

# Paul S. Cally

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/380330/publications.pdf>

Version: 2024-02-01

136  
papers

3,658  
citations

109321

35  
h-index

155660

55  
g-index

142  
all docs

142  
docs citations

142  
times ranked

970  
citing authors

#	ARTICLE	IF	CITATIONS
1	Leaky and non-leaky oscillations in magnetic flux tubes. <i>Solar Physics</i> , 1986, 103, 277-298.	2.5	184
2	Magnetic field inclination and atmospheric oscillations above solar active regions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 372, 551-564.	4.4	159
3	Coupling of magnetospheric cavity modes to field line resonances: A study of resonance widths. <i>Journal of Geophysical Research</i> , 1995, 100, 19441.	3.3	108
4	Three-Dimensional MHD Wave Propagation and Conversion to Alfvén Waves near the Solar Surface. I. Direct Numerical Solution. <i>Solar Physics</i> , 2008, 251, 251-265.	2.5	102
5	NUMERICAL SIMULATIONS OF CONVERSION TO ALFVÉN WAVES IN SUNSPOTS. <i>Astrophysical Journal</i> , 2012, 746, 68.	4.5	95
6	Umbral oscillations in sunspots: Absorption of p-modes and active region heating by mode conversion. <i>Astrophysical Journal</i> , 1994, 437, 505.	4.5	93
7	Solar p-modes in a vertical magnetic field - Trapped and damped pi-modes. <i>Astrophysical Journal</i> , 1993, 402, 721.	4.5	91
8	Velocity and Magnetic Field Fluctuations in the Photosphere of a Sunspot. <i>Astrophysical Journal</i> , 1998, 497, 464-482.	4.5	88
9	Probing sunspot magnetic fields with p-mode absorption and phase shift data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 346, 381-389.	4.4	84
10	Dispersion relations, rays and ray splitting in magnetohelioseismology. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2006, 364, 333-349.	3.4	82
11	Simulation of f- and p-Mode Interactions with a Stratified Magnetic Field Concentration. <i>Astrophysical Journal</i> , 1997, 486, L67-L70.	4.5	79
12	What to look for in the seismology of solar active regions. <i>Astronomische Nachrichten</i> , 2007, 328, 286-291.	1.2	74
13	Absorption of p-Modes by Slender Magnetic Flux Tubes and p-Mode Lifetimes. <i>Astrophysical Journal</i> , 1996, 465, 406.	4.5	73
14	Note on an Exact Solution for Magnetoatmospheric Waves. <i>Astrophysical Journal</i> , 2001, 548, 473-481.	4.5	70
15	Clamshell and Tipping Instabilities in a Two-dimensional Magnetohydrodynamic Tachocline. <i>Astrophysical Journal</i> , 2003, 582, 1190-1205.	4.5	70
16	ALFVÉN WAVES IN SIMULATIONS OF SOLAR PHOTOSPHERIC VORTICES. <i>Astrophysical Journal Letters</i> , 2013, 776, L4.	8.3	70
17	BENCHMARKING FAST-TO-ALFVÉN MODE CONVERSION IN A COLD MAGNETOHYDRODYNAMIC PLASMA. <i>Astrophysical Journal</i> , 2011, 738, 119.	4.5	66
18	The Local Helioseismology of Inclined Magnetic Fields and the Showerglass Effect. <i>Astrophysical Journal</i> , 2005, 621, L149-L152.	4.5	61

