Masashi Hayakawa

List of Publications by Year in Descending Order

249 papers	4,989 citations	37 h-index	58 g-index
263 ext. papers	5,717 ext. citations	2.1 avg, IF	5.86 L-index

#	Paper	IF	Citations
249	Seismogenic Anomalies in Atmospheric Gravity Waves as Observed from SABER/TIMED Satellite during Large Earthquakes. *Journal of Sensors*, **2022**, 2022, 1-23	2	2
248	Electromagnetic manifestations of Tonga eruption in Schumann resonance band. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2022**, 105897	2	5
247	Lithosphere–Atmosphere–Ionosphere Coupling Effects Based on Multiparameter Precursor Observations for February–March 2021 Earthquakes (M~7) in the Offshore of Tohoku Area of Japan. *Geosciences (Switzerland)*, **2021**, 11, 481	2.7	1
246	Estimation of the Epicenter Position of Kamchatka Earthquakes. *Pure and Applied Geophysics*, **2021**, 178, 813-821	2.2	1
245	Numerical simulation of lower ionospheric reflection parameters by using International Reference Ionosphere (IRI) model and validation with Very Low Frequency (VLF) radio signal characteristics. *Advances in Space Research*, **2021**, 67, 1599-1611	2.4	3
244	Statistical and Criticality Analysis of the Lower Ionosphere Prior to the 30 October 2020 Samos (Greece) Earthquake (M6.9), Based on VLF Electromagnetic Propagation Data as Recorded by a New VLF/LF Receiver Installed in Athens (Greece). *Entropy*, **2021**, 23,	2.8	3
243	Evidence of critical dynamics in various electromagnetic precursors. *European Physical Journal: Special Topics*, **2021**, 230, 151-177	2.3	6
242	Does air ionization by radon cause low-frequency atmospheric electromagnetic earthquake precursors?. *Natural Hazards*, **2021**, 106, 701-714	3	2
241	Pre-Seismic Irregularities during the 2020 Samos (Greece) Earthquake (M = 6.9) as Investigated from Multi-Parameter Approach by Ground and Space-Based Techniques. *Atmosphere*, **2021**, 12, 1059	2.7	13
240	Model source bearings of Q-bursts for observations in Antarctica. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2021**, 222, 105723	2	1
239	Model sub-ionospheric ELF–VLF pulses. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2021**, 223, 105726	2	1
238	Anomalies of Schumann resonances as observed near Nagoya associated with two huge (M~7) Tohoku offshore earthquakes in 2021. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2021**, 225, 105761	2	2
237	Unusual Surface Latent Heat Flux Variations and Their Critical Dynamics Revealed before Strong Earthquakes.. *Entropy*, **2021**, 24,	2.8	3
236	Progress in the Study of Transient Luminous and Atmospheric Events: A Review. *Surveys in Geophysics*, **2020**, 41, 1101-1142	7.6	9
235	Natural Time Analysis of Global Navigation Satellite System Surface Deformation: The Case of the 2016 Kumamoto Earthquakes. *Entropy*, **2020**, 22,	2.8	11
234	Gravity Wave Activity in the Stratosphere before the 2011 Tohoku Earthquake as the Mechanism of Lithosphere-atmosphere-ionosphere Coupling. *Entropy*, **2020**, 22,	2.8	10
233	A Review on Electrodynamic Influence of Atmospheric Processes to the Ionosphere. *Open Journal of Earthquake Research*, **2020**, 09, 113-141	0.8	12

232	Formation of Ionospheric Precursors of Earthquakes: Probable Mechanism and Its Substantiation. *Open Journal of Earthquake Research*, **2020**, 09, 142-169	0.8	5
231	Contaminated Effect of Geomagnetic Storms on Pre-Seismic Atmospheric and Ionospheric Anomalies during Imphal Earthquake. *Open Journal of Earthquake Research*, **2020**, 09, 383-402	0.8	6
230	Short-term earthquake prediction in Kamchatka using low-frequency magnetic fields. *Natural Hazards*, **2020**, 100, 735-755	3	7
229	Modifications of Schumann resonance spectra as an estimate of causative earthquake magnitude: The model treatment. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2020**, 209, 105392	2	1
228	Scattering of Extremely Low Frequency Electromagnetic Waves by a Localized Seismogenic Ionospheric Perturbation: Observation and Interpretation. *Radio Science*, **2020**, 55, e2020RS007130	1.4	3
