Shay Zucker

List of Publications by Citations

118 papers	17,155 citations	47 h-index	124 g-index
124 ext. papers	19,837 ext. citations	4.7 avg, IF	5.81 L-index

#	Paper	IF	Citations
118	Gaia Data Release 2. *Astronomy and Astrophysics*, **2018**, 616, A1	5.1	4787
117	TheGaiamission. *Astronomy and Astrophysics*, **2016**, 595, A1	5.1	2933
116	GaiaData Release 1. *Astronomy and Astrophysics*, **2016**, 595, A2	5.1	1364
115	A box-fitting algorithm in the search for periodic transits. *Astronomy and Astrophysics*, **2002**, 391, 369-377	5.1	694
114	SINFONI in the Galactic Center: Young Stars and Infrared Flares in the Central Light-Month. *Astrophysical Journal*, **2005**, 628, 246-259	4.7	493
113	Gaia Data Release 2. *Astronomy and Astrophysics*, **2018**, 616, A10	5.1	438
112	The effect of red noise on planetary transit detection. *Monthly Notices of the Royal Astronomical Society*, **2006**, 373, 231-242	4.3	404
111	Gaia Data Release 2. *Astronomy and Astrophysics*, **2018**, 616, A12	5.1	384
110	Correcting systematic effects in a large set of photometric light curves. *Monthly Notices of the Royal Astronomical Society*, **2005**, 356, 1466-1470	4.3	354
109	Study of spectroscopic binaries with TODCOR. 1: A new two-dimensional correlation algorithm to derive the radial velocities of the two components. *Astrophysical Journal*, **1994**, 420, 806	4.7	346
108	ELODIE metallicity-biased search for transiting Hot Jupiters. *Astronomy and Astrophysics*, **2005**, 444, L15-L19	5.1	331
107	The Spectroscopic Orbit of the Planetary Companion Transiting HD 209458. *Astrophysical Journal*, **2000**, 532, L55-L58	4.7	243
106	Gaia Data Release 2. *Astronomy and Astrophysics*, **2018**, 616, A11	5.1	237
105	Cosmic dynamics in the era of Extremely Large Telescopes. *Monthly Notices of the Royal Astronomical Society*, **2008**, 386, 1192-1218	4.3	171
104	A simple method to estimate radial velocity variations due to stellar activity using photometry. *Monthly Notices of the Royal Astronomical Society*, **2012**, 419, 3147-3158	4.3	170
103	Transiting exoplanets from the CoRoT space mission. *Astronomy and Astrophysics*, **2008**, 491, 889-897	5.1	164
102	On the Mass-Period Correlation of the Extrasolar Planets. *Astrophysical Journal*, **2002**, 568, L113-L116	4.7	158

101	HD 80606 b, a planet on an extremely elongated orbit. *Astronomy and Astrophysics*, **2001**, 375, L27-L30	5.1	148
100	Search for brown-dwarf companions of stars. *Astronomy and Astrophysics*, **2011**, 525, A95	5.1	132
99	Eclipsing binaries in open clusters III. V621 Per in Persei. *Monthly Notices of the Royal Astronomical Society*, **2004**, 355, 986-994	4.3	128
98	TRANSIT TIMING OBSERVATIONS FROM KEPLER . VIII. CATALOG OF TRANSIT TIMING MEASUREMENTS OF THE FIRST TWELVE QUARTERS. *Astrophysical Journal, Supplement Series*, **2013**, 208, 16	8	127
97	Beaming Binaries: A New Observational Category of Photometric Binary Stars. *Astrophysical Journal* , **2007**, 670, 1326-1330	4.7	124
96	Multi-order TODCOR: Application to observations taken with the CORALIE echelle spectrograph. *Astronomy and Astrophysics*, **2004**, 426, 695-698	5.1	118
95	An intriguing correlation between the masses and periods of the transiting planets. *Monthly Notices of the Royal Astronomical Society*, **2005**, 356, 955-957	4.3	100
94	Gaia Data Release 2. *Astronomy and Astrophysics*, **2018**, 616, A14	5.1	100
93	Gaia Data Release 2. *Astronomy and Astrophysics*, **2018**, 618, A30	5.1	95
92	Probing Post-Newtonian Physics near the Galactic Black Hole with Stellar Redshift Measurements. *Astrophysical Journal*, **2006**, 639, L21-L24	4.7	92
91	Cross-correlation and maximum-likelihood analysis: a new approach to combining cross-correlation functions. *Monthly Notices of the Royal Astronomical Society*, **2003**, 342, 1291-1298	4.3	87
90	Reassessing the radial-velocity evidence for planets around CoRoT-7. *Monthly Notices of the Royal Astronomical Society*, **2011**, 411, 1953-1962	4.3	75
89	Gaia Data Release 1. *Astronomy and Astrophysics*, **2017**, 601, A19	5.1	71
88	The Smallest Mass Ratio Young Star Spectroscopic Binaries. *Astrophysical Journal*, **2002**, 569, 863-871	4.7	69
87	A single sub-kilometre Kuiper belt object from a stellar occultation in archival data. *Nature*, **2009**, 462, 895-7	50.4	68
86	The Mass Ratio Distribution in Main-Sequence Spectroscopic Binaries Measured by Infrared Spectroscopy. *Astrophysical Journal*, **2003**, 599, 1344-1356	4.7	68
85	Component Masses of the Young Spectroscopic Binary UZ Tau E. *Astrophysical Journal*, **2002**, 579, L99-L102	4.7	65
84	Gaia Data Release 1. *Astronomy and Astrophysics*, **2017**, 605, A79	5.1	64