#	ARTICLE	IF	CITATIONS
19	Role of Interaction between Magnetic Rossby Waves and Tachocline Differential Rotation in Producing Solar Seasons. <i>Astrophysical Journal</i> , 2018, 853, 144.	4.5	56
20	Local magnetohelioseismology of active regions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 358, 353-362.	4.4	55
21	The Origin of the "Seasons" in Space Weather. <i>Scientific Reports</i> , 2017, 7, 14750.	3.3	53
22	Mode Conversion of Solar p Modes in non-Vertical Magnetic Fields – i. two-Dimensional Model. <i>Solar Physics</i> , 2003, 214, 201-226.	2.5	51
23	Phase-mixing and surface waves: a new interpretation. <i>Journal of Plasma Physics</i> , 1991, 45, 453-479.	2.1	48
24	Modelling p-Mode Interaction with a Spreading Sunspot Field. <i>Solar Physics</i> , 2000, 192, 395-401.	2.5	48
25	Seismic Emission from A M9.5-Class Solar Flare. <i>Solar Physics</i> , 2006, 239, 113-135.	2.5	48
26	Three-dimensional magneto-shear instabilities in the solar tachocline. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 339, 957-972.	4.4	46
27	An Observational Manifestation of Magnetoatmospheric Waves in Internetwork Regions of the Chromosphere and Transition Region. <i>Astrophysical Journal</i> , 2001, 548, L237-L241.	4.5	45
28	Mode Conversion of Solar p-Modes in Non-Vertical Magnetic Fields. <i>Solar Physics</i> , 2005, 227, 1-26.	2.5	43
29	Nonlinear Evolution of 2d Tachocline Instabilities. , 2001, 199, 231-249.		42
30	Genetic magnetohelioseismology with Hankel analysis data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 363, 1188-1204.	4.4	42
31	Helioseismic analysis of the solar flare-induced sunquake of 2005 January 15. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 374, 1155-1163.	4.4	42
32	Coronal Leaky Tube Waves and Oscillations Observed with Trace. <i>Solar Physics</i> , 2003, 217, 95-108.	2.5	40
33	Jacket Modes: Solar Acoustic Oscillations Confined to Regions Surrounding Sunspots and Plage. <i>Astrophysical Journal</i> , 1995, 453, 919.	4.5	40
34	BENCHMARKING FAST-TO-ALFVÉN MODE CONVERSION IN A COLD MHD PLASMA. II. HOW TO GET ALFVÉN WAVES THROUGH THE SOLAR TRANSITION REGION. <i>Astrophysical Journal</i> , 2012, 751, 31.	4.5	39
35	Waves in magnetized polytropes. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 1997, 453, 943-961.	2.1	38
36	Linear Analysis and Nonlinear Evolution of Two-Dimensional Global Magnetohydrodynamic Instabilities in a Diffusive Tachocline. <i>Astrophysical Journal</i> , 2004, 610, 597-615.	4.5	37

#	ARTICLE	IF	CITATIONS
37	NUMERICAL MODELS OF TRAVEL-TIME INHOMOGENEITIES IN SUNSPOTS. <i>Astrophysical Journal</i> , 2009, 690, L72-L75.	4.5	35
38	An introductory guide to fluid models with anisotropic temperatures. Part 1. CGL description and collisionless fluid hierarchy. <i>Journal of Plasma Physics</i> , 2019, 85, .	2.1	32
39	Chromospheric and coronal Alfvénic oscillations in non-vertical magnetic fields. <i>Solar Physics</i> , 1984, 92, 81-98.	2.5	31
40	Reflection and conversion of magnetogravity waves in the solar chromosphere: windows to the upper atmosphere. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 402, 386-394.	4.4	30
41	Alfvén waves in the structured solar corona. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 413-424.	4.4	30
42	Time-Dependent Distance Modelling in a Simulated Sunspot Atmosphere. <i>Solar Physics</i> , 2008, 251, 309-327.	2.5	28
43	ON THE DISPERSION AND SCATTERING OF MAGNETOHYDRODYNAMIC WAVES BY LONGITUDINALLY STRATIFIED FLUX TUBES. <i>Astrophysical Journal</i> , 2011, 743, 164.	4.5	28
44	FAST-TO-ALFVÉN MODE CONVERSION MEDIATED BY THE HALL CURRENT. I. COLD PLASMA MODEL. <i>Astrophysical Journal</i> , 2015, 814, 106.	4.5	28
45	Effects of Weak-to-Moderate Vertical Magnetic Fields on Solar f- and p-Modes. <i>Astrophysical Journal</i> , 1995, 451, 372.	4.5	28
46	Turbulent thermal conduction in the solar transition region. <i>Astrophysical Journal</i> , 1990, 355, 693.	4.5	27
47	Umbral oscillations in the presence of a spreading magnetic field. <i>Solar Physics</i> , 1983, 88, 77.	2.5	26
48	Resonant Absorption as Mode Conversion?. <i>Solar Physics</i> , 2010, 266, 17-38.	2.5	25
49	Numerical simulations of conversion to Alfvén waves in solar active regions. <i>Journal of Physics: Conference Series</i> , 2011, 271, 012042.	0.4	25
50	Chromospheric Heating by Magnetohydrodynamic Waves and Instabilities. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA029097.	2.4	25
51	An Exact Test of Generalised Ray Theory in Local Helioseismology. <i>Solar Physics</i> , 2009, 255, 193-202.	2.5	24
52	Magnetic and thermal phase shifts in the local helioseismology of sunspots. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 395, 1309-1318.	4.4	24
53	Seismology of the wounded Sun. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 435, 2589-2597.	4.4	24
54	Magnetohydrodynamic Tube Waves: Waves in Fibrils. <i>Australian Journal of Physics</i> , 1985, 38, 825.	0.6	24

