

# Dimitar D Sasselov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/963793/publications.pdf>

Version: 2024-02-01

113  
papers

20,162  
citations

22153

59  
h-index

26613

107  
g-index

115  
all docs

115  
docs citations

115  
times ranked

7510  
citing authors

#	ARTICLE	IF	CITATIONS
1	K2-79b and K2-222b: Mass Measurements of Two Small Exoplanets with Periods beyond 10 days that Overlap with Periodic Magnetic Activity Signals. <i>Astronomical Journal</i> , 2022, 163, 41.	4.7	3
2	Partitioning of Atmospheric O <sub>2</sub> into High-pressure Ice in Ocean Worlds. <i>Astrophysical Journal</i> , 2022, 926, 72.	4.5	0
3	On the origins of life's homochirality: Inducing enantiomeric excess with spin-polarized electrons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	25
4	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
5	How Flat Can a Planetary System Get? I. The Case of TRAPPIST-1. <i>Astrophysical Journal</i> , 2021, 913, 126.	4.5	2
6	The TESS Objects of Interest Catalog from the TESS Prime Mission. <i>Astrophysical Journal, Supplement Series</i> , 2021, 254, 39.	7.7	190
7	Ribose Alters the Photochemical Properties of the Nucleobase in Thionated Nucleosides. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6707-6713.	4.6	5
8	TOI-1634 b: An Ultra-short-period Keystone Planet Sitting inside the M-dwarf Radius Valley. <i>Astronomical Journal</i> , 2021, 162, 79.	4.7	25
9	The TESS Mission Target Selection Procedure. <i>Publications of the Astronomical Society of the Pacific</i> , 2021, 133, 095002.	3.1	5
10	Shielding from UV Photodamage: Implications for Surficial Origins of Life Chemistry on the Early Earth. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 239-246.	2.7	11
11	The Occurrence of Rocky Habitable-zone Planets around Solar-like Stars from Kepler Data. <i>Astronomical Journal</i> , 2021, 161, 36.	4.7	96
12	Prebiotic photoredox synthesis from carbon dioxide and sulfite. <i>Nature Chemistry</i> , 2021, 13, 1126-1132.	13.6	34
13	New Perspectives on the Exoplanet Radius Gap from a Mathematica Tool and Visualized Water Equation of State. <i>Astrophysical Journal</i> , 2021, 923, 247.	4.5	20
14	UV Transmission in Natural Waters on Prebiotic Earth. <i>Astrobiology</i> , 2021, , .	3.0	7
15	TOI-1235 b: A Keystone Super-Earth for Testing Radius Valley Emergence Models around Early M Dwarfs. <i>Astronomical Journal</i> , 2020, 160, 22.	4.7	33
16	A Pair of TESS Planets Spanning the Radius Valley around the Nearby Mid-M Dwarf LTT 3780. <i>Astronomical Journal</i> , 2020, 160, 3.	4.7	62
17	The origin of life as a planetary phenomenon. <i>Science Advances</i> , 2020, 6, eaax3419.	10.3	111
18	Going over the cliff: MOOC dropout behavior at chapter transition. <i>Distance Education</i> , 2020, 41, 6-25.	3.9	20

