

# Tarun Kumar Pant

## List of Publications by Year in descending order

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72  
papers

879  
citations

430442

18  
h-index

580395

25  
g-index

72  
all docs

72  
docs citations

72  
times ranked

653  
citing authors

#	ARTICLE	IF	CITATIONS
1	Atmosphere-Ionosphere coupling observed over the dip equatorial MLTI region through the quasi 16-day wave. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	48
2	Gadanki radar observations of $F_2$ region field-aligned irregularities during June solstice of solar minimum: First results and preliminary analysis. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	48
3	A multiwavelength daytime photometer - a new tool for the investigation of atmospheric processes. <i>Measurement Science and Technology</i> , 1998, 9, 585-591.	1.4	44
4	Deterministic prediction of post-sunset ESF based on the strength and asymmetry of EIA from ground based TEC measurements: Preliminary results. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	34
5	Highly localized cooling in daytime mesopause temperature over the dip equator during counter electrojet events: First results. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	33
6	Signatures of Equatorial Plasma Bubbles and Ionospheric Scintillations from Magnetometer and GNSS Observations in the Indian Longitudes during the Space Weather Events of Early September 2017. <i>Remote Sensing</i> , 2022, 14, 652.	1.8	28
7	Response of the equatorial and low-latitude ionosphere in the Indian sector to the geomagnetic storms of January 2005. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	27
8	Signatures of low latitude-high latitude coupling in the tropical MLT region during sudden stratospheric warming. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	25
9	Three different types of electric field disturbances affecting equatorial ionosphere during a long-duration prompt penetration event. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 4993-5008.	0.8	25
10	Additional stratifications in the equatorial $F_2$ region at dawn and dusk during geomagnetic storms: Role of electrodynamics. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	24
11	Gravity wave signatures in the dip equatorial ionosphere-thermosphere system during the annular solar eclipse of 15 January 2010. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 4929-4937.	0.8	24
12	A comparative study of daytime mesopause temperatures obtained using unique ground based optical and meteor wind radar techniques over the magnetic equator. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	22
13	Daytime wave characteristics in the mesosphere lower thermosphere region: Results from the Balloon-borne Investigations of Regional Atmospheric Dynamics experiment. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 2229-2242.	0.8	21
14	An additional layer in the low-latitude ionosphere in Indian longitudes: Total electron content observations and modeling. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	20
15	On the solar activity variations of nocturnal $F_2$ region vertical drifts covering two solar cycles in the Indian longitude sector. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 1445-1451.	0.8	20
16	Equatorial ionosphere-thermosphere system during geomagnetic storms. <i>Geophysical Monograph Series</i> , 2003, , 185-203.	0.1	19
17	A study on the low-latitude daytime $E$ region plasma irregularities using coordinated VHF radar, rocket-borne, and ionosonde observations. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	19
18	Ionogram signatures of large-scale wave structure and their relation to equatorial spread F. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	18

