

# 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	KMT-2021-BLG-0912Lb: a microlensing super Earth around a K-type star. <i>Astronomy and Astrophysics</i> , 2022, 658, A94.	5.1	7
2	Systematic KMTNet Planetary Anomaly Search. II. Six New $2 \text{--} 10 M_{\oplus}$ Mass-ratio Planets. <i>Astronomical Journal</i> , 2022, 163, 43.	4.7	27
3	A Multiparameter Degeneracy in Microlensing Events with Extreme Finite Source Effects. <i>Astrophysical Journal</i> , 2022, 927, 63.	4.5	2
4	OGLE-2018-BLG-0799Lb: a $2.7 \text{--} 10 M_{\oplus}$ planet with <i>Spitzer</i> parallax. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 514, 5952-5968.	4.4	4
5	An Isolated Stellar-mass Black Hole Detected through Astrometric Microlensing*. <i>Astrophysical Journal</i> , 2022, 933, 83.	4.5	60
6	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
7	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
8	Classifying High-cadence Microlensing Light Curves. I. Defining Features. <i>Astronomical Journal</i> , 2021, 161, 132.	4.7	3
9	Space Telescope and Optical Reverberation Mapping Project. IX. Velocity Delay Maps for Broad Emission Lines in NGC 5548. <i>Astrophysical Journal</i> , 2021, 907, 76.	4.5	36
10	OGLE-2018-BLG-1185b: A Low-mass Microlensing Planet Orbiting a Low-mass Dwarf. <i>Astronomical Journal</i> , 2021, 162, 77.	4.7	10
11	<i>Kepler K2</i> 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
12	OGLE-2019-BLG-0960 Lb: the Smallest Microlensing Planet. <i>Astronomical Journal</i> , 2021, 162, 180.	4.7	27
13	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
14	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
15	KMT-2018-BLG-1292: A Super-Jovian Microlens Planet in the Galactic Plane. <i>Astronomical Journal</i> , 2020, 159, 58.	4.7	6
16	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
17	KMT-2016-BLG-1836Lb: A Super-Jovian Planet from a High-cadence Microlensing Field. <i>Astronomical Journal</i> , 2020, 159, 98.	4.7	2
18	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

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19	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
20	OGLE-2018-BLG-0532Lb: Cold Neptune with Possible Jovian Sibling. <i>Astronomical Journal</i> , 2020, 160, 183.	4.7	15
21	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
22	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
23	A Fast Approximate Approach to Microlensing Survey Analysis. <i>Astronomical Journal</i> , 2019, 158, 9.	4.7	6
24	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
25	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
26	Kojima-1Lb Is a Mildly Cold Neptune around the Brightest Microlensing Host Star. <i>Astronomical Journal</i> , 2019, 158, 206.	4.7	18
27	WFIRST and EUCLID: Enabling the Microlensing Parallax Measurement from Space. <i>Astrophysical Journal Letters</i> , 2019, 880, L32.	8.3	12
28	Supporting an Electrolyte-Free Electrochemical Methoxymethylation of Alcohols Using a 3D-Printed Electrosynthesis Continuous Flow Cell System. <i>ChemElectroChem</i> , 2019, 6, 4144-4148.	3.4	35
29	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
30	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
31	Predictions of the WFIRST Microlensing Survey. I. Bound Planet Detection Rates. <i>Astrophysical Journal, Supplement Series</i> , 2019, 241, 3.	7.7	135
32	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
33	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
34	KELT-24b: A 5M <sub>J</sub> Planet on a 5.6 day Well-aligned Orbit around the Young V&A=8.3 F-star HD 93148. <i>Astronomical Journal</i> , 2019, 158, 197.	4.7	15
35	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
36	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