83	Gaia Data Release 2. *Astronomy and Astrophysics*, **2019**, 623, A110	5.1	62
82	Transiting exoplanets from the CoRoT space mission. *Astronomy and Astrophysics*, **2008**, 488, L43-L46	5.1	59
81	Analysis of theHipparcosObservations of the Extrasolar Planets and the Brown Dwarf Candidates. *Astrophysical Journal*, **2001**, 562, 549-557	4.7	56
80	Gaia Data Release 2. *Astronomy and Astrophysics*, **2018**, 616, A13	5.1	56
79	Kepler KOI-13.01 Detection of beaming and ellipsoidal modulations pointing to a massive hot Jupiter. *Astronomy and Astrophysics*, **2012**, 541, A56	5.1	55
78	Comparative blind test of five planetary transit detection algorithms on realistic synthetic light curves. *Astronomy and Astrophysics*, **2005**, 437, 355-368	5.1	54
77	Analysis of the Hipparcos Measurements of HD 10697: A Mass Determination of a Brown Dwarf Secondary. *Astrophysical Journal*, **2000**, 531, L67-L69	4.7	52
76	Multi-order TODCOR: Application to observations taken with the CORALIE echelle spectrograph. *Astronomy and Astrophysics*, **2003**, 404, 775-781	5.1	51
75	Analysis of the [ITAL]Hipparcos[/ITAL] Measurements of Andromedae: A Mass Estimate of Its Outermost Known Planetary Companion. *Astrophysical Journal*, **1999**, 522, L149-L151	4.7	51
74	EVIDENCE FOR PERIODICITY IN 43 YEAR-LONG MONITORING OF NGC 5548. *Astrophysical Journal, Supplement Series*, **2016**, 225, 29	8	49
73	A note on the snow line in protostellar accretion disks. *Meteoritics and Planetary Science*, **2004**, 39, 1859-1868	1.8	48
72	Study of Spectroscopic Binaries with TODCOR. III. Application to Triple-lined Systems. *Astrophysical Journal*, **1995**, 452, 863	4.7	48
71	Elodie metallicity-biased search for transiting Hot Jupiters. *Astronomy and Astrophysics*, **2006**, 446, 717-722	5.1	46
70	Public HARPS radial velocity database corrected for systematic errors. *Astronomy and Astrophysics*, **2020**, 636, A74	5.1	45
69	Noise properties of the CoRoT data. *Astronomy and Astrophysics*, **2009**, 506, 425-429	5.1	45
68	Correcting HIRES/Keck radial velocities for small systematic errors. *Monthly Notices of the Royal Astronomical Society: Letters*, **2019**, 484, L8-L13	4.3	45
67	Two empirical regimes of the planetary mass-radius relation. *Astronomy and Astrophysics*, **2017**, 604, A83	5.1	44
66	Shallow TransitsDeep Learning. I. Feasibility Study of Deep Learning to Detect Periodic Transits of Exoplanets. *Astronomical Journal*, **2018**, 155, 147	4.9	43