#	ARTICLE	IF	CITATIONS
55	Physical Properties of Wave Motion in Inclined Magnetic Fields within Sunspot Penumbrae. Solar Physics, 2008, 251, 341-359.	2.5	21
56	SEISMIC DISCRIMINATION OF THERMAL AND MAGNETIC ANOMALIES IN SUNSPOT UMBRAE. Astrophysical Journal, 2010, 719, 1144-1156.	4.5	21
57	Fast-to-Alfvén Mode Conversion and Ambipolar Heating in Structured Media. II. Numerical Simulation. Astrophysical Journal, 2019, 883, 179.	4.5	21
58	Stability, structure, and evolution of cool loops. Astrophysical Journal, 1991, 372, 329.	4.5	21
59	3D SIMULATIONS OF REALISTIC POWER HALOS IN MAGNETOHYDROSTATIC SUNSPOT ATMOSPHERES: LINKING THEORY AND OBSERVATION. Astrophysical Journal, 2016, 817, 45.	4.5	21
60	An introductory guide to fluid models with anisotropic temperatures. Part 2. Kinetic theory, Padé approximants and Landau fluid closures. Journal of Plasma Physics, 2019, 85, .	2.1	19
61	Force and energy balance in the transition region network. Solar Physics, 1990, 126, 69-88.	2.5	18
62	Fast-to-Alfvén Mode Conversion Mediated by Hall Current. II. Application to the Solar Atmosphere. Astrophysical Journal, 2019, 870, 94.	4.5	18
63	Helioseismology with Solar Orbiter. Space Science Reviews, 2015, 196, 251-283.	8.1	17
64	Phase Jumps in Local Helioseismology. Solar Physics, 2009, 254, 241-257.	2.5	16
65	Fast-to-Alfvén Mode Conversion in the Presence of Ambipolar Diffusion. Astrophysical Journal, 2018, 856, 20.	4.5	16
66	Frequency Dependent Ray Paths in Local Helioseismology. Publications of the Astronomical Society of Australia, 2001, 18, 243-251.	3.4	15
67	From Gigahertz to Millihertz: A Multiwavelength Study of the Acoustically Active 14 August 2004 M7.4 Solar Flare. Solar Physics, 2007, 245, 121-139.	2.5	15
68	AXISYMMETRIC MHD INSTABILITIES IN SOLAR/STELLAR TACHOCLINES. Astrophysical Journal, 2009, 692, 1421-1431.	4.5	15
69	MULTIPLE SCATTERING OF WAVES BY A PAIR OF GRAVITATIONALLY STRATIFIED FLUX TUBES. Astrophysical Journal, 2009, 697, 651-659.	4.5	15
70	MHD WAVE REFRACTION AND THE ACOUSTIC HALO EFFECT AROUND SOLAR ACTIVE REGIONS: A 3D STUDY. Astrophysical Journal, 2015, 801, 27.	4.5	15
71	Steady and nonsteady siphon flow in hot coronal loops. Astrophysical Journal, 1992, 397, 329.	4.5	15
72	A comparison between model calculations and observations of sunspot oscillations. Astronomy and Astrophysics, 2003, 410, 1023-1028.	5.1	14