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37	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
38	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
39	Continuum Reverberation Mapping of the Accretion Disks in Two Seyfert 1 Galaxies. <i>Astrophysical Journal</i> , 2018, 854, 107.	4.5	51
40	OGLE-2017-BLG-0173Lb: Low-mass-ratio Planet in a "Hollywood" Microlensing Event. <i>Astronomical Journal</i> , 2018, 155, 20.	4.7	50
41	UKIRT-2017-BLG-001Lb: A Giant Planet Detected through the Dust. <i>Astrophysical Journal Letters</i> , 2018, 857, L8.	8.3	33
42	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
43	Velocity-resolved Reverberation Mapping of Five Bright Seyfert 1 Galaxies. <i>Astrophysical Journal</i> , 2018, 866, 133.	4.5	63
44	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
45	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
46	KELT-19Ab: A $\sim 4.6$ -day Hot Jupiter Transiting a Likely Am Star with a Distant Stellar Companion. <i>Astronomical Journal</i> , 2018, 155, 35.	4.7	61
47	UKIRT under new management: status and plans. , 2018, , .		3
48	Measuring the Galactic Distribution of Transiting Planets with <i>WFIRST</i> . <i>Publications of the Astronomical Society of the Pacific</i> , 2017, 129, 044401.	3.1	48
49	KELT-16b: A Highly Irradiated, Ultra-short Period Hot Jupiter Nearing Tidal Disruption. <i>Astronomical Journal</i> , 2017, 153, 97.	4.7	58
50	Reverberation Mapping of Optical Emission Lines in Five Active Galaxies. <i>Astrophysical Journal</i> , 2017, 840, 97.	4.5	79
51	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
52	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
53	The Demographics of Rocky Free-floating Planets and their Detectability by <i>WFIRST</i> . <i>Astrophysical Journal</i> , 2017, 841, 86.	4.5	59
54	A giant planet undergoing extreme-ultraviolet irradiation by its hot massive-star host. <i>Nature</i> , 2017, 546, 514-518.	27.8	205

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55	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
56	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
57	KELT-12b: A 14.5 day, Highly Inflated Hot Jupiter Transiting a Mildly Evolved Hot Star. <i>Astronomical Journal</i> , 2017, 153, 178.	4.7	35
58	iPTF15eqv: Multiwavelength Exposure of a Peculiar Calcium-rich Transient. <i>Astrophysical Journal</i> , 2017, 846, 50.	4.5	30
59	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
60	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
61	OGLE-2016-BLG-0613LABb: A Microlensing Planet in a Binary System. <i>Astronomical Journal</i> , 2017, 154, 223.	4.7	48
62	KELT-18b: Puffy Planet, Hot Host, Probably Perturbed. <i>Astronomical Journal</i> , 2017, 153, 263.	4.7	30
63	Campaign 9 of the K2 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
64	CAUSTIC STRUCTURES AND DETECTABILITY OF CIRCUMBINARY PLANETS IN MICROLENSING. <i>Astrophysical Journal</i> , 2016, 827, 61.	4.5	34
65	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
66	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
67	THE FIRST CIRCUMBINARY PLANET FOUND BY MICROLENSING: OGLE-2007-BLG-349L(AB)c. <i>Astronomical Journal</i> , 2016, 152, 125.	4.7	94
68	IS THE GALACTIC BULGE DEVOID OF PLANETS?. <i>Astrophysical Journal</i> , 2016, 830, 150.	4.5	59
69	KELT-4Ab: AN INFLATED HOT JUPITER TRANSITING THE BRIGHT ( $V \approx 10$ ) COMPONENT OF A HIERARCHICAL TRIPLE. <i>Astronomical Journal</i> , 2016, 151, 45.	4.7	46
70	High-precision photometry by telescope defocussing. 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
71	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
72	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

