Hctor Olivares

List of Publications by Citations

54 papers	4,194 citations	21 h-index	55 g-index
55 ext. papers	6,922 ext. citations	6.4 avg, IF	4.22 L-index

#	Paper	IF	Citations
54	First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L1	7.9	1110
53	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
52	First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring. *Astrophysical Journal Letters*, **2019**, 875, L5	7.9	429
51	First M87 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L4	7.9	411
50	First M87 Event Horizon Telescope Results. II. Array and Instrumentation. *Astrophysical Journal Letters*, **2019**, 875, L2	7.9	325
49	First M87 Event Horizon Telescope Results. III. Data Processing and Calibration. *Astrophysical Journal Letters*, **2019**, 875, L3	7.9	267
48	BlackHoleCam: Fundamental physics of the galactic center. *International Journal of Modern Physics D*, **2017**, 26, 1730001	2.2	130
47	The current ability to test theories of gravity with black hole shadows. *Nature Astronomy*, **2018**, 2, 585-590	12.1	115
46	The black hole accretion code. *Computational Astrophysics and Cosmology*, **2017**, 4,	18.9	103
45	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. *Astrophysical Journal, Supplement Series*, **2019**, 243, 26	8	96
44	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
43	First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon. *Astrophysical Journal Letters*, **2021**, 910, L13	7.9	70
42	First M87 Event Horizon Telescope Results. VII. Polarization of the Ring. *Astrophysical Journal Letters*, **2021**, 910, L12	7.9	58
41	Modeling non-thermal emission from the jet-launching region of M 87 with adaptive mesh refinement. *Astronomy and Astrophysics*, **2019**, 632, A2	5.1	37
40	Plasmoid formation in global GRMHD simulations and AGN flares. *Monthly Notices of the Royal Astronomical Society*, **2020**, 495, 1549-1565	4.3	32
39	How to tell an accreting boson star from a black hole. *Monthly Notices of the Royal Astronomical Society*, **2020**, 497, 521-535	4.3	31
38	Polarimetric Properties of Event Horizon Telescope Targets from ALMA. *Astrophysical Journal Letters*, **2021**, 910, L14	7.9	28

37	Constrained transport and adaptive mesh refinement in the Black Hole Accretion Code. *Astronomy and Astrophysics*, **2019**, 629, A61	5.1	27
36	General-relativistic Resistive Magnetohydrodynamics with Robust Primitive-variable Recovery for Accretion Disk Simulations. *Astrophysical Journal, Supplement Series*, **2019**, 244, 10	8	25
35	THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope. *Astrophysical Journal* , **2020**, 897, 139	4.7	24
34	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
33	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
32	Monitoring the Morphology of M87* in 2009–2017 with the Event Horizon Telescope. *Astrophysical Journal*, **2020**, 901, 67	4.7	20
31	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
30	Constraints on black-hole charges with the 2017 EHT observations of M87*. *Physical Review D*, **2021** , 103,	4.9	18
29	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
28	Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2021**, 911, L11	7.9	16
27	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
26	First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass. *Astrophysical Journal Letters*, **2022**, 930, L15	7.9	16
25	Using evolutionary algorithms to model relativistic jets. *Astronomy and Astrophysics*, **2019**, 629, A4	5.1	15
24	First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric. *Astrophysical Journal Letters*, **2022**, 930, L17	7.9	14
23	Comparison of the ion-to-electron temperature ratio prescription: GRMHD simulations with electron thermodynamics. *Monthly Notices of the Royal Astronomical Society*, **2021**, 506, 741-758	4.3	13
22	Event Horizon Telescope observations of the jet launching and collimation in Centaurus A. *Nature Astronomy*,	12.1	13
21	Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2022**, 930, L19	7.9	11
20	Visibility of black hole shadows in low-luminosity AGN. *Monthly Notices of the Royal Astronomical Society*, **2021**, 501, 4722-4747	4.3	10

19	Two-moment scheme for general-relativistic radiation hydrodynamics: a systematic description and new applications. *Monthly Notices of the Royal Astronomical Society*, **2020**, 495, 2285-2304	4.3	9
18	Deep Horizon: A machine learning network that recovers accreting black hole parameters. *Astronomy and Astrophysics*, **2020**, 636, A94	5.1	9
17	Modelling the polarised emission from black holes on event horizon-scales. *Proceedings of the International Astronomical Union*, **2018**, 14, 9-12	0.1	9
16	Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI. *Astrophysical Journal Letters*, **2022**, 930, L21	7.9	9
15	A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows. *Astrophysical Journal Letters*, **2022**, 930, L20	7.9	8
14	SYMBA: An end-to-end VLBI synthetic data generation pipeline. *Astronomy and Astrophysics*, **2020**, 636, A5	5.1	7
13	The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole. *Astrophysical Journal*, **2021**, 912, 35	4.7	7
12	Selective Dynamical Imaging of Interferometric Data. *Astrophysical Journal Letters*, **2022**, 930, L18	7.9	7
11	Simulations of recoiling black holes: adaptive mesh refinement and radiative transfer. *Astronomy and Astrophysics*, **2017**, 598, A38	5.1	6
10	Radiative Signatures of Parsec-Scale Magnetised Jets. *Galaxies*, **2017**, 5, 73	2	5
9	Using space-VLBI to probe gravity around Sgr A*. *Astronomy and Astrophysics*, **2021**, 649, A116	5.1	5
8	Impact of non-thermal particles on the spectral and structural properties of M87. *Astronomy and Astrophysics*,	5.1	3
7	BlackHoleCam: Fundamental physics of the galactic center **2017**,		2
6	The Variability of the Black Hole Image in M87 at the Dynamical Timescale. *Astrophysical Journal*, **2022**, 925, 13	4.7	2
5	Optimizing the hybrid parallelization of BHAC. *Astronomy and Computing*, **2022**, 38, 100509	2.4	2
4	Observational signatures of spherically-symmetric black hole spacetimes. *Journal of Physics: Conference Series*, **2017**, 942, 012007	0.3	1
3	Fuzzball Shadows: Emergent Horizons from Microstructure. *Physical Review Letters*, **2021**, 127, 171601	7.4	1
2	Accreting Black Hole Binaries **2021**, 59-67		

List of Publications

1 Long-term Simulations of Magnetized Disks and Jets Around Supermassive Black-hole Binaries in General Relativity **2021**, 23-31