

Gunther Witzel

List of Publications by Year in descending order

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Version: 2024-02-01

52
papers

2,666
citations

172457

29
h-index

182427

51
g-index

54
all docs

54
docs citations

54
times ranked

1721
citing authors

#	ARTICLE	IF	CITATIONS
1	Relativistic redshift of the star S0-2 orbiting the Galactic Center supermassive black hole. <i>Science</i> , 2019, 365, 664-668.	12.6	270
2	AN IMPROVED DISTANCE AND MASS ESTIMATE FOR SGR A* FROM A MULTISTAR ORBIT ANALYSIS. <i>Astrophysical Journal</i> , 2016, 830, 17.	4.5	265
3	Testing General Relativity with Stellar Orbits around the Supermassive Black Hole in Our Galactic Center. <i>Physical Review Letters</i> , 2017, 118, 211101.	7.8	173
4	First Sagittarius A* Event Horizon Telescope Results. II. EHT and Multiwavelength Observations, Data Processing, and Calibration. <i>Astrophysical Journal Letters</i> , 2022, 930, L13.	8.3	142
5	First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass. <i>Astrophysical Journal Letters</i> , 2022, 930, L15.	8.3	137
6	Merging binaries in the Galactic Center: the eccentric Kozai-Lidov mechanism with stellar evolution. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 3494-3504.	4.4	122
7	SOURCE-INTRINSIC NEAR-INFRARED PROPERTIES OF SGR A*: TOTAL INTENSITY MEASUREMENTS. <i>Astrophysical Journal, Supplement Series</i> , 2012, 203, 18.	7.7	92
8	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. <i>Astrophysical Journal</i> , 2018, 863, 15.	4.5	83
9	DETECTION OF GALACTIC CENTER SOURCE G2 AT 3.8 μ m DURING PERIAPSE PASSAGE. <i>Astrophysical Journal Letters</i> , 2014, 796, L8.	8.3	81
10	KECK OBSERVATIONS OF THE GALACTIC CENTER SOURCE G2: GAS CLOUD OR STAR?. <i>Astrophysical Journal Letters</i> , 2013, 773, L13.	8.3	77
11	Simultaneous NIR/sub-mm observation of flare emission from Sagittarius A*. <i>Astronomy and Astrophysics</i> , 2008, 492, 337-344.	5.1	69
12	Near-infrared proper motions and spectroscopy of infrared excess sources at the Galactic center. <i>Astronomy and Astrophysics</i> , 2013, 551, A18.	5.1	68
13	Millimeter to X-ray flares from Sagittarius A*. <i>Astronomy and Astrophysics</i> , 2012, 537, A52.	5.1	67
14	Unprecedented Near-infrared Brightness and Variability of Sgr A*. <i>Astrophysical Journal Letters</i> , 2019, 882, L27.	8.3	58
15	A 600 Minute Near-Infrared Light Curve of Sagittarius A*. <i>Astrophysical Journal</i> , 2008, 688, L17-L20.	4.5	56
16	Near infrared flares of Sagittarius A*. <i>Astronomy and Astrophysics</i> , 2010, 510, A3.	5.1	54
17	Investigating the Binarity of S0-2: Implications for Its Origins and Robustness as a Probe of the Laws of Gravity around a Supermassive Black Hole. <i>Astrophysical Journal</i> , 2018, 854, 12.	4.5	48
18	THE X-RAY FLUX DISTRIBUTION OF SAGITTARIUS A* AS SEEN BY CHANDRA. <i>Astrophysical Journal</i> , 2015, 799, 199.	4.5	47

