

Andrew W Yau

List of Publications by Year in descending order

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137
papers

3,939
citations

109321

35
h-index

133252

59
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149
all docs

149
docs citations

149
times ranked

1484
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling and Validating a SuperDARN Radar's Poynting Flux Profile. Radio Science, 2022, 57, .	1.6	1
2	Thank You to Our 2021 Peer Reviewers. Geophysical Research Letters, 2022, 49, .	4.0	0
3	Altitude Distribution of Large and Small-Scale Equatorial Ionospheric Irregularities Sampled From an Elliptical Low-Earth Orbit. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	3
4	Modeling the radio wave polarization in transionospheric propagation. , 2022, , .		0
5	Satellite attitude effects on the reception of transionospheric HF signals: Examples from the Radio Receiver Instrument onboard e-POP/Swarm-E. , 2022, , .		0
6	Glow discharge excited at low to high radio frequencies around active dipoles in the ionosphere. Canadian Journal of Physics, 2021, 99, 358-366.	1.1	0
7	Thank You to Our 2020 Peer Reviewers. Geophysical Research Letters, 2021, 48, e2021GL093126.	4.0	0
8	Conjugate Observation of Magnetospheric Chorus Propagating to the Ionosphere by Ducting. Geophysical Research Letters, 2021, 48, e2021GL095933.	4.0	8
9	Seasonal and Hemispheric Asymmetries of F_{min} Region Polar Cap Plasma Density: Swarm and CHAMP Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028084.	2.4	9
10	Thank You to Our 2019 Peer Reviewers. Geophysical Research Letters, 2020, 47, e2020GL088048.	4.0	0
11	Whistlers and Related Phenomenon Observed by e-POP-RRI. , 2020, , .		0
12	ULF Waves Modulating and Acting as Mass Spectrometer for Dayside Ionospheric Outflow Ions. Geophysical Research Letters, 2019, 46, 8633-8642.	4.0	22
13	Space Weather Effects in the Ionosphere, in the Thermosphere and at Earth's Surface. , 2019, , 229-250.		0
14	Thank You to Our 2018 Peer Reviewers. Geophysical Research Letters, 2019, 46, 12608-12636.	4.0	0
15	Topside Ionospheric Disturbances Detected Using Radio Occultation Measurements During the August 2017 Solar Eclipse. Geophysical Research Letters, 2019, 46, 7069-7078.	4.0	15
16	Swarm-E observations of natural and stimulated emissions in the topside ionosphere. , 2019, , .		0
17	Low-Altitude Ion Heating, Downflowing Ions, and BBELF Waves in the Return Current Region. Journal of Geophysical Research: Space Physics, 2018, 123, 3087-3110.	2.4	22
18	Enhanced Polar Outflow Probe Ionospheric Radio Occultation Measurements at High Latitudes: Receiver Bias Estimation and Comparison With Ground-Based Observations. Radio Science, 2018, 53, 166-182.	1.6	8

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19	Alfvénic Dynamics and Fine Structuring of Discrete Auroral Arcs: Swarm and e-POP Observations. Geophysical Research Letters, 2018, 45, 545-555.	4.0	33
20	Eclipse-Induced Changes to Topside Ion Composition and Field-Aligned Ion Flows in the August 2017 Solar Eclipse: e-POP Observations. Geophysical Research Letters, 2018, 45, 10,829.	4.0	8
21	Appreciation of 2017 GRL Peer Reviewers. Geophysical Research Letters, 2018, 45, 4494-4528.	4.0	0
22	Citizen Radio Science: An Analysis of Amateur Radio Transmissions With e-POP RRI. Radio Science, 2018, 53, 933-947.	1.6	8
23	Polarization Characteristics Inferred From the Radio Receiver Instrument on the Enhanced Polar Outflow Probe. Journal of Geophysical Research: Space Physics, 2018, 123, 1648-1662.	2.4	7
24	First results of HF radio science with e-POP RRI and SuperDARN. Radio Science, 2017, 52, 78-93.	1.6	12
25	Large area sea mapping with Ground-Ionosphere-Ocean-Space (GIOS). , 2016, , .		2
26	Strong ambipolar-driven ion upflow within the cleft ion fountain during low geomagnetic activity. Journal of Geophysical Research: Space Physics, 2016, 121, 6950-6969.	2.4	8
27	Imaging thermal plasma mass and velocity analyzer. Journal of Geophysical Research: Space Physics, 2016, 121, 7326-7333.	2.4	9
28	Enhanced N ₂ and O ₂ densities inferred from EISCAT observations of Pc5 waves and associated electron precipitation. Journal of Geophysical Research: Space Physics, 2016, 121, 549-566.	2.4	12
29	The Earth: Plasma Sources, Losses, and Transport Processes. Space Sciences Series of ISSI, 2016, , 145-208.	0.0	3
30	First satellite imaging of auroral pulsations by the Fast Auroral Imager on e-POP. Geophysical Research Letters, 2015, 42, 6877-6882.	4.0	3
31	Fast Auroral Imager (FAI) for the e-POP Mission. Space Science Reviews, 2015, 189, 15-25.	8.1	17
32	The CASSIOPE/e-POP Magnetic Field Instrument (MGF). Space Science Reviews, 2015, 189, 27-39.	8.1	37
33	Electron conic distributions produced by solar ionizing radiation in planetary atmospheres. Advances in Space Research, 2015, 55, 2566-2572.	2.6	1
34	CASSIOPE Enhanced Polar Outflow Probe (e-POP) Mission Overview. Space Science Reviews, 2015, 189, 3-14.	8.1	60
35	Imaging and Rapid-Scanning Ion Mass Spectrometer (IRM) for the CASSIOPE e-POP Mission. Space Science Reviews, 2015, 189, 41-63.	8.1	17
36	The CASSIOPE/e-POP Suprathermal Electron Imager (SEI). Space Science Reviews, 2015, 189, 65-78.	8.1	20

