Umran S Inan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/400840/publications.pdf

Version: 2024-02-01

313 papers 13,601 citations

19608 61 h-index 97 g-index

316 all docs

316 docs citations

316 times ranked

3878 citing authors

#	Article	IF	CITATIONS
1	The Microâ€Broadband Receiver (μBBR) on the Veryâ€Lowâ€Frequency Propagation Mapper CubeSat. Earth and Space Science, 2021, 8, e2021EA001951.	1.1	6
2	Broadband longwave radio remote sensing instrumentation. Review of Scientific Instruments, 2018, 89, 094501.	0.6	32
3	Early/fast VLF events produced by the quiescent heating of the lower ionosphere by thunderstorms. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6217-6230.	1.2	14
4	Global occurrence rate of elves and ionospheric heating due to cloudâ€toâ€ground lightning. Journal of Geophysical Research: Space Physics, 2016, 121, 699-712.	0.8	15
5	Identifying the occurrence of lightning and transient luminous events by nadir spectrophotometric observation. Journal of Atmospheric and Solar-Terrestrial Physics, 2016, 145, 85-97.	0.6	12
6	Horizontal distributions of sprites derived from the JEMâ€GLIMS nadir observations. Journal of Geophysical Research D: Atmospheres, 2016, 121, 3171-3194.	1.2	13
7	Shipborne LF-VLF oceanic lightning observations and modeling. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,890-10,902.	1.2	13
8	Predicting conditions for the reception of oneâ€hop signals from the Siple transmitter experiment using the <i>Kp</i> index. Journal of Geophysical Research: Space Physics, 2015, 120, 8440-8447.	0.8	1
9	Overview and early results of the Global Lightning and Sprite Measurements mission. Journal of Geophysical Research D: Atmospheres, 2015, 120, 3822-3851.	1.2	33
10	Latitudinal dependence of static mesospheric E  fields above thunderstorms. Geophysical Research Letters, 2015, 42, 4208-4215.	1.5	11
11	An empirical profile of VLF triggered emissions. Journal of Geophysical Research: Space Physics, 2015, 120, 6581-6595.	0.8	5
12	The effect of electron and ion temperature on the refractive index surface of 1–10 kHz whistler mode waves in the inner magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 581-591.	0.8	13
13	Lightning-driven phenomena in near-earth space. , 2015, , .		O
14	Preferential amplification of rising versus falling frequency whistler mode signals. Geophysical Research Letters, 2015, 42, 207-214.	1.5	4
15	Differing current and optical return stroke speeds in lightning. Geophysical Research Letters, 2014, 41, 2561-2567.	1.5	22
16	On the spatial scale of streamers. , 2014, , .		1
17	Theoretical and numerical analysis of radiation belt electron precipitation by coherent whistler mode waves. Journal of Geophysical Research: Space Physics, 2014, 119, 4370-4388.	0.8	15
18	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

#	Article	IF	Citations
19	Lightning activity following the return stroke. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8329-8339.	1.2	2
20	Finite difference modeling of coherent wave amplification in the Earth's radiation belts. Geophysical Research Letters, 2014, 41, 8193-8200.	1.5	17
21	Return stroke speed of cloudâ€ŧoâ€ground lightning estimated from elve hole radii. Geophysical Research Letters, 2014, 41, 9182-9187.	1.5	10
22	Recent results on effects of lightning discharges on the ionosphere and the radiation belts. , 2014, , .		0
23	Analysis of experimentally validated transâ€ionospheric attenuation estimates of VLF signals. Journal of Geophysical Research: Space Physics, 2013, 118, 2708-2720.	0.8	48
24	Magnetospheric wave power density from ground-based VLF transmitters. , 2013, , .		0
25	Utilizing nonlinear ELF generation in modulated ionospheric heating experiments for communications applications. Radio Science, 2013, 48, 61-68.	0.8	10
26	Statistical patterns in the location of natural lightning. Journal of Geophysical Research D: Atmospheres, 2013, 118, 787-796.	1.2	9
27	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
28	Extended lateral heating of the nighttime ionosphere by groundâ€'based VLF transmitters. Journal of Geophysical Research: Space Physics, 2013, 118, 7783-7797.	0.8	10
29	Harmonic minimization waveforms for modulated heating experiments at HAARP. Journal of Geophysical Research, 2012, 117, .	3.3	4
30	Full wave modeling of VLF wave scattering and propagation in curvilinear stratified ionosphere. , 2012, , .		1
31	Very low latitude (L = 1.08) whistlers. Geophysical Research Letters, 2012, 39, .	1.5	10
32	Metamaterial waveguide model of a return stroke channel. , 2012, , .		0
33	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
34	Longâ€lasting <i>D</i> àêlregion ionospheric modifications, caused by intense lightning in association with elve and sprite pairs. Geophysical Research Letters, 2012, 39, .	1.5	38
35	Terrestrial VLF transmitter injection into the magnetosphere. Journal of Geophysical Research, 2012, 117, .	3.3	57
36	An Image Frequency Rejection Filter for SAW-Less GPS Receivers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 1085-1092.	3.5	4

