

David F Phillips

List of Publications by Year in descending order

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54
papers

2,817
citations

186265

28
h-index

243625

44
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docs citations

54
times ranked

2686
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Precision Mapping of Diamond Crystal Strain Using Quantum Interferometry. <i>Physical Review Applied</i> , 2022, 17, .	3.8	11
2	Identifying Exoplanets with Deep Learning. IV. Removing Stellar Activity Signals from Radial Velocity Measurements Using Neural Networks. <i>Astronomical Journal</i> , 2022, 164, 49.	4.7	20
3	Directional detection of dark matter with diamond. <i>Quantum Science and Technology</i> , 2021, 6, 024011.	5.8	15
4	Milky Way Accelerometry via Millisecond Pulsar Timing. <i>Physical Review Letters</i> , 2021, 126, 141103.	7.8	14
5	Long-term stellar activity variations and their effect on radial-velocity measurements. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 830-850.	4.4	10
6	Detection Limits of Low-mass, Long-period Exoplanets Using Gaussian Processes Applied to HARPS-N Solar Radial Velocities. <i>Astronomical Journal</i> , 2021, 161, 287.	4.7	17
7	Ultraheavy dark matter search with electron microscopy of geological quartz. <i>Physical Review D</i> , 2021, 104, .	4.7	10
8	Estimating Magnetic Filling Factors from Simultaneous Spectroscopy and Photometry: Disentangling Spots, Plage, and Network. <i>Astrophysical Journal</i> , 2021, 920, 21.	4.5	10
9	Scanning X-Ray Diffraction Microscopy for Diamond Quantum Sensing. <i>Physical Review Applied</i> , 2021, 16, .	3.8	6
10	Temporal evolution and correlations of optical activity indicators measured in Sun-as-a-star observations. <i>Astronomy and Astrophysics</i> , 2019, 627, A118.	5.1	31
11	Probing Dark Matter Using Precision Measurements of Stellar Accelerations. <i>Physical Review Letters</i> , 2019, 123, 091101.	7.8	16
12	HARPS-N Solar RVs Are Dominated by Large, Bright Magnetic Regions. <i>Astrophysical Journal</i> , 2019, 874, 107.	4.5	59
13	A giant impact as the likely origin of different twins in the Kepler-107 exoplanet system. <i>Nature Astronomy</i> , 2019, 3, 416-423.	10.1	64
14	An Ultra-short Period Rocky Super-Earth with a Secondary Eclipse and a Neptune-like Companion around K2-141. <i>Astronomical Journal</i> , 2018, 155, 107.	4.7	103
15	Visible-Spanning Flat Supercontinuum for Astronomical Applications. <i>Journal of Lightwave Technology</i> , 2018, 36, 5309-5315.	4.6	10
16	The Kepler-19 System: A Thick-envelope Super-Earth with Two Neptune-mass Companions Characterized Using Radial Velocities and Transit Timing Variations. <i>Astronomical Journal</i> , 2017, 153, 224.	4.7	58
17	Three-planet System: An Additional Non-transiting Super-Earth in the Bright HD 3167 System, and Masses for All Three Planets. <i>Astronomical Journal</i> , 2017, 154, 122.	4.7	90
18	Astro-comb calibrator and spectrograph characterization using a turn-key laser frequency comb. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2017, 3, 1.	1.8	9

