Roman Gold

List of Publications by Year in Descending Order

48 papers	4,211 citations	22 h-index	49 g-index
49 ext. papers	6,828 ext. citations	6.9 avg, IF	4.47 L-index

#	Paper	IF	Citations
48	The Variability of the Black Hole Image in M87 at the Dynamical Timescale. *Astrophysical Journal*, **2022**, 925, 13	4.7	2
47	Measuring Spin from Relative Photon-ring Sizes. *Astrophysical Journal*, **2022**, 927, 6	4.7	0
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	Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI. *Astrophysical Journal Letters*, **2022**, 930, L21	7.9	9
44	First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric. *Astrophysical Journal Letters*, **2022**, 930, L17	7.9	14
43	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
42	First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass. *Astrophysical Journal Letters*, **2022**, 930, L15	7.9	16
41	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
40	Selective Dynamical Imaging of Interferometric Data. *Astrophysical Journal Letters*, **2022**, 930, L18	7.9	7
39	Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2022**, 930, L19	7.9	11
38	A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows. *Astrophysical Journal Letters*, **2022**, 930, L20	7.9	8
37	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
36	Polarimetric Properties of Event Horizon Telescope Targets from ALMA. *Astrophysical Journal Letters*, **2021**, 910, L14	7.9	28
35	First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon. *Astrophysical Journal Letters*, **2021**, 910, L13	7.9	70
34	Minidisk Dynamics in Accreting, Spinning Black Hole Binaries: Simulations in Full General Relativity. *Astrophysical Journal Letters*, **2021**, 910, L26	7.9	7
33	Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2021**, 911, L11	7.9	16
32	Constraints on black-hole charges with the 2017 EHT observations of M87*. *Physical Review D*, **2021** , 103,	4.9	18

31	The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole. *Astrophysical Journal*, **2021**, 912, 35	4.7	7
30	First M87 Event Horizon Telescope Results. VII. Polarization of the Ring. *Astrophysical Journal Letters*, **2021**, 910, L12	7.9	58
29	Spacetime Tomography Using the Event Horizon Telescope. *Astrophysical Journal*, **2020**, 892, 132	4.7	9
28	THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope. *Astrophysical Journal* , **2020**, 897, 139	4.7	24
27	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
26	Hybrid Very Long Baseline Interferometry Imaging and Modeling with themis. *Astrophysical Journal*, **2020**, 898, 9	4.7	11
25	Monitoring the Morphology of M87* in 2009–2017 with the Event Horizon Telescope. *Astrophysical Journal*, **2020**, 901, 67	4.7	20
24	SYMBA: An end-to-end VLBI synthetic data generation pipeline. *Astronomy and Astrophysics*, **2020**, 636, A5	5.1	7
23	Verification of Radiative Transfer Schemes for the EHT. *Astrophysical Journal*, **2020**, 897, 148	4.7	18
22	Differentiating disc and black hole-driven jets with EHT images of variability in M87. *Monthly Notices of the Royal Astronomical Society*, **2020**, 493, 5606-5616	4.3	7
21	Probing neutron star structure via f-mode oscillations and damping in dynamical spacetime models. *Physical Review D*, **2019**, 99,	4.9	5
20	First M87 Event Horizon Telescope Results. III. Data Processing and Calibration. *Astrophysical Journal Letters*, **2019**, 875, L3	7.9	267
19	First M87 Event Horizon Telescope Results. II. Array and Instrumentation. *Astrophysical Journal Letters*, **2019**, 875, L2	7.9	325
18	First M87 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L4	7.9	411
17	First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L1	7.9	1110
16	First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring. *Astrophysical Journal Letters*, **2019**, 875, L5	7.9	429
15	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
14	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. *Astrophysical Journal, Supplement Series*, **2019**, 243, 26	8	96

13	Asymptotic safety casts its shadow. *Journal of Cosmology and Astroparticle Physics*, **2019**, 2019, 029-029	6.4	46
12	Relativistic Aspects of Accreting Supermassive Black Hole Binaries in Their Natural Habitat: A Review. *Galaxies*, **2019**, 7, 63	2	6
11	Dynamical ejecta and nucleosynthetic yields from eccentric binary neutron-star mergers. *Physical Review D*, **2018**, 98,	4.9	33
10	Gravitational Waves from F-modes Excited by the Inspiral of Highly Eccentric Neutron Star Binaries. *Astrophysical Journal*, **2017**, 837, 67	4.7	37
9	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
8	Resolved magnetic-field structure and variability near the event horizon of Sagittarius A. *Science*, **2015**, 350, 1242-5	33.3	144
7	Accretion disks around binary black holes of unequal mass: General relativistic magnetohydrodynamic simulations near decoupling. *Physical Review D*, **2014**, 89,	4.9	71
6	Accretion disks around binary black holes of unequal mass: General relativistic MHD simulations of postdecoupling and merger. *Physical Review D*, **2014**, 90,	4.9	44
5	Eccentric black hole mergers and zoom-whirl behavior from elliptic inspirals to hyperbolic encounters. *Physical Review D*, **2013**, 88,	4.9	33
4	Binary black-hole mergers in magnetized disks: simulations in full general relativity. *Physical Review Letters*, **2012**, 109, 221102	7.4	83
3	Eccentric binary neutron star mergers. *Physical Review D*, **2012**, 86,	4.9	74
2	Project h1021: Dynamics of Binary Black Hole Systems **2010**, 395-407		
1	Event Horizon Telescope observations of the jet launching and collimation in Centaurus A. *Nature Astronomy*,	12.1	13