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19	A multi-technique study of the 29 <sup>th</sup> –31 October 2003 geomagnetic storm effect on low latitude ionosphere over Indian region with magnetometer, ionosonde, and GPS observations. <i>Astrophysics and Space Science</i> , 2014, 354, 267-274.	0.5	18
20	First observation of topside ionization ledges using radio beacon measurements from low Earth orbiting satellites. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	17
21	Planetary wave-tidal interactions over the equatorial mesosphere-lower thermosphere region and their possible implications for the equatorial electrojet. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	16
22	On the latitudinal changes in ionospheric electrodynamics and composition based on observations over the 76 <sup>th</sup> –77 <sup>th</sup> °E meridian from both hemispheres during a geomagnetic storm. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 1557-1568.	0.8	16
23	MAVEN Observations of the Response of Martian Ionosphere to the Interplanetary Coronal Mass Ejections of March 2015. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 6917-6929.	0.8	15
24	Impact of Sudden Stratospheric Warming of 2009 on the Equatorial and Low <sup>Latitude</sup> Ionosphere of the Indian Longitudes: A Case Study. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 10,486.	0.8	14
25	Periodicity Variation of Solar Activity and Cosmic Rays During Solar Cycles 22 <sup>nd</sup> –24 <sup>th</sup> . <i>Solar Physics</i> , 2019, 294, 1.	1.0	14
26	Geomagnetic Storm <sup>Induced</sup> Plasma Density Enhancements in the Southern Polar Ionospheric Region: A Comparative Study Using St. Patrick's Day Storms of 2013 and 2015. <i>Space Weather</i> , 2020, 18, e2019SW002383.	1.3	14
27	Equatorial and low <sup>Latitude</sup> ionosphere <sup>thermosphere</sup> system response to the space weather event of August 2005. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	13
28	On the nature of low <sup>Latitude</sup> $E_{3}$ influencing the genesis of equatorial plasma bubble. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 524-532.	0.8	13
29	Electrodynamic influence on the diurnal behaviour of neutral daytime airglow emissions. <i>Annales Geophysicae</i> , 2016, 34, 1019-1030.	0.6	13
30	Peculiar features of ionospheric $F_{3}$ layer during prolonged solar minimum (2007 <sup>th</sup> –2009). <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8685-8697.	0.8	12
31	Investigation on the mesopause energetics and its possible implications on the equatorial MLTI processes through coordinated daytime airglow and radar measurements. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	11
32	First observational evidence of the modulation of the threshold height $h'F_c$ for the occurrence of equatorial spread $F$ by neutral composition changes. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3540-3545.	0.8	11
33	East-west asymmetries of the equatorial electrojet 8.3 m type-2 echoes observed over Trivandrum and a possible explanation. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	10
34	Determination of day <sup>Time</sup> OH emission heights using simultaneous meteor radar, day <sup>glow</sup> photometer and TIMED/SABER observations over Thumba (8.5 <sup>th</sup> °N, 77 <sup>th</sup> °E). <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	9
35	Response of the tropical mesopause to the longest annular solar eclipse of this millennium. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	9
36	Study of disturbance dynamo effects at nighttime equatorial F region in Indian longitude. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	9

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37	The impact of a stealth CME on the Martian topside ionosphere. Monthly Notices of the Royal Astronomical Society, 2021, 503, 625-632.	1.6	9
38	Westward electric field penetration to the dayside equatorial ionosphere during the main phase of the geomagnetic storm on 22 July 2009. Journal of Geophysical Research, 2011, 116, .	3.3	8
39	Variability of mesopause temperature derived from two independent methods using meteor radar and its comparison with SABER and EOS MLS and a collocated multi-wavelength dayglow photometer over an equatorial station, Thumba (8.5° N, 76.5° E). International Journal of Remote Sensing, 2012, 33, 4634-4647.	1.3	8
40	An evidence for prompt electric field disturbance driven by changes in the solar wind density under northward IMF $B_z$ condition. Journal of Geophysical Research: Space Physics, 2016, 121, 4800-4810.	0.8	8
41	Thermospheric gravity wave modes over low and equatorial latitudes during daytime. Journal of Geophysical Research, 2004, 109, .	3.3	7
42	On the significant impact of the moderate geomagnetic disturbance of March 2008 on the equatorial ionization anomaly region over Indian longitudes. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	7
43	Direct observational evidence for disturbance dynamo on the daytime low-latitude ionosphere: A case study based on the 28 June 2013 space weather event. Journal of Geophysical Research: Space Physics, 2016, 121, 10,064.	0.8	7
44	Impact of Stratospheric Sudden Warming on the Occurrence of the Equatorial Spread F. Journal of Geophysical Research: Space Physics, 2017, 122, 12,544.	0.8	7
45	Evolution of Freshly Generated Equatorial Spread F (ESF) Irregularities on Quiet and Disturbed Days. Journal of Geophysical Research: Space Physics, 2018, 123, 7710-7725.	0.8	7
46	Response of the Equatorial Ionosphere to the Annular Solar Eclipse of 15 January 2010. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027348.	0.8	7
47	Predicting the maximum sunspot number and the associated geomagnetic activity indices $A_p$ and $S_p$ for solar cycle 25. Astrophysics and Space Science, 2021, 366, 1.	0.5	7
48	Morphology and seasonal characteristics of low latitude region quasiperiodic echoes studied using large database of Gadanki radar observations. Journal of Geophysical Research, 2008, 113, .	3.3	6
49	Quiet and Disturbed Time Characteristics of Blanketing Es (Esb) During Solar Cycle 23. Journal of Geophysical Research: Space Physics, 2017, 122, 11,591.	0.8	6
50	The Role of the Phase of QBO in Modulating the Influence of the SSW Effect on the Equatorial Ionosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 6047-6063.	0.8	6
51	Reverse Fountain and the Nighttime Enhancement in the Ionospheric Electron Density Over the Equatorial Region: A Case Study. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027286.	0.8	6
52	Analysis of ionospheric scintillations of GPS and VHF/UHF signals over low latitude Indian region. , 2012, , .		5
53	Study of equatorial E region irregularities using rare daytime VHF scintillation observations. Journal of Geophysical Research: Space Physics, 2015, 120, 9074-9086.	0.8	5
54	Space Weather Research: Indian perspective. Space Weather, 2016, 14, 1082-1094.	1.3	5

