L13	7.9	70
84	Universal interferometric signatures of a black hole's photon ring. *Science Advances*, **2020**, 6, eaaz1310	14.3	68
83	Two-temperature, Magnetically Arrested Disc simulations of the jet from the supermassive black hole in M87. *Monthly Notices of the Royal Astronomical Society*, **2019**, 486, 2873-2895	4.3	66

82	The role of electron heating physics in images and variability of the Galactic Centre black hole Sagittarius A*. *Monthly Notices of the Royal Astronomical Society*, **2018**, 478, 5209-5229	4.3	66
81	MODELING SEVEN YEARS OF EVENT HORIZON TELESCOPE OBSERVATIONS WITH RADIATIVELY INEFFICIENT ACCRETION FLOW MODELS. *Astrophysical Journal*, **2016**, 820, 137	4.7	64
80	IMAGING AN EVENT HORIZON: MITIGATION OF SCATTERING TOWARD SAGITTARIUS A*. *Astrophysical Journal*, **2014**, 795, 134	4.7	62
79	PERSISTENT ASYMMETRIC STRUCTURE OF SAGITTARIUS A* ON EVENT HORIZON SCALES. *Astrophysical Journal*, **2016**, 820, 90	4.7	62
78	The Size, Shape, and Scattering of Sagittarius A* at 86 GHz: First VLBI with ALMA. *Astrophysical Journal*, **2019**, 871, 30	4.7	60
77	THEORY AND SIMULATIONS OF REFRACTIVE SUBSTRUCTURE IN RESOLVED SCATTER-BROADENED IMAGES. *Astrophysical Journal*, **2015**, 805, 180	4.7	60
76	The Shadow of a Spherically Accreting Black Hole. *Astrophysical Journal Letters*, **2019**, 885, L33	7.9	58
75	First M87 Event Horizon Telescope Results. VII. Polarization of the Ring. *Astrophysical Journal Letters*, **2021**, 910, L12	7.9	58
74	Detection of Intrinsic Source Structure at ~3 Schwarzschild Radii with Millimeter-VLBI Observations of SAGITTARIUS A*. *Astrophysical Journal*, **2018**, 859, 60	4.7	55
73	Probing the Magnetic Field Structure in Sgr A* on Black Hole Horizon Scales with Polarized Radiative Transfer Simulations. *Astrophysical Journal*, **2017**, 837, 180	4.7	52
72	Observing and Imaging Active Galactic Nuclei with the Event Horizon Telescope. *Galaxies*, **2016**, 4, 54	2	49
71	The Scattering and Intrinsic Structure of Sagittarius A* at Radio Wavelengths. *Astrophysical Journal*, **2018**, 865, 104	4.7	45
70	DISCOVERY OF SUBSTRUCTURE IN THE SCATTER-BROADENED IMAGE OF SGR A*. *Astrophysical Journal Letters*, **2014**, 794, L14	7.9	44
69	Dynamical Imaging with Interferometry. *Astrophysical Journal*, **2017**, 850, 172	4.7	40
68	ALMA Polarimetry of Sgr A*: Probing the Accretion Flow from the Event Horizon to the Bondi Radius. *Astrophysical Journal*, **2018**, 868, 101	4.7	40
67	PSR B0329+54: substructure in the scatter-broadened image discovered with RadioAstron on baselines up to 330 000 km. *Monthly Notices of the Royal Astronomical Society*, **2017**, 465, 978-985	4.3	34
66	PROBING THE PARSEC-SCALE ACCRETION FLOW OF 3C 84 WITH MILLIMETER WAVELENGTH POLARIMETRY. *Astrophysical Journal*, **2014**, 797, 66	4.7	32
65	STOCHASTIC OPTICS: A SCATTERING MITIGATION FRAMEWORK FOR RADIO INTERFEROMETRIC IMAGING. *Astrophysical Journal*, **2016**, 833, 74	4.7	30

