

# W Dean Pesnell

## List of Publications by Year in descending order

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84  
papers

4,357  
citations

218592

26  
h-index

106281

65  
g-index

85  
all docs

85  
docs citations

85  
times ranked

3082  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Solar Dynamics Observatory (SDO). <i>Solar Physics</i> , 2012, 275, 3-15.	1.0	2,374
2	SABER observations of mesospheric temperatures and comparisons with falling sphere measurements taken during the 2002 summer MaCWAVE campaign. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	174
3	Predictions of Solar Cycle 24. <i>Solar Physics</i> , 2008, 252, 209-220.	1.0	164
4	Solar Cycle Predictions (Invited Review). <i>Solar Physics</i> , 2012, 281, 507.	1.0	97
5	An Early Solar Dynamo Prediction: Cycle 23 $\hat{=}$ Cycle 22. <i>Geophysical Research Letters</i> , 1993, 20, 2275-2278.	1.5	96
6	Nonradial instability strips based on carbon and oxygen partial ionization in hot, evolved stars. <i>Astrophysical Journal</i> , 1984, 281, 800.	1.6	84
7	DECIPHERING SOLAR MAGNETIC ACTIVITY. I. ON THE RELATIONSHIP BETWEEN THE SUNSPOT CYCLE AND THE EVOLUTION OF SMALL MAGNETIC FEATURES. <i>Astrophysical Journal</i> , 2014, 792, 12.	1.6	80
8	Momentum transfer collision frequency of $O^{+}$ . <i>Geophysical Research Letters</i> , 1993, 20, 1343-1346.	1.5	78
9	An Early Prediction of the Amplitude of Solar Cycle 25. <i>Solar Physics</i> , 2018, 293, 1.	1.0	73
10	Automated detection of EUV Polar Coronal Holes during Solar Cycle 23. <i>Solar Physics</i> , 2009, 257, 99-112.	1.0	69
11	Meteoric magnesium ions in the Martian atmosphere. <i>Journal of Geophysical Research</i> , 2000, 105, 1695-1707.	3.3	68
12	SABER temperature observations in the summer polar mesosphere and lower thermosphere: Importance of accounting for the $CO_2^{1/2}$ quanta $\leftrightarrow$ V exchange. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	68
13	Predictions of Solar Cycle 24: How are we doing?. <i>Space Weather</i> , 2016, 14, 10-21.	1.3	68
14	Nonradial, nonadiabatic stellar pulsations. <i>Astrophysical Journal</i> , 1990, 363, 227.	1.6	52
15	The discovery of nonradial instability strips for hot, evolved stars. <i>Astrophysical Journal</i> , 1983, 268, L27.	1.6	48
16	On the possibility of detecting weak magnetic fields in variable white dwarfs. <i>Astrophysical Journal</i> , 1989, 336, 403.	1.6	47
17	Do meteor showers significantly perturb the ionosphere?. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1998, 60, 607-615.	0.6	43
18	An analysis of nonradial pulsations of the central star of the planetary nebula K1-16. <i>Astrophysical Journal</i> , 1985, 293, L23.	1.6	43

