

Paul A Bernhardt

List of Publications by Year in descending order

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101
papers

2,596
citations

236925

25
h-index

206112

48
g-index

105
all docs

105
docs citations

105
times ranked

1736
citing authors

#	ARTICLE	IF	CITATIONS
1	The COSMIC/FORMOSAT-3 Mission: Early Results. <i>Bulletin of the American Meteorological Society</i> , 2008, 89, 313-334.	3.3	783
2	Preliminary study of the CRRES magnetospheric barium releases. <i>Journal of Geophysical Research</i> , 1992, 97, 11-24.	3.3	115
3	Artificial Airglow Excited by High-Power Radio Waves. <i>Science</i> , 1988, 242, 1022-1027.	12.6	84
4	A critical comparison of ionospheric depletion chemicals. <i>Journal of Geophysical Research</i> , 1987, 92, 4617-4628.	3.3	80
5	Lightning driven EMP in the upper atmosphere. <i>Geophysical Research Letters</i> , 1995, 22, 361-364.	4.0	64
6	New satellite-based systems for ionospheric tomography and scintillation region imaging. <i>Radio Science</i> , 2006, 41, .	1.6	64
7	Probing the magnetosphere using chemical releases from the Combined Release and Radiation Effects Satellite. <i>Physics of Fluids B</i> , 1992, 4, 2249-2256.	1.7	63
8	Protonospheric-ionospheric modeling of VLF ducts. <i>Journal of Geophysical Research</i> , 1977, 82, 5222-5230.	3.3	58
9	Ground and Space-Based Measurement of Rocket Engine Burns in the Ionosphere. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 1267-1286.	1.3	58
10	Stimulated Brillouin Scatter in a Magnetized Ionospheric Plasma. <i>Physical Review Letters</i> , 2010, 104, 165004.	7.8	55
11	Two-dimensional mapping of the plasma density in the upper atmosphere with computerized ionospheric tomography (CIT). <i>Physics of Plasmas</i> , 1998, 5, 2010-2021.	1.9	54
12	Determination of the electron temperature in the modified ionosphere over HAARP using the HF pumped Stimulated Brillouin Scatter (SBS) emission lines. <i>Annales Geophysicae</i> , 2009, 27, 4409-4427.	1.6	50
13	Excitation of artificial airglow by high power radio waves from the "SURA" Ionospheric Heating Facility. <i>Geophysical Research Letters</i> , 1991, 18, 1477-1480.	4.0	49
14	High-altitude gas releases: transition from collisionless flow to diffusive flow in a nonuniform atmosphere. <i>Journal of Geophysical Research</i> , 1979, 84, 4341-4354.	3.3	46
15	Electron and ion Bernstein waves excited in the ionosphere by high power EM waves at the second harmonic of the electron cyclotron frequency. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	39
16	Artificial Ionospheric Layers during Pump Frequency Stepping Near the 4th Gyroharmonic at HAARP. <i>Physical Review Letters</i> , 2013, 110, 065002.	7.8	39
17	Heater-induced cavities as optical tracers of plasma drifts. <i>Journal of Geophysical Research</i> , 1989, 94, 7003-7010.	3.3	33
18	Incoherent scatter from space shuttle and rocket engine plumes in the ionosphere. <i>Journal of Geophysical Research</i> , 1998, 103, 2239-2251.	3.3	30

