

Stefan Osowski

List of Publications by Year in descending order

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Version: 2024-02-01

103
papers

8,272
citations

41344

49
h-index

45317

90
g-index

105
all docs

105
docs citations

105
times ranked

4413
citing authors

#	ARTICLE	IF	CITATIONS
1	The International Pulsar Timing Array project: using pulsars as a gravitational wave detector. <i>Classical and Quantum Gravity</i> , 2010, 27, 084013.	4.0	494
2	Gravitational waves from binary supermassive black holes missing in pulsar observations. <i>Science</i> , 2015, 349, 1522-1525.	12.6	386
3	European Pulsar Timing Array limits on an isotropic stochastic gravitational-wave background. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 453, 2577-2599.	4.4	380
4	High-precision timing of 42 millisecond pulsars with the European Pulsar Timing Array. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 458, 3341-3380.	4.4	351
5	The Parkes Pulsar Timing Array Project. <i>Publications of the Astronomical Society of Australia</i> , 2013, 30, .	3.4	350
6	A census of baryons in the Universe from localized fast radio bursts. <i>Nature</i> , 2020, 581, 391-395.	27.8	341
7	The International Pulsar Timing Array: First data release. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 458, 1267-1288.	4.4	332
8	A single fast radio burst localized to a massive galaxy at cosmological distance. <i>Science</i> , 2019, 365, 565-570.	12.6	295
9	Timing analysis for 20 millisecond pulsars in the Parkes Pulsar Timing Array. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 1751-1769.	4.4	233
10	The dispersionâ€‘brightness relation for fast radio bursts from a wide-field survey. <i>Nature</i> , 2018, 562, 386-390.	27.8	223
11	The International Pulsar Timing Array: second data release. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 4666-4687.	4.4	191
12	Measurement and correction of variations in interstellar dispersion in high-precision pulsar timing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 429, 2161-2174.	4.4	174
13	The International Pulsar Timing Array second data release: Search for an isotropic gravitational wave background. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 510, 4873-4887.	4.4	174
14	Development of a pulsar-based time-scale. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 427, 2780-2787.	4.4	163
15	European Pulsar Timing Array limits on continuous gravitational waves from individual supermassive black hole binaries. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 1665-1679.	4.4	149
16	Follow Up of GW170817 and Its Electromagnetic Counterpart by Australian-Led Observing Programmes. <i>Publications of the Astronomical Society of Australia</i> , 2017, 34, .	3.4	142
17	Gravitational-Wave Limits from Pulsar Timing Constrain Supermassive Black Hole Evolution. <i>Science</i> , 2013, 342, 334-337.	12.6	133
18	The Detection of an Extremely Bright Fast Radio Burst in a Phased Array Feed Survey. <i>Astrophysical Journal Letters</i> , 2017, 841, L12.	8.3	133

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19	Gravitational-Wave Cosmology across 29 Decades in Frequency. <i>Physical Review X</i> , 2016, 6, .	8.9	113
20	An ultra-wide bandwidth (704 to 4032MHz) receiver for the Parkes radio telescope. <i>Publications of the Astronomical Society of Australia</i> , 2020, 37, .	3.4	113
21	A study of multifrequency polarization pulse profiles of millisecond pulsars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 449, 3223-3262.	4.4	109
22	The MeerKAT telescope as a pulsar facility: System verification and early science results from MeerTime. <i>Publications of the Astronomical Society of Australia</i> , 2020, 37, .	3.4	108
23	FRB microstructure revealed by the real-time detection of FRB170827. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 1209-1217.	4.4	107
24	The Parkes Pulsar Timing Array project: second data release. <i>Publications of the Astronomical Society of Australia</i> , 2020, 37, .	3.4	107
25	An all-sky search for continuous gravitational waves in the Parkes Pulsar Timing Array data set. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 3709-3720.	4.4	98
26	A LOFAR census of non-recycled pulsars: average profiles, dispersion measures, flux densities, and spectra. <i>Astronomy and Astrophysics</i> , 2016, 591, A134.	5.1	96
27	Limitations in timing precision due to single-pulse shape variability in millisecond pulsars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 443, 1463-1481.	4.4	94
28	Faint Repetitions from a Bright Fast Radio Burst Source. <i>Astrophysical Journal Letters</i> , 2019, 887, L30.	8.3	94
29	The LOFAR pilot surveys for pulsars and fast radio transients. <i>Astronomy and Astrophysics</i> , 2014, 570, A60.	5.1	89
30	Limits on fast radio bursts at 145MHz with artemis, a real-time software backend. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 452, 1254-1262.	4.4	82
31	From spin noise to systematics: stochastic processes in the first International Pulsar Timing Array data release. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 458, 2161-2187.	4.4	82
32	Searching for gravitational wave memory bursts with the Parkes Pulsar Timing Array. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 446, 1657-1671.	4.4	79
33	A LOFAR census of millisecond pulsars. <i>Astronomy and Astrophysics</i> , 2016, 585, A128.	5.1	78
34	High signal-to-noise ratio observations and the ultimate limits of precision pulsar timing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 418, 1258-1271.	4.4	75
35	PULSAR OBSERVATIONS OF EXTREME SCATTERING EVENTS. <i>Astrophysical Journal</i> , 2015, 808, 113.	4.5	75
36	Tests of gravitational symmetries with pulsar binary J1713+0747. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 3249-3260.	4.4	73