#	Article	IF	CITATIONS
37	Spatial dependence of banded chorus intensity near the magnetic equator. Geophysical Research Letters, 2012, 39, .	1.5	8
38	Models of ionospheric VLF absorption of powerful ground based transmitters. Geophysical Research Letters, 2012, 39, .	1.5	44
39	A 9mW direct RF sampling GPS receiver front-end in 0.13µm BiCMOS., 2012,,.		2
40	HF beam parameters in ELF/VLF wave generation via modulated heating of the ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	16
41	Morphological features of tweeks and nighttime <i>D</i> region ionosphere at tweek reflection height from the observations in the lowâ€latitude Indian sector. Journal of Geophysical Research, 2012, 117, .	3.3	12
42	Design Framework for Soft-Error-Resilient Sequential Cells. IEEE Transactions on Nuclear Science, 2011, 58, 3026-3032.	1.2	30
43	Determination of solar cycle variations of midlatitude ELF/VLF chorus and hiss via automated signal detection. Journal of Geophysical Research, $2011, 116, \ldots$	3.3	16
44	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
45	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
46	DEMETER observations of ionospheric heating by powerful VLF transmitters. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	25
47	Cluster observations of whistler mode ducts and banded chorus. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	30
48	Longitudinal dependence of lightning-induced electron precipitation. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	12
49	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
50	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
51	Modeling scattering from lightning-induced ionospheric disturbances with the discontinuous Galerkin method. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	4
52	Transmitter-induced modulation of subionospheric VLF signals: Ionospheric heating rather than electron precipitation. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	13
53	The contribution of artificial D-region disturbances to the ionospheric VLF wave environment. , $2011, ,$		0
54	A Double notch RF filter architecture for SAW-less GPS receivers. , 2011, , .		8

#	Article	IF	Citations
55	DEMETER observations of the ionospheric trough over HAARP in relation to HF heating experiments. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	19
56	Discontinuous Galerkin particle-in-cell simulation of longitudinal plasma wave damping and comparison to the Landau approximation and the exact solution of the dispersion relation. Physics of Plasmas, 2011, 18, .	0.7	3
57	Estimation of global lightning activity and observations of atmospheric electric field. Acta Geophysica, 2011, 59, 183-204.	1.0	12
58	Detection of magnetospherically ducted VLF signals geomagnetically conjugate to a Russian Alpha transmitter at L=1.9. , 2011, , .		0
59	Modeling VLF propagation in the Earth-ionosphere waveguide using the discontinuous Galerkin method. , $2011,\ldots$		0
60	Spatial and temporal patterns in lightning discharges as a proxy of thunderstorm characteristics. , $2011, , .$		0
61	Model estimates of optical emissions due to lightning-induced electron precipitation. , 2011, , .		1
62	The Global Lightning and Sprite Measurement (GLIMS) Mission on International Space Station -Concept and Overview IEEJ Transactions on Fundamentals and Materials, 2011, 131, 971-976.	0.2	12
63	Lightning and Sprite Observation from International Space Station. IEEJ Transactions on Fundamentals and Materials, 2011, 131, 16-20.	0.2	1
64	LEAP: Layout Design through Error-Aware Transistor Positioning for soft-error resilient sequential cell design. , 2010, , .		72
65	Magnetic Sensor Design for Femtotesla Low-Frequency Signals. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 396-402.	2.7	24
66	SPRITE-SAT: a Micro Satellite for Scientific Observation of Transient Luminous Events and Terrestrial Gamma-Ray Flashes. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2010, 8, Tm_7-Tm_12.	0.1	7
67	Geolocation of terrestrial gammaâ€ray flash source lightning. Geophysical Research Letters, 2010, 37, .	1.5	46
68	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
69	Drivers of chorus in the outer dayside magnetosphere. Journal of Geophysical Research, 2010, $115, \ldots$	3.3	35
70	Elves and associated electron density changes due to cloudâ€toâ€ground and in loud lightning discharges. Journal of Geophysical Research, 2010, 115, .	3.3	56
71	Neutron production in terrestrial gamma ray flashes. Journal of Geophysical Research, 2010, 115, .	3.3	50
72	Wave normal angles of magnetospheric chorus emissions observed on the Polar spacecraft. Journal of Geophysical Research, 2010, $115, \ldots$	3.3	68

#	Article	IF	Citations
73	Twoâ€dimensional frequency domain modeling of lightning EMPâ€induced perturbations to VLF transmitter signals. Journal of Geophysical Research, 2010, 115, .	3.3	24
74	A survey of ELF and VLF research on lightningâ€ionosphere interactions and causative discharges. Journal of Geophysical Research, 2010, 115, .	3.3	146
75	Fullâ€wave modeling of "early―VLF perturbations caused by lightning electromagnetic pulses. Journal of Geophysical Research, 2010, 115, .	3.3	14
76	Propagation of whistler mode waves with a modulated frequency in the magnetosphere. Journal of Geophysical Research, 2010, 115 , .	3.3	13
77	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
78	A lightning discharge producing a beam of relativistic electrons into space. Geophysical Research Letters, 2010, 37, .	1.5	30
79	Optical signatures of radiation belt electron precipitation induced by groundâ€based VLF transmitters. Journal of Geophysical Research, 2010, 115, .	3.3	9
80	Terrestrial gamma ray flash production by active lightning leader channels. Journal of Geophysical Research, 2010, 115, .	3.3	69
81	Quasiâ€electrostatic whistler mode wave excitation by linear scattering of EM whistler mode waves from magnetic fieldâ€aligned density irregularities. Journal of Geophysical Research, 2010, 115, .	3.3	11
82	Role of the plasmapause in dictating the ground accessibility of ELF/VLF chorus. Journal of Geophysical Research, 2010, 115 , .	3.3	22
83	Longâ€range lightning geolocation using a VLF radio atmospheric waveform bank. Journal of Geophysical Research, 2010, 115, .	3.3	152
84	Mitigation of 50-60 Hz power line interference in geophysical data. Radio Science, 2010, 45, n/a-n/a.	0.8	36
85	Sensitive Broadband ELF/VLF Radio Reception With the AWESOME Instrument. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3-17.	2.7	193
86	Fluid simulation of the collisionless plasma sheath surrounding an electric dipole antenna in the inner magnetosphere. Radio Science, 2010, 45, n/a-n/a.	0.8	12
87	Observations of Earth space by self-powered stations in Antarctica. Review of Scientific Instruments, 2009, 80, 124501.	0.6	11
88	Observations of Terrestrial Gamma-Ray Flash Electrons. , 2009, , .		14
89	Very Low Frequency Remote Sensing Measurements of the Lower Ionosphere at Site of the United Arab Emirates. Earth, Moon and Planets, 2009, 104, 189-193.	0.3	0
90	Source regions of banded chorus. Geophysical Research Letters, 2009, 36, .	1.5	55

