

# Matthew Penny

## List of Publications by Year in descending order

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106  
papers

4,047  
citations

126907

33  
h-index

197818

49  
g-index

111  
all docs

111  
docs citations

111  
times ranked

2924  
citing authors

#	ARTICLE	IF	CITATIONS
1	A giant planet undergoing extreme-ultraviolet irradiation by its hot massive-star host. <i>Nature</i> , 2017, 546, 514-518.	27.8	205
2	Predictions of the <i>WFIRST</i> Microlensing Survey. I. Bound Planet Detection Rates. <i>Astrophysical Journal</i> , Supplement Series, 2019, 241, 3.	7.7	135
3	ExELS: an exoplanet legacy science proposal for the ESA Euclid mission. I. Cold exoplanets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 434, 2-22.	4.4	107
4	CRITERIA FOR SAMPLE SELECTION TO MAXIMIZE PLANET SENSITIVITY AND YIELD FROM SPACE-BASED MICROLENS PARALLAX SURVEYS. <i>Astrophysical Journal</i> , 2015, 810, 155.	4.5	94
5	THE FIRST CIRCUMBINARY PLANET FOUND BY MICROLENSING: OGLE-2007-BLG-349L(AB)c. <i>Astronomical Journal</i> , 2016, 152, 125.	4.7	94
6	Space Telescope and Optical Reverberation Mapping Project. V. Optical Spectroscopic Campaign and Emission-line Analysis for NGC 5548. <i>Astrophysical Journal</i> , 2017, 837, 131.	4.5	93
7	Physical properties, transmission and emission spectra of the WASP-19 planetary system from multi-colour photometry.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 436, 2-18.	4.4	90
8	Campaign 9 of the <i>K2</i> Mission: Observational Parameters, Scientific Drivers, and Community Involvement for a Simultaneous Space- and Ground-based Microlensing Survey. <i>Publications of the Astronomical Society of the Pacific</i> , 2016, 128, 124401.	3.1	79
9	Reverberation Mapping of Optical Emission Lines in Five Active Galaxies. <i>Astrophysical Journal</i> , 2017, 840, 97.	4.5	79
10	OPTIMAL SURVEY STRATEGIES AND PREDICTED PLANET YIELDS FOR THE KOREAN MICROLENSING TELESCOPE NETWORK. <i>Astrophysical Journal</i> , 2014, 794, 52.	4.5	78
11	KELT-7b: A HOT JUPITER TRANSITING A BRIGHT $V = 8.54$ RAPIDLY ROTATING F-STAR. <i>Astronomical Journal</i> , 2015, 150, 12.	4.7	78
12	High-precision photometry by telescope defocussing. VI. WASP-24, WASP-25 and WASP-26.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 776-789.	4.4	73
13	Transits and starspots in the WASP-6 planetary system. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 450, 1760-1769.	4.4	71
14	MOA 2010-BLG-477Lb: CONSTRAINING THE MASS OF A MICROLENSING PLANET FROM MICROLENSING PARALLAX, ORBITAL MOTION, AND DETECTION OF BLENDED LIGHT. <i>Astrophysical Journal</i> , 2012, 754, 73.	4.5	64
15	Predictions of the Nancy Grace Roman Space Telescope Galactic Exoplanet Survey. II. Free-floating Planet Detection Rates*. <i>Astronomical Journal</i> , 2020, 160, 123.	4.7	64
16	Velocity-resolved Reverberation Mapping of Five Bright Seyfert 1 Galaxies. <i>Astrophysical Journal</i> , 2018, 866, 133.	4.5	63
17	High-precision photometry by telescope defocusing - IV. Confirmation of the huge radius of WASP-17b. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 426, 1338-1348.	4.4	61
18	PREDICTIONS FOR MICROLENSING PLANETARY EVENTS FROM CORE ACCRETION THEORY. <i>Astrophysical Journal</i> , 2014, 788, 73.	4.5	61