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19	Self-consistent modeling of equatorial dawn density depletions with SAMI3. Geophysical Research Letters, 2010, 37, .	4.0	29
20	Ion gyroharmonic structuring in the stimulated radiation spectrum and optical emissions during electron gyroharmonic heating. Journal of Geophysical Research: Space Physics, 2013, 118, 1270-1287.	2.4	29
21	Investigation of ionospheric stimulated Brillouin scatter generated at pump frequencies near electron gyroharmonics. Radio Science, 2013, 48, 685-697.	1.6	28
22	Stimulated Brillouin scatter and stimulated ion Bernstein scatter during electron gyroharmonic heating experiments. Radio Science, 2013, 48, 607-616.	1.6	28
23	A physics-based model for the ionization of samarium by the MOSC chemical releases in the upper atmosphere. Radio Science, 2017, 52, 559-577.	1.6	27
24	Ion gyroharmonic structures in stimulated radiation during second electron gyroharmonic heating: 1. Theory. Journal of Geophysical Research: Space Physics, 2013, 118, 502-514.	2.4	26
25	Tomographic studies of aeronomic phenomena using radio and UV techniques. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 1573-1580.	1.6	25
26	Ionospheric applications of the scintillation and tomography receiver in space (CITRIS) mission when used with the DORIS radio beacon network. Journal of Geodesy, 2006, 80, 473-485.	3.6	25
27	Skidding™ of the CRRES GØ barium release. Geophysical Research Letters, 1992, 19, 1085-1088.	4.0	23
28	Artificial ionospheric modification: The Metal Oxide Space Cloud experiment. Radio Science, 2017, 52, 539-558.	1.6	23
29	Incoherent scatter measurements of ring-ion beam distributions produced by space shuttle exhaust injections into the ionosphere. Journal of Geophysical Research, 2004, 109, .	3.3	22
30	Radio tomographic imaging of sporadic-E<i>i> layers during SEEK-2. Annales Geophysicae, 2005, 23, 2357-2368.	1.6	22
31	Generation and detection of super small striations by <i>F</i> region HF heating. Journal of Geophysical Research: Space Physics, 2014, 119, 6000-6011.	2.4	21
32	Optical Emissions Observed During the Charged Aerosol Release Experiment (CARE I) in the Ionosphere. IEEE Transactions on Plasma Science, 2011, 39, 2774-2775.	1.3	20
33	Stimulated Brillouin scattering during electron gyro-harmonic heating at EISCAT. Annales Geophysicae, 2015, 33, 983-990.	1.6	20
34	Linear mode conversion in inhomogeneous magnetized plasmas during ionospheric modification by HF radio waves. Journal of Geophysical Research, 2003, 108, .	3.3	19
35	Large ionospheric disturbances produced by the HAARP HF facility. Radio Science, 2016, 51, 1081-1093.	1.6	19
36	Artificial disturbances of the ionosphere over the Millstone Hill Incoherent Scatter Radar from dedicated burns of the space shuttle orbital maneuver subsystem engines. Journal of Geophysical Research, 2005, 110, .	3.3	18

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37	Ion gyroharmonic structures in stimulated radiation during second electron gyroharmonic heating: 2. Simulations. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 462-478.	2.4	17
38	Electron gyroharmonic effects on ionospheric stimulated Brillouin scatter. <i>Geophysical Research Letters</i> , 2014, 41, 5710-5716.	4.0	17
39	COMMUNICATIONS USING CHAOTIC FREQUENCY MODULATION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994, 04, 427-440.	1.7	16
40	Persistent enhancement of the HF pump-induced plasma line measured with a UHF diagnostic radar at HAARP. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	16
41	Small-scale plasma irregularities produced during electron attachment chemical releases. <i>Geophysical Research Letters</i> , 1994, 21, 605-608.	4.0	15
42	Using radio-induced aurora to measure the horizontal structure of ion layers in the lower thermosphere. <i>Journal of Geophysical Research</i> , 2003, 108, SIA 1-1-SIA 1-11.	3.3	15
43	First observations of minority ion (H^{+}) structuring in stimulated radiation during second electron gyroharmonic heating experiments. <i>Geophysical Research Letters</i> , 2013, 40, 1479-1483.	4.0	15
44	Effect of an Altitude-Dependent Background Atmosphere on Shuttle Plumes. <i>Journal of Spacecraft and Rockets</i> , 2010, 47, 700-704.	1.9	14
45	A medium-scale traveling ionospheric disturbance observed from the ground and from space. <i>Radio Science</i> , 2011, 46, .	1.6	14
46	On ion gyro-harmonic structuring in the stimulated electromagnetic emission spectrum during second electron gyro-harmonic heating. <i>Annales Geophysicae</i> , 2012, 30, 1587-1594.	1.6	14
47	Exploring HF-induced ionospheric turbulence by Doppler sounding and stimulated electromagnetic emissions at the High Frequency Active Auroral Research Program heating facility. <i>Radio Science</i> , 2016, 51, 1118-1130.	1.6	13
48	Radio tomographic images of postmidnight equatorial plasma depletions. <i>Geophysical Research Letters</i> , 2014, 41, 13-19.	4.0	12
49	Studies of the ionospheric turbulence excited by the fourth gyroharmonic at HAARP. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 6646-6660.	2.4	12
50	The CERTO Beacon on CASSIOPE/e-POP and Experiments Using High-Power HF Ionospheric Heaters. <i>Space Science Reviews</i> , 2015, 189, 107-122.	8.1	12
51	First Observations of Narrowband Stimulated Electromagnetic Emissions at the Pump Frequency Second Harmonic During Ionosphere Interaction Experiments. <i>Geophysical Research Letters</i> , 2018, 45, 8690-8697.	4.0	12
52	Coupling of the relaxation and resonant elements in the autonomous chaotic relaxation oscillator (ACRO). <i>Chaos</i> , 1992, 2, 183-199.	2.5	11
53	Design and applications of a versatile HF radar calibration target in low Earth orbit. <i>Radio Science</i> , 2008, 43, .	1.6	10
54	Modeling Arecibo conjugate heating effects with SAMI2. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	10

