Charles F Gammie

List of Publications by Year in Descending Order

86 papers	8,340 citations	37 h-index	89 g-index
89 ext. papers	11,440 ext. citations	6.1 avg, IF	5.79 L-index

#	Paper	IF	Citations
86	The Variability of the Black Hole Image in M87 at the Dynamical Timescale. *Astrophysical Journal*, **2022**, 925, 13	4.7	2
85	Spherical Accretion in Alternative Theories of Gravity. *Astrophysical Journal*, **2022**, 925, 119	4.7	1
84	PATOKA: Simulating Electromagnetic Observables of Black Hole Accretion. *Astrophysical Journal, Supplement Series*, **2022**, 259, 64	8	3
83	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
82	Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI. *Astrophysical Journal Letters*, **2022**, 930, L21	7.9	9
81	First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric. *Astrophysical Journal Letters*, **2022**, 930, L17	7.9	14
80	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
79	First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass. *Astrophysical Journal Letters*, **2022**, 930, L15	7.9	16
78	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
77	Selective Dynamical Imaging of Interferometric Data. *Astrophysical Journal Letters*, **2022**, 930, L18	7.9	7
76	Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2022**, 930, L19	7.9	11
75	A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows. *Astrophysical Journal Letters*, **2022**, 930, L20	7.9	8
74	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
73	iharm3D: Vectorized General Relativistic Magnetohydrodynamics. *Journal of Open Source Software*, **2021**, 6, 3336	5.2	5
72	Updated Transfer Coefficients for Magnetized Plasmas. *Astrophysical Journal*, **2021**, 921, 17	4.7	3
71	Polarimetric Properties of Event Horizon Telescope Targets from ALMA. *Astrophysical Journal Letters*, **2021**, 910, L14	7.9	28
70	First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon. *Astrophysical Journal Letters*, **2021**, 910, L13	7.9	70

69	Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign. *Astrophysical Journal Letters*, **2021**, 911, L11	7.9	16
68	Constraints on black-hole charges with the 2017 EHT observations of M87*. *Physical Review D*, **2021**, 103,	4.9	18
67	The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole. *Astrophysical Journal*, **2021**, 912, 35	4.7	7
66	The Jet–Disk Boundary Layer in Black Hole Accretion. *Astrophysical Journal*, **2021**, 914, 55	4.7	6
65	The Relative Importance of Faraday Rotation and QED Birefringence for the Linear Polarization of X-Rays from Mass-accreting Black Holes. *Astrophysical Journal*, **2021**, 914, 51	4.7	2
64	Disks as Inhomogeneous, Anisotropic Gaussian Random Fields. *Astrophysical Journal*, **2021**, 906, 39	4.7	6
63	Pair Drizzle around Sub-Eddington Supermassive Black Holes. *Astrophysical Journal*, **2021**, 907, 73	4.7	8
62	First M87 Event Horizon Telescope Results. VII. Polarization of the Ring. *Astrophysical Journal Letters*, **2021**, 910, L12	7.9	58
61	A characteristic optical variability time scale in astrophysical accretion disks. *Science*, **2021**, 373, 789-792	33.3	10
60	Non-thermal models for infrared flares from Sgr A*. *Monthly Notices of the Royal Astronomical Society*, **2020**, 494, 5923-5935	4.3	11
59	The Surge After the Surge: Cardiac Surgery Post-COVID-19. *Annals of Thoracic Surgery*, **2020**, 110, 2020-2025	4.7	43
58	Universal interferometric signatures of a black hole's photon ring. *Science Advances*, **2020**, 6, eaaz1310	14.3	68
57	THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope. *Astrophysical Journal*, **2020**, 897, 139	4.7	24
56	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
55	The Structure of Radiatively Inefficient Black Hole Accretion Flows. *Astrophysical Journal*, **2020**, 891, 63	4.7	11
54	Covariant Radiative Transfer for Black Hole Spacetimes. *Astrophysical Journal*, **2020**, 888, 94	4.7	6
53	Bremsstrahlung in GRMHD Models of Accreting Black Holes. *Astrophysical Journal*, **2020**, 898, 50	4.7	6
52	Monitoring the Morphology of M87* in 2009–2017 with the Event Horizon Telescope. *Astrophysical Journal*, **2020**, 901, 67	4.7	20