227	Criticality analysis of 3-year-long VLF subionospheric propagation data possibly related to significant earthquake events in Japan. *Natural Hazards*, **2020**, 102, 47-66	3	2
226	Abnormal Gravity Wave Activity in the Stratosphere Prior to the 2016 Kumamoto Earthquakes. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 1410-1425	2.6	33
225	On Possible Electromagnetic Precursors to a Significant Earthquake (Mw = 6.3) Occurred in Lesvos (Greece) on 12 June 2017. *Entropy*, **2019**, 21,	2.8	11
224	Scattering of ELF radio waves by a localized non-uniformity in the lower ionosphere. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2019**, 194, 105093	2	5
223	Seismogenic effects in ULF/ELF/VLF electromagnetic waves **2019**, 06, 1-86		7
222	Interpretation of observations of global electromagnetic resonance by ionosphere non-uniformity localized over the earthquake center. *Radiofizika I Elektronika*, **2019**, 24, 21-29	0.1	
221	SHIFT OF ANTIPODE MAXIMUM OF ELECTRIC FIELD IN THE RESONATOR THE EARTH–IONOSPHERE CAVITY CAUSED BY DAY–NIGHT NON-UNIFORMITY. *Radiofizika I Elektronika*, **2019**, 24, 33-46	0.1	1
220	Analysis of the ultra-low frequency magnetic field fluctuations prior to the 2016 Kumamoto (Japan) earthquakes in terms of the method of critical fluctuations. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 514, 563-572	3.3	7
219	Amplitude variations of ELF radio waves in the Earth–ionosphere cavity with the day–night non-uniformity. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2018**, 169, 23-36	2	19
218	Natural time analysis on the ultra-low frequency magnetic field variations prior to the 2016 Kumamoto (Japan) earthquakes. *Journal of Asian Earth Sciences*, **2018**, 154, 419-427	2.8	18
217	Criticality Analysis of the Lower Ionosphere Perturbations Prior to the 2016 Kumamoto (Japan) Earthquakes as Based on VLF Electromagnetic Wave Propagation Data Observed at Multiple Stations. *Entropy*, **2018**, 20,	2.8	23
216	Very-Low- to Low-Frequency Sounding of Ionospheric Perturbations and Possible Association with Earthquakes. *Geophysical Monograph Series*, **2018**, 275-304	1.1	11
215	Earthquake Precursor Studies in Japan. *Geophysical Monograph Series*, **2018**, 7-18	1.1	5

214	The effect of a compact ionosphere disturbance over the earthquake: A Focus on Schumann resonance **2018**, 5, 11-39		4
213	On the Tempo-Spatial Evolution of the Lower Ionospheric Perturbation for the 2016 Kumamoto Earthquakes from Comparisons of VLF Propagation Data Observed at Multiple Stations with Wave-Hop Theoretical Computations. *Open Journal of Earthquake Research*, **2018**, 07, 161-185	0.8	5
212	Intermittency-induced criticality in the lower ionosphere prior to the 2016 Kumamoto earthquakes as embedded in the VLF propagation data observed at multiple stations. *Tectonophysics*, **2018**, 722, 422-431	3.1	12
211	Impact of the Ionospheric Day/Night Non-Uniformity on the ELF Radio-Wave Propagation. *Radiophysics and Quantum Electronics*, **2018**, 61, 176-191	0.7	5
210	Source Bearing of Extremely Low Frequency (ELF) Waves in the Earth-Ionosphere Cavity With Day-Night Nonuniformity. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 10,895-10,910	4.4	3
209	Modifications of Middle Atmosphere Conductivity During Sudden Ionospheric Disturbances Deduced From Changes of Schumann Resonance Peak Frequencies. *Radio Science*, **2018**, 53, 670-682	1.4	6
208	Fractal analysis of the ground-recorded ULF magnetic fields prior to the 11 March 2011 Tohoku earthquake (M W = 9): discriminating possible earthquake precursors from space-sourced disturbances. *Natural Hazards*, **2017**, 85, 59-86	3	15
207	Statistical Evaluations of Variations in Dairy Cows' Milk Yields as a Precursor of Earthquakes. *Animals*, **2017**, 7,	3.1	3
206	Electromagnetic Precursors to the 2016 Kumamoto Earthquakes. *Open Journal of Earthquake Research*, **2017**, 06, 168-179	0.8	7
205	Semianalytical models of sprite formation from plasma inhomogeneities. *Geomagnetism and Aeronomy*, **2016**, 56, 724-732	0.9	2