65	A Planet Candidate in the Stellar Triple System HD 178911. *Astrophysical Journal*, **2002**, 568, 363-368	4.7	43
64	Rate and nature of false positives in the CoRoT exoplanet search. *Astronomy and Astrophysics*, **2009**, 506, 337-341	5.1	42
63	Photometric follow-up of the transiting planet WASP-1b. *Monthly Notices of the Royal Astronomical Society*, **2007**, 376, 1296-1300	4.3	42
62	Derivation of the Mass Distribution of Extrasolar Planets with MAXLIMA, a Maximum Likelihood Algorithm. *Astrophysical Journal*, **2001**, 562, 1038-1044	4.7	42
61	On using the beaming effect to measure spin□orbit alignment in stellar binaries with Sun-like components. *New Astronomy*, **2012**, 17, 309-315	1.8	38
60	An Upper Bound on the 1.6 Micron Flux Ratio of the Companion to □Coronae Borealis. *Astronomical Journal*, **2005**, 129, 402-408	4.9	38
59	Infrared Detection of Low-Mass Secondaries in Spectroscopic Binaries. *Astrophysical Journal*, **2002**, 564, 1007-1014	4.7	38
58	DETECTION OF TRANSITING JOVIAN EXOPLANETS BY GAIA PHOTOMETRY□EXPECTED YIELD. *Astrophysical Journal Letters*, **2012**, 753, L1	7.9	34
57	A possible correlation between planetary radius and orbital period for small planets. *Monthly Notices of the Royal Astronomical Society: Letters*, **2016**, 455, L96-L98	4.3	29
56	Todcor: A TwO-Dimensional CORrelation technique to analyze stellar spectra in search of faint companions. *Astrophysics and Space Science*, **1994**, 212, 349-356	1.6	29
55	VERY LOW-MASS STELLAR AND SUBSTELLAR COMPANIONS TO SOLAR-LIKE STARS FROM MARVELS. VI. A GIANT PLANET AND A BROWN DWARF CANDIDATE IN A CLOSE BINARY SYSTEM HD 87646. *Astronomical Journal*, **2016**, 152, 112	4.9	28
54	Directed follow-up strategy of low-cadence photometric surveys in search of transiting exoplanets - I. Bayesian approach for adaptive scheduling. *Monthly Notices of the Royal Astronomical Society*, **2011**, 415, 2513-2522	4.3	24
53	Directed follow-up strategy of low-cadence photometric surveys in search of transiting exoplanets □II. Application to Gaia. *Monthly Notices of the Royal Astronomical Society*, **2013**, 428, 3641-3647	4.3	23
52	Dynamical mass determination for the very low mass stars LHS 1070 B and C. *Astronomy and Astrophysics*, **2001**, 367, 183-188	5.1	23
51	Disproving the validated planets K2-78b, K2-82b, and K2-92b. *Astronomy and Astrophysics*, **2017**, 606, A75	5.1	22
50	QUASAR CARTOGRAPHY: FROM BLACK HOLE TO BROAD-LINE REGION SCALES. *Astrophysical Journal*, **2013**, 769, 124	4.7	22
49	TRIMOR - three-dimensional correlation technique to analyse multi-order spectra of triple stellar systems: application to HD 188753. *Monthly Notices of the Royal Astronomical Society*, **2009**, 399, 906-913	4.3	21
48	Studies of multiple stellar systems -- IV. The triple-lined spectroscopic system Gliese 644. *Monthly Notices of the Royal Astronomical Society*, **2001**, 325, 343-357	4.3	21

47	ESPRESSO: A High Resolution Spectrograph for the Combined Coud Focus of the VLT. *Thirty Years of Astronomical Discovery With UKIRT*, **2009**, 395-399	0.3	20
46	Removing systematics from the CoRoT light curves. *Astronomy and Astrophysics*, **2009**, 506, 431-434	5.1	18
45	The exoplanet hunter HARPS: unequalled accuracy and perspectives toward 1 cm s-1precision **2006** ,		18
44	ELODIE metallicity-biased search for transiting Hot Jupiters. *Astronomy and Astrophysics*, **2007**, 473, 323-328	5.1	18
43	Codex **2008**, 249-253		17
42	A massive planet to the young disc star HD 81040. *Astronomy and Astrophysics*, **2006**, 449, 417-424	5.1	17
41	Methods of Reverberation Mapping. I. Time-lag Determination by Measures of Randomness. *Astrophysical Journal*, **2017**, 844, 146	4.7	15
40	Spectroscopic Binary Mass Determination Using Relativity. *Astrophysical Journal*, **2007**, 654, L83-L86	4.7	14
39	ELODIE metallicity-biased search for transiting Hot Jupiters. *Astronomy and Astrophysics*, **2006**, 458, 327-329	5.1	13
38	ELODIE metallicity-biased search for transiting Hot Jupiters. *Astronomy and Astrophysics*, **2008**, 487, 369-372	5.1	13
37	Study of Spectroscopic Binaries with TODCOR. II. The Highly Eccentric Binary HD 2909. *Astrophysical Journal*, **1995**, 449, 909	4.7	12
36	tiravel??? Template-Independent RAdial VELocity measurement. *Monthly Notices of the Royal Astronomical Society*, **2006**, 371, 1513-1518	4.3	10
35	A Possible Correlation between Mass Ratio and Period Ratio in Multiple Planetary Systems. *Astrophysical Journal*, **2003**, 590, L115-L117	4.7	10
34	Detection of periodicity based on independence tests III. Phase distance correlation periodogram. *Monthly Notices of the Royal Astronomical Society: Letters*, **2018**, 474, L86-L90	4.3	8
33	Small Planets in the Galactic Context: Host Star Kinematics, Iron, and Alpha-element Enhancement. *Astronomical Journal*, **2019**, 158, 61	4.9	8
32	ON THE AGES OF PLANETARY SYSTEMS WITH MEAN-MOTION RESONANCES. *Astrophysical Journal Letters*, **2011**, 741, L23	7.9	8
31	Detection of Periodicity Based on Independence Tests II. Improved Serial Independence Measure. *Monthly Notices of the Royal Astronomical Society: Letters*, **2016**, 457, L118-L121	4.3	7
30	A Quantitative Comparison of Exoplanet Catalogs. *Geosciences (Switzerland)*, **2018**, 8, 325	2.7	7