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37	The Earth: Plasma Sources, Losses, and Transport Processes. <i>Space Science Reviews</i> , 2015, 192, 145-208.	8.1	54
38	An assessment of the role of soft electron precipitation in global ion upwelling. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 7665-7678.	2.4	6
39	Radio-Frequency Ion Mass Spectrometer Measurements of Ion Composition, Velocity and Temperature: the EXOS-D Suprathermal Mass Spectrometer. <i>Geophysical Monograph Series</i> , 2013, , 307-312.	0.1	5
40	Effect of finite electrode area ratio on high-frequency Langmuir probe measurements. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 075205.	2.8	10
41	Transport of thermal energy ionospheric oxygen (O^{+}) ions between the ionosphere and the plasma sheet and ring current at quiet times preceding magnetic storms. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	34
42	Suprathermal plasma analyzer for the measurement of low-energy electron distribution in the ionosphere. <i>Review of Scientific Instruments</i> , 2011, 82, 074501.	1.3	4
43	Localized electron density enhancements in the high-altitude polar ionosphere and their relationships with storm-enhanced density (SED) plumes and polar tongues of ionization (TOI). <i>Annales Geophysicae</i> , 2011, 29, 367-375.	1.6	6
44	Scientific Objectives of the Canadian CASSIOPE Enhanced Polar Outflow Probe (e-POP) Small Satellite Mission. , 2011, , 355-364.		6
45	Thermal ion upflow in the cusp ionosphere and its dependence on soft electron energy flux. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	35
46	Observations of very low energy (<10 eV) ion outflows dominated by O^{+} ions in the region of enhanced electron density in the polar cap magnetosphere during geomagnetic storms. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	23
47	The Outer Radiation Belt Injection, Transport, Acceleration and Loss Satellite (ORBITALS): A Proposed Canadian Small Satellite Mission for ILWS. , 2009, , .		0
48	CASSIOPE Enhanced Polar Outflow Probe (e-POP) Small Satellite Mission: Space Plasma Observations and International Collaborations. , 2009, , .		1
49	ARGO Science Mission. , 2009, , .		0
50	The Canadian Enhanced Polar Outflow Probe (e-POP) Mission:. <i>Data Science Journal</i> , 2009, 8, S38-S44.	1.3	3
51	The effects of IMF and convection on thermal ion outflow in magnetosphere-ionosphere coupling. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2008, 70, 2132-2143.	1.6	19
52	Model/data comparisons of ionospheric outflow as a function of invariant latitude and magnetic local time. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	15
53	Solar minimum quiet time ion energization and outflow in dynamic boundary related coordinates. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	49
54	The polar wind: Recent observations. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2007, 69, 1936-1983.	1.6	115