#	ARTICLE	IF	CITATIONS
19	The impact of student misconceptions on student persistence in a MOOC. <i>Journal of Research in Science Teaching</i> , 2020, 57, 879-910.	3.3	20
20	Ultraviolet-Driven Deamination of Cytidine Ribonucleotides Under Planetary Conditions. <i>Astrobiology</i> , 2020, 20, 878-888.	3.0	7
21	UV photostability of three 2-aminoazoles with key roles in prebiotic chemistry on the early earth. <i>Chemical Communications</i> , 2019, 55, 10388-10391.	4.1	22
22	Using HARPS-N to characterize the long-period planets in the PH-2 and Kepler-103 systems. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 5103-5121.	4.4	10
23	The Revised TESS Input Catalog and Candidate Target List. <i>Astronomical Journal</i> , 2019, 158, 138.	4.7	577
24	TESS Discovery of an Ultra-short-period Planet around the Nearby M Dwarf LHS 3844. <i>Astrophysical Journal Letters</i> , 2019, 871, L24.	8.3	108
25	Growth model interpretation of planet size distribution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 9723-9728.	7.1	311
26	K2-291b: A Rocky Super-Earth in a 2.2 day Orbit $\hat{=}$ . <i>Astronomical Journal</i> , 2019, 157, 116.	4.7	13
27	Nitrogen Oxide Concentrations in Natural Waters on Early Earth. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 2021-2039.	2.5	65
28	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
29	A New Desalination Pump Helps Define the pH of Ocean Worlds. <i>Astrophysical Journal</i> , 2018, 857, 65.	4.5	4
30	Sulfidic Anion Concentrations on Early Earth for Surficial Origins-of-Life Chemistry. <i>Astrobiology</i> , 2018, 18, 1023-1040.	3.0	64
31	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
32	Solvated-electron production using cyanocuprates is compatible with the UV-environment on a Hadean "Archaean Earth. <i>Chemical Communications</i> , 2018, 54, 1121-1124.	4.1	21
33	Photometric variability of TW Hya from seconds to years as seen from space and the ground during 2013-2017. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 758-783.	4.4	21
34	Visible-Spanning Flat Supercontinuum for Astronomical Applications. <i>Journal of Lightwave Technology</i> , 2018, 36, 5309-5315.	4.6	10
35	TESS Discovery of a Transiting Super-Earth in the $\pi$ Mensae System. <i>Astrophysical Journal Letters</i> , 2018, 868, L39.	8.3	148
36	Selective prebiotic conversion of pyrimidine and purine anhydronucleosides into Watson-Crick base-pairing arabino-furanosyl nucleosides in water. <i>Nature Communications</i> , 2018, 9, 4073.	12.8	36

#	ARTICLE	IF	CITATIONS
37	Photochemical reductive homologation of hydrogen cyanide using sulfite and ferrocyanide. <i>Chemical Communications</i> , 2018, 54, 5566-5569.	4.1	82
38	An Accurate Mass Determination for Kepler-1655b, a Moderately Irradiated World with a Significant Volatile Envelope. <i>Astronomical Journal</i> , 2018, 155, 203.	4.7	19
39	Survival function analysis of planet size distribution with Gaia Data Release 2 updates. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 5567-5576.	4.4	12
40	Metal-silicate Partitioning and Its Role in Core Formation and Composition on Super-Earths. <i>Astrophysical Journal</i> , 2017, 835, 234.	4.5	15
41	No Conclusive Evidence for Transits of Proxima b in MOST Photometry. <i>Astronomical Journal</i> , 2017, 153, 93.	4.7	34
42	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
43	Constraints on the Early Terrestrial Surface UV Environment Relevant to Prebiotic Chemistry. <i>Astrobiology</i> , 2017, 17, 169-204.	3.0	54
44	The Abundance of Atmospheric CO <sub>2</sub> in Ocean Exoplanets: a Novel CO <sub>2</sub> Deposition Mechanism. <i>Astrophysical Journal</i> , 2017, 838, 24.	4.5	23
45	Two massive rocky planets transiting a K-dwarf 6.5 parsecs away. <i>Nature Astronomy</i> , 2017, 1, .	10.1	84
46	Three <sup>TM</sup> s Company: 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
47	UV-light-driven prebiotic synthesis of iron-sulfur clusters. <i>Nature Chemistry</i> , 2017, 9, 1229-1234.	13.6	110
48	The Surface UV Environment on Planets Orbiting M-Dwarfs: Implications for Prebiotic Chemistry and the Need for Experimental Follow-up. <i>Astrophysical Journal</i> , 2017, 843, 110.	4.5	100
49	Precise Masses in the WASP-47 System. <i>Astronomical Journal</i> , 2017, 154, 237.	4.7	66
50	Atmospheric Constraints on the Surface UV Environment of Mars at 3.9 parsecs Relevant to Prebiotic Chemistry. <i>Astrobiology</i> , 2017, 17, 687-708.	3.0	11
51	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
52	Exoplanet Radius Gap Dependence on Host Star Type. <i>Research Notes of the AAS</i> , 2017, 1, 32.	0.7	17
53	KEPLER-21b: A ROCKY PLANET AROUND A V=8.25 mag STAR*. <i>Astronomical Journal</i> , 2016, 152, 204.	4.7	80
54	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