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19	KEPLER-21b: A ROCKY PLANET AROUND A V \hat{A} = \hat{A} 8.25 mag STAR*. <i>Astronomical Journal</i> , 2016, 152, 204.	4.7	80
20	A 1.9 EARTH RADIUS ROCKY PLANET AND THE DISCOVERY OF A NON-TRANSITING PLANET IN THE KEPLER-20 SYSTEM*. <i>Astronomical Journal</i> , 2016, 152, 160.	4.7	85
21	THE ORBIT AND MASS OF THE THIRD PLANET IN THE KEPLER-56 SYSTEM. <i>Astronomical Journal</i> , 2016, 152, 165.	4.7	58
22	An astro-comb calibrated solar telescope to search for the radial velocity signature of Venus. <i>Proceedings of SPIE</i> , 2016, , .	0.8	22
23	State of the Field: Extreme Precision Radial Velocities. <i>Publications of the Astronomical Society of the Pacific</i> , 2016, 128, 066001.	3.1	253
24	THE KEPLER-454 SYSTEM: A SMALL, NOT-ROCKY INNER PLANET, A JOVIAN WORLD, AND A DISTANT COMPANION. <i>Astrophysical Journal</i> , 2016, 816, 95.	4.5	55
25	THE MASS OF Kepler-93b AND THE COMPOSITION OF TERRESTRIAL PLANETS. <i>Astrophysical Journal</i> , 2015, 800, 135.	4.5	211
26	CHARACTERIZING K2 PLANET DISCOVERIES: A SUPER-EARTH TRANSITING THE BRIGHT K DWARF HIP 116454. <i>Astrophysical Journal</i> , 2015, 800, 59.	4.5	104
27	Operation of a broadband visible-wavelength astro-comb with a high-resolution astrophysical spectrograph. <i>Optica</i> , 2015, 2, 250.	9.3	48
28	HARPS-N OBSERVES THE SUN AS A STAR. <i>Astrophysical Journal Letters</i> , 2015, 814, L21.	8.3	112
29	Femtosecond laser frequency comb for precision calibration of HARPS-N. , 2014, , .		0
30	THE KEPLER-10 PLANETARY SYSTEM REVISITED BY HARPS-N: A HOT ROCKY WORLD AND A SOLID NEPTUNE-MASS PLANET. <i>Astrophysical Journal</i> , 2014, 789, 154.	4.5	164
31	Green astro-comb for HARPS-N. , 2014, , .		5
32	A green astro-comb for Earth-like exoplanet searches. , 2014, , .		3
33	A broadband green astro-comb for sub-10 cm/s calibration on astrophysical spectrographs. , 2013, , .		0
34	Calibration of an astrophysical spectrograph below 1 m/s using a laser frequency comb. <i>Optics Express</i> , 2012, 20, 13711.	3.4	80
35	Optimization of filtering schemes for broadband astro-combs. <i>Optics Express</i> , 2012, 20, 24987.	3.4	22
36	Conjugate Fabryâ€‘Perot cavity pair for improved astro-comb accuracy. <i>Optics Letters</i> , 2012, 37, 3090.	3.3	12

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37	High-resolution Fourier transform spectrograph for characterization of echelle spectrograph wavelength calibrators. , 2012, , .		4
38	Calibration of an echelle spectrograph with an astro-comb: a laser frequency comb with very high repetition rate. , 2012, , .		6
39	Green astro-comb for HARPS-N. Proceedings of SPIE, 2012, , .	0.8	4
40	Coherent-population-trapping resonances with linearly polarized light for all-optical miniature atomic clocks. Physical Review A, 2010, 81, .	2.5	84
41	Toward a broadband astro-comb: effects of nonlinear spectral broadening in optical fibers. Optics Express, 2010, 18, 12736.	3.4	48
42	In-situ determination of astro-comb calibrator lines to better than 10 cm s ⁻¹ . Optics Express, 2010, 18, 13239.	3.4	35
43	Visible wavelength astro-comb. Optics Express, 2010, 18, 19175.	3.4	42
44	Improved constraints on isotropic shift and anisotropies of the speed of light using rotating cryogenic sapphire oscillators. Physical Review D, 2010, 82, .	4.7	28
45	TESTS OF FUNDAMENTAL SYMMETRIES USING NOBLE GAS MASERS. , 2010, , .		0
46	Particle-Accelerator Constraints on Isotropic Modifications of the Speed of Light. Physical Review Letters, 2009, 102, 170402.	7.8	61
47	Limits on isotropic Lorentz violation in QED from collider physics. Physical Review D, 2009, 80, .	4.7	77
48	Electromagnetically induced transparency with noisy lasers. Physical Review A, 2009, 80, .	2.5	31
49	A laser frequency comb that enables radial velocity measurements with a precision of 1â€‰cmâ€‰s ⁻¹ . Nature, 2008, 452, 610-612.	27.8	391
50	Astro-comb: revolutionizing precision spectroscopy in astrophysics. Proceedings of the International Astronomical Union, 2008, 4, 499-501.	0.0	0
51	IMPROVED TESTS OF LORENTZ AND CPT SYMMETRY USING NOBLE-GAS MASERS. , 2008, , .		0
52	IVES-STILWELL FOR THE NEW MILLENNIUM. , 2008, , .		0
53	Diffusion-Induced Ramsey Narrowing. Physical Review Letters, 2006, 96, 043601.	7.8	103
54	Three-photon-absorption resonance for all-optical atomic clocks. Physical Review A, 2005, 72, .	2.5	36