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55	Impact of active geomagnetic conditions on stimulated radiation during ionospheric second electron gyroharmonic heating. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 548-565.	2.4	9
56	Asymmetry in Stimulated Emission Polarization and Irregularity Evolution During Ionospheric Electron Gyroharmonic Heating. <i>Geophysical Research Letters</i> , 2018, 45, 9363-9371.	4.0	9
57	NSEE Yielding Electron Temperature Measurements at the Arecibo Observatory. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 3699-3708.	2.4	9
58	Quasi-analytic models for density bubbles and plasma clouds in the equatorial ionosphere: Closed form solutions for electric fields and potentials. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	8
59	Heater-induced ionization inferred from spectrometric airglow measurements. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 2038-2045.	2.4	8
60	Quasi-analytic models for density bubbles and plasma clouds in the equatorial ionosphere: 2. A simple Lagrangian transport model. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	7
61	Comparisons of equatorial irregularities measurements from C/NOFS: TEC using CERTO and CITRIS with in-situ plasma density. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	7
62	New Systems for Space Based Monitoring of Ionospheric Irregularities and Radio Wave Scintillations. <i>Geophysical Monograph Series</i> , 2013, , 431-440.	0.1	7
63	Predictions of HF system performance for propagation through disturbed ionospheres measured using low-Earth-orbit satellite radio beacon tomography. <i>Radio Science</i> , 2014, 49, 506-517.	1.6	7
64	A new technique for absolute total electron content determination using the CITRIS instrument on STPSat1 and the CERTO beacons on COSMIC. <i>Radio Science</i> , 2010, 45, n/a-n/a.	1.6	6
65	Using TEC and radio scintillation data from the CITRIS radio beacon receiver to study low and midlatitude ionospheric irregularities. <i>Radio Science</i> , 2011, 46, .	1.6	6
66	Ionospheric Non-linear Effects Observed During Very-Long-Distance HF Propagation. <i>Frontiers in Astronomy and Space Sciences</i> , 2019, 6, .	2.8	6
67	Strong Amplification of ELF/VLF Signals in Space Using Neutral Gas Injections From a Satellite Rocket Engine. <i>Radio Science</i> , 2021, 56, e2020RS007207.	1.6	6
68	Evidence of HF-driven wave interactions in the ionospheric focused heating experiment. <i>Geophysical Research Letters</i> , 1995, 22, 3251-3254.	4.0	5
69	Low-latitude ionospheric scintillations and total electron content obtained with the CITRIS instrument on STPSat1 using radio transmissions from DORIS ground beacons. <i>Advances in Space Research</i> , 2010, 45, 1535-1540.	2.6	5
70	A coupled ionosphere-raytrace model for high-power HF heating. <i>Geophysical Research Letters</i> , 2015, 42, 9650-9656.	4.0	5
71	Twisted Beam-SEE Observations of Ionospheric Heating from HAARP. <i>Earth, Moon and Planets</i> , 2015, 116, 55-66.	0.6	5
72	Spatiotemporal Characteristics of HF-induced Ionospheric Turbulence Revealed by Diagnostic Stimulated Electromagnetic Emission and Test Radio Waves at HAARP. <i>Radio Science</i> , 2018, 53, 1506-1520.	1.6	5

