Rajkumar Hajra

List of Publications by Year
in descending order

63 papers	1,328 citations	279778 23 h-index	395678 33 g-index
71 all docs	71 docs citations	71 times ranked	946 citing authors

#	Article	IF	Citations
1	Cometary plasma science. Experimental Astronomy, 2022, 54, 1129-1167.	3.7	3
2	Intense, Longâ€Duration Geomagnetically Induced Currents (GICs) Caused by Intense Substorm Clusters. Space Weather, 2022, 20, e2021SW002937.	3.7	10
3	Intense Geomagnetically Induced Currents (GICs): Association with Solar and Geomagnetic Activities. Solar Physics, 2022, 297, 1.	2.5	7
4	Near-Earth Sub-AlfvÃ©nic Solar Winds: Interplanetary Origins and Geomagnetic Impacts. Astrophysical Journal, 2022, 926, 135.	4.5	8
5	Corotating Interaction Regions during Solar Cycle 24: A Study on Characteristics and Geoeffectiveness. Solar Physics, 2022, 297, 1.	2.5	14
6	Identification of the planetary magnetosphere boundaries with the wavelet multi-resolution analysis. Journal of Atmospheric and Solar-Terrestrial Physics, 2022, 230, 105842.	1.6	2
7	Geomagnetically Induced Currents. Encyclopedia of Earth Sciences Series, 2021, , 523-527.	0.1	3
8	The Interplanetary and Magnetospheric causes of Geomagnetically Induced Currents (GICs)Â>Â10ÂA in the MÃntsÃlÃ Finland Pipeline: 1999 through 2019. Journal of Space Weather and Space Climate, 2021, 11, 23.	3.3	29
9	Seasonal dependence of the Earth's radiation belt â€“ new insights. Annales Geophysicae, 2021, 39, 181-187.	1.6	3
10	Weakest Solar Cycle of the Space Age: A Study on Solar Windâ€“Magnetosphere Energy Coupling and Geomagnetic Activity. Solar Physics, 2021, 296, 1.	2.5	25
11	September 2017 Space-Weather Events: A Study on Magnetic Reconnection and Geoeffectiveness. Solar Physics, 2021, 296, 1.	2.5	7
12	Longâ€Term Variations of the Geomagnetic Activity: A Comparison Between the Strong and Weak Solar Activity Cycles and Implications for the Space Climate. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028695.	2.4	15
13	Variation of the Interplanetary Shocks in the Inner Heliosphere. Astrophysical Journal, 2021, 917, 91.	4.5	8
14	The Interplanetary and Magnetospheric causes of Geomagnetically Induced Currents (GICs) > 10ÂA in the MÃntsÃlÃ Finland Pipeline: 1999 through 2019 â€“ Erratum. Journal of Space Weather and Space Climate, 2021, 11, 32.	3.3	3
15	Seasonal features of geomagnetic activity: a study on the solar activity dependence. Annales Geophysicae, 2021, 39, 929-943.	1.6	9
16	Lowerâ€Band â€œMonochromaticâ€•Chorus Riser Subelement/Wave Packet Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028090.	2.4	28
17	Plasma distribution around Comet 67P in the last month of the Rosetta mission. Icarus, 2020, 350, 113924.	2.5	0
18	The physics of space weather/solar-terrestrial physics (STP): what we know now and what the current and future challenges are. Nonlinear Processes in Geophysics, 2020, 27, 75-119.	1.3	49

