

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
g-index

54
all docs

54
docs citations

54
times ranked

2686
citing authors

#	ARTICLE	IF	CITATIONS
1	A laser frequency comb that enables radial velocity measurements with a precision of 1 cm s^{-1} . Nature, 2008, 452, 610-612.	27.8	391
2	State of the Field: Extreme Precision Radial Velocities. Publications of the Astronomical Society of the Pacific, 2016, 128, 066001.	3.1	253
3	THE MASS OF Kepler-93b AND THE COMPOSITION OF TERRESTRIAL PLANETS. Astrophysical Journal, 2015, 800, 135.	4.5	211
4	THE KEPLER-10 PLANETARY SYSTEM REVISITED BY HARPS-N: A HOT ROCKY WORLD AND A SOLID NEPTUNE-MASS PLANET. Astrophysical Journal, 2014, 789, 154.	4.5	164
5	HARPS-N OBSERVES THE SUN AS A STAR. Astrophysical Journal Letters, 2015, 814, L21.	8.3	112
6	CHARACTERIZING K2 PLANET DISCOVERIES: A SUPER-EARTH TRANSITING THE BRIGHT K DWARF HIP 116454. Astrophysical Journal, 2015, 800, 59.	4.5	104
7	Diffusion-Induced Ramsey Narrowing. Physical Review Letters, 2006, 96, 043601.	7.8	103
8	An Ultra-short Period Rocky Super-Earth with a Secondary Eclipse and a Neptune-like Companion around K2-141. Astronomical Journal, 2018, 155, 107.	4.7	103
9	Threeâ€™s Company: An Additional Non-transiting Super-Earth in the Bright HD 3167 System, and Masses for All Three Planets. Astronomical Journal, 2017, 154, 122.	4.7	90
10	A 1.9 EARTH RADIUS ROCKY PLANET AND THE DISCOVERY OF A NON-TRANSITING PLANET IN THE KEPLER-20 SYSTEM*. Astronomical Journal, 2016, 152, 160.	4.7	85
11	Coherent-population-trapping resonances with linearly polarized light for all-optical miniature atomic clocks. Physical Review A, 2010, 81, .	2.5	84
12	Calibration of an astrophysical spectrograph below 1 m/s using a laser frequency comb. Optics Express, 2012, 20, 13711.	3.4	80
13	KEPLER-21b: A ROCKY PLANET AROUND A $V=8.25$ mag STAR*. Astronomical Journal, 2016, 152, 204.	4.7	80
14	Limits on isotropic Lorentz violation in QED from collider physics. Physical Review D, 2009, 80, .	4.7	77
15	A giant impact as the likely origin of different twins in the Kepler-107 exoplanet system. Nature Astronomy, 2019, 3, 416-423.	10.1	64
16	Particle-Accelerator Constraints on Isotropic Modifications of the Speed of Light. Physical Review Letters, 2009, 102, 170402.	7.8	61
17	HARPS-N Solar RVs Are Dominated by Large, Bright Magnetic Regions. Astrophysical Journal, 2019, 874, 107.	4.5	59
18	THE ORBIT AND MASS OF THE THIRD PLANET IN THE KEPLER-56 SYSTEM. Astronomical Journal, 2016, 152, 165.	4.7	58

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Toward a broadband astro-comb: effects of nonlinear spectral broadening in optical fibers. <i>Optics Express</i> , 2010, 18, 12736.	3.4	48
22	Operation of a broadband visible-wavelength astro-comb with a high-resolution astrophysical spectrograph. <i>Optica</i> , 2015, 2, 250.	9.3	48
23	Visible wavelength astro-comb. <i>Optics Express</i> , 2010, 18, 19175.	3.4	42
24	Three-photon-absorption resonance for all-optical atomic clocks. <i>Physical Review A</i> , 2005, 72, .	2.5	36
25	In-situ determination of astro-comb calibrator lines to better than 10 cm s^{-1} . <i>Optics Express</i> , 2010, 18, 13239.	3.4	35
26	Electromagnetically induced transparency with noisy lasers. <i>Physical Review A</i> , 2009, 80, .	2.5	31
27	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
28	Improved constraints on isotropic shift and anisotropies of the speed of light using rotating cryogenic sapphire oscillators. <i>Physical Review D</i> , 2010, 82, .	4.7	28
29	Optimization of filtering schemes for broadband astro-combs. <i>Optics Express</i> , 2012, 20, 24987.	3.4	22
30	An astro-comb calibrated solar telescope to search for the radial velocity signature of Venus. <i>Proceedings of SPIE</i> , 2016, , .	0.8	22
31	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
32	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
33	Probing Dark Matter Using Precision Measurements of Stellar Accelerations. <i>Physical Review Letters</i> , 2019, 123, 091101.	7.8	16
34	Directional detection of dark matter with diamond. <i>Quantum Science and Technology</i> , 2021, 6, 024011.	5.8	15
35	Milky Way Accelerometry via Millisecond Pulsar Timing. <i>Physical Review Letters</i> , 2021, 126, 141103.	7.8	14
36	Conjugate Fabry-Pérot cavity pair for improved astro-comb accuracy. <i>Optics Letters</i> , 2012, 37, 3090.	3.3	12

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37	High-Precision Mapping of Diamond Crystal Strain Using Quantum Interferometry. <i>Physical Review Applied</i> , 2022, 17, .	3.8	11
38	Visible-Spanning Flat Supercontinuum for Astronomical Applications. <i>Journal of Lightwave Technology</i> , 2018, 36, 5309-5315.	4.6	10
39	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
40	Ultraheavy dark matter search with electron microscopy of geological quartz. <i>Physical Review D</i> , 2021, 104, .	4.7	10
41	Estimating Magnetic Filling Factors from Simultaneous Spectroscopy and Photometry: Disentangling Spots, Plage, and Network. <i>Astrophysical Journal</i> , 2021, 920, 21.	4.5	10
42	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
43	Calibration of an echelle spectrograph with an astro-comb: a laser frequency comb with very high repetition rate. , 2012, , .		6
44	Scanning X-Ray Diffraction Microscopy for Diamond Quantum Sensing. <i>Physical Review Applied</i> , 2021, 16, .	3.8	6
45	Green astro-comb for HARPS-N. , 2014, , .		5
46	High-resolution Fourier transform spectrograph for characterization of echelle spectrograph wavelength calibrators. , 2012, , .		4
47	Green astro-comb for HARPS-N. <i>Proceedings of SPIE</i> , 2012, , .	0.8	4
48	A green astro-comb for Earth-like exoplanet searches. , 2014, , .		3
49	Astro-comb: revolutionizing precision spectroscopy in astrophysics. <i>Proceedings of the International Astronomical Union</i> , 2008, 4, 499-501.	0.0	0
50	Femtosecond laser frequency comb for precision calibration of HARPS-N. , 2014, , .		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	TESTS OF FUNDAMENTAL SYMMETRIES USING NOBLE GAS MASERS. , 2010, , .		0
54	A broadband green astro-comb for sub-10 cm/s calibration on astrophysical spectrographs. , 2013, , .		0