#	ARTICLE	IF	CITATIONS
55	PREDICTIONS OF THE ATMOSPHERIC COMPOSITION OF GJ 1132b. <i>Astrophysical Journal</i> , 2016, 829, 63.	4.5	130
56	MOST OBSERVATIONS OF OUR NEAREST NEIGHBOR: FLARES ON PROXIMA CENTAURI. <i>Astrophysical Journal Letters</i> , 2016, 829, L31.	8.3	93
57	THE ORBIT AND MASS OF THE THIRD PLANET IN THE KEPLER-56 SYSTEM. <i>Astronomical Journal</i> , 2016, 152, 165.	4.7	58
58	An astro-comb calibrated solar telescope to search for the radial velocity signature of Venus. <i>Proceedings of SPIE</i> , 2016, , .	0.8	22
59	MASS-RADIUS RELATION FOR ROCKY PLANETS BASED ON PREM. <i>Astrophysical Journal</i> , 2016, 819, 127.	4.5	293
60	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
61	Influence of the UV Environment on the Synthesis of Prebiotic Molecules. <i>Astrobiology</i> , 2016, 16, 68-88.	3.0	106
62	THE PERSISTENCE OF OCEANS ON EARTH-LIKE PLANETS: INSIGHTS FROM THE DEEP-WATER CYCLE. <i>Astrophysical Journal</i> , 2015, 801, 40.	4.5	71
63	THE MASS OF Kepler-93b AND THE COMPOSITION OF TERRESTRIAL PLANETS. <i>Astrophysical Journal</i> , 2015, 800, 135.	4.5	211
64	CHARACTERIZING K2 PLANET DISCOVERIES: A SUPER-EARTH TRANSITING THE BRIGHT K DWARF HIP 116454. <i>Astrophysical Journal</i> , 2015, 800, 59.	4.5	104
65	Operation of a broadband visible-wavelength astro-comb with a high-resolution astrophysical spectrograph. <i>Optica</i> , 2015, 2, 250.	9.3	48
66	UV SURFACE ENVIRONMENT OF EARTH-LIKE PLANETS ORBITING FGKM STARS THROUGH GEOLOGICAL EVOLUTION. <i>Astrophysical Journal</i> , 2015, 806, 137.	4.5	105
67	HARPS-N OBSERVES THE SUN AS A STAR. <i>Astrophysical Journal Letters</i> , 2015, 814, L21.	8.3	112
68	Transiting Exoplanet Survey Satellite. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2014, 1, 014003.	1.8	2,300
69	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
70	MASSES, RADII, AND ORBITS OF SMALL KEPLER PLANETS: THE TRANSITION FROM GASEOUS TO ROCKY PLANETS. <i>Astrophysical Journal, Supplement Series</i> , 2014, 210, 20.	7.7	418
71	Transiting Exoplanet Survey Satellite (TESS). <i>Proceedings of SPIE</i> , 2014, , .	0.8	566
72	THE EFFECT OF TEMPERATURE EVOLUTION ON THE INTERIOR STRUCTURE OF H <sub>2</sub> O-RICH PLANETS. <i>Astrophysical Journal</i> , 2014, 784, 96.	4.5	58