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55	Quiet time solar illumination effects on the fluxes and characteristic energies of ionospheric outflow. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	40
56	Role of plasma waves in Mars' atmospheric loss. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	71
57	The Canadian Enhanced Polar Outflow Probe (e-POP) mission in ILWS. <i>Advances in Space Research</i> , 2006, 38, 1870-1877.	2.6	31
58	MULTISCALE GEOSPACE PHYSICS IN CANADA. , 2005, , 487-508.		0
59	Long-term variation of the polar wind velocity and its implication for the ion acceleration process: Akebono/suprathermal ion mass spectrometer observations. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	54
60	Akebono/Suprathermal Mass Spectrometer observations of low-energy ion outflow: Dependence on magnetic activity and solar wind conditions. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	130
61	Supply of thermal ionospheric ions to the central plasma sheet. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	54
62	Plasma density enhancements in the high-altitude polar cap region observed on Akebono. <i>Geophysical Research Letters</i> , 2002, 29, 41-1-41-4.	4.0	4
63	The Polar Outflow Probe (POP): Science Objectives and Instrument Development. <i>Canadian Aeronautics and Space Journal</i> , 2002, 48, 39-49.	0.1	8
64	Polar/Toroidal Imaging Mass-Angle Spectrograph observations of suprathermal ion outflow during solar minimum conditions. <i>Journal of Geophysical Research</i> , 2001, 106, 6059-6066.	3.3	54
65	Planned observations of thermal plasma drifts and solar wind interactions in the Martian ionosphere. <i>Earth, Planets and Space</i> , 1998, 50, 195-198.	2.5	5
66	Ion temperature measurements from the Akebono suprathermal mass spectrometer: Application to the polar wind. <i>Journal of Geophysical Research</i> , 1997, 102, 17523-17539.	3.3	21
67	Theories and Observations of Ion Energization and Outflow in the High Latitude Magnetosphere. <i>Space Science Reviews</i> , 1997, 80, 27-48.	8.1	166
68	Sources of Ion Outflow in the High Latitude Ionosphere. <i>Space Science Reviews</i> , 1997, 80, 1-25.	8.1	298
69	Sources of Ion Outflow in the High Latitude Ionosphere. , 1997, , 1-25.		43
70	Theories and Observations of Ion Energization and Outflow in the High Latitude Magnetosphere. , 1997, , 27-48.		40
71	Observations of Polar Wind and Thermal Ion Outflow by Akebono/SMS.. <i>Journal of Geomagnetism and Geoelectricity</i> , 1996, 48, 319-325.	0.9	44
72	Akebono Observations of the Polar Wind and Suprathermal Auroral Ions: An Overview.. <i>Journal of Geomagnetism and Geoelectricity</i> , 1996, 48, 45-56.	0.9	1

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73	Cold Plasma Source of Upflowing Ionospheric Ions in the Nightside Auroral Ionosphere. Journal of Geomagnetism and Geoelectricity, 1996, 48, 947-957.	0.9	3
74	Akebono observations of electron temperature anisotropy in the polar wind. Journal of Geophysical Research, 1995, 100, 17451.	3.3	33
75	EXOS-D Observations of Thermal Ion Energy Distributions in Transverse Ion Energization Regions.. Journal of Geomagnetism and Geoelectricity, 1995, 47, 1161-1169.	0.9	1
76	The Freja F3C Cold Plasma Analyzer. Space Science Reviews, 1994, 70, 541-561.	8.1	27
77	Soft ion precipitation at very high latitudes during northward interplanetary magnetic field. Journal of Geophysical Research, 1994, 99, 15025.	3.3	2
78	Sub-kilometer thermal plasma structure near 1750 km altitude in the polar cusp/cleft. Geophysical Research Letters, 1994, 21, 1907-1910.	4.0	14
79	On the sources of energization of molecular ions at ionospheric altitudes. Journal of Geophysical Research, 1994, 99, 23257.	3.3	32
80	The Freja F3C Cold Plasma Analyzer. , 1994, , 137-157.		1
81	Simultaneous observations of H ⁺ and O ⁺ ions at two altitudes by the Akebono and Dynamics Explorer 1 satellites. Journal of Geophysical Research, 1993, 98, 11177-11190.	3.3	26
82	EXOS D (Akebono) suprathermal mass spectrometer observations of the polar wind. Journal of Geophysical Research, 1993, 98, 11191-11203.	3.3	128
83	EXOS D (Akebono) observations of molecular NO ⁺ and N ₂ ⁺ upflowing ions in the high-altitude auroral ionosphere. Journal of Geophysical Research, 1993, 98, 11205-11224.	3.3	43
84	Ion depletion zones in the polar wind: EXOS D suprathermal ion mass spectrometer observations in the polar cap. Journal of Geophysical Research, 1993, 98, 11439-11448.	3.3	17
85	Altitude profile of the polar wind velocity and its relationship to ionospheric conditions. Geophysical Research Letters, 1993, 20, 2825-2828.	4.0	63
86	Observations of a transverse magnetic field perturbation at two altitudes on the equatorward edge of the magnetospheric cusp. Journal of Geophysical Research, 1993, 98, 21463-21470.	3.3	9
87	Auroral ion composition during large magnetic storms. Canadian Journal of Physics, 1992, 70, 500-509.	1.1	11
88	Thermal ion observations of depletion and refilling in the plasmaspheric trough. Journal of Geophysical Research, 1992, 97, 1081-1096.	3.3	41
89	Observations in the transverse ion energization region. Geophysical Research Letters, 1991, 18, 725-728.	4.0	50
90	Low energy upflowing ion events observed by EXOS-D: Initial results. Geophysical Research Letters, 1991, 18, 337-340.	4.0	4