51	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
50	Verification of Radiative Transfer Schemes for the EHT. *Astrophysical Journal*, **2020**, 897, 148	4.7	18
49	Decomposing the internal faraday rotation of black hole accretion flows. *Monthly Notices of the Royal Astronomical Society*, **2020**, 498, 5468-5488	4.3	17
48	First M87 Event Horizon Telescope Results. III. Data Processing and Calibration. *Astrophysical Journal Letters*, **2019**, 875, L3	7.9	267
47	First M87 Event Horizon Telescope Results. II. Array and Instrumentation. *Astrophysical Journal Letters*, **2019**, 875, L2	7.9	325
46	First M87 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L4	7.9	411
45	First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole. *Astrophysical Journal Letters*, **2019**, 875, L1	7.9	1110
44	First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring. *Astrophysical Journal Letters*, **2019**, 875, L5	7.9	429
43	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
42	The Event Horizon General Relativistic Magnetohydrodynamic Code Comparison Project. *Astrophysical Journal, Supplement Series*, **2019**, 243, 26	8	96
41	The Shadow of a Spherically Accreting Black Hole. *Astrophysical Journal Letters*, **2019**, 885, L33	7.9	58
40	Multiwavelength Light Curves of Two Remarkable Sagittarius A* Flares. *Astrophysical Journal*, **2019**, 864,	4.7	15
39	Variability Timescale and Spectral Index of Sgr A* in the Near Infrared: Approximate Bayesian Computation Analysis of the Variability of the Closest Supermassive Black Hole. *Astrophysical Journal*, **2018**, 863,	4.7	62
38	Two-temperature GRRMHD Simulations of M87. *Astrophysical Journal*, **2018**, 864, 126	4.7	44
37	Numerical Evaluation of the Relativistic Magnetized Plasma Susceptibility Tensor and Faraday Rotation Coefficients. *Astrophysical Journal*, **2018**, 868, 13	4.7	4
36	grim: A Flexible, Conservative Scheme for Relativistic Fluid Theories. *Astrophysical Journal*, **2017**, 837, 92	4.7	15
35	Resolution Dependence of Magnetorotational Turbulence in the Isothermal Stratified Shearing Box. *Astrophysical Journal*, **2017**, 840, 6	4.7	27
34	How important is non-ideal physics in simulations of sub-Eddington accretion on to spinning black holes?. *Monthly Notices of the Royal Astronomical Society*, **2017**, 470, 2240-2252	4.3	25

33	Time Domain Filtering of Resolved Images of Sgr A*. *Astrophysical Journal*, **2017**, 846, 29	4.7	10
32	The Radiative Efficiency and Spectra of Slowly Accreting Black Holes from Two-temperature GRRMHD Simulations. *Astrophysical Journal Letters*, **2017**, 844, L24	7.9	44
31	IMAGING AN EVENT HORIZON: MITIGATION OF SOURCE VARIABILITY OF SAGITTARIUS A*. *Astrophysical Journal*, **2016**, 817, 173	4.7	42
30	Evolution of accretion discs around a kerr black hole using extended magnetohydrodynamics. *Monthly Notices of the Royal Astronomical Society*, **2016**, 456, 1332-1345	4.3	39
29	AN EXTENSION OF THE ATHENA++ CODE FRAMEWORK FOR GRMHD BASED ON ADVANCED RIEMANN SOLVERS AND STAGGERED-MESH CONSTRAINED TRANSPORT. *Astrophysical Journal, Supplement Series*, **2016**, 225, 22	8	104
28	POLARIZED SYNCHROTRON EMISSIVITIES AND ABSORPTIVITIES FOR RELATIVISTIC THERMAL, POWER-LAW, AND KAPPA DISTRIBUTION FUNCTIONS. *Astrophysical Journal*, **2016**, 822, 34	4.7	31
27	AN EXTENDED MAGNETOHYDRODYNAMICS MODEL FOR RELATIVISTIC WEAKLY COLLISIONAL PLASMAS. *Astrophysical Journal*, **2015**, 810, 162	4.7	33
26	ALMA and VLA measurements of frequency-dependent time lags in Sagittarius A*: evidence for a relativistic outflow. *Astronomy and Astrophysics*, **2015**, 576, A41	5.1	43
25	THE X-RAY FLUX DISTRIBUTION OF SAGITTARIUS A* AS SEEN BYCHANDRA. *Astrophysical Journal*, **2015**, 799, 199	4.7	41
24	Observational appearance of inefficient accretion flows and jets in 3D GRMHD simulations: Application to Sagittarius A*. *Astronomy and Astrophysics*, **2014**, 570, A7	5.1	115
23	ACHANDRA/HETGS CENSUS OF X-RAY VARIABILITY FROM Sgr A* DURING 2012. *Astrophysical Journal*, **2013**, 774, 42	4.7	123
22	The 3 Ms Chandra campaign on Sgr A*: a census of X-ray flaring activity from the Galactic center. *Proceedings of the International Astronomical Union*, **2013**, 9, 374-378	0.1	
21	A FORMALISM FOR COVARIANT POLARIZED RADIATIVE TRANSPORT BY RAY TRACING. *Astrophysical Journal*, **2012**, 752, 123	4.7	18
20	NEAR-INFRARED AND X-RAY QUASI-PERIODIC OSCILLATIONS IN NUMERICAL MODELS OF Sgr A*. *Astrophysical Journal Letters*, **2012**, 746, L10	7.9	47
19	GLOBAL GENERAL RELATIVISTIC MAGNETOHYDRODYNAMIC SIMULATIONS OF BLACK HOLE ACCRETION FLOWS: A CONVERGENCE STUDY. *Astrophysical Journal*, **2012**, 744, 187	4.7	51
18	RADIALLY EXTENDED, STRATIFIED, LOCAL MODELS OF ISOTHERMAL DISKS. *Astrophysical Journal*, **2011**, 728, 130	4.7	55
17	NUMERICAL CALCULATION OF MAGNETOBREMSSTRAHLUNG EMISSION AND ABSORPTION COEFFICIENTS. *Astrophysical Journal*, **2011**, 737, 21	4.7	33
16	The jet in the galactic center: An ideal laboratory for magnetohydrodynamics and general relativity. *Proceedings of the International Astronomical Union*, **2010**, 6, 68-76	0.1	2