#	ARTICLE	IF	CITATIONS
73	Three regimes of extrasolar planet radius inferred from host star metallicities. <i>Nature</i> , 2014, 509, 593-595.	27.8	249
74	An Earth-sized planet with an Earth-like density. <i>Nature</i> , 2013, 503, 377-380.	27.8	199
75	A Detailed Model Grid for Solid Planets from 0.1 through 100 Earth Masses. <i>Publications of the Astronomical Society of the Pacific</i> , 2013, 125, 227-239.	3.1	185
76	PLANETARY CANDIDATES OBSERVED BY <i>KEPLER</i> . III. ANALYSIS OF THE FIRST 16 MONTHS OF DATA. <i>Astrophysical Journal, Supplement Series</i> , 2013, 204, 24.	7.7	823
77	<i>MOST</i> DETECTS TRANSITS OF HD 97658b, A WARM, LIKELY VOLATILE-RICH SUPER-EARTH. <i>Astrophysical Journal Letters</i> , 2013, 772, L2.	8.3	83
78	Two Earth-sized planets orbiting Kepler-20. <i>Nature</i> , 2012, 482, 195-198.	27.8	172
79	PLANET OCCURRENCE WITHIN 0.25 AU OF SOLAR-TYPE STARS FROM <i>KEPLER</i> . <i>Astrophysical Journal, Supplement Series</i> , 2012, 201, 15.	7.7	871
80	Kepler-36: A Pair of Planets with Neighboring Orbits and Dissimilar Densities. <i>Science</i> , 2012, 337, 556-559.	12.6	335
81	KEPLER-21b: A 1.6<i>R</i><sub>Earth</sub> PLANET TRANSITING THE BRIGHT OSCILLATING F SUBGIANT STAR HD 179070. <i>Astrophysical Journal</i> , 2012, 746, 123.	4.5	124
82	KEPLER-20: A SUN-LIKE STAR WITH THREE SUB-NEPTUNE EXOPLANETS AND TWO EARTH-SIZE CANDIDATES. <i>Astrophysical Journal</i> , 2012, 749, 15.	4.5	125
83	Using<i>MOST</i> to reveal the secrets of the mischievous Wolf-Rayet binary CV Ser. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 426, 1720-1730.	4.4	15
84	Harps-N: the new planet hunter at TNG. <i>Proceedings of SPIE</i> , 2012, , .	0.8	219
85	<i>KEPLER</i>'S FIRST ROCKY PLANET: KEPLER-10b. <i>Astrophysical Journal</i> , 2011, 729, 27.	4.5	473
86	MODELING<i>KEPLER</i> TRANSIT LIGHT CURVES AS FALSE POSITIVES: REJECTION OF BLEND SCENARIOS FOR KEPLER-9, AND VALIDATION OF KEPLER-9 d, A SUPER-EARTH-SIZE PLANET IN A MULTIPLE SYSTEM. <i>Astrophysical Journal</i> , 2011, 727, 24.	4.5	215
87	A FIRST COMPARISON OF KEPLER PLANET CANDIDATES IN SINGLE AND MULTIPLE SYSTEMS. <i>Astrophysical Journal Letters</i> , 2011, 732, L24.	8.3	167
88	A SUPER-EARTH TRANSITING A NAKED-EYE STAR. <i>Astrophysical Journal Letters</i> , 2011, 737, L18.	8.3	243
89	A closely packed system of low-mass, low-density planets transiting Kepler-11. <i>Nature</i> , 2011, 470, 53-58.	27.8	553
90	KEPLER-18b, c, AND d: A SYSTEM OF THREE PLANETS CONFIRMED BY TRANSIT TIMING VARIATIONS, LIGHT CURVE VALIDATION, <i>WARM-SPITZER</i> PHOTOMETRY, AND RADIAL VELOCITY MEASUREMENTS. <i>Astrophysical Journal, Supplement Series</i> , 2011, 197, 7.	7.7	171