#	Article	IF	CITATIONS
91	Modeling of Dopplerâ€shifted terrestrial VLF transmitter signals observed by DEMETER. Geophysical Research Letters, 2009, 36, .	1.5	19
92	Cross modulation of whistler mode and HF waves above the HAARP ionospheric heater. Geophysical Research Letters, 2009, 36, .	1.5	16
93	Seasonal dependence of energetic electron precipitation: Evidence for a global role of lightning. Geophysical Research Letters, 2009, 36, .	1.5	30
94	Relationship between electrojet current strength and ELF signal intensity in modulated heating experiments. Journal of Geophysical Research, 2009, 114 , .	3.3	18
95	On remote sensing of transient luminous events' parent lightning discharges by ELF/VLF wave measurements on board a satellite. Journal of Geophysical Research, 2009, 114, .	3.3	13
96	Effect of frequency modulation on whistler mode waves in the magnetosphere. Journal of Geophysical Research, 2009, 114 , .	3. 3	9
97	Terrestrial gamma ray flash production by lightning current pulses. Journal of Geophysical Research, 2009, 114, .	3. 3	56
98	Penetration of lightning MF signals to the upper ionosphere over VLF groundâ€based transmitters. Journal of Geophysical Research, 2009, 114, .	3. 3	25
99	High-Frame-Rate Reconstruction of a Dynamic 2-D Scene From Continuous Orthogonal Projections. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2646-2657.	2.7	3
100	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― Geophysical Research Letters, 2009, 36, .	1.5	5
101	Fullâ€wave modeling of transionospheric propagation of VLF waves. Geophysical Research Letters, 2009, 36, .	1.5	76
102	PENGUIn multiâ€instrument observations of dayside highâ€iatitude injections during the 23 March 2007 substorm. Journal of Geophysical Research, 2009, 114, .	3.3	8
103	Propagation of unducted whistlers from their source lightning: A case study. Journal of Geophysical Research, 2009, 114, .	3.3	45
104	Diurnal dependence of ELF/VLF hiss and its relation to chorus at $\langle i \rangle L \langle i \rangle = 2.4$. Journal of Geophysical Research, 2009, 114, .	3.3	10
105	DEMETER observations of transmitter $\hat{\mathbf{e}}$ induced precipitation of inner radiation belt electrons. Journal of Geophysical Research, 2009, 114, .	3.3	32
106	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
107	Orientation of the HAARP ELF ionospheric dipole and the auroral electrojet. Geophysical Research Letters, 2008, 35, .	1.5	35
108	Precipitation signatures of groundâ€based VLF transmitters. Journal of Geophysical Research, 2008, 113, .	3.3	44

#	Article	IF	CITATIONS
109	Radiation of ELF/VLF waves by harmonically varying currents into a stratified ionosphere with application to radiation by a modulated electrojet. Journal of Geophysical Research, 2008, 113, .	3.3	98
110	Multistation observations of ELF/VLF whistler mode chorus. Journal of Geophysical Research, 2008, $113, \ldots$	3.3	30
111	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, .	1.5	32
112	Effects of plasma density irregularities on the pitch angle scattering of radiation belt electrons by signals from ground based VLF transmitters. Geophysical Research Letters, 2008, 35, .	1.5	17
113	Early VLF perturbations caused by lightning EMPâ€driven dissociative attachment. Geophysical Research Letters, 2008, 35, .	1.5	41
114	Nonlinear interaction of energetic electrons with large amplitude chorus. Geophysical Research Letters, 2008, 35, .	1.5	201
115	A novel technique for remote sensing of thunderstorm electric fields via the Kerr effect and sky polarization. Geophysical Research Letters, 2008, 35, .	1.5	5
116	Energetic electron precipitation induced by space based VLF transmitters. Journal of Geophysical Research, 2008, 113 , .	3.3	11
117	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
118	DEMETER observations of an intense upgoing column of ELF/VLF radiation excited by the HAARP HF heater. Journal of Geophysical Research, 2008, 113 , .	3.3	45
119	Runaway relativistic electron avalanche seeding in the Earth's atmosphere. Journal of Geophysical Research, 2008, 113, .	3.3	26
120	Saturation effects in the VLFâ€triggered emission process. Journal of Geophysical Research, 2008, 113, .	3.3	17
121	HF signatures of powerful lightning recorded on DEMETER. Journal of Geophysical Research, 2008, 113,	3.3	16
122	Vâ€shaped VLF streaks recorded on DEMETER above powerful thunderstorms. Journal of Geophysical Research, 2008, 113, .	3.3	17
123	Fast Photometric Imaging Using Orthogonal Linear Arrays. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 3885-3893.	2.7	14
124	Terminal Impedance and Antenna Current Distribution of a VLF Electric Dipole in the Inner Magnetosphere. IEEE Transactions on Antennas and Propagation, 2008, 56, 2454-2468.	3.1	33
125	Finite difference frequency domain (FDFD) modeling of trans-ionospheric propagation of VLF signals over long sub-ionospheric paths. , 2007, , .		0
126	DEMETER satellite observations of lightning-induced electron precipitation. Geophysical Research Letters, 2007, 34, .	1.5	58