29	Detection of periodicity based on serial dependence of phase-folded data. *Monthly Notices of the Royal Astronomical Society*, **2015**, 449, 2723-2733	4.3	6
28	CODEX: measuring the acceleration of the universe and beyond. *Proceedings of the International Astronomical Union*, **2005**, 1, 193-197	0.1	6
27	Comparison between Extrasolar Planets and Low-Mass Secondaries. *Symposium - International Astronomical Union*, **2001**, 200, 519-528		5
26	A Transiting Warm Giant Planet around the Young Active Star TOI-201. *Astronomical Journal*, **2021**, 161, 235	4.9	5
25	Occurrence rates of small planets from HARPS. *Astronomy and Astrophysics*, **2020**, 643, A106	5.1	4
24	Planets in Multiple-Star Systems: Properties and Detections. *International Astronomical Union Colloquium*, **2004**, 191, 206-214		3
23	USuRPER: Unit-sphere representation periodogram for full spectra. *Astronomy and Astrophysics*, **2020**, 642, A146	5.1	3
22	Systematic search for long-term transit duration changes in Kepler transiting planets. *Monthly Notices of the Royal Astronomical Society*, **2021**, 505, 1293-1310	4.3	3
21	Quantifying the similarity of planetary system architectures. *Astronomy and Astrophysics*, **2021**, 651, A61	5.1	3
20	Prospects for detecting the astrometric signature of Barnard□s Star b. *Astronomy and Astrophysics*, **2019**, 623, A10	5.1	3
19	Detection of periodicity based on independence tests □V. Phase distance correlation periodogram for two-dimensional astrometry. *Monthly Notices of the Royal Astronomical Society: Letters*, **2019**, 484, L14-L18	4.3	2
18	Fluid-like representation of Fickian diffusion. *Physics of Fluids*, **2022**, 34, 011701	4.4	2
17	From ESPRESSO to CODEX. *Thirty Years of Astronomical Discovery With UKIRT*, **2009**, 243-247	0.3	2
16	Exoplanets in the Galactic context: planet occurrence rates in the thin disc, thick disc, and stellar halo of Kepler stars. *Monthly Notices of the Royal Astronomical Society*, **2022**, 510, 3449-3459	4.3	2
15	Constraining the orbits of small solar system bodies using spectroscopic Doppler shift measurements □a preliminary study. *Astronomische Nachrichten*, **2015**, 336, 634-637	0.7	1
14	Extrasolar Planets in Double and Multiple Stellar Systems **2008**, 169-182		1
13	Sparse Box-fitting Least Squares. *Publications of the Astronomical Society of the Pacific*, **2021**, 133, 024502	3	0
12	New periodograms separating orbital radial velocities and spectral shape variation. *Astronomy and Astrophysics*, **2022**, 659, A189	5.1	0

11	Significance of periodogram peaks. *Proceedings of the International Astronomical Union*, **2015**, 11, 219-219	0.1
10	GATE (Gaia Transiting Exoplanets): Detecting Transiting Exoplanets with Gaia. *Proceedings of the International Astronomical Union*, **2015**, 11, 224-224	0.1
9	The Impact of Gaia and LSST on Binaries and Exoplanets. *Proceedings of the International Astronomical Union*, **2011**, 7, 33-40	0.1
8	TODCOR – Two-Dimensional Correlation. *Proceedings of the International Astronomical Union*, **2011**, 7, 371-378	0.1
7	Hebrew names of the planets. *Proceedings of the International Astronomical Union*, **2009**, 5, 301-305	0.1
6	Spectroscopic binary mass determination using relativity. *Proceedings of the International Astronomical Union*, **2009**, 5, 135-139	0.1
5	Observations of extrasolar planetary systems3-20	
4	TODCOR: A Two-Dimensional Correlation of a Composite Spectrum to Derive the Radial Velocities of its Components. *International Astronomical Union Colloquium*, **1992**, 135, 164-166	
3	Spectroscopic Binary Mass Determination Using Relativity **2008**, 149-152	
2	TIRAVEL – Template Independent RAdial VELocity Measurement **2008**, 327-328	
1	Shallow Transits–Deep Learning. II. Identify Individual Exoplanetary Transits in Red Noise using Deep Learning. *Astronomical Journal*, **2022**, 163, 237	4.9