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19	Using Polar Coronal Hole Area Measurements to Determine the Solar Polar Magnetic Field Reversal in Solar Cycle 24. <i>Solar Physics</i> , 2014, 289, 3381-3390.	1.0	41
20	Observable quantities of nonradial pulsations in the presence of slow rotation. <i>Astrophysical Journal</i> , 1985, 292, 238.	1.6	40
21	Meteoric Ions in the Ionosphere of Jupiter. <i>Icarus</i> , 2001, 150, 261-278.	1.1	38
22	Destruction of Sun-Grazing Comet C/2011 N3 (SOHO) Within the Low Solar Corona. <i>Science</i> , 2012, 335, 324-328.	6.0	30
23	A new driving mechanism for stellar pulsations. <i>Astrophysical Journal</i> , 1987, 314, 598.	1.6	30
24	THE EXTREME-ULTRAVIOLET EMISSION FROM SUN-GRAZING COMETS. <i>Astrophysical Journal</i> , 2012, 760, 18.	1.6	28
25	CO <sub>2</sub> ( $\tilde{\nu}_2$ )-O quenching rate coefficient derived from coincidental SABER/TIMED and Fort Collins lidar observations of the mesosphere and lower thermosphere. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 9013-9023.	1.9	27
26	Predicting Solar Cycle 24 Using a Geomagnetic Precursor Pair. <i>Solar Physics</i> , 2014, 289, 2317-2331.	1.0	27
27	Areas of Polar Coronal Holes from 1996 Through 2010. <i>Solar Physics</i> , 2014, 289, 4047-4067.	1.0	27
28	Lessons learned from predictions of Solar Cycle 24. <i>Journal of Space Weather and Space Climate</i> , 2020, 10, 60.	1.1	27
29	Pulsations of white dwarf stars with thick hydrogen or helium surface layers. <i>Astrophysical Journal</i> , 1987, 317, 303.	1.6	24
30	Accuracy of O <sup>+</sup> O collision cross-section deduced from ionosphere-thermosphere observations. <i>Geophysical Research Letters</i> , 1994, 21, 2429-2432.	1.5	17
31	Seasonal variations of magnesium atoms in the mesosphere-thermosphere. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	17
32	A search of UARS data for ozone depletions caused by the highly relativistic electron precipitation events of May 1992. <i>Journal of Geophysical Research</i> , 1999, 104, 165-175.	3.3	15
33	APPEARANCES AND STATISTICS OF CORONAL CAVITIES DURING THE ASCENDING PHASE OF SOLAR CYCLE 24. <i>Astrophysical Journal</i> , 2015, 810, 123.	1.6	15
34	Effects of Version 2 of the International Sunspot Number on Na <sup>+</sup> Predictions of Solar Cycle 25. <i>Space Weather</i> , 2018, 16, 1997-2003.	1.3	15
35	How active was solar cycle 22?. <i>Geophysical Research Letters</i> , 1993, 20, 1335-1338.	1.5	12
36	STUDY OF THE 3D GEOMETRIC STRUCTURE AND TEMPERATURE OF A CORONAL CAVITY USING THE LIMB SYNOPTIC MAP METHOD. <i>Astrophysical Journal</i> , 2015, 810, 124.	1.6	12

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37	Flying through polytropes. American Journal of Physics, 2016, 84, 192-201.	0.3	12
38	The Connection Between Nonradial Pulsations and Stellar Winds in Massive Stars. Publications of the Astronomical Society of the Pacific, 1986, 98, 29.	1.0	12
39	Variation of mesospheric ozone during the highly relativistic electron event in May 1992 as measured by the High Resolution Doppler Imager instrument on UARS. Journal of Geophysical Research, 2000, 105, 22943-22953.	3.3	11
40	Meteoric materialâ€”an important component of planetary atmospheres. Geophysical Monograph Series, 2002, , 235-244.	0.1	11
41	Watching meteors on Triton. Icarus, 2004, 169, 482-491.	1.1	11
42	Comparisons of Supergranule Characteristics During the Solar Minima of Cycles 22/23 and 23/24. Solar Physics, 2011, 270, 125-136.	1.0	11
43	Analysis of Supergranule Sizes and Velocities Using Solar Dynamics Observatory (SDO)/Helioseismic Magnetic Imager (HMI) and Solar and Heliospheric Observatory (SOHO)/Michelson Doppler Imager (MDI) Dopplergrams. Solar Physics, 2014, 289, 11-25.	1.0	11
44	SunCET: The Sun Coronal Ejection Tracker Concept. Journal of Space Weather and Space Climate, 2021, 11, 20.	1.1	11
45	Meteoric ions in planetary ionospheres. Advances in Space Research, 2001, 27, 1807-1814.	1.2	10
46	THE TIME-DEPENDENT CHEMISTRY OF COMETARY DEBRIS IN THE SOLAR CORONA. Astrophysical Journal, 2014, 785, 50.	1.6	8
47	ON THE ABSENCE OF EUV EMISSION FROM COMET C/2012 S1 (ISON). Astrophysical Journal, 2016, 822, 77.	1.6	8
48	Solar Dynamics Observatory (SDO). , 2015, , 179-196.		7
49	The Formation and Maintenance of the Dominant Southern Polar Crown Cavity of Cycle 24. Astrophysical Journal, 2017, 835, 135.	1.6	7
50	Inter-hemispheric coupling during northern polar summer periods of 2002â€”2010 using TIMED/SABER measurements. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 104, 277-284.	0.6	6
51	The structure of the thermal modes in pulsating stars. Astrophysical Journal, 1986, 303, 740.	1.6	5
52	Pioneer Venus Orbiter Measurements of Solar EUV Flux During Solar Cycles 21 and 22. Solar Physics, 1998, 177, 203-216.	1.0	4
53	The flight of Newton's cannonball. American Journal of Physics, 2018, 86, 338-343.	0.3	4
54	Orbits through polytropes. American Journal of Physics, 2019, 87, 452-464.	0.3	4