#	ARTICLE	IF	CITATIONS
73	Global MHD instabilities of the tachocline. , 2007, , 243-274.		14
74	Fast-to-Alfvén Mode Conversion and Ambipolar Heating in Structured Media. I. Simplified Cold Plasma Model. <i>Astrophysical Journal</i> , 2019, 885, 58.	4.5	14
75	Alfvén Reflection and Reverberation in the Solar Atmosphere. <i>Solar Physics</i> , 2012, 280, 33-50.	2.5	13
76	An inverse coordinate multigrid method for free boundary magnetohydrostatics. <i>Journal of Computational Physics</i> , 1991, 93, 411-425.	3.8	12
77	Helioseismic analysis of the solar flare-induced sunquake of 2005 January 15 - II. A magnetoseismic study. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 389, 1905-1910.	4.4	12
78	Mode conversion of radiatively damped magnetogravity waves in the solar chromosphere. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 417, 1162-1169.	4.4	12
79	A Fourier-space description of oscillations in an inhomogeneous plasma. Part 2. Discrete approach. <i>Journal of Plasma Physics</i> , 1994, 52, 265-296.	2.1	11
80	A Sufficient Condition for Instability in a Sheared Incompressible Magnetofluid. <i>Solar Physics</i> , 2000, 194, 189-196.	2.5	11
81	Note on the Initial Value Problem for Coronal Loop Kink Waves. <i>Solar Physics</i> , 2006, 233, 79-87.	2.5	11
82	Surface magnetic field effects in local helioseismology. <i>Astronomische Nachrichten</i> , 2007, 328, 292-297.	1.2	11
83	Three-dimensional magneto-shear instabilities in the solar tachocline - II. Axisymmetric case. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 391, 891-900.	4.4	11
84	On mode conversion, reflection, and transmission of magnetoacoustic waves from above in an isothermal stratified atmosphere. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 1826-1836.	4.4	11
85	SPECTROPOLARIMETRICALLY ACCURATE MAGNETOHYDROSTATIC SUNSPOT MODEL FOR FORWARD MODELING IN HELIOSEISMOLOGY. <i>Astrophysical Journal</i> , 2015, 807, 20.	4.5	10
86	Modified p-modes in penumbral filaments?. <i>Astronomy and Astrophysics</i> , 2007, 469, 1155-1161.	5.1	10
87	The Contribution by Thin Magnetic Flux Tubes to Mode Line Widths. <i>Astrophysical Journal</i> , 1999, 521, 878-884.	4.5	10
88	A modal view of oscillations in inhomogeneous compressible MHD. <i>Journal of Plasma Physics</i> , 1997, 57, 591-609.	2.1	9
89	THE SCATTERING OF $f$ - AND $p$ -MODES FROM ENSEMBLES OF THIN MAGNETIC FLUX TUBES: AN ANALYTICAL APPROACH. <i>Astrophysical Journal</i> , 2014, 791, 129.	4.5	9
90	SENSITIVITY OF HELIOSEISMIC TRAVEL TIMES TO THE IMPOSITION OF A LORENTZ FORCE LIMITER IN COMPUTATIONAL HELIOSEISMOLOGY. <i>Astrophysical Journal Letters</i> , 2014, 782, L26.	8.3	9

#	ARTICLE	IF	CITATIONS
91	Hall-coupling of Slow and Alfvén Waves at Low Frequencies in the Lower Solar Atmosphere. <i>Solar Physics</i> , 2019, 294, 1.	2.5	9
92	Complex eigenvalue bounds in magnetoatmospheric shear flow. I. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 1983, 23, 43-55.	1.2	8
93	Magnetohydrodynamic tube waves and high speed solar wind streams. <i>Solar Physics</i> , 1987, 108, 183-189.	2.5	8
94	A Fourier-space description of oscillations in an inhomogeneous plasma. Part 1. Continuous Fourier transformation. <i>Journal of Plasma Physics</i> , 1994, 52, 245-264.	2.1	8
95	Directional time-distance probing of model sunspot atmospheres. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 449, 3074-3081.	4.4	8
96	Smoothing of MHD Shocks in Mode Conversion. <i>Astrophysical Journal Letters</i> , 2019, 881, L21.	8.3	8
97	Driven Acoustic Oscillations within a Vertical Magnetic Field. <i>Astrophysical Journal</i> , 1996, 459, 760.	4.5	8
98	On photospheric and chromospheric penumbral waves. <i>Solar Physics</i> , 1983, 85, 97-111.	2.5	7
99	Complex eigenvalue bounds in magnetoatmospheric shear flow. II. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 1983, 23, 57-67.	1.2	7
100	Phase mixing and surface-wave decay in an inhomogeneous plasma. <i>Journal of Plasma Physics</i> , 1992, 48, 145-158.	2.1	7
101	Mode Mixing by a Shallow Sunspot. <i>Solar Physics</i> , 2000, 193, 373-382.	2.5	7
102	Statistical mechanics and the gravothermal catastrophe. <i>Journal of Mathematical Physics</i> , 1981, 22, 348-351.	1.1	6
103	Modelling Fast-Alfvén Mode Conversion Using SPARC. <i>Journal of Physics: Conference Series</i> , 2013, 440, 012047.	0.4	6
104	Time-Distance Seismology and the Solar Transition Region. <i>Solar Physics</i> , 2014, 289, 4425-4432.	2.5	6
105	Sensitivity of coronal loop sausage mode frequencies and decay rates to radial and longitudinal density inhomogeneities: a spectral approach. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 025501.	2.1	6
106	On the fragility of Alfvén waves in a stratified atmosphere. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 510, 1093-1105.	4.4	6
107	Chromospheric line emission in seismically active flares. <i>Advances in Space Research</i> , 2007, 40, 1921-1925.	2.6	5
108	Resonant Absorption as Mode Conversion? II. Temporal Ray Bundle. <i>Solar Physics</i> , 2011, 269, 105-110.	2.5	5