#	Article	IF	CITATIONS
127	Subionospheric VLF observations of transmitter-induced precipitation of inner radiation belt electrons. Geophysical Research Letters, 2007, 34, .	1.5	41
128	Possible direct cloud-to-ionosphere current evidenced by sprite-initiated secondary TLEs. Geophysical Research Letters, 2007, 34, .	1.5	20
129	Possible persistent ionization caused by giant blue jets. Geophysical Research Letters, 2007, 34, .	1.5	59
130	Constraints on terrestrial gamma ray flash production from satellite observation. Geophysical Research Letters, 2007, 34, .	1.5	89
131	ELF waves generated by modulated HF heating of the auroral electrojet and observed at a ground distance of â ¹ / ₄ 4400 km. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	52
132	A quantitative comparison of lightningâ€induced electron precipitation and VLF signal perturbations. Journal of Geophysical Research, 2007, 112, .	3.3	31
133	VLF observation of long ionospheric recovery events. Geophysical Research Letters, 2007, 34, .	1.5	31
134	HF modulated ionospheric currents. Geophysical Research Letters, 2007, 34, .	1.5	31
135	Remote sensing of ionospheric disturbances associated with energetic particle precipitation using the South Pole VLF beacon. Journal of Geophysical Research, 2007, 112 , .	3.3	13
136	Very low frequency sferic bursts, sprites, and their association with lightning activity. Journal of Geophysical Research, 2007, 112 , .	3.3	15
137	A Technique for Efficiently Modeling Long-Path Propagation for Use in Both FDFD and FDTD. IEEE Antennas and Wireless Propagation Letters, 2006, 5, 525-528.	2.4	20
138	Landau damping and resultant unidirectional propagation of chorus waves. Geophysical Research Letters, 2006, 33, .	1.5	70
139	Temporal signatures of radiation belt electron precipitation induced by lightning-generated MR whistler waves: 1. Methodology. Journal of Geophysical Research, 2006, 111, .	3.3	65
140	Perturbations of midlatitude subionospheric VLF signals associated with lower ionospheric disturbances during major geomagnetic storms. Journal of Geophysical Research, 2006, 111, .	3.3	47
141	Rapidly moving sources of upper band ELF/VLF chorus near the magnetic equator. Journal of Geophysical Research, 2006, 111 , .	3.3	13
142	Observations of the relationship between sprite morphology and in-cloud lightning processes. Journal of Geophysical Research, 2006, 111, .	3.3	79
143	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
144	Current distribution of a VLF electric dipole antenna in the plasmasphere. Radio Science, 2006, 41, n/a-n/a.	0.8	19

#	Article	IF	CITATIONS
145	Characterization of terminal impedance and radiation properties of a horizontal VLF antenna over Antarctic ice. Radio Science, 2006, 41, n/a-n/a.	0.8	4
146	High-speed measurements of small-scale features in sprites: Sizes and lifetimes. Radio Science, 2006, 41, n/a-n/a.	0.8	26
147	DEMETER observations of ELF waves injected with the HAARP HF transmitter. Geophysical Research Letters, 2006, 33, .	1.5	36
148	Terrestrial gamma ray flashes and lightning discharges. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	59
149	Whistler mode illumination of the plasmaspheric resonant cavity via in situ injection of ELF/VLF waves. Journal of Geophysical Research, 2006, 111 , .	3.3	6
150	"Early/slow―events: A new category of VLF perturbations observed in relation with sprites. Journal of Geophysical Research, 2006, 111, .	3.3	47
151	On the association of early/fast very low frequency perturbations with sprites and rare examples of VLF backscatter. Journal of Geophysical Research, 2006, 111 , .	3.3	36
152	Observations of amplitude saturation in ELF/VLF wave generation by modulated HF heating of the auroral electrojet. Geophysical Research Letters, 2006, 33, .	1.5	28
153	A TID and SEE Radiation-Hardened, Wideband, Low-Noise Amplifier. IEEE Transactions on Nuclear Science, 2006, 53, 3439-3448.	1.2	15
154	A PML Utilizing k-Vector Information as Applied to the Whistler Mode in a Magnetized Plasma. IEEE Transactions on Antennas and Propagation, 2006, 54, 2424-2429.	3.1	12
155	High-speed telescopic imaging of sprites. Geophysical Research Letters, 2005, 32, .	1.5	39
156	Co-ordinated observations of transient luminous events during the EuroSprite2003 campaign. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 807-820.	0.6	81
157	Subionospheric VLF signatures and their association with sprites observed during EuroSprite-2003. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 1580-1597.	0.6	39
158	Wave acceleration of electrons in the Van Allen radiation belts. Nature, 2005, 437, 227-230.	13.7	505
159	Optical observations geomagnetically conjugate to sprite-producing lightning discharges. Annales Geophysicae, 2005, 23, 2231-2237.	0.6	6
160	ATMOSPHERIC SCIENCE: Gamma Rays Made on Earth. Science, 2005, 307, 1054-1055.	6.0	21
161	Improvement of the efficiency of plasma display panels by combining waveform and cell geometry design. IEEE Transactions on Plasma Science, 2005, 33, 147-156.	0.6	13
162	Simulation of self-erase discharge waveforms in plasma display panels. IEEE Transactions on Plasma Science, 2005, 33, 516-517.	0.6	2