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37	Parkes Pulsar Timing Array constraints on ultralight scalar-field dark matter. <i>Physical Review D</i> , 2018, 98, .	4.7	72
38	Polarization observations of 20 millisecond pulsars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 414, 2087-2100.	4.4	69
39	Pulsar polarisation below 200 MHz: Average profiles and propagation effects. <i>Astronomy and Astrophysics</i> , 2015, 576, A62.	5.1	68
40	Timing of young radio pulsars – I. Timing noise, periodic modulation, and proper motion. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 3810-3826.	4.4	63
41	A glitch in the millisecond pulsar J0613+0200. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 461, 2809-2817.	4.4	60
42	The UTMOST: A Hybrid Digital Signal Processor Transforms the Molonglo Observatory Synthesis Telescope. <i>Publications of the Astronomical Society of Australia</i> , 2017, 34, .	3.4	59
43	Wide-band, low-frequency pulse profiles of 100 radio pulsars with LOFAR. <i>Astronomy and Astrophysics</i> , 2016, 586, A92.	5.1	57
44	Population synthesis of double neutron stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 413, 461-479.	4.4	56
45	On detection of the stochastic gravitational-wave background using the Parkes pulsar timing array. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 414, 1777-1787.	4.4	54
46	Inferring the population properties of binary neutron stars with gravitational-wave measurements of spin. <i>Physical Review D</i> , 2018, 98, .	4.7	52
47	The UTMOST pulsar timing programme I: Overview and first results. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 484, 3691-3712.	4.4	52
48	Lense–Thirring frame dragging induced by a fast-rotating white dwarf in a binary pulsar system. <i>Science</i> , 2020, 367, 577-580.	12.6	51
49	A pulsar-based time-scale from the International Pulsar Timing Array. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 491, 5951-5965.	4.4	51
50	Extremely band-limited repetition from a fast radio burst source. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 500, 2525-2531.	4.4	51
51	Five new real-time detections of fast radio bursts with UTMOST. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 2989-3002.	4.4	49
52	The noise properties of 42 millisecond pulsars from the European Pulsar Timing Array and their impact on gravitational-wave searches. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 457, 4421-4440.	4.4	48
53	Limits on Anisotropy in the Nanohertz Stochastic Gravitational Wave Background. <i>Physical Review Letters</i> , 2015, 115, 041101.	7.8	47
54	Identifying and mitigating noise sources in precision pulsar timing data sets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 478-493.	4.4	47

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55	The UTMOST pulsar timing programme – II. Timing noise across the pulsar population. Monthly Notices of the Royal Astronomical Society, 2020, 494, 228-245.	4.4	46
56	A millisecond pulsar in an extremely wide binary system. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2207-2222.	4.4	41
57	A DEEP CAMPAIGN TO CHARACTERIZE THE SYNCHRONOUS RADIO/X-RAY MODE SWITCHING OF PSR B0943+10. Astrophysical Journal, 2016, 831, 21.	4.5	40
58	Precision Orbital Dynamics from Interstellar Scintillation Arcs for PSR J0437–4715. Astrophysical Journal, 2020, 904, 104.	4.5	39
59	21-Year timing of the black-widow pulsar J2051+0827. Monthly Notices of the Royal Astronomical Society, 2016, 462, 1029-1038.	4.4	36
60	Studying the Solar system with the International Pulsar Timing Array. Monthly Notices of the Royal Astronomical Society, 2018, 481, 5501-5516.	4.4	36
61	First detection of frequency-dependent, time-variable dispersion measures. Astronomy and Astrophysics, 2019, 624, A22.	5.1	34
62	THE DISTURBANCE OF A MILLISECOND PULSAR MAGNETOSPHERE. Astrophysical Journal Letters, 2016, 828, L1.	8.3	33
63	Which bright fast radio bursts repeat?. Monthly Notices of the Royal Astronomical Society, 2020, 495, 2416-2427.	4.4	33
64	Timing of young radio pulsars – II. Braking indices and their interpretation. Monthly Notices of the Royal Astronomical Society, 2020, 494, 2012-2026.	4.4	33
65	Commensal discovery of four fast radio bursts during Parkes Pulsar Timing Array observations. Monthly Notices of the Royal Astronomical Society, 2019, 488, 868-875.	4.4	31
66	Timing, polarimetry and physics of the bright, nearby millisecond pulsar PSR J0437–4715 – a single-pulse perspective. Monthly Notices of the Royal Astronomical Society, 2014, 441, 3148-3160.	4.4	29
67	The relativistic binary programme on MeerKAT: science objectives and first results. Monthly Notices of the Royal Astronomical Society, 2021, 504, 2094-2114.	4.4	27
68	Status update of the Parkes pulsar timing array. Classical and Quantum Gravity, 2010, 27, 084015.	4.0	26
69	Long-term variability of a black widow’s eclipses – A decade of PSR J2051–0827. Monthly Notices of the Royal Astronomical Society, 2019, 490, 889-908.	4.4	25
70	On the usefulness of existing solar wind models for pulsar timing corrections. Monthly Notices of the Royal Astronomical Society, 2019, 487, 394-408.	4.4	25
71	Measurements of pulse jitter and single-pulse variability in millisecond pulsars using MeerKAT. Monthly Notices of the Royal Astronomical Society, 2021, 502, 407-422.	4.4	25
72	Robust estimation of scattering in pulsar timing analysis. Monthly Notices of the Royal Astronomical Society, 2017, 468, 1474-1485.	4.4	23

