R-R Hsu

List of Publications by Year
in descending order

61 papers	1,685 citations	331670 21 h-index	289244 40 g-index
61 all docs	61 docs citations	61 times ranked	802 citing authors

#	Article	IF	Citations
1	Gigantic jets between a thundercloud and the ionosphere. Nature, 2003, 423, 974-976.	27.8	191
2	Global distributions and occurrence rates of transient luminous events. Journal of Geophysical Research, 2008, 113, .	3.3	186
3	Dregion ionization by lightning-induced electromagnetic pulses. Journal of Geophysical Research, 2005, 110, .	3.3	100
4	Electric fields and electron energies inferred from the ISUAL recorded sprites. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	89
5	Discharge processes, electric field, and electron energy in ISUALâ€recorded gigantic jets. Journal of Geophysical Research, 2009, 114, .	3.3	73
6	Modeling elves observed by FORMOSATâ€2 satellite. Journal of Geophysical Research, 2007, 112, .	3.3	59
7	Halos generated by negative cloudâ€toâ€ground lightning. Geophysical Research Letters, 2007, 34, .	4.0	58
8	Comparison of results from sprite streamer modeling with spectrophotometric measurements by ISUAL instrument on FORMOSAT-2 satellite. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	57
9	Resolution of the sprite polarity paradox: The role of halos. Radio Science, 2012, 47, .	1.6	56
10	Observation of sprites over the Asian continent and over oceans around Taiwan. Geophysical Research Letters, 2002, 29, 3-1.	4.0	55
11	Radiative emission and energy deposition in transient luminous events. Journal Physics D: Applied Physics, 2008, 41, 234014.	2.8	51
12	Electric field transition between the diffuse and streamer regions of sprites estimated from ISUAL/array photometer measurements. Geophysical Research Letters, 2006, 33, .	4.0	50
13	Gigantic jets with negative and positive polarity streamers. Journal of Geophysical Research, 2010, 115, .	3.3	45
14	Beta-type stepped leader of elve-producing lightning. Geophysical Research Letters, 2005, 32, .	4.0	38
15	Broadband very low frequency measurement ofDregion ionospheric perturbations caused by lightning electromagnetic pulses. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	38
16	ISUAL farâ€ultraviolet events, elves, and lightning current. Journal of Geophysical Research, 2010, 115, .	3.3	38
17	Simultaneous radio and satellite optical measurements of high-altitude sprite current and lightning continuing current. Journal of Geophysical Research, 2006, 111, .	3.3	35
18	Assessment of sprite initiating electric fields and quenching altitude of a¹Î_g state of N₂ using sprite streamer modeling and ISUAL spectrophotometric measurements. Journal of Geophysical Research, 2009, 114, .	3.3	30

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19	Optical emissions and behaviors of the blue starters, blue jets, and gigantic jets observed in the Taiwan transient luminous event ground campaign. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	30
20	The Imager for Sprites and Upper Atmospheric Lightning (ISUAL). Journal of Geophysical Research: Space Physics, 2016, 121, 8134-8145.	2.4	23
21	ISUALâ€Observed Blue Luminous Events: The Associated Sferics. Journal of Geophysical Research: Space Physics, 2018, 123, 3063-3077.	2.4	23
22	Absolute optical energy of sprites and its relationship to charge moment of parent lightning discharge based on measurement by ISUAL/AP. Journal of Geophysical Research, 2010, 115, .	3.3	18
23	Occurrence of elves and lightning during El NiÃ±o and La NiÃ±a. Geophysical Research Letters, 2012, 39, .	4.0	18
24	The blue luminous events observed by ISUAL payload on board FORMOSATâ€2 satellite. Journal of Geophysical Research: Space Physics, 2015, 120, 9795-9804.	2.4	18
25	Ionization emissions associated with N₂⁺ 1N band in halos without visible sprite streamers. Journal of Geophysical Research: Space Physics, 2013, 118, 5317-5326.	2.4	17
26	Analysis of lightning strokes associated with sprites observed by ISUAL in the vicinity of North America. Terrestrial, Atmospheric and Oceanic Sciences, 2017, 28, 583-595.	0.6	17
27	On the Global Occurrence and Impacts of Transient Luminous Events (TLEs). , 2009, , .		16
28	The O I 135.6 nm airglow observations of the midlatitude summer nighttime anomaly by TIMED/GUVI. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	16
29	On the Causative Strokes of Halos Observed by ISUAL in the Vicinity of North America. Geophysical Research Letters, 2018, 45, 10,781.	4.0	16
30	On negative Sprites and the Polarity Paradox. Geophysical Research Letters, 2019, 46, 9370-9378.	4.0	16
31	On the Energy of a Charged Dilaton Black Hole. International Journal of Modern Physics D, 1997, 06, 349-356.	2.1	15
32	Estimating lightning current moment waveforms from satellite optical measurements. Geophysical Research Letters, 2009, 36, .	4.0	15
33	Spaceâ€based imaging of nighttime mediumâ€scale traveling ionospheric disturbances using FORMOSATâ€2/ISUAL 630.0â€‰nm airglow observations. Journal of Geophysical Research: Space Physics, 2016, 121, 4769-4781.	2.4	15
34	Midnight latitudeâ€altitude distribution of 630 nm airglow in the Asian sector measured with FORMOSATâ€2/ISUAL. Journal of Geophysical Research, 2010, 115, .	3.3	13
35	Identifying the occurrence of lightning and transient luminous events by nadir spectrophotometric observation. Journal of Atmospheric and Solar-Terrestrial Physics, 2016, 145, 85-97.	1.6	12
36	Fullâ€kinetic elve model simulations and their comparisons with the ISUAL observed events. Journal of Geophysical Research, 2012, 117, .	3.3	11