15	RADIATIVE MODELS OF SGR A* FROM GRMHD SIMULATIONS. *Astrophysical Journal*, **2009**, 706, 497-507	4.7	226
14	grmonty: A MONTE CARLO CODE FOR RELATIVISTIC RADIATIVE TRANSPORT. *Astrophysical Journal, Supplement Series*, **2009**, 184, 387-397	8	76
13	LOCALITY OF MHD TURBULENCE IN ISOTHERMAL DISKS. *Astrophysical Journal*, **2009**, 694, 1010-1018	4.7	99
12	Axisymmetric Shearing Box Models of Magnetized Disks. *Astrophysical Journal, Supplement Series*, **2008**, 174, 145-157	8	19
11	Orbital Advection by Interpolation: A Fast and Accurate Numerical Scheme for Super-Fast MHD Flows. *Astrophysical Journal, Supplement Series*, **2008**, 177, 373-387	8	36
10	Simulating the emission and outflows from accretion discs. *Classical and Quantum Gravity*, **2007**, 24, S259-S274	3.3	99
9	Primitive Variable Solvers for Conservative General Relativistic Magnetohydrodynamics. *Astrophysical Journal*, **2006**, 641, 626-637	4.7	181
8	A Measurement of the Electromagnetic Luminosity of a Kerr Black Hole. *Astrophysical Journal*, **2004**, 611, 977-995	4.7	415
7	HARM: A Numerical Scheme for General Relativistic Magnetohydrodynamics. *Astrophysical Journal*, **2003**, 589, 444-457	4.7	467
6	Efficiency of Magnetized Thin Accretion Disks in the Kerr Metric. *Astrophysical Journal*, **1999**, 522, L57-L60	4.7	154
5	Advection-dominated Accretion Model of Sagittarius A*: Evidence for a Black Hole at the Galactic Center. *Astrophysical Journal*, **1998**, 492, 554-568	4.7	320
4	Three-dimensional Magnetohydrodynamical Simulations of Vertically Stratified Accretion Disks. *Astrophysical Journal*, **1996**, 463, 656	4.7	459
3	Local Three-dimensional Magnetohydrodynamic Simulations of Accretion Disks. *Astrophysical Journal*, **1995**, 440, 742	4.7	879
2	Event Horizon Telescope observations of the jet launching and collimation in Centaurus A. *Nature Astronomy*,	12.1	13
1	Constraining particle acceleration in Sgr A* with simultaneous GRAVITY, Spitzer, NuSTAR, and Chandra observations. *Astronomy and Astrophysics*,	5.1	8