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19	KELT-19Ab: A $4.6$ -day Hot Jupiter Transiting a Likely Am Star with a Distant Stellar Companion. <i>Astronomical Journal</i> , 2018, 155, 35.	4.7	61
20	An Isolated Stellar-mass Black Hole Detected through Astrometric Microlensing*. <i>Astrophysical Journal</i> , 2022, 933, 83.	4.5	60
21	IS THE GALACTIC BULGE DEVOID OF PLANETS?. <i>Astrophysical Journal</i> , 2016, 830, 150.	4.5	59
22	The Demographics of Rocky Free-floating Planets and their Detectability by WFIRST. <i>Astrophysical Journal</i> , 2017, 841, 86.	4.5	59
23	The transiting system GJ1214: high-precision defocused transit observations and a search for evidence of transit timing variation. <i>Astronomy and Astrophysics</i> , 2013, 549, A10.	5.1	58
24	KELT-16b: A Highly Irradiated, Ultra-short Period Hot Jupiter Nearing Tidal Disruption. <i>Astronomical Journal</i> , 2017, 153, 97.	4.7	58
25	MICROLENSING DISCOVERY OF A POPULATION OF VERY TIGHT, VERY LOW MASS BINARY BROWN DWARFS. <i>Astrophysical Journal</i> , 2013, 768, 129.	4.5	57
26	KELT-21b: A Hot Jupiter Transiting the Rapidly Rotating Metal-poor Late-A Primary of a Likely Hierarchical Triple System. <i>Astronomical Journal</i> , 2018, 155, 100.	4.7	55
27	MOA-2010-BLG-073L: AN M-DWARF WITH A SUBSTELLAR COMPANION AT THE PLANET/BROWN DWARF BOUNDARY. <i>Astrophysical Journal</i> , 2013, 763, 67.	4.5	54
28	KELT-6b: A $7.9$ DAY HOT SATURN TRANSITING A METAL-POOR STAR WITH A LONG-PERIOD COMPANION. <i>Astronomical Journal</i> , 2014, 147, 39.	4.7	54
29	KELT-8b: A HIGHLY INFLATED TRANSITING HOT JUPITER AND A NEW TECHNIQUE FOR EXTRACTING HIGH-PRECISION RADIAL VELOCITIES FROM NOISY SPECTRA. <i>Astrophysical Journal</i> , 2015, 810, 30.	4.5	53
30	OGLE-2016-BLG-1190Lb: The First Spitzer Bulge Planet Lies Near the Planet/Brown-dwarf Boundary. <i>Astronomical Journal</i> , 2018, 155, 40.	4.7	53
31	Continuum Reverberation Mapping of the Accretion Disks in Two Seyfert 1 Galaxies. <i>Astrophysical Journal</i> , 2018, 854, 107.	4.5	51
32	OGLE-2017-BLG-0173Lb: Low-mass-ratio Planet in a "Hollywood" Microlensing Event. <i>Astronomical Journal</i> , 2018, 155, 20.	4.7	50
33	Detectability of orbital motion in stellar binary and planetary microlenses. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 412, 607-626.	4.4	48
34	Measuring the Galactic Distribution of Transiting Planets with WFIRST. <i>Publications of the Astronomical Society of the Pacific</i> , 2017, 129, 044401.	3.1	48
35	OGLE-2016-BLG-0613LABb: A Microlensing Planet in a Binary System. <i>Astronomical Journal</i> , 2017, 154, 223.	4.7	48
36	KELT-4Ab: AN INFLATED HOT JUPITER TRANSITING THE BRIGHT ( $V < 10$ ) COMPONENT OF A HIERARCHICAL TRIPLE. <i>Astronomical Journal</i> , 2016, 151, 45.	4.7	46