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19	Ionospheric total electron content of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2020, 635, A51.	5.1	3
20	Geomagnetically Induced Currents. Encyclopedia of Earth Sciences Series, 2020, , 1-4.	0.1	6
21	The Complex Space Weather Events of 2017 September. Astrophysical Journal, 2020, 899, 3.	4.5	28
22	Solar flares observed by Rosetta at comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2019, 630, A49.	5.1	4
23	Comment on â€œFirst Observation of Mesosphere Response to the Solar Wind Highâ€Speed Streamsâ€•by W. Yi et al.. Journal of Geophysical Research: Space Physics, 2019, 124, 8165-8168.	2.4	5
24	Properties of the singing comet waves in the 67P/Churyumov-Gerasimenko plasma environment as observed by the Rosetta mission. Astronomy and Astrophysics, 2019, 630, A39.	5.1	14
25	Low Frequency (f < 200 Hz) Polar Plasmaspheric Hiss: Coherent and Intense. Journal of Geophysical Research: Space Physics, 2019, 124, 10063-10084.	2.4	11
26	Magnetospheric â€œKillerâ€•Relativistic Electron Dropouts (REDs) and Repopulation: A Cyclical Process. , 2018, , 373-400.		18
27	Comment on â€œModeling Extreme â€œCarringtonâ€Typeâ€•Space Weather Events Using Threeâ€Dimensional Global MHD Simulationsâ€•by C. M. Ngwira, A. Pulkkinen, M. M. Kuznetsova, and A. Glocerâ€• Journal of Geophysical Research: Space Physics, 2018, 123, 1388-1392.	2.4	15
28	Dynamic unmagnetized plasma in the diamagnetic cavity around comet 67P/Churyumovâ€“Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2018, 475, 4140-4147.	4.4	19
29	Plasma density structures at comet 67P/Churyumovâ€“Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1296-1307.	4.4	11
30	Plasmaspheric Hiss: Coherent and Intense. Journal of Geophysical Research: Space Physics, 2018, 123, 10,009.	2.4	20
31	Plasma source and loss at comet 67P during the Rosetta mission. Astronomy and Astrophysics, 2018, 618, A77.	5.1	38
32	Cometary plasma response to interplanetary corotating interaction regions during 2016 Juneâ€“September: a quantitative study by the Rosetta Plasma Consortium. Monthly Notices of the Royal Astronomical Society, 2018, 480, 4544-4556.	4.4	26
33	Interplanetary Shocks Inducing Magnetospheric Supersubstorms (SML < â^’2500 nT): Unusual Auroral Morphologies and Energy Flow. Astrophysical Journal, 2018, 858, 123.	4.5	38
34	A correlation study regarding the AE index and ACE solar wind data for AlfvÃ©nic intervals using wavelet decomposition and reconstruction. Nonlinear Processes in Geophysics, 2018, 25, 67-76.	1.3	21
35	Cross-correlation and cross-wavelet analyses of the solar wind IMF <i>B</i>_{<i>z</i>} and auroral electrojet index AE coupling during HILDCAAs. Annales Geophysicae, 2018, 36, 205-211.	1.6	23
36	Diamagnetic region(s): structure of the unmagnetized plasma around Comet 67P/CG. Monthly Notices of the Royal Astronomical Society, 2017, 469, S372-S379.	4.4	51