#	ARTICLE	IF	CITATIONS
91	CHARACTERISTICS OF PLANETARY CANDIDATES OBSERVED BY<i>KEPLER</i>. II. ANALYSIS OF THE FIRST FOUR MONTHS OF DATA. <i>Astrophysical Journal</i> , 2011, 736, 19.	4.5	859
92	MINIMUM RADII OF SUPER-EARTHS: CONSTRAINTS FROM GIANT IMPACTS. <i>Astrophysical Journal Letters</i> , 2010, 712, L73-L76.	8.3	129
93	Kepler-9: A System of Multiple Planets Transiting a Sun-Like Star, Confirmed by Timing Variations. <i>Science</i> , 2010, 330, 51-54.	12.6	339
94	<i>KEPLER MISSION</i> DESIGN, REALIZED PHOTOMETRIC PERFORMANCE, AND EARLY SCIENCE. <i>Astrophysical Journal Letters</i> , 2010, 713, L79-L86.	8.3	941
95	Kepler Planet-Detection Mission: Introduction and First Results. <i>Science</i> , 2010, 327, 977-980.	12.6	2,848
96	THE ATMOSPHERIC SIGNATURES OF SUPER-EARTHS: HOW TO DISTINGUISH BETWEEN HYDROGEN-RICH AND HYDROGEN-POOR ATMOSPHERES. <i>Astrophysical Journal</i> , 2009, 690, 1056-1067.	4.5	192
97	The role of high-pressure experiments on determining super-Earth properties. <i>Astrophysics and Space Science</i> , 2009, 322, 135-139.	1.4	32
98	Extrasolar planets. <i>Nature</i> , 2008, 451, 29-31.	27.8	20
99	Astro-comb: revolutionizing precision spectroscopy in astrophysics. <i>Proceedings of the International Astronomical Union</i> , 2008, 4, 499-501.	0.0	0
100	<i>MOST</i> Space-based Photometry of the Transiting Exoplanet System HD 209458: Transit Timing to Search for Additional Planets. <i>Astrophysical Journal</i> , 2008, 682, 586-592.	4.5	35
101	Inevitability of Plate Tectonics on Super-Earths. <i>Astrophysical Journal</i> , 2007, 670, L45-L48.	4.5	229
102	Detailed Models of Super-Earths: How Well Can We Infer Bulk Properties?. <i>Astrophysical Journal</i> , 2007, 665, 1413-1420.	4.5	268
103	Radius and Structure Models of the First Super-Earth Planet. <i>Astrophysical Journal</i> , 2007, 656, 545-551.	4.5	193
104	An Upper Limit on the Albedo of HD 209458b: Direct Imaging Photometry with theMOSTSatellite. <i>Astrophysical Journal</i> , 2006, 646, 1241-1251.	4.5	151
105	Internal structure of massive terrestrial planets. <i>Icarus</i> , 2006, 181, 545-554.	2.5	436
106	Using Local Group galaxies to investigate the influence of blending on Cepheid distances and the cosmological distance scale. <i>International Astronomical Union Colloquium</i> , 2004, 193, 41-45.	0.1	1
107	The Transiting Extrasolar Giant Planet around the Star OGLE-TR-113. <i>Astrophysical Journal</i> , 2004, 609, L37-L40.	4.5	102
108	A Synoptic Variability Survey of M3. <i>International Astronomical Union Colloquium</i> , 2000, 176, 161-164.	0.1	0

#	ARTICLE	IF	CITATIONS
109	DIRECT Distances to Local Group Galaxies. International Astronomical Union Colloquium, 2000, 176, 182-186.	0.1	1
110	Radii and Distances of Cepheids. I. Method and Measurement Errors. Astrophysical Journal, 1997, 479, 875-885.	4.5	27
111	Pulsating stellar atmospheres. Symposium - International Astronomical Union, 1997, 189, 253-260.	0.1	0
112	The Centre-of-Mass Velocity of a Radially Pulsating Star: Insights from NLTE Models. International Astronomical Union Colloquium, 1995, 155, 375-376.	0.1	0
113	Evolution from the AGB: Variability. Symposium - International Astronomical Union, 1993, 155, 259-262.	0.1	0