

Morris B Cohen

List of Publications by Year in descending order

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110
papers

2,002
citations

218381

26
h-index

288905

40
g-index

119
all docs

119
docs citations

119
times ranked

1402
citing authors

#	ARTICLE	IF	CITATIONS
1	Sensitive Broadband ELF/VLF Radio Reception With the AWESOME Instrument. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3-17.	2.7	193
2	Highly intense lightning over the oceans: Estimated peak currents from global GLD360 observations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6905-6915.	1.2	154
3	Terrestrial gamma ray flashes and lightning discharges. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	59
4	Terrestrial VLF transmitter injection into the magnetosphere. Journal of Geophysical Research, 2012, 117, .	3.3	57
5	Distributing space weather monitoring instruments and educational materials worldwide for IHY 2007: The AWESOME and SID project. Advances in Space Research, 2008, 42, 1777-1785.	1.2	49
6	Confining the angular distribution of terrestrial gamma ray flash emission. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	49
7	Terrestrial gamma ray flashes observed aboard the Compton Gamma Ray Observatory/Burst and Transient Source Experiment and ELF/VLF radio atmospherics. Journal of Geophysical Research, 2006, 111, .	3.3	48
8	Analysis of experimentally validated trans-ionospheric attenuation estimates of VLF signals. Journal of Geophysical Research: Space Physics, 2013, 118, 2708-2720.	0.8	48
9	Geolocation of terrestrial gamma-ray flash source lightning. Geophysical Research Letters, 2010, 37, .	1.5	46
10	Lightning development associated with two negative gigantic jets. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	44
11	Models of ionospheric VLF absorption of powerful ground based transmitters. Geophysical Research Letters, 2012, 39, .	1.5	44
12	Magnetospheric amplification and emission triggering by ELF/VLF waves injected by the 3.6 MW HAARP ionospheric heater. Journal of Geophysical Research, 2008, 113, .	3.3	41
13	On the generation of ELF/VLF waves for long-distance propagation via steerable HF heating of the lower ionosphere. Journal of Geophysical Research, 2010, 115, .	3.3	40
14	The VLF fingerprint of elves: Step-like and long-recovery early VLF perturbations caused by powerful Å±CG lightning EM pulses. Journal of Geophysical Research: Space Physics, 2013, 118, 5392-5402.	0.8	40
15	Long-lasting D-region ionospheric modifications, caused by intense lightning in association with elve and sprite pairs. Geophysical Research Letters, 2012, 39, .	1.5	38
16	D-region ionosphere response to the total solar eclipse of 22 July 2009 deduced from ELF-VLF tweek observations in the Indian sector. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	37
17	Nighttime D region electron density measurements from ELF-VLF tweek radio atmospherics recorded at low latitudes. Journal of Geophysical Research, 2012, 117, .	3.3	37
18	Mitigation of 50-60 Hz power line interference in geophysical data. Radio Science, 2010, 45, n/a-n/a.	0.8	36

