Morris B Cohen

List of Publications by Year
in descending order

110	2,002	218677	289244
papers	citations	26 h-index	40 g-index

119	119	119	1402
all docs	docs citations	times ranked	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.	6.3	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.	3.3	154
3	Terrestrial gamma ray flashes and lightning discharges. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	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.	2.6	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 transâ€ionospheric attenuation estimates of VLF signals. Journal of Geophysical Research: Space Physics, 2013, 118, 2708-2720.	2.4	48
9	Geolocation of terrestrial gammaâ€ray flash source lightning. Geophysical Research Letters, 2010, 37, .	4.0	46
10	Lightning development associated with two negative gigantic jets. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	44
11	Models of ionospheric VLF absorption of powerful ground based transmitters. Geophysical Research Letters, 2012, 39, .	4.0	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 longâ€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: Stepâ€like and longâ€recovery early VLF perturbations caused by powerful Â±CG lightning EM pulses. Journal of Geophysical Research: Space Physics, 2013, 118, 5392-5402.	2.4	40
15	Longâ€lastingDâ€region ionospheric modifications, caused by intense lightning in association with elve and sprite pairs. Geophysical Research Letters, 2012, 39, .	4.0	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 ELFâ€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.	1.6	36

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19	Orientation of the HAARP ELF ionospheric dipole and the auroral electrojet. Geophysical Research Letters, 2008, 35, .	4.0	35
20	ELF/VLF wave generation via ionospheric HF heating: Experimental comparison of amplitude modulation, beam painting, and geometric modulation. Journal of Geophysical Research, 2010, 115, .	3.3	35
21	On the occurrence of ground observations of ELF/VLF magnetospheric amplification induced by the HAARP facility. Journal of Geophysical Research, 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. Geophysical Research Letters, 2008, 35, .	4.0	32
23	100 days of ELF/VLF generation via HF heating with HAARP. Journal of Geophysical Research: Space Physics, 2013, 118, 6597-6607.	2.4	32
24	Broadband longwave radio remote sensing instrumentation. Review of Scientific Instruments, 2018, 89, 094501.	1.3	32
25	On the relationship between lightning peak current and Early VLF perturbations. Journal of Geophysical Research: Space Physics, 2013, 118, 7272-7282.	2.4	31
26	A lightning discharge producing a beam of relativistic electrons into space. Geophysical Research Letters, 2010, 37, .	4.0	30
27	Polarization of Narrowband VLF Transmitter Signals as an Ionospheric Diagnostic. Journal of Geophysical Research: Space Physics, 2018, 123, 901-917.	2.4	30
28	ELF/VLF wave generation from the beating of two HF ionospheric heating sources. Journal of Geophysical Research, 2012, 117, .	3.3	27
29	Amplitude and phase of nonlinear magnetospheric wave growth excited by the HAARP HF heater. Journal of Geophysical Research, 2010, 115, .	3.3	24
30	VLF observations of ionospheric disturbances in association with TLEs from the EuroSpriteâ€2007 campaign. Journal of Geophysical Research, 2010, 115, .	3.3	23
31	The relationship between geophysical conditions and ELF amplitude in modulated heating experiments at HAARP: Modeling and experimental results. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	22
32	Long recovery VLF perturbations associated with lightning discharges. Journal of Geophysical Research, 2012, 117, .	3.3	22
33	Differing current and optical return stroke speeds in lightning. Geophysical Research Letters, 2014, 41, 2561-2567.	4.0	22
34	Multistation observations of the azimuth, polarization, and frequency dependence of ELF/VLF waves generated by electrojet modulation. Radio Science, 2015, 50, 1008-1026.	1.6	22
35	The Lower Ionospheric VLF/LF Response to the 2017 Great American Solar Eclipse Observed Across the Continent. Geophysical Research Letters, 2018, 45, 3348-3355.	4.0	20
36	Dataâ€Driven Forecasting of Lowâ€Latitude Ionospheric Total Electron Content Using the Random Forest and LSTM Machine Learning Methods. Space Weather, 2021, 19, e2020SW002639.	3.7	20

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37	On the altitude of the ELF/VLF source region generated during â€œbeatâ€•waveâ€•HF heating experiments. Geophysical Research Letters, 2012, 39, .	4.0	19
38	VLF Remote Sensing of the D Region Ionosphere Using Neural Networks. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027135.	2.4	19
39	RFDIDS: 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, .	4.0	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.	2.4	16
43	Ionospheric D Region Remote Sensing Using ELF Sferic Group Velocity. Geophysical Research Letters, 2018, 45, 12,739.	4.0	16
44	ELF/VLF recordings during the 11 March 2011 Japanese Tohoku earthquake. Geophysical Research Letters, 2012, 39, .	4.0	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.	3.3	13
47	Spatial and Temporal Ionospheric Monitoring Using Broadband Sferic Measurements. Journal of Geophysical Research: Space Physics, 2018, 123, 3111-3130.	2.4	13
48	Magnetic Field Penetration Into a Metal Enclosure Using an ELF/VLF Loop Antenna. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1225-1236.	2.2	13
49	Estimation of global lightning activity and observations of atmospheric electric field. Acta Geophysica, 2011, 59, 183-204.	2.0	12
50	Morphological features of tweeks and nighttime D region ionosphere at tweek reflection height from the observations in the lowâ€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.	4.0	12
52	Analysis of magnetospheric ELF/VLF wave amplification from the Siple Transmitter experiment. Journal of Geophysical Research: Space Physics, 2014, 119, 1837-1850.	2.4	11
53	TLEs and early VLF events: Simulating the important impact of transmitterâ€disturbanceâ€receiver geometry. Journal of Geophysical Research: Space Physics, 2017, 122, 792-801.	2.4	11
54	Very low latitude (L = 1.08) whistlers. Geophysical Research Letters, 2012, 39, .	4.0	10