204	Vertical profile of atmospheric conductivity that matches Schumann resonance observations. *SpringerPlus*, **2016**, 5, 108		17
203	On the precursors to the 2011 Tohoku earthquake: crustal movements and electromagnetic signatures. *Geomatics, Natural Hazards and Risk*, **2016**, 7, 471-492	3.6	15
202	On the ionospheric perturbation for the 1995 Kobe earthquake: revisited. *Geomatics, Natural Hazards and Risk*, **2016**, 7, 278-286	3.6	3
201	Intermittent criticality revealed in ULF magnetic fields prior to the 11 March 2011 Tohoku earthquake (MW=9). *Physica A: Statistical Mechanics and Its Applications*, **2016**, 452, 19-28	3.3	23
200	ULF/ELF Atmospheric Radiation in Possible Association to the 2011 Tohoku Earthquake as Observed in China. *Earth Science Research*, **2016**, 5, 47		9
199	Propagation of Extremely Low-Frequency Radio Waves **2016**, 1-20		10
198	Earthquake prediction with electromagnetic phenomena **2016**,		10
197	On precursory ULF/ELF electromagnetic signatures for the Kobe earthquake on April 12, 2013. *Journal of Asian Earth Sciences*, **2015**, 114, 305-311	2.8	8

196	Knee model: Comparison between heuristic and rigorous solutions for the Schumann resonance problem. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2015**, 135, 85-91	2	9
195	Very exceptional cases of VLF/LF ionospheric perturbations for deep oceanic earthquakes offshore the Japan island. *Journal of Asian Earth Sciences*, **2015**, 114, 279-288	2.8	2
194	Criticality features in ULF magnetic fields prior to the 2011 Tohoku earthquake. *Proceedings of the Japan Academy Series B: Physical and Biological Sciences*, **2015**, 91, 25-30	4	32
193	ELF Techniques **2015**, 87-137		
192	**2015**,		46
191	Seismo-meteo-electromagnetic phenomena observed during a 5-year interval around the 2011 Tohoku earthquake. *Physics and Chemistry of the Earth*, **2015**, 85-86, 167-173	3	10
190	COMPARISON OF EXACT AND APPROXIMATE SOLUTIONS OF THE SCHUMANN RESONANCE PROBLEM FOR THE KNEE CONDUCTIVITY PROFILE. *Telecommunications and Radio Engineering (English Translation of Elektrosvyaz and Radiotekhnika)*, **2015**, 74, 1377-1390	1.8	8
189	VERTICAL PROFILE OF ATMOSPHERIC CONDUCTIVITY CORRESPONDING TO SCHUMANN RESONANCE PARAMETERS. *Telecommunications and Radio Engineering (English Translation of Elektrosvyaz and Radiotekhnika)*, **2015**, 74, 1483-1495	1.8	7
188	Disturbances of lower ionosphere above the center of earthquake and anomaly in the global electromagnetic resonance signal. Part 2. Anomalies in the power spectra. *Radiofizika I Elektronika*, **2015**, 20, 31-39	0.1	1
187	Spectra and waveforms of ELF transients in the Earth-ionosphere cavity with small losses. *Radio Science*, **2014**, 49, 118-130	1.4	5
186	The origin of spectral resonance structures of the ionospheric Alfvén resonator. Single high-altitude reflection or resonant cavity excitation?. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 3117-3129	2.6	9
185	Tsunami-driven ionospheric perturbations associated with the 2011 Tohoku earthquake as detected by subionospheric VLF signals. *Geomatics, Natural Hazards and Risk*, **2014**, 5, 285-292	3.6	7
184	Ultra and Extremely Low Frequency Electromagnetic Fields **2014**,		35
183	Detection of tsunami-driven phase and amplitude perturbations of subionospheric VLF signals following the 2010 Chile earthquake. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 5012-5019	2.6	8
182	Meteorological effects in the lower ionosphere as based on VLF/LF signal observations. *Natural Hazards and Earth System Sciences*, **2014**, 14, 2671-2679	3.9	37
181	Schumann Resonance for Tyros **2014**,		50
180	Localized ionospheric disturbance over the earthquake epicentre and modifications of Schumann resonance electromagnetic fields. *Geomatics, Natural Hazards and Risk*, **2014**, 5, 271-283	3.6	7
179	Schumann resonance observation in China and anomalous disturbance possibly associated with Tohoku M9.0 earthquake. *Earthquake Science*, **2013**, 26, 137-145	1.5	10