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19	Orientation of the HAARP ELF ionospheric dipole and the auroral electrojet. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	35
20	ELF/VLF wave generation via ionospheric HF heating: Experimental comparison of amplitude modulation, beam painting, and geometric modulation. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	35
21	On the occurrence of ground observations of ELF/VLF magnetospheric amplification induced by the HAARP facility. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	33
22	Geometric modulation: A more effective method of steerable ELF/VLF wave generation with continuous HF heating of the lower ionosphere. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	32
23	100 days of ELF/VLF generation via HF heating with HAARP. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 6597-6607.	0.8	32
24	Broadband longwave radio remote sensing instrumentation. <i>Review of Scientific Instruments</i> , 2018, 89, 094501.	0.6	32
25	On the relationship between lightning peak current and Early VLF perturbations. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 7272-7282.	0.8	31
26	A lightning discharge producing a beam of relativistic electrons into space. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	30
27	Polarization of Narrowband VLF Transmitter Signals as an Ionospheric Diagnostic. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 901-917.	0.8	30
28	ELF/VLF wave generation from the beating of two HF ionospheric heating sources. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	27
29	Amplitude and phase of nonlinear magnetospheric wave growth excited by the HAARP HF heater. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	24
30	VLF observations of ionospheric disturbances in association with TLEs from the EuroSpriteâ€™2007 campaign. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	23
31	The relationship between geophysical conditions and ELF amplitude in modulated heating experiments at HAARP: Modeling and experimental results. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	22
32	Long recovery VLF perturbations associated with lightning discharges. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	22
33	Differing current and optical return stroke speeds in lightning. <i>Geophysical Research Letters</i> , 2014, 41, 2561-2567.	1.5	22
34	Multistation observations of the azimuth, polarization, and frequency dependence of ELF/VLF waves generated by electrojet modulation. <i>Radio Science</i> , 2015, 50, 1008-1026.	0.8	22
35	The Lower Ionospheric VLF/LF Response to the 2017 Great American Solar Eclipse Observed Across the Continent. <i>Geophysical Research Letters</i> , 2018, 45, 3348-3355.	1.5	20
36	Dataâ€Driven Forecasting of Lowâ€Latitude Ionospheric Total Electron Content Using the Random Forest and LSTM Machine Learning Methods. <i>Space Weather</i> , 2021, 19, e2020SW002639.	1.3	20

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37	On the altitude of the ELF/VLF source region generated during "beat-wave" HF heating experiments. Geophysical Research Letters, 2012, 39, .	1.5	19
38	VLF Remote Sensing of the <i>D</i> Region Ionosphere Using Neural Networks. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027135.	0.8	19
39	RFIDS: Radio Frequency-based Distributed Intrusion Detection System for the Power Grid. , 2019, , .		19
40	Cross modulation of whistler mode and HF waves above the HAARP ionospheric heater. Geophysical Research Letters, 2009, 36, .	1.5	16
41	HF beam parameters in ELF/VLF wave generation via modulated heating of the ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	16
42	Characteristics of long recovery early VLF events observed by the North African AWESOME Network. Journal of Geophysical Research: Space Physics, 2013, 118, 5215-5222.	0.8	16
43	Ionospheric <i>D</i> Region Remote Sensing Using ELF Sferic Group Velocity. Geophysical Research Letters, 2018, 45, 12,739.	1.5	16
44	ELF/VLF recordings during the 11 March 2011 Japanese Tohoku earthquake. Geophysical Research Letters, 2012, 39, .	1.5	15
45	Magnetospheric injection of ELF/VLF waves with modulated or steered HF heating of the lower ionosphere. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	14
46	Shipborne LF-VLF oceanic lightning observations and modeling. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,890-10,902.	1.2	13
47	Spatial and Temporal Ionospheric Monitoring Using Broadband Sferic Measurements. Journal of Geophysical Research: Space Physics, 2018, 123, 3111-3130.	0.8	13
48	Magnetic Field Penetration Into a Metal Enclosure Using an ELF/VLF Loop Antenna. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1225-1236.	1.4	13
49	Estimation of global lightning activity and observations of atmospheric electric field. Acta Physica, 2011, 59, 183-204.	1.0	12
50	Morphological features of twecks and nighttime <i>D</i> region ionosphere at tweek reflection height from the observations in the low-latitude Indian sector. Journal of Geophysical Research, 2012, 117, .	3.3	12
51	Exploiting LF/MF signals of opportunity for lower ionospheric remote sensing. Geophysical Research Letters, 2017, 44, 8665-8671.	1.5	12
52	Analysis of magnetospheric ELF/VLF wave amplification from the Siple Transmitter experiment. Journal of Geophysical Research: Space Physics, 2014, 119, 1837-1850.	0.8	11
53	TLEs and early VLF events: Simulating the important impact of transmitter "disturbance" receiver geometry. Journal of Geophysical Research: Space Physics, 2017, 122, 792-801.	0.8	11
54	Very low latitude (L = 1.08) whistlers. Geophysical Research Letters, 2012, 39, .	1.5	10