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37	Highâ€speed solar wind stream effects on the topside ionosphere over Arecibo: A case study during solar minimum. Geophysical Research Letters, 2017, 44, 7607-7617.	4.0	13
38	Characterization of high-intensity, long-duration continuous auroral activity (HILDCAA) events using recurrence quantification analysis. Nonlinear Processes in Geophysics, 2017, 24, 407-417.	1.3	15
39	Impact of a cometary outburst on its ionosphere. Astronomy and Astrophysics, 2017, 607, A34.	5.1	21
40	An empirical model of ionospheric total electron content (TEC) near the crest of the equatorial ionization anomaly (EIA). Journal of Space Weather and Space Climate, 2016, 6, A29.	3.3	33
41	Estimation of energy budget of ionosphere-thermosphere system during two CIR-HSS events: observations and modeling. Journal of Space Weather and Space Climate, 2016, 6, A20.	3.3	12
42	Heliospheric plasma sheet (HPS) impingement onto the magnetosphere as a cause of relativistic electron dropouts (REDs) via coherent EMIC wave scattering with possible consequences for climate change mechanisms. Journal of Geophysical Research: Space Physics, 2016, 121, 10,130.	2.4	59
43	Supersubstorms (SMLâ€‰<â€‰âˆ’2500â€‰nT): Magnetic storm and solar cycle dependences. Journal of Geophysical Research: Space Physics, 2016, 121, 7805-7816.	2.4	47
44	A study on the main periodicities in interplanetary magnetic field Bz component and geomagnetic AE index during HILDCAA events using wavelet analysis. Journal of Atmospheric and Solar-Terrestrial Physics, 2016, 149, 81-86.	1.6	29
45	Comparison of geophysical patterns in the southern hemisphere mid-latitude region. Advances in Space Research, 2016, 58, 2090-2103.	2.6	3
46	Electromagnetic cyclotron waves in the dayside subsolar outer magnetosphere generated by enhanced solar wind pressure: EMIC wave coherency. Journal of Geophysical Research: Space Physics, 2015, 120, 7536-7551.	2.4	35
47	Relativistic electron acceleration during HILDCAA events: are precursor CIR magnetic storms important?. Earth, Planets and Space, 2015, 67, .	2.5	26
48	RELATIVISTIC (<i>E</i>> 0.6, > 2.0, AND > 4.0 MeV) ELECTRON ACCELERATION AT GEOSYNCHRONOUS ORBIT DURING HIGH-INTENSITY, LONG-DURATION, CONTINUOUS AE ACTIVITY (HILDCAA) EVENTS. Astrophysical Journal, 2015, 799, 39.	4.5	56
49	Medium-Range Thermosphere-Ionosphere Storm Forecasts. Space Weather, 2015, 13, 125-129.	3.7	18
50	Extremely intense (SML â‰â€“2500 nT) substorms: isolated events that are externally triggered?. Annales Geophysicae, 2015, 33, 519-524.	1.6	64
51	Interplanetary AlfvÃ©n Waves, HILDCAAs, Acceleration of Magnetospheric Relativistic â€œKillerâ€• Electrons and Auroral Zone Heating. , 2015, , .		0
52	Relativistic electron acceleration during high-intensity, long-duration, continuous<i>AE</i>activity (HILDCAA) events: Solar cycle phase dependences. Geophysical Research Letters, 2014, 41, 1876-1881.	4.0	54
53	Superposed epoch analyses of HILDCAAs and their interplanetary drivers: Solar cycle and seasonal dependences. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 121, 24-31.	1.6	27
54	Solar windâ€magnetosphere energy coupling efficiency and partitioning: HILDCAAs and preceding CIR storms during solar cycle 23. Journal of Geophysical Research: Space Physics, 2014, 119, 2675-2690.	2.4	48

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55	Solar cycle dependence of Highâ€Intensity Longâ€Duration Continuous AE Activity (HILDCAA) events, relativistic electron predictors?. Journal of Geophysical Research: Space Physics, 2013, 118, 5626-5638.	2.4	91
56	Evolution of equatorial irregularities under varying electrodynamical conditions: A multitechnique case study from Indian longitude zone. Journal of Geophysical Research, 2012, 117, .	3.3	9
57	Ionospheric scintillation near the anomaly crest in relation to the variability of ambient ionization. Radio Science, 2012, 47, .	1.6	8
58	Equatorial ionospheric responses in relation to the occurrence of main phase of intense geomagnetic storms in the local dusk sector. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 760-770.	1.6	4
59	Variability of total electron content near the crest of the equatorial anomaly during moderate geomagnetic storms. Journal of Atmospheric and Solar-Terrestrial Physics, 2010, 72, 900-911.	1.6	9
60	Ionospheric effects near the magnetic equator and the anomaly crest of the Indian longitude zone during a large number of intense geomagnetic storms. Journal of Atmospheric and Solar-Terrestrial Physics, 2010, 72, 1299-1308.	1.6	6
61	Electrojet control of ambient ionization near the crest of the equatorial anomaly in the Indian zone. Annales Geophysicae, 2009, 27, 93-105.	1.6	25
62	Electrodynamical control of the ambient ionization near the equatorial anomaly crest in the Indian zone during counter electrojet days. Radio Science, 2009, 44, .	1.6	9
63	Solar control of ambient ionization of the ionosphere near the crest of the equatorial anomaly in the Indian zone. Annales Geophysicae, 2008, 26, 47-57.	1.6	30