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55	Modulation of auroral electrojet currents using dual modulated HF beams with ELF phase offset, a potential Dâ€•region ionospheric diagnostic. Journal of Geophysical Research: Space Physics, 2013, 118, 2350-2358.	2.4	10
56	Utilizing nonlinear ELF generation in modulated ionospheric heating experiments for communications applications. Radio Science, 2013, 48, 61-68.	1.6	10
57	VLF Signal Anomalies During Cyclone Activity in the Atlantic Ocean. Geophysical Research Letters, 2018, 45, 10,185.	4.0	10
58	Quantification of Ionospheric Perturbations From Lightning Using Overlapping Paths of VLF Signal Propagation. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028540.	2.4	10
59	Returning Lightning Data to the Cloud. Eos, 2020, 101, .	0.1	10
60	Statistical patterns in the location of natural lightning. Journal of Geophysical Research D: Atmospheres, 2013, 118, 787-796.	3.3	9
61	Very low latitude (L â€‰=â€‰1.08) whistlers and correlation with lightning activity. Journal of Geophysical Research: Space Physics, 2015, 120, 6694-6706.	2.4	8
62	A New Fourâ€Parameter Dâ€Region Ionospheric Model: Inferences From Lightningâ€Emitted VLF Signals. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	8
63	Ultra-sensitive broadband â€œAWESOMEâ€•electric field receiver for nanovolt low-frequency signals. Review of Scientific Instruments, 2021, 92, 024704.	1.3	7
64	Seasonal Variation of the Dâ€Region Ionosphere: Very Low Frequency (VLF) and Machine Learning Models. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029689.	2.4	7
65	Analysis of a mesoscale convective system that produced a single sprite. Advances in Atmospheric Sciences, 2017, 34, 258-271.	4.3	6
66	Imaging Conductive Objects Through Metal Enclosures Using ELF/VLF Magnetic Fields. IEEE Access, 2020, 8, 79745-79753.	4.2	6
67	Strong Amplification of ELF/VLF Signals in Space Using Neutral Gas Injections From a Satellite Rocket Engine. Radio Science, 2021, 56, e2020RS007207.	1.6	6
68	Reply to comment by R. C. Moore and M. T. Rietveld on â€œGeometric modulation: A more effective method of steerable ELF/VLF wave generation with continuous HF heating of the lower ionosphereâ€• Geophysical Research Letters, 2009, 36, .	4.0	5
69	Assessment of Unusual Gigantic Jets observed during the Monsoon season: First observations from Indian Subcontinent. Scientific Reports, 2017, 7, 16436.	3.3	5
70	Observation of Very Short Period Atmospheric Gravity Waves in the Lower Ionosphere Using Very Low Frequency Waves. Journal of Geophysical Research: Space Physics, 2019, 124, 9448-9461.	2.4	5
71	OPTIMAL DESIGN OF ELECTRICALLY-SMALL LOOP RECEIVING ANTENNA. Progress in Electromagnetics Research C, 2020, 98, 155-169.	0.9	5
72	Automated Largeâ€Scale Extraction of Whistlers Using Maskâ€Scoring Regional Convolutional Neural Network. Geophysical Research Letters, 2021, 48, e2021GL093819.	4.0	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.	5.1	5
74	Active Precipitation of Radiation Belt Electrons using Rocket Exhaust Driven Amplification (REDA) of Manâ€Made Whistlers. Journal of Geophysical Research: Space Physics, 0, , .	2.4	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.	1.3	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.	1.3	4
78	Ground Observation of Negative Sprites Over a Tropical Thunderstorm as the Embryo of Hurricane Harvey (2017). Geophysical Research Letters, 2021, 48, e2021GL094032.	4.0	4
79	Geomagnetically Induced Currents at Middle Latitudes: 1. Quietâ€Time Variability. Space Weather, 2022, 20, e2021SW002729.	3.7	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, , .	0.4	3
82	The Estimation of Dâ€Region Electron Densities From Transâ€Ionospheric Very Low Frequency Signals. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029256.	2.4	3
83	Revealing Novel Connections Between Space Weather and the Power Grid: Network Analysis of Groundâ€Based Magnetometer and Geomagnetically Induced Currents (GIC) Measurements. Space Weather, 2022, 20, .	3.7	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.	3.3	2
86	Optical Analysis of Nanosecond-Lifetime Plasma Parameters. IEEE Transactions on Plasma Science, 2020, 48, 179-188.	1.3	2
87	Measuring the Electron Density Roughness of the Dâ€Region Ionosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028111.	2.4	2
88	Broadband VLF/LF Transmission from an Electrically-Small Structure via Time-Varying Antenna Properties. , 2020, , .		2
89	Development of a Highâ€Latitude Convection Model by Application of Machine Learning to SuperDARN Observations. Space Weather, 2022, 20, .	3.7	2
90	Mass Statistical Analysis of Early VLF Events. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	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 NystrÃ¶m 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, .	2.5	0