#	Article	IF	Citations
163	Streamers and diffuse glow observed in upper atmospheric electrical discharges. IEEE Transactions on Plasma Science, 2005, 33, 282-283.	0.6	17
164	Whistlers observed by the Cluster spacecraft outside the plasma sphere. Journal of Geophysical Research, 2005, 110, .	3.3	13
165	Electron precipitation events driven by lightning in hurricanes. Journal of Geophysical Research, 2005, 110, .	3.3	14
166	Production of terrestrial gamma-ray flashes by an electromagnetic pulse from a lightning return stroke. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	44
167	Ground based VLF observations nearL= 2.5 during the Halloween 2003 storm. Geophysical Research Letters, 2005, 32, .	1.5	14
168	Cluster observations of ELF/VLF signals generated by modulated heating of the lower ionosphere with the HAARP HF transmitter. Annales Geophysicae, 2004, 22, 2643-2653.	0.6	15
169	Cluster observations of mid-latitude hiss near the plasmapause. Annales Geophysicae, 2004, 22, 2565-2575.	0.6	18
170	A PML Using a Convolutional Curl Operator and a Numerical Reflection Coefficient for General Linear Media. IEEE Transactions on Antennas and Propagation, 2004, 52, 1647-1657.	3.1	16
171	The link between a detached subauroral proton arc and a plasmaspheric plume. Geophysical Research Letters, 2004, 31, .	1.5	109
172	Comparison of photometric measurements and charge moment estimations in two sprite-producing storms. Geophysical Research Letters, 2004, 31, .	1.5	10
173	Cluster measurements of rapidly moving sources of ELF/VLF chorus. Journal of Geophysical Research, 2004, 109, .	3.3	31
174	Latitudinal and seasonal variations of quasiperiodic and periodic VLF emissions in the outer magnetosphere. Journal of Geophysical Research, 2004, 109, .	3.3	44
175	Multi-hop whistler-mode ELF/VLF signals and triggered emissions excited by the HAARP HF heater. Geophysical Research Letters, 2004, 31, .	1.5	45
176	On the occurrence and spatial extent of electron precipitation induced by oblique nonducted whistler waves. Journal of Geophysical Research, 2004, 109, .	3.3	34
177	Diagnostics of magnetospheric electron density and irregularities at altitudes <5000 km using whistler and Z mode echoes from radio sounding on the IMAGE satellite. Journal of Geophysical Research, 2004, 109, .	3.3	29
178	Subionospheric early VLF signal perturbations observed in one-to-one association with sprites. Journal of Geophysical Research, 2004, 109, .	3.3	66
179	Localization of individual lightning discharges via directional and temporal triangulation of sferic measurements at two distant sites. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	12
180	Observations of decameter-scale morphologies in sprites. Journal of Atmospheric and Solar-Terrestrial Physics, 2003, 65, 567-572.	0.6	43

#	Article	IF	CITATIONS
181	Energy distribution and lifetime of magnetospherically reflecting whistlers in the plasmasphere. Journal of Geophysical Research, 2003, 108, .	3.3	48
182	Frequency-time spectra of magnetospherically reflecting whistlers in the plasmasphere. Journal of Geophysical Research, 2003, 108 , .	3.3	62
183	Controlled precipitation of radiation belt electrons. Journal of Geophysical Research, 2003, 108, .	3.3	102
184	Early/fast VLF events produced by electron density changes associated with sprite halos. Journal of Geophysical Research, 2003, 108 , .	3.3	51
185	IonosphericDregion electron density profiles derived from the measured interference pattern of VLF waveguide modes. Radio Science, 2003, 38, n/a-n/a.	0.8	25
186	Global response of the plasmasphere to a geomagnetic disturbance. Journal of Geophysical Research, 2003, 108, .	3.3	144
187	Z-mode sounding within propagation "cavities―and other inner magnetospheric regions by the RPI instrument on the IMAGE satellite. Journal of Geophysical Research, 2003, 108, .	3.3	37
188	Simulation studies of the coplanar electrode and other plasma display panel cell designs. Journal of Applied Physics, 2002, 91, 9502.	1.1	20
189	Cell geometry designs for efficient plasma display panels. Journal of Applied Physics, 2002, 92, 4897-4905.	1.1	17
190	Fine Structure of Sprites and Proposed Global Observations. COSPAR Colloquia Series, 2002, 14, 287-293.	0.2	2
191	Small-scale field-aligned plasmaspheric density structures inferred from the Radio Plasma Imager on IMAGE. Journal of Geophysical Research, 2002, 107, SMP 22-1.	3.3	55
192	Exponential relaxation of optical emissions in sprites. Journal of Geophysical Research, 2002, 107, SIA 6-1.	3.3	18
193	Long-range tracking of thunderstorms using sferic measurements. Journal of Geophysical Research, 2002, 107, ACL 1-1-ACL 1-9.	3.3	19
194	A survey of streamer and diffuse glow dynamics observed in sprites using telescopic imagery. Journal of Geophysical Research, 2002, 107, SIA 4-1.	3.3	48
195	Source characteristics of ELF/VLF chorus. Journal of Geophysical Research, 2002, 107, SMP 10-1-SMP 10-17.	3.3	128
196	Determining the size of lightning-induced electron precipitation patches. Journal of Geophysical Research, 2002, 107, SIA 10-1-SIA 10-11.	3.3	32
197	Ldependence of energetic electron precipitation driven by magnetospherically reflecting whistler waves. Journal of Geophysical Research, 2002, 107, SMP 1-1-SMP 1-13.	3.3	22
198	Lightning effects at high altitudes: sprites, elves, and terrestrial gamma ray flashes. Comptes Rendus Physique, 2002, 3, 1411-1421.	0.3	14