178	The lower ionospheric perturbation as a precursor to the 11 March 2011 Japan earthquake. *Geomatics, Natural Hazards and Risk*, **2013**, 4, 275-287	3.6	27
177	ULF Magnetic Field Depression as a Possible Precursor to the 2011/3.11 Japan Earthquake. *Journal of Atmospheric Electricity*, **2013**, 33, 41-51	0.1	11
176	Possible Electromagnetic Effects on Abnormal Animal Behavior Before an Earthquake. *Animals*, **2013**, 3, 19-32	3.1	9
175	The Ionospheric Precursor to the 2011 March 11 Earthquake Based upon Observations Obtained from the Japan-Pacific Subionospheric VLF/LF Network. *Terrestrial, Atmospheric and Oceanic Sciences*, **2013**, 24, 393	1.8	19
174	The ULF/ELF electromagnetic radiation before the 11 March 2011 Japanese earthquake. *Radio Science*, **2013**, 48, 589-596	1.4	29
173	An evidence on the lithosphere-ionosphere coupling in terms of atmospheric gravity waves on the basis of a combined analysis of surface pressure, ionospheric perturbations and ground-based ULF variations. *Journal of Atmospheric Electricity*, **2013**, 33, 53-68	0.1	12
172	Generation of Seismic-Related DC Electric Fields and Lithosphere-Atmosphere-Ionosphere Coupling. *Modern Applied Science*, **2013**, 7,	1.3	44
171	A note on the correlation of seismo-ionospheric perturbations with ground motions as deduced from F-net seismic observations. *Journal of Atmospheric Electricity*, **2013**, 33, 69-76	0.1	4
170	The observation of Doppler shifts of subionospheric LF signal in possible association with earthquakes. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		10
169	Tsunami-induced phase and amplitude perturbations of subionospheric VLF signals. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		22
168	Underlying mechanisms of transient luminous events: a review. *Annales Geophysicae*, **2012**, 30, 1185-1212		23
167	Fractal analysis of ULF electromagnetic emissions in possible association with earthquakes in China. *Nonlinear Processes in Geophysics*, **2012**, 19, 577-583	2.9	7
166	On the Ultra-Low-Frequency Magnetic Field Depression for Three Huge Oceanic Earthquakes in Japan and in the Kurile Islands. *Earth Science Research*, **2012**, 2,		3
165	Over-the-Horizon Anomalous VHF Propagation and Earthquake Precursors. *Surveys in Geophysics*, **2012**, 33, 1081-1106	7.6	10
164	The effect of a gamma ray flare on Schumann resonances. *Annales Geophysicae*, **2012**, 30, 1321-1329	2	14
163	Anomaly disturbances of the magnetic fields before the strong earthquake in Japan on March 11, 2011. *Annals of Geophysics*, **2012**, 55,	1.1	5
162	Measurement of Doppler shifts of short-distance subionospheric LF transmitter signals and seismic effects. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		8
161	Detection of transient ELF emission caused by the extremely intense cosmic gamma-ray flare of 27 December 2004. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	11

160	Universal and local time variations deduced from simultaneous Schumann resonance records at three widely separated observatories. *Radio Science*, **2011**, 46, n/a-n/a	1.4	9
159	The ultra-low-frequency magnetic disturbances associated with earthquakes. *Earthquake Science*, **2011**, 24, 523-534	1.5	17
158	Probing the lower ionospheric perturbations associated with earthquakes by means of subionospheric VLF/LF propagation. *Earthquake Science*, **2011**, 24, 609-637	1.5	33
157	Global Lightning Activity on the Basis of Inversions of Natural ELF Electromagnetic Data Observed at Multiple Stations around the World. *Surveys in Geophysics*, **2011**, 32, 705-732	7.6	24
156	Impact of a gamma-ray burst on the Schumann resonance. *Radiophysics and Quantum Electronics*, **2011**, 53, 542-556	0.7	5
155	Seismogenic Effects in the ELF Schumann Resonance Band. *IEEJ Transactions on Fundamentals and Materials*, **2011**, 131, 684-690	0.2	9
154	Atmospheric gravity waves as a possible candidate for seismo-ionospheric perturbations. *Journal of Atmospheric Electricity*, **2011**, 31, 129-140	0.1	26