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91	Minor ion composition in the polar ionosphere. <i>Geophysical Research Letters</i> , 1991, 18, 345-348.	4.0	27
92	The suprathreshold ion mass spectrometer(SMS) onboard the Akebono (EXOS-D) satellite. <i>Journal of Geomagnetism and Geoelectricity</i> , 1990, 42, 511-536.	0.9	47
93	Statistical analysis of upflowing ion beam and conic distributions at DE 1 altitudes. <i>Journal of Geophysical Research</i> , 1990, 95, 12091-12102.	3.3	44
94	The helium components of energetic terrestrial ion upflows: Their occurrence, morphology, and intensity. <i>Journal of Geophysical Research</i> , 1988, 93, 7558-7564.	3.3	43
95	Studies of the electron-impact ionization cross section of vibrationally excited oxygen employing a shock-heated molecular beam. <i>Physical Review A</i> , 1988, 38, 2782-2788.	2.5	2
96	Quantitative parametrization of energetic ionospheric ion outflow. <i>Geophysical Monograph Series</i> , 1988, , 211-217.	0.1	92
97	Vertical ion flow in the polar ionosphere. <i>Geophysical Monograph Series</i> , 1988, , 229-240.	0.1	15
98	Pitch angle distributions of low-energy ions in the near-Earth magnetosphere. <i>Journal of Geophysical Research</i> , 1987, 92, 12241-12254.	3.3	25
99	Particle precipitation and ionospheric convection morphology in dayside aurora. <i>Canadian Journal of Physics</i> , 1986, 64, 1446-1451.	1.1	0
100	Observations of plasma waves within regions of perpendicular ion acceleration. <i>Geophysical Research Letters</i> , 1986, 13, 1113-1116.	4.0	49
101	Large amplitude wave packets observed in the ionosphere in association with transverse ion acceleration. <i>Journal of Geophysical Research</i> , 1986, 91, 7113-7118.	3.3	100
102	The vibrational relaxation of molecules in a shock heated Ar-N ₂ and Ar-CO mixture molecular beam. <i>Journal Physics D: Applied Physics</i> , 1986, 19, 1843-1852.	2.8	1
103	Waterhole auroral arc modification experiments: Electrodynamical response. <i>Journal of Geophysical Research</i> , 1985, 90, 8377-8386.	3.3	11
104	Energetic auroral and polar ion outflow at DE 1 altitudes: Magnitude, composition, magnetic activity dependence, and long-term variations. <i>Journal of Geophysical Research</i> , 1985, 90, 8417-8432.	3.3	252
105	Long-term (solar cycle) and seasonal variations of upflowing ionospheric ion events at DE 1 altitudes. <i>Journal of Geophysical Research</i> , 1985, 90, 6395-6407.	3.3	135
106	Simulations and observations of plasma depletion, ion composition, and airglow emissions in two auroral ionospheric depletion experiments. <i>Journal of Geophysical Research</i> , 1985, 90, 8387-8406.	3.3	16
107	Depletion core in ionospheric depletion experiments: Snowplow effects or plasma recombination?. <i>Geophysical Research Letters</i> , 1984, 11, 319-322.	4.0	7
108	Distribution of upflowing ionospheric ions in the high-altitude polar cap and auroral ionosphere. <i>Journal of Geophysical Research</i> , 1984, 89, 5507-5522.	3.3	157