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37	First results of the limb imaging of 630.0 nm airglow using FORMOSATâ€2/Imager of Sprites and Upper Atmospheric Lightnings. Journal of Geophysical Research, 2009, 114, .	3.3	10
38	The 762 nm emissions of sprites. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	10
39	A statistical study on ELFâ€whistlers/emissions and Mâ€‰â€¥â€‰5.0 earthquakes in Taiwan. Journal of Geophysical Research: Space Physics, 2013, 118, 3760-3768.	2.4	10
40	Energetics and geographic distribution of elveâ€producing discharges. Journal of Geophysical Research: Space Physics, 2014, 119, 1381-1391.	2.4	10
41	Further investigations of lightningâ€induced transient emissions in the OH airglow layer. Journal of Geophysical Research, 2010, 115, .	3.3	9
42	First satellite-imaging observation of medium-scale traveling ionospheric disturbances by FORMOSAT-2/ISUAL. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	9
43	Low-latitude ELF-whistlers observed in Taiwan. Geophysical Research Letters, 2005, 32, .	4.0	8
44	Characteristics of TLEâ€producing lightning in a coastal thunderstorm. Journal of Geophysical Research: Space Physics, 2014, 119, 9303-9320.	2.4	8
45	The leading role of atomic oxygen in the collocation of elves and hydroxyl nightglow in the lowâ€latitude mesosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 5550-5567.	2.4	7
46	Secondary gigantic jets as possible inducers of sprites. Geophysical Research Letters, 2013, 40, 1462-1467.	4.0	6
47	Temporal and radiometric statistics on lightning flashes observed from space with the ISUAL spectrophotometer. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7586-7598.	3.3	6
48	Triangulation and Coupling of Gigantic Jets Near the Lower Ionosphere Altitudes. Journal of Geophysical Research: Space Physics, 2018, 123, 6904-6916.	2.4	6
49	Lowâ€latitude midnight brightness in 630.0 nm limb observations by FORMOSATâ€2/ISUAL. Journal of Geophysical Research: Space Physics, 2014, 119, 4894-4904.	2.4	5
50	Rare examples of early VLF events observed in association with ISUAL-detected gigantic jets. Radio Science, 2014, 49, 36-43.	1.6	5
51	Selected results from the ISUAL/FORMOSAT2 mission. Terrestrial, Atmospheric and Oceanic Sciences, 2017, 28, 525-544.	0.6	5
52	Transient luminous event coordinated observations using FORMOSAT-2 satellite and Taiwan sprites campaign. Terrestrial, Atmospheric and Oceanic Sciences, 2017, 28, 597-608.	0.6	4
53	Wave mode of the low-latitudinal ELF-whistlers. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	2
54	Multivariate analysis of dim elves from ISUAL observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7454-7466.	3.3	2

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55	The Boltzmann Vibrational Temperature of N₂ (B³Î_g) Derived From ISUAL Imager Multiband Measurements of Transient Luminous Events. Journal of Geophysical Research: Space Physics, 2019, 124, 10760-10777.	2.4	2
56	Experimental Validation of N2 Emission Ratios in Altitude Profiles of Observed Sprites. Frontiers in Earth Science, 2021, 9, .	1.8	2
57	Intercomparison of radar meteor velocity corrections using different ionization coefficients. Geophysical Research Letters, 2017, 44, 5766-5773.	4.0	1
58	BLACK-BODY RADIATION AND EINSTEINâ€™S TRANSITION PROBABILITY FOR q-BOSONS. Modern Physics Letters B, 1993, 07, 1809-1816.	1.9	0
59	ISUAL multi-band observations of elves. , 2011, , .		0
60	Meteorological balloons as an experimental platform for scientific and engineering research. , 2013, , .		0
61	The electromagnetic signatures of transient luminous events. , 2014, , .		0