#	ARTICLE	IF	CITATIONS
109	NEAR- AND FAR-FIELD RESPONSE TO COMPACT ACOUSTIC SOURCES IN STRATIFIED CONVECTION ZONES. <i>Astrophysical Journal</i> , 2013, 768, 35.	4.5	5
110	Resonant structures within incompressible ideal MHD. <i>Journal of Plasma Physics</i> , 1992, 47, 321-347.	2.1	4
111	Magnetoseismic signatures and flow diagnostics beneath magnetic regions. <i>Astronomische Nachrichten</i> , 2007, 328, 298-304.	1.2	4
112	Nonlinear Evolution of Axisymmetric Twisted Flux Tubes in the Solar Tachocline. <i>Solar Physics</i> , 2009, 260, 251-260.	2.5	4
113	AN ANALYTICAL APPROACH TO SCATTERING BETWEEN TWO THIN MAGNETIC FLUX TUBES IN A STRATIFIED ATMOSPHERE. <i>Astrophysical Journal</i> , 2014, 781, 125.	4.5	4
114	Probing sunspots with two-skip time-distance helioseismology. <i>Astronomy and Astrophysics</i> , 2018, 613, A73.	5.1	4
115	ANALYSES OF THREE-DIMENSIONAL MAGNETOHYDRODYNAMIC INSTABILITY OF ANTISOLAR LATITUDINAL DIFFERENTIAL ROTATION IN F, G, AND K STARS. <i>Astrophysical Journal</i> , 2011, 739, 4.	4.5	3
116	Multiple Scattering of Seismic Waves from Ensembles of Upwardly Lossy Thin Flux Tubes. <i>Solar Physics</i> , 2015, 290, 1889-1896.	2.5	3
117	Benchmarking hall-induced magnetoacoustic to Alfvén mode conversion in the solar chromosphere. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 507, 2671-2683.	4.4	3
118	Numerical Solutions of Three-Dimensional Pressure-Bounded Magnetohydrostatic Flux Tubes. <i>Solar Physics</i> , 2001, 201, 289-304.	2.5	2
119	Seismic Radiation from M-class Solar Flares. <i>Proceedings of the International Astronomical Union</i> , 2006, 2, 385.	0.0	2
120	How to turn gravity waves into Alfvén waves and other such tricks. <i>Journal of Physics: Conference Series</i> , 2011, 271, 012037.	0.4	2
121	A study of acoustic halos in active region NOAA 11330 using multi-height SDO observations. <i>Advances in Space Research</i> , 2018, 61, 691-704.	2.6	2
122	Conversion and Smoothing of MHD Shocks in Atmospheres with Open and Closed Magnetic Field and Neutral Points. <i>Solar Physics</i> , 2021, 296, 1.	2.5	2
123	Why Heating is Not Necessary in the Transition Region or Upper Chromosphere. , 1991, , 103-108.		2
124	The Solar Tachocline: Limiting Magneto-Tipping Instabilities. <i>Symposium - International Astronomical Union</i> , 2004, 219, 541-545.	0.1	1
125	Three-dimensional ray propagation in a toy sunspot. <i>Journal of Physics: Conference Series</i> , 2008, 118, 012037.	0.4	1
126	Wave resonances and the partition of energy in ideal compressible magnetohydrodynamic fluids. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	1



#	ARTICLE	IF	CITATIONS
127	DIVISION E COMMISSION 10: SOLAR ACTIVITY. Proceedings of the International Astronomical Union, 2015, 11, 245-277.	0.0	1
128	The Equilibrium Statistical Mechanics of Self-gravitating Systems. Australian Journal of Physics, 1981, 34, 267.	0.6	1
129	Observations and Interpretation of Subsurface Magnetic Structures. Highlights of Astronomy, 2005, 13, 435-438.	0.0	0
130	Chromospheric Line Emission Analysis of the July 16, 2004 Sun Quake. AIP Conference Proceedings, 2007, , .	0.4	0
131	Correlative study of the emission from flares associated with Sun quakes. Proceedings of the International Astronomical Union, 2007, 3, 99-104.	0.0	0
132	HXR photospheric footprints. Proceedings of the International Astronomical Union, 2007, 3, 110-113.	0.0	0
133	A Comparison of the Acoustic Hardness of Acoustically Active and Non-Active Solar Flares. AIP Conference Proceedings, 2008, , .	0.4	0
134	Timeâ€™sâ€™Distance Modelling in a Simulated Sunspot Atmosphere. , 2008, , 309-327.		0
135	How surface magnetism affects helioseismic waves. Proceedings of the International Astronomical Union, 2009, 5, 349-350.	0.0	0
136	Helioseismology with Solar Orbiter. Space Sciences Series of ISSI, 2017, , 257-289.	0.0	0