#	Article	IF	CITATIONS
199	Electrical discharge from a thundercloud top to the lower ionosphere. Nature, 2002, 416, 152-154.	13.7	301
200	A first approach to model the low-frequency wave activity in the plasmasphere. Annales Geophysicae, 2002, 20, 981-996.	0.6	27
201	Wave normal and Poynting vector calculations using the Cassini radio and plasma wave instrument. Journal of Geophysical Research, 2001, 106, 30253-30269.	3.3	16
202	Identification of sprites and elves with intensified video and broadband array photometry. Journal of Geophysical Research, 2001, 106, 1741-1750.	3.3	195
203	Mesosphere-troposphere coupling due to sprites. Geophysical Research Letters, 2001, 28, 3821-3824.	1.5	34
204	He–Xe microdischarges: Comparison of simulation results with experimental data. Applied Physics Letters, 2001, 78, 25-27.	1.5	6
205	Fundamental properties of inert gas mixtures for plasma display panels. IEEE Transactions on Plasma Science, 2000, 28, 1271-1279.	0.6	26
206	lonosphericEregion remote sensing with ELF radio atmospherics. Radio Science, 2000, 35, 1437-1444.	0.8	27
207	Simultaneous triggered VLF emissions and energetic electron distributions observed on POLAR with PWI and HYDRA. Geophysical Research Letters, 2000, 27, 165-168.	1.5	25
208	Solar wind control of polar chorus. Geophysical Research Letters, 2000, 27, 649-652.	1.5	9
209	Fractal structure of sprites. Geophysical Research Letters, 2000, 27, 497-500.	1.5	72
210	Sferic clusters associated with early/Fast VLF events. Geophysical Research Letters, 2000, 27, 1391-1394.	1.5	34
211	Trapped energetic electron curtains produced by thunderstorm driven relativistic runaway electrons. Geophysical Research Letters, 2000, 27, 1095-1098.	1.5	37
212	Modeling ELF radio atmospheric propagation and extracting lightning currents from ELF observations. Radio Science, 2000, 35, 385-394.	0.8	94
213	Telescopic imaging of sprites. Geophysical Research Letters, 2000, 27, 2637-2640.	1.5	155
214	lonospheric effects of relativistic electron enhancement events. Geophysical Research Letters, 1999, 26, 3557-3560.	1.5	18
215	lonization of the lower ionosphere by \hat{l}^3 -rays from a Magnetar: Detection of a low energy (3-10 keV) component. Geophysical Research Letters, 1999, 26, 3357-3360.	1.5	62
216	Sprites triggered by negative lightning discharges. Geophysical Research Letters, 1999, 26, 3605-3608.	1.5	92

#	Article	IF	CITATIONS
217	Subionospheric VLF signatures of oblique (nonducted) whistler-induced precipitation. Geophysical Research Letters, 1999, 26, 3569-3572.	1.5	43
218	Elves triggered by positive and negative lightning discharges. Geophysical Research Letters, 1999, 26, 683-686.	1.5	101
219	ELF sferic energy as a proxy indicator for sprite occurrence. Geophysical Research Letters, 1999, 26, 987-990.	1.5	36
220	Mesospheric electric field transients due to tropospheric lightning discharges. Geophysical Research Letters, 1999, 26, 1247-1250.	1.5	25
221	Poleward-displaced electron precipitation from lightning-generated oblique whistlers. Geophysical Research Letters, 1999, 26, 2633-2636.	1.5	36
222	Scattering pattern of lightning-induced ionospheric disturbances associated with early/fast VLF events. Geophysical Research Letters, 1999, 26, 2363-2366.	1.5	61
223	Characteristics of mesospheric optical emissions produced by lightning discharges. Journal of Geophysical Research, 1999, 104, 12645-12656.	3.3	41
224	Ionospheric effects due to electrostatic thundercloud fields. Journal of Atmospheric and Solar-Terrestrial Physics, 1998, 60, 863-870.	0.6	27
225	Intense continuing currents following positive cloud-to-ground lightning associated with red sprites. Geophysical Research Letters, 1998, 25, 1285-1288.	1.5	69
226	Spatial structure of sprites. Geophysical Research Letters, 1998, 25, 2123-2126.	1.5	214
227	VLF chorus emissions observed by Polar during the January 10, 1997, magnetic cloud. Geophysical Research Letters, 1998, 25, 2995-2998.	1.5	47
228	Mechanism of ELF radiation from sprites. Geophysical Research Letters, 1998, 25, 3493-3496.	1.5	79
229	ELF radiation produced by electrical currents in sprites. Geophysical Research Letters, 1998, 25, 1281-1284.	1.5	152
230	IonosphericDregion remote sensing using VLF radio atmospherics. Radio Science, 1998, 33, 1781-1792.	0.8	184
231	Measurement of charge transfer in sprite-producing lightning using ELF radio atmospherics. Geophysical Research Letters, 1997, 24, 1731-1734.	1.5	93
232	A two-dimensional model of runaway electron beams driven by quasi-electrostatic thundercloud fields. Geophysical Research Letters, 1997, 24, 2639-2642.	1.5	62
233	Rapid lateral expansion of optical luminosity in lightning-induced ionospheric flashes referred to as †elves'. Geophysical Research Letters, 1997, 24, 583-586.	1.5	111
234	Sprites as evidence of vertical gravity wave structures above mesoscale thunderstorms. Geophysical Research Letters, 1997, 24, 1735-1738.	1.5	41