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55	Modulation of auroral electrojet currents using dual modulated HF beams with ELF phase offset, a potential D-region ionospheric diagnostic. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 2350-2358.	0.8	10
56	Utilizing nonlinear ELF generation in modulated ionospheric heating experiments for communications applications. <i>Radio Science</i> , 2013, 48, 61-68.	0.8	10
57	VLF Signal Anomalies During Cyclone Activity in the Atlantic Ocean. <i>Geophysical Research Letters</i> , 2018, 45, 10,185.	1.5	10
58	Quantification of Ionospheric Perturbations From Lightning Using Overlapping Paths of VLF Signal Propagation. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028540.	0.8	10
59	Returning Lightning Data to the Cloud. <i>Eos</i> , 2020, 101, .	0.1	10
60	Statistical patterns in the location of natural lightning. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 787-796.	1.2	9
61	Very low latitude ($L \approx 1.08$) whistlers and correlation with lightning activity. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 6694-6706.	0.8	8
62	A New Four-Parameter D-region Ionospheric Model: Inferences From Lightning-Emitted VLF Signals. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, .	0.8	8
63	Ultra-sensitive broadband "AWESOME" electric field receiver for nanovolt low-frequency signals. <i>Review of Scientific Instruments</i> , 2021, 92, 024704.	0.6	7
64	Seasonal Variation of the D-region Ionosphere: Very Low Frequency (VLF) and Machine Learning Models. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029689.	0.8	7
65	Analysis of a mesoscale convective system that produced a single sprite. <i>Advances in Atmospheric Sciences</i> , 2017, 34, 258-271.	1.9	6
66	Imaging Conductive Objects Through Metal Enclosures Using ELF/VLF Magnetic Fields. <i>IEEE Access</i> , 2020, 8, 79745-79753.	2.6	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.	0.8	6
68	Reply to comment by R. C. Moore and M. T. Rietveld on "Geometric modulation: A more effective method of steerable ELF/VLF wave generation with continuous HF heating of the lower ionosphere". <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	5
69	Assessment of Unusual Gigantic Jets observed during the Monsoon season: First observations from Indian Subcontinent. <i>Scientific Reports</i> , 2017, 7, 16436.	1.6	5
70	Observation of Very Short Period Atmospheric Gravity Waves in the Lower Ionosphere Using Very Low Frequency Waves. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 9448-9461.	0.8	5
71	OPTIMAL DESIGN OF ELECTRICALLY-SMALL LOOP RECEIVING ANTENNA. <i>Progress in Electromagnetics Research C</i> , 2020, 98, 155-169.	0.6	5
72	Automated Large-Scale Extraction of Whistlers Using Mask-Scoring Regional Convolutional Neural Network. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093819.	1.5	5