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73	Active Precipitation of Radiation Belt Electrons using Rocket Exhaust Driven Amplification (REDA) of Man-made Whistlers. Journal of Geophysical Research: Space Physics, 0, , .	2.4	5
74	Eye on the Ionosphere. GPS Solutions, 2005, 9, 174-177.	4.3	4
75	Plasma Cavity Formation During Ionospheric Heating at Arecibo. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027715.	2.4	4
76	The Whistler Traveling Wave Parametric Amplifier Driven by an Ion-Ring Beam Distribution from a Neutral Gas Injection in Space Plasmas. IEEE Transactions on Plasma Science, 2021, 49, 1983-1996.	1.3	4
77	Frequency-Shifted Signature of the HF Pump in the Ionospheric Focused Heating Experiment. Geophysical Research Letters, 1997, 24, 635-638.	4.0	3
78	Visible Plasma Clouds With an Externally Excited Spherical Porous Cavity Resonator. IEEE Transactions on Plasma Science, 2015, 43, 1911-1918.	1.3	3
79	Artificial Ionospheric GPS Phase Scintillation Excited During High-Power Radiowave Modulation of the Ionosphere. Radio Science, 2018, 53, 775-789.	1.6	3
80	Pump Power Effects on Second Harmonic Stimulated Electromagnetic Emissions During Ionosphere Heating. Journal of Geophysical Research: Space Physics, 2019, 124, 9739-9754.	2.4	3
81	Satellite Observations of Strong Plasma Wave Emissions With Frequency Shifts Induced by an Engine Burn From the Cygnus Spacecraft. Radio Science, 2021, 56, e2020RS007143.	1.6	3
82	Geomagnetic field impacts on second harmonic generation during high power radio wave-ionosphere interaction. Physics of Plasmas, 2021, 28, 062901.	1.9	3
83	Initial results of stimulated radiation measurements during the HAARP campaign of September 2017. Radiation Effects and Defects in Solids, 2018, 173, 66-72.	1.2	2
84	Radiation Belt Electron Acceleration Driven by Very-Low-Frequency Transmitter Waves in Near-Earth Space. Geophysical Research Letters, 0, , .	4.0	2
85	New observations of artificial aurora associated with TMA releases. Geophysical Research Letters, 2006, 33, .	4.0	1
86	Simultaneous inversion of total electron content and UV radiance data to produce F-region electron densities. Radio Science, 2006, 41, n/a-n/a.	1.6	1
87	The tandem instrumented CubeSats experiment (TICE) in low earth orbit for continuous occultation observations of the ionosphere. , 2011, , .		1
88	Application of Directed Relational Graph to Air Plasma Chemistry During Plasma Relaxation. IEEE Transactions on Plasma Science, 2021, 49, 1732-1738.	1.3	1
89	Fast Ion Beams and Plasma Instabilities Excited by the Space Shuttle Orbital Maneuvering Subsystem (OMS) Engines. , 2007, , .		0
90	Coordinated Observations of High Power Interactions with the High Latitude Ionosphere. , 2007, , .		0

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91	CARE: Rocket Experiments for Investigation of the Radar Scatter Properties of a Dusty Plasma. , 2007, , .		0
92	Collisional/resonance absorption in cold/warm magnetized plasmas of the F ² region high-latitude ionosphere. Geophysical Research Letters, 2009, 36, .	4.0	0
93	HF Stimulated Electromagnetic Emissions and radar observations of ionospheric heating from HAARP. , 2011, , .		0
94	25 Years of ionospheric modification with Space Shuttle OMS burns. , 2011, , .		0
95	Resonant properties of conducting polyhedral spheres with polygon mesh surfaces. , 2011, , .		0
96	Electric field glow discharge inside externally excited porous spherical cavity resonators. , 2012, , .		0
97	Investigation of Stimulated Electromagnetic Emission SEE during second electron gyro-harmonic heating. , 2013, , .		0
98	Satellite-based measurements of radio phase scintillation using CITRIS, DORIS and CERTO. , 2013, , .		0
99	Microwave Driven Plasma Ball Generator For Illumination And Rf Applications. , 2017, , .		0
100	Properties of the Stimulated Electromagnetic Emissions During the Inclined High-Frequency Pumping of the Ionosphere Near the Fourth Electron Gyroharmonic at the High-Frequency Active Auroral Research Program Facility. Geophysical Research Letters, 2019, 46, 5653-5661.	4.0	0
101	Strong Amplification of ELF/VLF Signals in Space Using Neutral Gas Injection from a Satellite Rocket Engine. , 2020, , .		0