153	A study on global temperature and thunderstorm activity by using the data of Schumann resonance observed at Nakatsugawa, Japan. *Journal of Atmospheric Electricity*, **2011**, 31, 111-119	0.1	3
152	The ionospheric perturbations associated with Asian earthquakes as seen from the subionospheric propagation from NWC to Japanese stations. *Natural Hazards and Earth System Sciences*, **2010**, 10, 581-588	3.9	25
151	A statistical study on the correlation between lower ionospheric perturbations as seen by subionospheric VLF/LF propagation and earthquakes. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		102
150	Schumann resonances excitation due to positive and negative cloud-to-ground lightning. *Journal of Geophysical Research*, **2010**, 115,		10
149	Reception of ELF transmitter signals at Moshiri, Japan, and their propagation characteristics. *Radio Science*, **2010**, 45, n/a-n/a	1.4	5
148	Spectral Properties of Modulated Signal in the Doppler Domain in Urban Radio Channels With Fading. *IEEE Transactions on Antennas and Propagation*, **2010**, 58, 2795-2800	4.9	3
147	Current status of seismo-electromagnetics for short-term earthquake prediction. *Geomatics, Natural Hazards and Risk*, **2010**, 1, 115-155	3.6	79
146	Variations of the global lightning distribution revealed from three-station Schumann resonance measurements. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		24
145	Estimation of lightning and sprite parameters based on observation of sprite-producing lightning power spectra. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2010**, 72, 448-456	2	4
144	On the correlation between ionospheric perturbations as detected by subionospheric VLF/LF signals and earthquakes as characterized by seismic intensity. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2010**, 72, 982-987	2	21
143	Interpretation in terms of gyrotropic waves of Schumann-resonance-like line emissions observed at Nakatsugawa in possible association with nearby Japanese earthquakes. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2010**, 72, 1292-1298	2	16

142	Q-Bursts: Natural ELF Radio Transients. *Surveys in Geophysics*, **2010**, 31, 409-425	7.6	18
141	Subionospheric VLF/LF Probing of Ionospheric Perturbations Associated with Earthquakes: A Possibility of Earthquake Prediction. *SICE Journal of Control Measurement and System Integration*, **2010**, 3, 10-14	0.3	15
140	Comparison of time delays of sprites induced by winter lightning flashes in the Japan Sea with those in the Pacific Ocean. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2009**, 71, 101-111	2	14
139	A study of the morphology of winter sprites in the Hokuriku area of Japan in relation to cloud charge height. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2009**, 71, 597-602	2	6
138	Three-dimensional EM computer simulation on sprite initiation above a horizontal lightning discharge. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2009**, 71, 983-990	2	15
137	Anomalous excitation of Schumann resonances and additional anomalous resonances before the 2004 Mid-Niigata prefecture earthquake and the 2007 Noto Hantou Earthquake. *Physics and Chemistry of the Earth*, **2009**, 34, 441-448	3	21
136	AGW as a seismo-ionospheric coupling responsible agent. *Physics and Chemistry of the Earth*, **2009**, 34, 485-495	3	46
135	The Design of Radio Maps in Tokyo City Based on Stochastic Multi-Parametric and Deterministic Ray-Tracing Approaches [Wireless Corner]. *IEEE Antennas and Propagation Magazine*, **2009**, 51, 200-208	1.7	9
134	Interferometric direction finding of over-horizon VHF transmitter signals and natural VHF radio emissions possibly associated with earthquakes. *Radio Science*, **2009**, 44, n/a-n/a	1.4	10
133	Computer simulations on sprite initiation for realistic lightning models with higher-frequency surges. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		29
132	Further study on the role of atmospheric gravity waves on the seismo-ionospheric perturbations as detected by subionospheric VLF/LF propagation. *Natural Hazards and Earth System Sciences*, **2009**, 9, 1111-1118	3.9	29