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73	Broadband Electrically Small VLF/LF Transmitter via Time-Varying Antenna Properties. IEEE Transactions on Antennas and Propagation, 2022, 70, 97-110.	3.1	5
74	Active Precipitation of Radiation Belt Electrons using Rocket Exhaust Driven Amplification (REDA) of Man-made Whistlers. Journal of Geophysical Research: Space Physics, 0, , .	0.8	5
75	Harmonic minimization waveforms for modulated heating experiments at HAARP. Journal of Geophysical Research, 2012, 117, .	3.3	4
76	Time-Resolved Measurements of Plasma Parameters for Nanosecond-Pulsed Argon Plasmas. IEEE Transactions on Plasma Science, 2020, 48, 1060-1075.	0.6	4
77	Using a High-Speed Plasma as a Conducting Channel to Enable a Novel Antenna Approach. IEEE Transactions on Plasma Science, 2021, 49, 794-804.	0.6	4
78	Ground Observation of Negative Sprites Over a Tropical Thunderstorm as the Embryo of Hurricane Harvey (2017). Geophysical Research Letters, 2021, 48, e2021GL094032.	1.5	4
79	Geomagnetically Induced Currents at Middle Latitudes: 1. Quiet-time Variability. Space Weather, 2022, 20, e2021SW002729.	1.3	4
80	Revitalizing electromagnetics education with the flipped classroom. , 2015, , .		3
81	Nonlinear plasma experiments in geospace with gigawatts of RF power at HAARP. AIP Conference Proceedings, 2015, , .	0.3	3
82	The Estimation of D-region Electron Densities From Trans-ionospheric Very Low Frequency Signals. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029256.	0.8	3
83	Revealing Novel Connections Between Space Weather and the Power Grid: Network Analysis of Ground-based Magnetometer and Geomagnetically Induced Currents (GIC) Measurements. Space Weather, 2022, 20, .	1.3	3
84	Examining lightning channel electrical properties with time domain fractal lightning modeling. , 2011, , .		2
85	Lightning activity following the return stroke. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8329-8339.	1.2	2
86	Optical Analysis of Nanosecond-Lifetime Plasma Parameters. IEEE Transactions on Plasma Science, 2020, 48, 179-188.	0.6	2
87	Measuring the Electron Density Roughness of the D-region Ionosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028111.	0.8	2
88	Broadband VLF/LF Transmission from an Electrically-Small Structure via Time-Varying Antenna Properties. , 2020, , .		2
89	Development of a High-latitude Convection Model by Application of Machine Learning to SuperDARN Observations. Space Weather, 2022, 20, .	1.3	2
90	Mass Statistical Analysis of Early VLF Events. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	2

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91	Full wave modeling of VLF wave scattering and propagation in curvilinear stratified ionosphere. , 2012, , .		1
92	The Flipped Classroom Approach to Engineering Electromagnetics: A Case Study. , 2019, , .		1
93	Exploiting polarization of very low frequency scattered fields to localize objects. , 2019, , .		1
94	The relationship between geophysical conditions and ELF amplitude in modulated heating experiments at HAARP: Modeling and experimental results. , 2011, , .		0
95	Detection of magnetospherically ducted VLF signals geomagnetically conjugate to a Russian Alpha transmitter at L=1.9. , 2011, , .		0
96	Observations of lightning flash development associated with gigantic jets. , 2011, , .		0
97	Confining the angular distribution of TGF emission. , 2011, , .		0
98	Spatial and temporal patterns in lightning discharges as a proxy of thunderstorm characteristics. , 2011, , .		0
99	Metamaterial waveguide model of a return stroke channel. , 2012, , .		0
100	Magnetospheric wave power density from ground-based VLF transmitters. , 2013, , .		0
101	Multi-station observations of frequency dependence of amplitude and polarization of the ELF waves generated via ionospheric modification. , 2014, , .		0
102	Optimizing fast discharges for high speed time varying plasma antenna using particle in cell simulations. , 2017, , .		0
103	Numerical Modeling Of High Speed Time Varying Plasma Antenna Using Electromagnetic 2D Particle-In-Cell Simulation. , 2017, , .		0
104	Detection of Scatterers Inside Metal Containers via VLF Signals of Opportunity. , 2019, , .		0
105	Electric Field Sensor Design for Longwave Radio Reception. , 2019, , .		0
106	The low period atmospheric gravity waves observed using Very Low Frequency signals. , 2019, , .		0
107	Modeling Low Frequency Magnetic Field Shielding using the Locally Corrected Nyström Method. , 2019, , .		0
108	Wideband VLF/LF Transmission from an Electrically-Small Antenna by Means of Time-Varying Non-Reciprocity via High-Speed Switches. , 2021, , .		0

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109	Seasonal Variation of the D-Region Ionosphere Modelled using Machine Learning Based VLF Remote Sensing. , 2021, , .		0
110	On the use of ELF/VLF emissions triggered by HAARP to simulate PLHR and to study associated MLR events. Earth, Planets and Space, 2022, 74, .	0.9	0