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37	The KELT Follow-up Network and Transit False-positive Catalog: Pre-vetted False Positives for TESS. <i>Astronomical Journal</i> , 2018, 156, 234.	4.7	46
38	MOA-2010-BLG-328Lb: A SUB-NEPTUNE ORBITING VERY LATE M DWARF?. <i>Astrophysical Journal</i> , 2013, 779, 91.	4.5	45
39	OGLE-2011-BLG-0265Lb: A JOVIAN MICROLENSING PLANET ORBITING AN M DWARF. <i>Astrophysical Journal</i> , 2015, 804, 33.	4.5	45
40	High-precision photometry by telescope defocusing â€“ V. WASP-15 and WASP-16â€“.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 434, 1300-1308.	4.4	44
41	A SUPER-JUPITER ORBITING A LATE-TYPE STAR: A REFINED ANALYSIS OF MICROLENSING EVENT OGLE-2012-BLG-0406. <i>Astrophysical Journal</i> , 2014, 782, 48.	4.5	42
42	High-precision photometry by telescope defocussing â€“ VIII. WASP-22, WASP-41, WASP-42 and WASP-55. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 457, 4205-4217.	4.4	42
43	Three-Dimensional Printing of a Scalable Molecular Model and Orbital Kit for Organic Chemistry Teaching and Learning. <i>Journal of Chemical Education</i> , 2017, 94, 1265-1271.	2.3	41
44	Space Telescope and Optical Reverberation Mapping Project. IX. Velocityâ€“Delay Maps for Broad Emission Lines in NGC 5548. <i>Astrophysical Journal</i> , 2021, 907, 76.	4.5	36
45	KELT-12b: A PÂˆ¼5 day, Highly Inflated Hot Jupiter Transiting a Mildly Evolved Hot Star. <i>Astronomical Journal</i> , 2017, 153, 178.	4.7	35
46	Supportingâ€“Electrolyteâ€“Free Electrochemical Methoxymethylation of Alcohols Using a 3Dâ€“Printed Electrosynthesis Continuous Flow Cell System. <i>ChemElectroChem</i> , 2019, 6, 4144-4148.	3.4	35
47	Radii of 88 M Subdwarfs and Updated Radius Relations for Low-metallicity M-dwarf Stars. <i>Astronomical Journal</i> , 2019, 157, 63.	4.7	35
48	SPEEDING UP LOW-MASS PLANETARY MICROLENSING SIMULATIONS AND MODELING: THE CAUSTIC REGION OF INFLUENCE. <i>Astrophysical Journal</i> , 2014, 790, 142.	4.5	34
49	CAUSTIC STRUCTURES AND DETECTABILITY OF CIRCUMBINARY PLANETS IN MICROLENSING. <i>Astrophysical Journal</i> , 2016, 827, 61.	4.5	34
50	EMPIRICAL STUDY OF SIMULATED TWO-PLANET MICROLENSING EVENTS. <i>Astrophysical Journal</i> , 2014, 794, 53.	4.5	33
51	UKIRT-2017-BLG-001Lb: A Giant Planet Detected through the Dust. <i>Astrophysical Journal Letters</i> , 2018, 857, L8.	8.3	33
52	PLANET SENSITIVITY FROM COMBINED GROUND- AND SPACE-BASED MICROLENSING OBSERVATIONS. <i>Astrophysical Journal</i> , 2015, 814, 129.	4.5	31
53	Predictions for the Detection and Characterization of a Population of Free-floating Planets with K2 Campaign 9. <i>Astronomical Journal</i> , 2017, 153, 161.	4.7	31
54	MOA-2016-BLG-227Lb: A Massive Planet Characterized by Combining Light-curve Analysis and Keck AO Imaging. <i>Astronomical Journal</i> , 2017, 154, 3.	4.7	31