64	EXTREME BRIGHTNESS TEMPERATURES AND REFRACTIVE SUBSTRUCTURE IN 3C 273 WITH RADIOASTRON. *Astrophysical Journal Letters*, **2016**, 820, L10	7.9	28
63	THE INTRINSIC SHAPE OF SAGITTARIUS A* AT 3.5 mm WAVELENGTH. *Astrophysical Journal*, **2016**, 824, 40	4.7	28
62	Polarimetric Properties of Event Horizon Telescope Targets from ALMA. *Astrophysical Journal Letters*, **2021**, 910, L14	7.9	28
61	Closure Statistics in Interferometric Data. *Astrophysical Journal*, **2020**, 894, 31	4.7	27
60	Quantifying Intrinsic Variability of Sagittarius A$* $ Using Closure Phase Measurements of the Event Horizon Telescope. *Astrophysical Journal*, **2017**, 847, 55	4.7	27
59	INTERSTELLAR SCINTILLATION AND THE RADIO COUNTERPART OF THE FAST RADIO BURST FRB 150418. *Astrophysical Journal Letters*, **2016**, 824, L3	7.9	27
58	UNBOUND DEBRIS STREAMS AND REMNANTS RESULTING FROM THE TIDAL DISRUPTIONS OF STARS BY SUPERMASSIVE BLACK HOLES. *Astrophysical Journal*, **2016**, 822, 48	4.7	27
57	Universal polarimetric signatures of the black hole photon ring. *Physical Review D*, **2020**, 101,	4.9	25
56	THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope. *Astrophysical Journal* , **2020**, 897, 139	4.7	24
55	EXCESS OPTICAL ENHANCEMENT OBSERVED WITH ARCONS FOR EARLY CRAB GIANT PULSES. *Astrophysical Journal Letters*, **2013**, 779, L12	7.9	24
54	RELATIVE ASTROMETRY OF COMPACT FLARING STRUCTURES IN Sgr A* WITH POLARIMETRIC VERY LONG BASELINE INTERFEROMETRY. *Astrophysical Journal*, **2014**, 794, 150	4.7	23
53	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	7.9	23
52	Metrics and Motivations for Earth–Space VLBI: Time-resolving Sgr A* with the Event Horizon Telescope. *Astrophysical Journal*, **2019**, 881, 62	4.7	22
51	Event Horizon Telescope imaging of the archetypal blazar 3C 279 at an extreme 20 microarcsecond resolution. *Astronomy and Astrophysics*, **2020**, 640, A69	5.1	21
50	RADIOASTRONSTUDIES OF THE NEARBY, TURBULENT INTERSTELLAR PLASMA WITH THE LONGEST SPACE-GROUND INTERFEROMETER BASELINE. *Astrophysical Journal*, **2014**, 786, 115	4.7	21
49	THE OPTICS OF REFRACTIVE SUBSTRUCTURE. *Astrophysical Journal*, **2016**, 826, 170	4.7	21
48	Monitoring the Morphology of M87* in 2009–2017 with the Event Horizon Telescope. *Astrophysical Journal*, **2020**, 901, 67	4.7	20
47	PSR B0329+54: STATISTICS OF SUBSTRUCTURE DISCOVERED WITHIN THE SCATTERING DISK ONRADIOASTRONBASELINES OF UP TO 235,000 km. *Astrophysical Journal*, **2016**, 822, 96	4.7	20

46	First Sagittarius A* Event Horizon Telescope Results. III. Imaging of the Galactic Center Supermassive Black Hole. *Astrophysical Journal Letters*, **2022**, 930, L14	7.9	20
45	Evaluation of New Submillimeter VLBI Sites for the Event Horizon Telescope. *Astrophysical Journal, Supplement Series*, **2021**, 253, 5	8	19
44	CONSTRAINING THE VELA PULSARS RADIO EMISSION REGION USING NYQUIST-LIMITED SCINTILLATION STATISTICS. *Astrophysical Journal*, **2012**, 758, 8	4.7	18
43	Verification of Radiative Transfer Schemes for the EHT. *Astrophysical Journal*, **2020**, 897, 148	4.7	18
42	Constraints on black-hole charges with the 2017 EHT observations of M87*. *Physical Review D*, **2021** , 103,	4.9	18
41	First Sagittarius A* Event Horizon Telescope Results. V. Testing Astrophysical Models of the Galactic Center Black Hole. *Astrophysical Journal Letters*, **2022**, 930, L16	7.9	18
40	Decomposing the internal faraday rotation of black hole accretion flows. *Monthly Notices of the Royal Astronomical Society*, **2020**, 498, 5468-5488	4.3	17
39	EHT-HOPS Pipeline for Millimeter VLBI Data Reduction. *Astrophysical Journal*, **2019**, 882, 23	4.7	17
38	Testing General Relativity with the Black Hole Shadow Size and Asymmetry of Sagittarius A*: Limitations from Interstellar Scattering. *Astrophysical Journal*, **2019**, 870, 6	4.7	16
37	Reconstructing Video of Time-Varying Sources From Radio Interferometric Measurements. *IEEE Transactions on Computational Imaging*, **2018**, 4, 512-527	4.5	16
36	Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2021**, 911, L11	7.9	16
35	First Sagittarius A* Event Horizon Telescope Results. II. EHT and Multiwavelength Observations, Data Processing, and Calibration. *Astrophysical Journal Letters*, **2022**, 930, L13	7.9	16
34	First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass. *Astrophysical Journal Letters*, **2022**, 930, L15	7.9	16
33	EFFECTS OF INTERMITTENT EMISSION: NOISE INVENTORY FOR THE SCINTILLATING PULSAR B0834+06. *Astrophysical Journal*, **2011**, 733, 52	4.7	15
32	Computational Imaging for VLBI Image Reconstruction **2016**,		15
31	Observing the Inner Shadow of a Black Hole: A Direct View of the Event Horizon. *Astrophysical Journal*, **2021**, 918, 6	4.7	14
30	First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric. *Astrophysical Journal Letters*, **2022**, 930, L17	7.9	14
29	Event Horizon Telescope observations of the jet launching and collimation in Centaurus A. *Nature Astronomy*,	12.1	13