131	A Review on Direction Finding of VLF/ELF Sferics. *Journal of Atmospheric Electricity*, **2009**, 29, 35-52	0.1	4
130	Fractal ULF signatures related to seismic processes. *Journal of Atmospheric Electricity*, **2009**, 29, 81-93	0.1	3
129	Morphology of winter sprites in the Hokuriku area of Japan: Monthly variation and dependence on air temperature. *Journal of Atmospheric Electricity*, **2009**, 29, 23-34	0.1	
128	Global distribution and characteristics of intense lightning discharges as deduced from ELF transients observed at Moshiri (Japan). *Journal of Atmospheric Electricity*, **2009**, 29, 71-80	0.1	2
127	Computer simulations on the initiation and morphological difference of Japan winter and summer sprites. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		25
126	Comment on Sprite lightning heard round the world by Schumann resonance methods by E. R. Williams, V. C. Mushtak, R. Boldi, R. L. Dowden, and Z.-I. Kawasaki. *Radio Science*, **2008**, 43, n/a-n/a	1.4	1
125	Signal power distribution in time delay in Tokyo City experimental sites. *Radio Science*, **2008**, 43, n/a-n/a	1.4	3

124	On the generation of narrow-banded ULF/ELF pulsations in the lower ionospheric conducting layer. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		11
123	Ionospheric disturbances caused by SGR 1900+14 giant gamma ray flare in 1998: Constraints on the energy spectrum of the flare. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		28
122	Natural electromagnetic ULF noise due to fluctuations of ionospheric currents. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		3
121	Q-bursts: A comparison of experimental and computed ELF waveforms. *Radio Science*, **2008**, 43, n/a-n/a	1.4	7
120	On the statistical correlation between the ionospheric perturbations as detected by subionospheric VLF/LF propagation anomalies and earthquakes. *Natural Hazards and Earth System Sciences*, **2008**, 8, 653-656	3.9	29
119	About possibility to locate an EQ epicenter using parameters of ELF/ULF preseismic emission. *Natural Hazards and Earth System Sciences*, **2008**, 8, 1237-1242	3.9	19
118	Recent Developments in Portable Weather Radars and New Experiments. *IEEJ Transactions on Fundamentals and Materials*, **2008**, 128, 2-4	0.2	
117	Anomalous ELF phenomena in the Schumann resonance band as observed at Moshiri (Japan) in possible association with an earthquake in Taiwan. *Natural Hazards and Earth System Sciences*, **2008**, 8, 1309-1316	3.9	30
116	Universal and local time components in Schumann resonance intensity. *Annales Geophysicae*, **2008**, 26, 813-822	2	1
115	Anomalous Excitation of Schumann Resonances associated with Earthquakes. *Journal of Atmospheric Electricity*, **2008**, 28, 87-99	0.1	1
114	The Solutions of LCD Panel (T-Con) EMI Noise for Wireless Integration **2007**,		7
113	ULF/ELF magnetic field variations from atmosphere induced by seismicity. *Radio Science*, **2007**, 42,	1.4	39
112	Solar flare induced D region perturbation in the ionosphere, as revealed from a short-distance VLF propagation path. *Geophysical Research Letters*, **2007**, 34,	4.9	21
111	ULF electromagnetic noise due to random variations of background atmospheric current and conductivity. *Journal of Geophysical Research*, **2007**, 112,		6
110	Use of generalized cross validation for identification of global lightning distribution by using Schumann resonances. *Radio Science*, **2007**, 42, n/a-n/a	1.4	10
109	VLF/LF Radio Sounding of Ionospheric Perturbations Associated with Earthquakes. *Sensors*, **2007**, 7, 1141-1158	1.8	105
108	Application of different signal analysis methods to the ULF data for the 1993 Guam earthquake. *Natural Hazards and Earth System Sciences*, **2007**, 7, 479-484	3.9	9
107	Characteristics of Japanese winter sprites and their parent lightning as estimated by VHF lightning and ELF transients. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2007**, 69, 1431-1446	2	24

106	Fractal characteristics of the ground-observed ULF emissions in relation to geomagnetic and seismic activities. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2007**, 69, 1833-1841	2	20