#	Article	IF	CITATIONS
235	Infrared glow above thunderstorms?. Geophysical Research Letters, 1997, 24, 2635-2638.	1.5	20
236	Quasiperiodic $\hat{a}^{-1/4}$ 5-60 s fluctuations of VLF signals propagating in the Earth-ionosphere waveguide: A result of pulsating auroral particle precipitation?. Journal of Geophysical Research, 1997, 102, 347-361.	3.3	4
237	Sprites produced by quasi-electrostatic heating and ionization in the lower ionosphere. Journal of Geophysical Research, 1997, 102, 4529-4561.	3.3	386
238	Space-time structure of optical flashes and ionization changes produced by lighting-EMP. Geophysical Research Letters, 1996, 23, 133-136.	1.5	101
239	Frequency variations of quasi-periodic ELF-VLF emissions: A possible new ground-based diagnostic of the outer high-latitude magnetosphere. Journal of Geophysical Research, 1996, 101, 83-97.	3.3	7
240	VLF strip holographie imaging of lightning-associated ionospheric disturbances. Radio Science, 1996, 31, 335-348.	0.8	6
241	Blue jets produced by quasi-electrostatic pre-discharge thundercloud fields. Geophysical Research Letters, 1996, 23, 301-304.	1.5	60
242	Sprites as luminous columns of ionization produced by quasi-electrostatic thundercloud fields. Geophysical Research Letters, 1996, 23, 649-652.	1.5	84
243	On the association of terrestrial gamma-ray bursts with lightning and implications for sprites. Geophysical Research Letters, 1996, 23, 1017-1020.	1.5	140
244	Sustained heating of the ionosphere above thunderstorms as evidenced in "early/fast―VLF events. Geophysical Research Letters, 1996, 23, 1067-1070.	1.5	74
245	Elves: Lightningâ€induced transient luminous events in the lower ionosphere. Geophysical Research Letters, 1996, 23, 2157-2160.	1.5	252
246	Particle simulation of the timeâ€dependent interaction with the ionosphere of rapidly varying lightning EMP. Geophysical Research Letters, 1996, 23, 2193-2196.	1.5	12
247	\hat{I}^3 -Ray emission produced by a relativistic beam of runaway electrons accelerated by quasi-electrostatic thundercloud fields. Geophysical Research Letters, 1996, 23, 2645-2648.	1.5	65
248	Reply [to "Comment of â€~VLF signatures of ionospheric disturbances associated with sprites' by Inan et al.â€]. Geophysical Research Letters, 1996, 23, 3423-3424.	1.5	13
249	Evidence for continuing current in sprite-producing cloud-to-ground lightning. Geophysical Research Letters, 1996, 23, 3639-3642.	1.5	80
250	Characteristics of localized ionospheric disturbances inferred from VLF measurements at two closely spaced receivers. Journal of Geophysical Research, 1996, 101, 15737-15747.	3.3	15
251	An interpretation of a mysterious 3.0- to 4.6-kHz emission band observed on Voyager 2 near Neptune. Journal of Geophysical Research, 1995, 100, 1795.	3.3	2
252	Focusing of nonducted whistlers by the equatorial anomaly. Journal of Geophysical Research, 1995, 100, 7783.	3.3	10

#	Article	IF	CITATIONS
253	Heating, ionization and upward discharges in the mesosphere, due to intense quasi-electrostatic thundercloud fields. Geophysical Research Letters, 1995, 22, 365-368.	1.5	188
254	Runaway electrons as a source of red sprites in the mesosphere. Geophysical Research Letters, 1995, 22, 2127-2130.	1.5	102
255	VLF signatures of ionospheric disturbances associated with sprites. Geophysical Research Letters, 1995, 22, 3461-3464.	1.5	93
256	Altitude profiles of localizedDregion density disturbances produced in lightning-induced electron precipitation events. Journal of Geophysical Research, 1995, 100, 21375-21383.	3.3	23
257	VLF signatures of ionospheric heating by HIPAS. Radio Science, 1995, 30, 1855-1867.	0.8	3
258	Electron density changes in the nighttimeDregion due to heating by very-low-frequency transmitters. Geophysical Research Letters, 1994, 21, 93-96.	1.5	32
259	Source regions of long-period pulsation events in electron precipitation and magnetic fields at South Pole Station. Journal of Geophysical Research, 1994, 99, 3869.	3.3	15
260	DE-1 and COSMOS 1809 observations of lower hybrid waves excited by VLF whistler mode waves. Geophysical Research Letters, 1994, 21, 653-656.	1.5	11
261	Recovery signatures of lightning-associated VLF perturbations as a measure of the lower ionosphere. Journal of Geophysical Research, 1994, 99, 17523.	3.3	48
262	Heating of the nighttimeDregion by very low frequency transmitters. Journal of Geophysical Research, 1994, 99, 23329.	3.3	21
263	A multipleâ€mode threeâ€dimensional model of VLF propagation in the Earthâ€ionosphere waveguide in the presence of localized <i>D</i> region disturbances. Journal of Geophysical Research, 1993, 98, 1705-1717.	3.3	65
264	Interaction with the lower ionosphere of electromagnetic pulses from lightning: Heating, attachment, and ionization. Geophysical Research Letters, 1993, 20, 1539-1542.	1.5	139
265	The heating of suprathermal ions above thunderstorm cells. Geophysical Research Letters, 1993, 20, 1991-1994.	1.5	17
266	VLF signatures of lightningâ€induced heating and ionization of the nighttime Dâ€region. Geophysical Research Letters, 1993, 20, 2355-2358.	1.5	82
267	The interaction with the lower ionosphere of electromagnetic pulses from lightning: Excitation of optical emissions. Geophysical Research Letters, 1993, 20, 2675-2678.	1.5	83
268	The scattering of VLF waves by localized ionospheric disturbances produced by lightningâ€induced electron precipitation. Journal of Geophysical Research, 1993, 98, 15553-15559.	3.3	34
269	ionospheric modification with a VLF transmitter. Geophysical Research Letters, 1992, 19, 2071-2074.	1.5	25
270	Magnetospherically reflected whistlers as a source of plasmaspheric hiss. Geophysical Research Letters, 1992, 19, 233-236.	1.5	86