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19	Modeling mm- to X-ray flare emission from Sagittarius A*. <i>Astronomy and Astrophysics</i> , 2009, 500, 935-946.	5.1	47
20	Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign. <i>Astrophysical Journal Letters</i> , 2022, 930, L19.	8.3	43
21	The instrumental polarization of the Nasmyth focus polarimetric differential imager NAOS/CONICA (NACO) at the VLT. <i>Astronomy and Astrophysics</i> , 2011, 525, A130.	5.1	41
22	The S-star cluster at the center of the Milky Way. <i>Astronomy and Astrophysics</i> , 2012, 545, A70.	5.1	36
23	Polarized light from Sagittarius A* in the near-infrared K_s -band. <i>Astronomy and Astrophysics</i> , 2015, 576, A20.	5.1	35
24	Rapid Variability of Sgr A* across the Electromagnetic Spectrum. <i>Astrophysical Journal</i> , 2021, 917, 73.	4.5	35
25	<i>SPITZER</i> /IRAC OBSERVATIONS OF THE VARIABILITY OF Sgr A* AND THE OBJECT G2 AT 4.5 μ m. <i>Astrophysical Journal</i> , 2014, 793, 120.	4.5	33
26	The extreme luminosity states of Sagittarius A*. <i>Astronomy and Astrophysics</i> , 2010, 512, A2.	5.1	32
27	The Post-periastron Evolution of Galactic Center Source G1: The Second Case of a Resolved Tidal Interaction with a Supermassive Black Hole. <i>Astrophysical Journal</i> , 2017, 847, 80.	4.5	30
28	Kinematic Structure of the Galactic Center S Cluster. <i>Astrophysical Journal</i> , 2020, 896, 100.	4.5	30
29	General relativistic MHD simulations of non-thermal flaring in Sagittarius A*. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 507, 5281-5302.	4.4	30
30	Confusing Binaries: The Role of Stellar Binaries in Biasing Disk Properties in the Galactic Center. <i>Astrophysical Journal Letters</i> , 2018, 853, L24.	8.3	28
31	Constraining particle acceleration in Sgr A* with simultaneous GRAVITY, <i>Spitzer</i> , <i>NuSTAR</i> , and <i>Chandra</i> observations. <i>Astronomy and Astrophysics</i> , 2021, 654, A22.	5.1	28
32	Coordinated NIR/mm observations of flare emission from Sagittarius A*. <i>Astronomy and Astrophysics</i> , 2010, 517, A46.	5.1	24
33	A FORMAL METHOD FOR IDENTIFYING DISTINCT STATES OF VARIABILITY IN TIME-VARYING SOURCES: SGR A* AS AN EXAMPLE. <i>Astrophysical Journal</i> , 2014, 791, 24.	4.5	24
34	Simultaneous X-Ray and Infrared Observations of Sagittarius A*'s Variability. <i>Astrophysical Journal</i> , 2019, 871, 161.	4.5	24
35	The Galactic Center: An Improved Astrometric Reference Frame for Stellar Orbits around the Supermassive Black Hole. <i>Astrophysical Journal</i> , 2019, 873, 65.	4.5	24
36	The near-infrared spectral index of Sagittarius A* derived from K_s - and H -band flare statistics. <i>Astronomy and Astrophysics</i> , 2011, 532, A26.	5.1	23

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37	Improving Orbit Estimates for Incomplete Orbits with a New Approach to Priors: with Applications from Black Holes to Planets. <i>Astronomical Journal</i> , 2019, 158, 4.	4.7	22
38	Multiwavelength Light Curves of Two Remarkable Sagittarius A* Flares. <i>Astrophysical Journal</i> , 2018, 864, 58.	4.5	20
39	Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI. <i>Astrophysical Journal Letters</i> , 2022, 930, L21.	8.3	20
40	Using infrared/X-ray flare statistics to probe the emission regions near the event horizon of Sgr A*. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 461, 552-559.	4.4	19
41	EXTENDED SUBMILLIMETER EMISSION OF THE GALACTIC CENTER AND NEAR-INFRARED/SUBMILLIMETER VARIABILITY OF ITS SUPERMASSIVE BLACK HOLE. <i>Astrophysical Journal</i> , 2011, 738, 158.	4.5	18
42	An Adaptive Optics Survey of Stellar Variability at the Galactic Center. <i>Astrophysical Journal</i> , 2019, 871, 103.	4.5	18
43	Submillimeter and radio variability of Sagittarius A*. <i>Astronomy and Astrophysics</i> , 2017, 601, A80.	5.1	16
44	Second-scale Submillimeter Variability of Sagittarius A* during Flaring Activity of 2019: On the Origin of Bright Near-infrared Flares. <i>Astrophysical Journal Letters</i> , 2021, 920, L7.	8.3	14
45	Consistency of the Infrared Variability of SGR A* over 22 yr. <i>Astrophysical Journal Letters</i> , 2019, 882, L28.	8.3	11
46	The AIROPA software package: milestones for testing general relativity in the strong gravity regime with AO. <i>Proceedings of SPIE</i> , 2016, , .	0.8	8
47	Multiwavelength Variability of Sagittarius A* in 2019 July. <i>Astrophysical Journal</i> , 2022, 931, 7.	4.5	7
48	The Keplerian orbit of G2. <i>Proceedings of the International Astronomical Union</i> , 2013, 9, 264-268.	0.0	4
49	Off-axis PSF reconstruction for integral field spectrograph: instrumental aberrations and application to Keck/OSIRIS data. , 2018, , .		3
50	Flaremodel: An open-source Python package for one-zone numerical modelling of synchrotron sources. <i>Astronomy and Astrophysics</i> , 2022, 658, A111.	5.1	3
51	Observations of NIR polarized light from Sagittarius A*. <i>Proceedings of the International Astronomical Union</i> , 2013, 9, 283-287.	0.0	0
52	Constraining the Variability and Binary Fraction of Galactic Center Young Stars. <i>Proceedings of the International Astronomical Union</i> , 2016, 11, 237-238.	0.0	0