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55	A giant planet beyond the snow line in microlensing event OGLE-2011-BLG-0251. <i>Astronomy and Astrophysics</i> , 2013, 552, A70.	5.1	30
56	POSSIBLE SOLUTION OF THE LONG-STANDING DISCREPANCY IN THE MICROLENSING OPTICAL DEPTH TOWARD THE GALACTIC BULGE BY CORRECTING THE STELLAR NUMBER COUNT. <i>Astrophysical Journal</i> , 2016, 827, 139.	4.5	30
57	iPTF15eqy: Multiwavelength Exposures of a Peculiar Calcium-rich Transient. <i>Astrophysical Journal</i> , 2017, 846, 50.	4.5	30
58	KELT-18b: Puffy Planet, Hot Host, Probably Perturbed. <i>Astronomical Journal</i> , 2017, 153, 263.	4.7	30
59	How fast do Jupiters grow? Signatures of the snowline and growth rate in the distribution of gas giant planets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 428, 756-762.	4.4	28
60	KMT-2017-BLG-0165Lb: A Super-Neptune-mass Planet Orbiting a Sun-like Host Star. <i>Astronomical Journal</i> , 2019, 157, 72.	4.7	27
61	OGLE-2019-BLG-0960 Lb: the Smallest Microlensing Planet. <i>Astronomical Journal</i> , 2021, 162, 180.	4.7	27
62	Systematic KMTNet Planetary Anomaly Search. II. Six New $10^{-4}$ Mass-ratio Planets. <i>Astronomical Journal</i> , 2022, 163, 43.	4.7	27
63	A novel experimental approach to investigate the effect of different agitation methods using sodium hypochlorite as an irrigant on the rate of bacterial biofilm removal from the wall of a simulated root canal model. <i>Dental Materials</i> , 2016, 32, 1289-1300.	3.5	26
64	Confocal laser scanning, scanning electron, and transmission electron microscopy investigation of <i>Enterococcus faecalis</i> biofilm degradation using passive and active sodium hypochlorite irrigation within a simulated root canal model. <i>MicrobiologyOpen</i> , 2017, 6, e00455.	3.0	26
65	Modular 3D Printed Compressed Air Driven Continuous Flow Systems for Chemical Synthesis. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 3783-3787.	2.4	26
66	KELT-25 b and KELT-26 b: A Hot Jupiter and a Substellar Companion Transiting Young A Stars Observed by TESS*. <i>Astronomical Journal</i> , 2020, 160, 111.	4.7	26
67	CHARACTERIZING LOW-MASS BINARIES FROM OBSERVATION OF LONG-TIMESCALE CAUSTIC-CROSSING GRAVITATIONAL MICROLENSING EVENTS. <i>Astrophysical Journal</i> , 2012, 755, 91.	4.5	25
68	Design and development of 3D printed catalytically-active stirrers for chemical synthesis. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 853-858.	3.7	24
69	A detailed census of variable stars in the globular cluster NGC 6333 (M9) from CCD differential photometry.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 434, 1220-1238.	4.4	23
70	WFIRST ULTRA-PRECISE ASTROMETRY II: ASTEROSEISMOLOGY. <i>Journal of the Korean Astronomical Society</i> , 2015, 48, 93-104.	1.5	23
71	Space Telescope and Optical Reverberation Mapping Project. XII. Broad-line Region Modeling of NGC 5548. <i>Astrophysical Journal</i> , 2020, 902, 74.	4.5	22
72	An Earth-mass planet in a time of COVID-19: KMT-2020-BLG-0414Lb. <i>Research in Astronomy and Astrophysics</i> , 2021, 21, 239.	1.7	21

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73	A NEW TYPE OF AMBIGUITY IN THE PLANET AND BINARY INTERPRETATIONS OF CENTRAL PERTURBATIONS OF HIGH-MAGNIFICATION GRAVITATIONAL MICROLENSING EVENTS. <i>Astrophysical Journal</i> , 2012, 756, 48.	4.5	20
74	Measurement of Source Star Colors with the <i>K2</i> -CFHT Multi-color Microlensing Survey. <i>Publications of the Astronomical Society of the Pacific</i> , 2018, 130, 104401.	3.1	20
75	OGLE-2018-BLG-1011Lb,c: Microlensing Planetary System with Two Giant Planets Orbiting a Low-mass Star. <i>Astronomical Journal</i> , 2019, 158, 114.	4.7	20
76	Full orbital solution for the binary system in the northern Galactic disc microlensing event Gaia16aye. <i>Astronomy and Astrophysics</i> , 2020, 633, A98.	5.1	19
77	Kojima-1Lb Is a Mildly Cold Neptune around the Brightest Microlensing Host Star. <i>Astronomical Journal</i> , 2019, 158, 206.	4.7	18
78	MOA-2010-BLG-311: A PLANETARY CANDIDATE BELOW THE THRESHOLD OF RELIABLE DETECTION. <i>Astrophysical Journal</i> , 2013, 769, 77.	4.5	17
79	The effect of sodium hypochlorite concentration and irrigation needle extension on biofilm removal from a simulated root canal model. <i>Australian Endodontic Journal</i> , 2017, 43, 102-109.	1.5	17
80	EMCCD photometry reveals two new variable stars in the crowded central region of the globular cluster NGC 6981. <i>Astronomy and Astrophysics</i> , 2013, 553, A111.	5.1	16
81	Spitzer Parallax of OGLE-2018-BLG-0596: A Low-mass-ratio Planet around an M Dwarf. <i>Astronomical Journal</i> , 2019, 158, 28.	4.7	15
82	KELT-24b: A 5M <sub>J</sub> Planet on a 5.6 day Well-aligned Orbit around the Young V=8.3 F-star HD 93148. <i>Astronomical Journal</i> , 2019, 158, 197.	4.7	15
83	OGLE-2018-BLG-0532Lb: Cold Neptune with Possible Jovian Sibling. <i>Astronomical Journal</i> , 2020, 160, 183.	4.7	15
84	MICROLENSING BINARIES DISCOVERED THROUGH HIGH-MAGNIFICATION CHANNEL. <i>Astrophysical Journal</i> , 2012, 746, 127.	4.5	14
85	MOA-2010-BLG-523: A FAILED PLANET-RS CVn STAR. <i>Astrophysical Journal</i> , 2013, 763, 141.	4.5	14
86	WFIRST and EUCLID: Enabling the Microlensing Parallax Measurement from Space. <i>Astrophysical Journal Letters</i> , 2019, 880, L32.	8.3	12
87	Rapidly rotating lenses: repeating features in the light curves of short-period binary microlenses. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 417, 2216-2229.	4.4	11
88	OGLE-2018-BLG-1185b: A Low-mass Microlensing Planet Orbiting a Low-mass Dwarf. <i>Astronomical Journal</i> , 2021, 162, 77.	4.7	10
89	KELT-22Ab: A Massive, Short-Period Hot Jupiter Transiting a Near-solar Twin. <i>Astrophysical Journal, Supplement Series</i> , 2019, 240, 13.	7.7	9
90	The 2L1S/1L2S Degeneracy for Two Microlensing Planet Candidates Discovered by the KMTNet Survey in 2017. <i>Astronomical Journal</i> , 2019, 158, 199.	4.7	9