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73	Transits and starspots in the WASP-6 planetary system. Monthly Notices of the Royal Astronomical Society, 2015, 450, 1760-1769.	4.4	71
74	OGLE-2011-BLG-0265Lb: A JOVIAN MICROLENSING PLANET ORBITING AN M DWARF. Astrophysical Journal, 2015, 804, 33.	4.5	45
75	KELT-7b: A HOT JUPITER TRANSITING A BRIGHT $V = 8.54$ RAPIDLY ROTATING F-STAR. Astronomical Journal, 2015, 150, 12.	4.7	78
76	PLANET SENSITIVITY FROM COMBINED GROUND- AND SPACE-BASED MICROLENSING OBSERVATIONS. Astrophysical Journal, 2015, 814, 129.	4.5	31
77	WFIRST ULTRA-PRECISE ASTROMETRY II: ASTEROSEISMOLOGY. Journal of the Korean Astronomical Society, 2015, 48, 93-104.	1.5	23
78	OPTIMAL SURVEY STRATEGIES AND PREDICTED PLANET YIELDS FOR THE KOREAN MICROLENSING TELESCOPE NETWORK. Astrophysical Journal, 2014, 794, 52.	4.5	78
79	High-precision photometry by telescope defocussing VI. WASP-24, WASP-25 and WASP-26.... Monthly Notices of the Royal Astronomical Society, 2014, 444, 776-789.	4.4	73
80	KELT-6b: A $P = 7.9$ DAY HOT SATURN TRANSITING A METAL-POOR STAR WITH A LONG-PERIOD COMPANION. Astronomical Journal, 2014, 147, 39.	4.7	54
81	EMPIRICAL STUDY OF SIMULATED TWO-PLANET MICROLENSING EVENTS. Astrophysical Journal, 2014, 794, 53.	4.5	33
82	PREDICTIONS FOR MICROLENSING PLANETARY EVENTS FROM CORE ACCRETION THEORY. Astrophysical Journal, 2014, 788, 73.	4.5	61
83	A SUPER-JUPITER ORBITING A LATE-TYPE STAR: A REFINED ANALYSIS OF MICROLENSING EVENT OGLE-2012-BLG-0406. Astrophysical Journal, 2014, 782, 48.	4.5	42
84	SPEEDING UP LOW-MASS PLANETARY MICROLENSING SIMULATIONS AND MODELING: THE CAUSTIC REGION OF INFLUENCE. Astrophysical Journal, 2014, 790, 142.	4.5	34
85	MICROLENSING DISCOVERY OF A POPULATION OF VERY TIGHT, VERY LOW MASS BINARY BROWN DWARFS. Astrophysical Journal, 2013, 768, 129.	4.5	57
86	ExELS: an exoplanet legacy science proposal for the ESA Euclid mission I. Cold exoplanets. Monthly Notices of the Royal Astronomical Society, 2013, 434, 2-22.	4.4	107
87	How fast do Jupiters grow? Signatures of the snowline and growth rate in the distribution of gas giant planets. Monthly Notices of the Royal Astronomical Society, 2013, 428, 756-762.	4.4	28
88	A detailed census of variable stars in the globular cluster NGC 6333 (M9) from CCD differential photometry.... Monthly Notices of the Royal Astronomical Society, 2013, 434, 1220-1238.	4.4	23
89	Physical properties, transmission and emission spectra of the WASP-19 planetary system from multi-colour photometry.... Monthly Notices of the Royal Astronomical Society, 2013, 436, 2-18.	4.4	90
90	High-precision photometry by telescope defocusing V. WASP-15 and WASP-16.... Monthly Notices of the Royal Astronomical Society, 2013, 434, 1300-1308.	4.4	44

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91	MOA-2010-BLG-311: A PLANETARY CANDIDATE BELOW THE THRESHOLD OF RELIABLE DETECTION. <i>Astrophysical Journal</i> , 2013, 769, 77.	4.5	17
92	MOA-2010-BLG-328Lb: A SUB-NEPTUNE ORBITING VERY LATE M DWARF?. <i>Astrophysical Journal</i> , 2013, 779, 91.	4.5	45
93	MOA-2010-BLG-523: "FAILED PLANET" RS CVn STAR. <i>Astrophysical Journal</i> , 2013, 763, 141.	4.5	14
94	Exploring exoplanetary systems beyond 1AU with WFIRST. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 62-63.	0.0	0
95	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
96	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
97	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
98	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
99	CHARACTERIZING LOW-MASS BINARIES FROM OBSERVATION OF LONG-TIMESCALE CAUSTIC-CROSSING GRAVITATIONAL MICROLENSING EVENTS. <i>Astrophysical Journal</i> , 2012, 755, 91.	4.5	25
100	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
101	MICROLENSING BINARIES DISCOVERED THROUGH HIGH-MAGNIFICATION CHANNEL. <i>Astrophysical Journal</i> , 2012, 746, 127.	4.5	14
102	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
103	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
104	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
105	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
106	Towards habitable Earths with EUCLID and WFIRST. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 349-353.	0.0	2