105	Cellular automaton modeling of mesospheric optical emissions: Sprites. *Physics of Plasmas*, **2007**, 14, 042902	2.1	11
104	Monitoring of ULF (Ultra-Low-Frequency) Geomagnetic Variations Associated with Earthquakes. *Sensors*, **2007**, 7, 1108-1122	3.8	99
103	Recent Progress and State of the Art of Seismo-Electromagnetics. *IEEJ Transactions on Fundamentals and Materials*, **2007**, 127, 4-6	0.2	2
102	Diurnal variations in Schumann resonance intensity in the local and universal times. *Journal of Atmospheric Electricity*, **2007**, 27, 83-93	0.1	1
101	Fractal analysis of radar images of Japanese winter thunderclouds inducing sprites and its comparison with their corresponding life cycle. *Journal of Atmospheric Electricity*, **2007**, 27, 113-121	0.1	2
100	Formation mechanism of the lower-ionospheric disturbances by the atmosphere electric current over a seismic region. *Journal of Atmospheric and Solar-Terrestrial Physics*, **2006**, 68, 1260-1268	2	44
99	Deembedding and unterminating microwave fixtures with the genetic algorithm. *IEEE Transactions on Microwave Theory and Techniques*, **2006**, 54, 3131-3140	4.1	12
98	Identification of electric circuits described by ill-conditioned mathematical models. *IEEE Transactions on Circuits and Systems Part 1: Regular Papers*, **2006**, 53, 78-91		14
97	Variations in global thunderstorm activity inferred from the OTD records. *Geophysical Research Letters*, **2006**, 33,	4.9	13
96	How do winter thundercloud systems generate sprite-inducing lightning in the Hokuriku area of Japan?. *Geophysical Research Letters*, **2006**, 33, n/a-n/a	4.9	23
95	Determination of hearth position of a forthcoming strong EQ using gradients and phase velocities of ULF geomagnetic disturbances. *Physics and Chemistry of the Earth*, **2006**, 31, 292-298	3	11
94	Survey of anomalous Schumann resonance phenomena observed in Japan, in possible association with earthquakes in Taiwan. *Physics and Chemistry of the Earth*, **2006**, 31, 397-402	3	30
93	Singular spectral analysis and principal component analysis for signal discrimination of ULF geomagnetic data associated with 2000 Izu Island Earthquake Swarm. *Physics and Chemistry of the Earth*, **2006**, 31, 281-291	3	46
92	Seismo-ionospheric depression of the ULF geomagnetic fluctuations at Kamchatka and Japan. *Physics and Chemistry of the Earth*, **2006**, 31, 313-318	3	36
91	Model modifications in Schumann resonance intensity caused by a localized ionosphere disturbance over the earthquake epicenter. *Annales Geophysicae*, **2006**, 24, 567-575	2	24
90	Fractal analysis for the ULF data during the 1993 Guam earthquake to study prefracture criticality. *Nonlinear Processes in Geophysics*, **2006**, 13, 409-412	2.9	36
89	Evidence on a link between the intensity of Schumann resonance and global surface temperature. *Annales Geophysicae*, **2006**, 24, 1809-1817	2	44

88	The Importance of Direction Finding Technique for the Study of VLF/ELF Sferics and Whistlers. *IEEJ Transactions on Fundamentals and Materials*, **2006**, 126, 65-70	0.2	9
87	Recent Progress in Seismo Electromagnetics (Electromagnetic Phenomena Associated with Earthquakes). *IEEJ Transactions on Fundamentals and Materials*, **2006**, 126, 43-44	0.2	1
86	Observation of ULF Geomagnetic Variations and Detection of ULF Emissions Associated with Earthquakes: Review. *IEEJ Transactions on Fundamentals and Materials*, **2006**, 126, 1238-1244	0.2	1
85	Electromagnetic Phenomena Associated with Earthquakes. *IEEJ Transactions on Fundamentals and Materials*, **2006**, 126, 211-214	0.2	8
84	Multifractal Analysis for the ULF Geomagnetic Data during the Guam Earthquake. *IEEJ Transactions on Fundamentals and Materials*, **2006**, 126, 215-219	0.2	3
83	A statistical study on the effect of earthquakes on the ionosphere, based on the subionospheric LF propagation data in Japan. *Annales Geophysicae*, **2006**, 24, 2219-2225	2	61
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