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55	Response of Thermospheric Nightglow Emissions Over the Magnetic Equator to Prompt Penetration Electric Field Events. Journal of Geophysical Research: Space Physics, 2019, 124, 5918-5935.	0.8	5
56	On the Cause of the Postâ€Sunset Nocturnal OI 630Ånm Airglow Enhancement Over Lowâ€Latitude Thermosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029146.	0.8	4
57	Investigation of the response of equatorial MLTI region during a partial solar eclipse through groundâ€based daytime optical technique. Journal of Geophysical Research, 2008, 113, .	3.3	3
58	Unusual depletion of OI 630.0â€nm dayglow and simultaneous mesopause heating during the penetration of interplanetary electric field over dip equator. Journal of Geophysical Research: Space Physics, 2015, 120, 2110-2117.	0.8	3
59	Further refinements to the spatiotemporal forecast model for <i>L</i>â€band scintillation based on comparison with C/NOFS observations. Journal of Geophysical Research: Space Physics, 2017, 122, 5643-5652.	0.8	3
60	Argonâ€40 in Lunar Exosphere: Observations From CHACEâ€2 on Chandrayaanâ€2 Orbiter. Geophysical Research Letters, 2021, 48, e2021GL094970.	1.5	2
61	Daytime upper mesospheric energetics over a tropical station, Trivandrum (8.5Â°N, 77Â°E): An investigation using the multiwavelength dayglow photometry. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	1
62	GNU Radio Beacon Receiver (GRBR) observations of large-scale wave structure (LSWS) and equatorial spread F (ESF). , 2011, , .		1
63	Role of Equatorial Fountain for the Delayed Response of Thermosphere O 1 D 630.0Ånm Dayglow Over the Dip Equator During an Xâ€Class Flare. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028624.	0.8	1
64	Role of the phase of Quasi-Biennial Oscillation in modulating the influence of SSW on Equatorial Ionosphere. , 2019, , .		1
65	Nature and Variability of the Electron Velocity Distribution Functions and the Nonequilibrium Boltzmann Entropy in the Solar Wind at the First Lagrangian (L1) Point During the Halo CME Event on 25 July 2004. Solar Physics, 2021, 296, 1.	1.0	1
66	Reply to comment by S. Tulasi Ram et al. on â€Westward electric field penetration to the dayside equatorial ionosphere during the main phase of the geomagnetic storm on 22 July 2009â€; Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	0
67	A new perspective to the daytime h'F variations and its role in modulating the mesopause energetics over equatorial latitudes. , 2011, , .		0
68	Development of computerized ionospheric tomography technique and its application to study the Equatorial Ionization Anomaly over the Indian region. , 2011, , .		0
69	Radio and optical signatures of interplanetary electric fields over the dip equatorial upper atmosphere. , 2014, , .		0
70	Effect of Amplitude Scintillations on the Tracking Error of IRNSS Receiver for Indoor Navigation Applications. , 2017, , .		0
71	The topside ionization over Indian region: An analysis using tomograms from Radio Beacon for Ionospheric Tomography (RaBIT) onboard YOUTHSAT.. , 2019, , .		0
72	Inferences regarding ionosphere-thermosphere coupling - Indian ionospheric tomography experiment. , 2019, , .		0