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91	KELT-23Ab: A Hot Jupiter Transiting a Near-solar Twin Close to the TESS and JWST Continuous Viewing Zones. <i>Astronomical Journal</i> , 2019, 158, 78.	4.7	8
92	KMT-2021-BLG-0912Lb: a microlensing super Earth around a K-type star. <i>Astronomy and Astrophysics</i> , 2022, 658, A94.	5.1	7
93	A Fast Approximate Approach to Microlensing Survey Analysis. <i>Astronomical Journal</i> , 2019, 158, 9.	4.7	6
94	KMT-2018-BLG-1292: A Super-Jovian Microlens Planet in the Galactic Plane. <i>Astronomical Journal</i> , 2020, 159, 58.	4.7	6
95	Extending practical flow chemistry into the undergraduate curriculum via the use of a portable low-cost 3D printed continuous flow system. <i>Journal of Flow Chemistry</i> , 2021, 11, 19-29.	1.9	6
96	Revealing Short-period Exoplanets and Brown Dwarfs in the Galactic Bulge Using the Microlensing Xallarap Effect with the Nancy Grace Roman Space Telescope. <i>Astronomical Journal</i> , 2021, 161, 84.	4.7	6
97	Kepler K2 Campaign 9 I. Candidate short-duration events from the first space-based survey for planetary microlensing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 5584-5602.	4.4	5
98	Comparing Observed Stellar Kinematics and Surface Densities in a Low-latitude Bulge Field to Galactic Population Synthesis Models. <i>Astrophysical Journal</i> , 2020, 889, 126.	4.5	5
99	OGLE-2018-BLG-0799Lb: a $2.7 \text{--} 10^3$ planet with Spitzer parallax. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 514, 5952-5968.	4.4	4
100	Classifying High-cadence Microlensing Light Curves. I. Defining Features. <i>Astronomical Journal</i> , 2021, 161, 132.	4.7	3
101	Design, 3D printing and validation of a novel low-cost high-capacity sitting-drop bridge for protein crystallization. <i>Journal of Applied Crystallography</i> , 2019, 52, 171-174.	4.5	3
102	UKIRT under new management: status and plans. , 2018, , .		3
103	Towards habitable Earths with EUCLID and WFIRST. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 349-353.	0.0	2
104	KMT-2016-BLG-1836Lb: A Super-Jovian Planet from a High-cadence Microlensing Field. <i>Astronomical Journal</i> , 2020, 159, 98.	4.7	2
105	A Multiparameter Degeneracy in Microlensing Events with Extreme Finite Source Effects. <i>Astrophysical Journal</i> , 2022, 927, 63.	4.5	2
106	Exploring exoplanetary systems beyond 1AU with WFIRST. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 62-63.	0.0	0