28	Photon ring autocorrelations. *Physical Review D*, **2021**, 103,	4.9	12
27	Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2022**, 930, L19	7.9	11
26	NOISE AND SIGNAL FOR SPECTRA OF INTERMITTENT NOISELIKE EMISSION. *Astrophysical Journal*, **2011**, 733, 51	4.7	10
25	On the Approximation of the Black Hole Shadow with a Simple Polar Curve. *Astrophysical Journal*, **2020**, 900, 77	4.7	10
24	SIZE OF THE VELA PULSARS EMISSION REGION AT 18 cm WAVELENGTH. *Astrophysical Journal*, **2012**, 758, 7	4.7	9
23	ULTRA-HIGH-RESOLUTION INTENSITY STATISTICS OF A SCINTILLATING SOURCE. *Astrophysical Journal*, **2012**, 755, 179	4.7	9
22	NOISE IN THE CROSS-POWER SPECTRUM OF THE VELA PULSAR. *Astrophysical Journal*, **2012**, 758, 6	4.7	9
21	Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI. *Astrophysical Journal Letters*, **2022**, 930, L21	7.9	9
20	A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows. *Astrophysical Journal Letters*, **2022**, 930, L20	7.9	8
19	MEASURING THE DIRECTION AND ANGULAR VELOCITY OF A BLACK HOLE ACCRETION DISK VIA LAGGED INTERFEROMETRIC COVARIANCE. *Astrophysical Journal*, **2015**, 813, 132	4.7	7
18	Density of states of helium droplets. *Physical Review B*, **2007**, 76,	3.3	7
17	The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole. *Astrophysical Journal*, **2021**, 912, 35	4.7	7
16	Selective Dynamical Imaging of Interferometric Data. *Astrophysical Journal Letters*, **2022**, 930, L18	7.9	7
15	An Unexpectedly Small Emission Region Size Inferred from Strong High-frequency Diffractive Scintillation in GRB 161219B. *Astrophysical Journal*, **2019**, 870, 67	4.7	6
14	Light echos and coherent autocorrelations in a black hole spacetime. *Classical and Quantum Gravity*, **2021**, 38, 125006	3.3	6
13	Detection of Pulses from the Vela Pulsar at Millimeter Wavelengths with Phased ALMA. *Astrophysical Journal Letters*, **2019**, 885, L10	7.9	6
12	The Role of Adaptive Ray Tracing in Analyzing Black Hole Structure. *Astrophysical Journal*, **2021**, 912, 39	4.7	5
11	INTERFEROMETRIC VISIBILITY OF A SCINTILLATING SOURCE: STATISTICS AT THE NYQUIST LIMIT. *Astrophysical Journal*, **2013**, 768, 170	4.7	4

10	VLBI imaging of black holes via second moment regularization. *Astronomy and Astrophysics*, **2019**, 629, A32	5.1	4
9	Polarized image of equatorial emission in the Kerr geometry. *Physical Review D*, **2021**, 104,	4.9	4
8	The Intrinsic Structure of Sagittarius A* at 1.3 cm and 7 mm. *Astrophysical Journal*, **2022**, 926, 108	4.7	3
7	Toward Determining the Number of Observable Supermassive Black Hole Shadows. *Astrophysical Journal*, **2021**, 923, 260	4.7	3
6	The Variability of the Black Hole Image in M87 at the Dynamical Timescale. *Astrophysical Journal*, **2022**, 925, 13	4.7	2
5	First Space-VLBI Observations of Sagittarius A*. *Astrophysical Journal Letters*, **2021**, 922, L28	7.9	2
4	An 86 GHz Search for Pulsars in the Galactic Center with the Atacama Large Millimeter / submillimeter Array. *Astrophysical Journal*, **2021**, 914, 30	4.7	2
3	OPTIMAL CORRELATION ESTIMATORS FOR QUANTIZED SIGNALS. *Astrophysical Journal*, **2013**, 765, 135	4.7	1
2	VLBA Observations of Strong Anisotripic Radio Scattering Toward the Orion Nebula. *Astronomical Journal*, **2018**, 155, 218	4.9	0
1	Prospects for Wideband VLBI Correlation in the Cloud. *Publications of the Astronomical Society of the Pacific*, **2019**, 131, 124501	5	0