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55	Weight functions in adiabatic stellar pulsations. I - Radially symmetric motion. Publications of the Astronomical Society of the Pacific, 1987, 99, 975.	1.0	4
56	Uptake coefficient of charged aerosols-implications for atmospheric chemistry. Geophysical Research Letters, 1998, 25, 1309-1312.	1.5	3
57	Properties of Supergranulation During the Solar Minima of Cycles 22/23 and 23/24. Journal of Physics: Conference Series, 2011, 271, 012082.	0.3	3
58	Rotational mode splitting about an inclined axis. Astrophysical Journal, 1984, 286, L43.	1.6	3
59	Growth and decay of relativistic electrons during a magnetic storm as seen in low-Earth orbit. Journal of Geophysical Research, 2001, 106, 30039-30046.	3.3	2
60	Fluxes of relativistic electrons in low-Earth orbit during the decline of solar cycle 22. IEEE Transactions on Nuclear Science, 2001, 48, 2016-2021.	1.2	2
61	Temporal evolution of the vertical content of metallic ion and neutral species. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 1238-1244.	0.6	2
62	Time-Series Analysis of Supergranule Characteristics at Solar Minimum. Solar Physics, 2014, 289, 1101-1113.	1.0	2
63	A Note on the Opacity of the Sun's Atmosphere. Atoms, 2020, 8, 37.	0.7	2
64	A Study of Equatorial Coronal Holes during the Maximum Phase of Four Solar Cycles. Astrophysical Journal, 2020, 901, 124.	1.6	2
65	Properties of Eotvos spheres. Astrophysical Journal, 1989, 344, 851.	1.6	2
66	Dynamical interactions between the middle atmosphere and thermosphere. Advances in Space Research, 1992, 12, 335-343.	1.2	1
67	NASA's Solar Dynamics Observatory (SDO): A systems approach to a complex mission. , 2012, , .		1
68	The Solar Dynamics Observatory (SDO) Education and Outreach (E/PO) Program: Changing Perceptions One Program at a Time. Solar Physics, 2012, 275, 391-406.	1.0	1
69	Characteristics of Ephemeral Coronal Holes. Astrophysical Journal, 2019, 880, 98.	1.6	1
70	Thermal response of stellar envelopes during nonradial pulsations. Astrophysical Journal, 1984, 285, 778.	1.6	1
71	Brunt-Vaisala frequency and semiconvection. Astrophysical Journal, 1986, 301, 204.	1.6	1
72	Some thoughts on the rapidly oscillating AP stars. Astrophysical Journal, 1989, 339, 1038.	1.6	1

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73	On one-zone models of stellar pulsation. <i>Astrophysical Journal</i> , 1985, 299, 161.	1.6	1
74	Two New Methods for Counting and Tracking the Evolution of Polar Faculae. <i>Solar Physics</i> , 2022, 297, .	1.0	1
75	Spherical Oscillation Patterns. <i>International Astronomical Union Colloquium</i> , 1980, 58, 473-474.	0.1	0
76	Spherical oscillation patterns: The movie. <i>American Journal of Physics</i> , 1985, 53, 579-580.	0.3	0
77	A comparison of solar EUV flux from Langmuir probe photoelectron measurements on the Pioneer Venus Orbiter with other solar activity indicators. <i>Advances in Space Research</i> , 1997, 20, 187-190.	1.2	0
78	Evolution of relativistic electrons during a magnetic storm as seen in low-earth orbit. <i>Advances in Space Research</i> , 2003, 31, 1059-1062.	1.2	0
79	A Time-Dependent Distance Helioseismology Method for Quasi-Linear Geometries. <i>Solar Physics</i> , 2019, 294, 1.	1.0	0
80	Using Hilbert curves to organize, sample, and sonify solar data. <i>American Journal of Physics</i> , 2021, 89, 943-954.	0.3	0
81	Chromospheric Lines as Diagnostics of Stellar Oscillations. <i>Globular Clusters - Guides To Galaxies</i> , 2008, , 311-312.	0.1	0
82	Stability analysis of slow spherical motion for a gravitating fluid. <i>Astrophysical Journal</i> , 1981, 243, 617.	1.6	0
83	Comparing the Sun Watcher Using Active Pixel System Detector and Image Processing Instrument to the Atmosphere Imaging Assembly Instrument Through Measurements of Polar Coronal Holes. <i>Solar Physics</i> , 2022, 297, 1.	1.0	0
84	Critique of the iterative theory of stellar pulsations. <i>Astrophysical Journal</i> , 1984, 283, 316.	1.6	0