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109	Particle and wave observations of low-altitude ionospheric ion acceleration events. <i>Journal of Geophysical Research</i> , 1983, 88, 341-355.	3.3	135
110	Tangential electric fields in a drifting auroral arc. <i>Geophysical Research Letters</i> , 1981, 8, 373-376.	4.0	6
111	Observations of particle precipitation, electric field, and optical morphology of an artificially perturbed auroral arc: Project Waterhole. <i>Journal of Geophysical Research</i> , 1981, 86, 5601-5613.	3.3	21
112	Rocketborne measurements of particle pulsation in pulsating aurora. <i>Journal of Geophysical Research</i> , 1981, 86, 5673-5681.	3.3	50
113	Rocketborne observations of ion convection and electric fields in dayside and nightside visual auroral arcs. <i>Journal of Geophysical Research</i> , 1981, 86, 6899-6907.	3.3	9
114	Effective collision frequency of electrons in noble gases. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1981, 14, 1485-1495.	1.6	75
115	Preliminary results from Project Waterhole – an auroral modification experiment. <i>Canadian Journal of Physics</i> , 1981, 59, 1175-1182.	1.1	6
116	Electron energy measurements in pulsating auroras. <i>Canadian Journal of Physics</i> , 1981, 59, 1106-1115.	1.1	68
117	Specific decomposition rate constants in unimolecular reactions. <i>Canadian Journal of Chemistry</i> , 1980, 58, 1516-1526.	1.1	3
118	Electron scattering from noble gases. II. Argon, krypton and xenon. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1980, 13, 377-384.	1.6	39
119	A reformulation of the theory of unimolecular reactions. <i>Canadian Journal of Chemistry</i> , 1980, 58, 626-626.	1.1	0
120	On the uniform-interactions-mixing assumption in the theory of radiationless transitions. <i>Molecular Physics</i> , 1979, 38, 333-335.	1.7	2
121	Toward a unified master-equation theory of thermal decomposition reactions: Analytic solution for diatomic dissociation. <i>The Journal of Physical Chemistry</i> , 1979, 83, 134-149.	2.9	25
122	Unimolecular reactions of N ₂ O and CO ₂ at high pressure. <i>Canadian Journal of Chemistry</i> , 1979, 57, 1731-1742.	1.1	14
123	On the reliability of the inversion of the Arrhenius rate law. <i>Canadian Journal of Chemistry</i> , 1979, 57, 2458-2463.	1.1	4
124	Perturbed normal-mode analysis of induction times, relaxation times, and reaction rates in unimolecular reactions. <i>Canadian Journal of Chemistry</i> , 1979, 57, 1723-1730.	1.1	5
125	Lindemann unimolecular fall-off in weak-collision systems at high temperature. <i>Chemical Physics Letters</i> , 1978, 60, 140-144.	2.6	11
126	A reformulation of the theory of unimolecular reactions. <i>Canadian Journal of Chemistry</i> , 1978, 56, 1389-1414.	1.1	15

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127	Electron scattering from noble gases. Journal of Physics B: Atomic and Molecular Physics, 1978, 11, 2907-2922.	1.6	46
128	The unimolecular isomerisation of monofluorocyclopropane: a reaction with multiple fall-off characteristics?. Canadian Journal of Chemistry, 1977, 55, 1595-1598.	1.1	4
129	Density of states and the steepest descent method: a non-iterative procedure. Canadian Journal of Chemistry, 1977, 55, 992-995.	1.1	3
130	Entropy production in bulk isothermal relaxation. Canadian Journal of Chemistry, 1977, 55, 1588-1591.	1.1	2
131	Information theory and bulk rotational or vibrational relaxation processes. Canadian Journal of Chemistry, 1977, 55, 737-742.	1.1	8
132	Fine-structure excitation of carbon by atomic hydrogen impact. Astrophysical Journal, 1976, 206, 652.	4.5	11
133	The Role of Quiet Time Ionospheric Plasma in the Storm Time Inner Magnetosphere. Geophysical Monograph Series, 0, , 329-340.	0.1	0
134	Waterhole: An Auroral-Ionosphere Perturbation Experiment. Geophysical Monograph Series, 0, , 199-205.	0.1	4
135	Low-Altitude Transverse Ionospheric Ion Acceleration. Geophysical Monograph Series, 0, , 39-42.	0.1	5
136	Accelerated Auroral and Polar-Cap Ions : Outflow at De-1 Altitudes. Geophysical Monograph Series, 0, , 72-76.	0.1	8
137	Ion Acceleration in the Low- and Mid-Altitude Auroral Ionosphere. Geophysical Monograph Series, 0, , 183-193.	0.1	1