#	Article	IF	Citations
271	Excitation of whistler mode signals via injection of polarized VLF waves with the Siple transmitter. Radio Science, 1992, 27, 31-46.	0.8	5
272	Whistlerâ€mode chorus and morningside aurorae. Geophysical Research Letters, 1992, 19, 653-656.	1.5	50
273	Correction to "Pitch angle scattering of energetic particles by oblique whistler waves―by U.S. Inan and T.F. Bell. Geophysical Research Letters, 1992, 19, 841-841.	1.5	0
274	Precipitation of suprathermal (100 EV) Electrons by oblique whistler waves. Geophysical Research Letters, 1992, 19, 1639-1642.	1.5	24
275	Optical signatures of lightningâ€Induced heating of the <i>D</i> region. Geophysical Research Letters, 1992, 19, 1815-1818.	1.5	19
276	<i>D</i> region disturbances caused by electromagnetic pulses from lightning. Geophysical Research Letters, 1992, 19, 2067-2070.	1.5	27
277	Pitch angle scattering of energetic particles by oblique whistler waves. Geophysical Research Letters, 1991, 18, 49-52.	1.5	22
278	DEâ€1 observations of lower hybrid waves excited by VLF whistler mode waves. Geophysical Research Letters, 1991, 18, 393-396.	1.5	23
279	Anomalous optical events detected by rocketâ€borne sensor in the WIPP Campaign. Journal of Geophysical Research, 1991, 96, 1315-1326.	3.3	31
280	On the spatial relationship between lightning discharges and propagation paths of perturbed subionospheric VLF/LF signals. Journal of Geophysical Research, 1991, 96, 249-258.	3.3	18
281	Heating and ionization of the lower ionosphere by lightning. Geophysical Research Letters, 1991, 18, 705-708.	1.5	176
282	ULF magnetic signatures at the Earth surface due to ground water flow: A possible precursor to earthquakes. Geophysical Research Letters, 1991, 18, 1127-1130.	1.5	68
283	Simultaneous Disturbance of Conjugate Ionospheric Regions in Association With Individual Lightning Flashes. Geophysical Research Letters, 1990, 17, 259-262.	1.5	29
284	Rapid whistlerâ€mode wave growth resulting from frequencyâ€time curvature. Geophysical Research Letters, 1990, 17, 599-602.	1.5	5
285	VLF heating of the lower ionosphere. Geophysical Research Letters, 1990, 17, 729-732.	1.5	65
286	Wideband VLF electromagnetic bursts on the DE 1 satellite. Geophysical Research Letters, $1990,17,1861-1864.$	1.5	13
287	Equatorial gyroresonance between electrons and magnetospherically reflected whistlers. Geophysical Research Letters, 1990, 17, 1865-1868.	1.5	12
288	Subionospheric VLF "imaging―of lightningâ€induced electron precipitation from the magnetosphere. Journal of Geophysical Research, 1990, 95, 17217-17231.	3.3	33

#	Article	IF	Citations
289	Lightning as an embryonic source of VLF hiss. Journal of Geophysical Research, 1989, 94, 6986-6994.	3.3	114
290	Observation of an ionospheric disturbance caused by a gamma-ray burst. Nature, 1988, 331, 418-420.	13.7	58
291	Lightningâ€associated precipitation of MeV electrons from the inner radiation belt. Geophysical Research Letters, 1988, 15, 172-175.	1.5	55
292	Wave normal direction and spectral properties of whistler mode hiss observed on the DE 1 satellite. Journal of Geophysical Research, 1988, 93, 7493-7514.	3.3	31
293	Plasma wave observations with the Dynamics Explorer 1 spacecraft. Reviews of Geophysics, 1988, 26, 285-316.	9.0	83
294	Gyroresonant pitch angle scattering by coherent and incoherent whistler mode waves in the magnetosphere. Journal of Geophysical Research, 1987, 92, 127-142.	3.3	50
295	Waves and instabilities. Reviews of Geophysics, 1987, 25, 588-598.	9.0	10
296	Results from the SEEP active space plasma experiment: Effects on the ionosphere. Radio Science, 1985, 20, 511-518.	0.8	4
297	Precipitation of radiation belt electrons by manâ€made waves: A comparison between theory and measurement. Journal of Geophysical Research, 1985, 90, 359-369.	3.3	70
298	Lightning-induced electron precipitation. Nature, 1984, 312, 740-742.	13.7	157
299	Direct multiple path magnetospheric propagation: A fundamental property of nonducted VLF waves. Journal of Geophysical Research, 1984, 89, 2823-2830.	3.3	26
300	Electron precipitation zones around major groundâ€based VLF signal sources. Journal of Geophysical Research, 1984, 89, 2891-2906.	3.3	87
301	Diurnal variation of burst precipitation effects on subionospheric VLF/LF signal propagation near L = 2. Journal of Geophysical Research, 1984, 89, 9139-9143.	3.3	34
302	Perturbations of subionospheric LF and MF signals due to whistlerâ€induced electron precipitation bursts. Journal of Geophysical Research, 1984, 89, 9857-9862.	3.3	42
303	Nonlinear pitch angle scattering and trapping of energetic particles during Landau resonance interactions with whistler mode waves. Journal of Geophysical Research, 1984, 89, 10813-10826.	3.3	9
304	Modulated beam injection from the space shuttle during magnetic conjunctions of STS 3 with the DE 1 satellite. Radio Science, 1984, 19, 487-495.	0.8	14
305	Direct observation of radiation belt electrons precipitated by the controlled injection of VLF signals from a groundâ€based transmitter. Geophysical Research Letters, 1983, 10, 361-364.	1.5	102
306	The modulated precipitation of radiation belt electrons by controlled signals from VLF transmitters. Geophysical Research Letters, 1983, 10, 615-618.	1.5	40

#	Article	IF	CITATION
307	The apparent spectral broadening of VLF transmitter signals during transionospheric propagation. Journal of Geophysical Research, 1983, 88, 4813-4840.	3.3	69
308	Terrestrial versus Jovian VLF chorus; A comparative study. Journal of Geophysical Research, 1983, 88, 6171-6180.	3.3	27
309	Energetic electron precipitation due to gyroresonant interactions in the magnetosphere Involving coherent VLF waves with slowly varying frequency. Journal of Geophysical Research, 1983, 88, 7037-7050.	3.3	22
310	A theoretical model study of observed correlations between whistler mode waves and energetic electron precipitation events in the magnetosphere. Journal of Geophysical Research, 1983, 88, 10053-10064.	3.3	26
311	DEâ€1 observations of VLF transmitter signals and waveâ€particle interactions in the magnetosphere. Geophysical Research Letters, 1982, 9, 917-920.	1.5	21
312	A Novel Approach for Finding the Spectrum of Periodically Modulated FM Carriers. IRE Transactions on Communications Systems, 1978, 26, 1309-1315.	0.6	0
313	From Alaska to the South Pacific In One-Hop. , 0, , .		1