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73	Dispersion measure variability for 36 millisecond pulsars at 150 MHz with LOFAR. <i>Astronomy and Astrophysics</i> , 2020, 644, A153.	5.1	23
74	Improving the precision of pulsar timing through polarization statistics. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 430, 416-424.	4.4	22
75	Improving timing sensitivity in the microhertz frequency regime: limits from PSR J1713+0747 on gravitational waves produced by supermassive black hole binaries. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 218-227.	4.4	22
76	The PULSE@Parkes Project: a New Observing Technique for Long-Term Pulsar Monitoring. <i>Publications of the Astronomical Society of Australia</i> , 2009, 26, 468-475.	3.4	21
77	Comparison of pulsar positions from timing and very long baseline astrometry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 469, 425-434.	4.4	20
78	The 2018 X-Ray and Radio Outburst of Magnetar XTE J1810â€“197. <i>Astrophysical Journal Letters</i> , 2019, 874, L25.	8.3	20
79	The impact of solar wind variability on pulsar timing. <i>Astronomy and Astrophysics</i> , 2021, 647, A84.	5.1	20
80	Low-frequency pulse profile variation in PSR B2217+47: evidence for echoes from the interstellar medium. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 476, 2704-2716.	4.4	19
81	A fast radio burst in the direction of the Virgo Cluster. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 1-8.	4.4	19
82	Testing the accuracy of the ionospheric Faraday rotation corrections through LOFAR observations of bright northern pulsars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 483, 4100-4113.	4.4	19
83	Wide-band profile domain pulsar timing analysis. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 3706-3727.	4.4	18
84	Versatile directional searches for gravitational waves with Pulsar Timing Arrays. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 3662-3673.	4.4	17
85	Rotation measure variations for 20 millisecond pulsars. <i>Astrophysics and Space Science</i> , 2011, 335, 485-498.	1.4	16
86	Ultrarelativistic astrophysics using multimessenger observations of double neutron stars with LISA and the SKA. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 5408-5412.	4.4	12
87	Markov Chain Monte Carlo population synthesis of single radio pulsars in the Galaxy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 492, 4043-4057.	4.4	12
88	Hunting for Radio Emission from the Intermittent Pulsar J1107-5907 at Low Frequencies. <i>Astrophysical Journal</i> , 2018, 869, 134.	4.5	11
89	Relativistic Spin Precession in the Binary PSR J1141âˆ“6545. <i>Astrophysical Journal Letters</i> , 2019, 873, L15.	8.3	11
90	Detection of a Glitch in the Pulsar J1709âˆ“4429. <i>Research Notes of the AAS</i> , 2018, 2, 139.	0.7	9

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91	Measurement of the Rate Distribution of the Population of Repeating Fast Radio Bursts: Implications for Progenitor Models. <i>Astrophysical Journal Letters</i> , 2020, 895, L22.	8.3	8
92	Gravitational lensing as a probe of compact object populations in the Galaxy. <i>Astronomy and Astrophysics</i> , 2008, 478, 429-434.	5.1	7
93	Pulsar Timing Array Experiments. , 2021, , 1-42.		7
94	Limits on the mass, velocity and orbit of PSR J1933+6211. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 471, 4579-4586.	4.4	6
95	The UTMOST survey for magnetars, intermittent pulsars, RRATs, and FRBs – I. System description and overview. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 492, 4752-4767.	4.4	6
96	A model for distortions of polarisation-angle curves in radio pulsars. <i>Astronomy and Astrophysics</i> , 2016, 593, A83.	5.1	6
97	Systematic upper limits on the size of missing pulsar glitches in the first UTMOST open data release. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 512, 1469-1482.	4.4	6
98	Mode switching characteristics of PSR B0329+54 at 150 MHz. <i>Astrophysics and Space Science</i> , 2018, 363, 1.	1.4	4
99	Multifrequency behaviour of the anomalous events of PSR J0922+0638. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2018, 477, L25-L29.	3.3	2
100	Multiwavelength Follow-up of FRB180309. <i>Astrophysical Journal</i> , 2021, 913, 78.	4.5	2
101	Tracking dispersion measure variations of timing array pulsars with the GMRT. <i>Proceedings of the International Astronomical Union</i> , 2012, 8, 432-434.	0.0	1
102	Pulsar Timing Array Experiments. , 2022, , 157-198.		1
103	Properties of double neutron stars. <i>EAS Publications Series</i> , 2008, 30, 137-140.	0.3	0