

# Thomas Immel

## List of Publications by Year in descending order

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45  
papers

2,957  
citations

218677

26  
h-index

233421

45  
g-index

50  
all docs

50  
docs citations

50  
times ranked

1296  
citing authors

#	ARTICLE	IF	CITATIONS
1	Control of equatorial ionospheric morphology by atmospheric tides. Geophysical Research Letters, 2006, 33, .	4.0	551
2	Longitudinal structure of the equatorial anomaly in the nighttime ionosphere observed by IMAGE/FUV. Journal of Geophysical Research, 2005, 110, .	3.3	267
3	Longitudinal variation of the E-region electric fields caused by atmospheric tides. Geophysical Research Letters, 2006, 33, .	4.0	219
4	Connections between deep tropical clouds and the Earth's ionosphere. Geophysical Research Letters, 2007, 34, .	4.0	198
5	Plausible effect of atmospheric tides on the equatorial ionosphere observed by the FORMOSAT-3/COSMIC: Three-dimensional electron density structures. Geophysical Research Letters, 2007, 34, .	4.0	158
6	The Ionospheric Connection Explorer Mission: Mission Goals and Design. Space Science Reviews, 2018, 214, 1.	8.1	152
7	O/N <sub>2</sub> changes during 14 October 2002 storms: IMAGE SI-13 and TIMED/GUVI observations. Journal of Geophysical Research, 2004, 109, .	3.3	135
8	Michelson Interferometer for Global High-Resolution Thermospheric Imaging (MIGHTI): Instrument Design and Calibration. Space Science Reviews, 2017, 212, 553-584.	8.1	116
9	Modeling of multiple effects of atmospheric tides on the ionosphere: An examination of possible coupling mechanisms responsible for the longitudinal structure of the equatorial ionosphere. Journal of Geophysical Research, 2010, 115, .	3.3	108
10	Effect of atmospheric tides on the morphology of the quiet time, postsunset equatorial ionospheric anomaly. Journal of Geophysical Research, 2006, 111, .	3.3	102
11	The MIGHTI Wind Retrieval Algorithm: Description and Verification. Space Science Reviews, 2017, 212, 585-600.	8.1	74
12	Dayside enhancements of thermospheric O/N <sub>2</sub> following magnetic storm onset. Journal of Geophysical Research, 2001, 106, 15471-15488.	3.3	66
13	Gravity wave variations during elevated stratopause events using SABER observations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5287-5303.	3.3	59
14	Sudden solar wind dynamic pressure enhancements and dayside detached auroras: IMAGE and DMSP observations. Journal of Geophysical Research, 2003, 108, COA 2-1.	3.3	48
15	Validation of ICON's MIGHTI Thermospheric Wind Observations: 2. Green's Line Comparisons to Specular Meteor Radars. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028947.	2.4	45
16	Variations in the FUV dayglow after intense auroral activity. Geophysical Research Letters, 1994, 21, 2793-2796.	4.0	43
17	Determination of low latitude plasma drift speeds from FUV images. Geophysical Research Letters, 2003, 30, .	4.0	43
18	Negative ionospheric storms seen by the IMAGE FUV instrument. Journal of Geophysical Research, 2003, 108, .	3.3	42

#	ARTICLE	IF	CITATIONS
19	Pronounced Suppression and Xâ€Pattern Merging of Equatorial Ionization Anomalies After the 2022 Tonga Volcano Eruption. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	42
20	The Far Ultra-Violet Imager on the Icon Mission. <i>Space Science Reviews</i> , 2017, 212, 655-696.	8.1	39
21	The effect of non-migrating tides on the morphology of the equatorial ionospheric anomaly: seasonal variability. <i>Earth, Planets and Space</i> , 2009, 61, 493-503.	2.5	37
22	Modeling the longitudinal variation in the postâ€sunset farâ€ultraviolet OI airglow using the SAMI2 model. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	32
23	Rapid decay of storm time ring current due to pitch angle scattering in curved field line. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	32
24	Upward propagating tidal effects across the E- and F-regions of the ionosphere. <i>Earth, Planets and Space</i> , 2009, 61, 505-512.	2.5	29
25	Examining the Wind Shear Theory of Sporadic E With ICON/MIGHTI Winds and COSMICâ€2 Radio Occultation Data. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	29
26	Temporal modulation of the fourâ€peaked longitudinal structure of the equatorial ionosphere by the 2 day planetary wave. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	28
27	Simultaneous observations of equatorial plasma depletion by IMAGE and ROCSAT-1 satellites. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	26
28	Regulation of ionospheric plasma velocities by thermospheric winds. <i>Nature Geoscience</i> , 2021, 14, 893-898.	12.9	25
29	Sensitivity study for ICON tidal analysis. <i>Progress in Earth and Planetary Science</i> , 2020, 7, 18.	3.0	23
30	A method for determining the drift velocity of plasma depletions in the equatorial ionosphere using farâ€ultraviolet spacecraft observations. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	20
31	Temporal modulations of the longitudinal structure in $F_2$ peak height in the equatorial ionosphere as observed by COSMIC. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	20
32	Inferring Nighttime Ionospheric Parameters with the Far Ultraviolet Imager Onboard the Ionospheric Connection Explorer. <i>Space Science Reviews</i> , 2018, 214, 1.	8.1	20
33	Signatures of the 3â€day wave in the lowâ€latitude and midlatitude ionosphere during the January 2010 URSI World Day campaign. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	19
34	Daytime O/N2 Retrieval Algorithm for the Ionospheric Connection Explorer (ICON). <i>Space Science Reviews</i> , 2018, 214, 1.	8.1	19
35	Atmosphereâ€Ionosphere (Aâ€I) Coupling as Viewed by ICON: Dayâ€toâ€Day Variability Due to Planetary Wave (PW)â€Tide Interactions. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028927.	2.4	14
36	Storm-time enhancement of mid-latitude ultraviolet emissions due to energetic neutral atom precipitation. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	13

#	ARTICLE	IF	CITATIONS
37	Dynamical Coupling Between the Low-Latitude Lower Thermosphere and Ionosphere via the Nonmigrating Diurnal Tide as Revealed by Concurrent Satellite Observations and Numerical Modeling. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093277.	4.0	9
38	Evaluation of Atmospheric 3-Day Waves as a Source of Day-to-Day Variation of the Ionospheric Longitudinal Structure. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094877.	4.0	9
39	Topside Plasma Flows in the Equatorial Ionosphere and Their Relationships to F-Region Winds Near 250 km. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	2.4	9
40	Vertical Shears of Horizontal Winds in the Lower Thermosphere Observed by ICON. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	9
41	First Results From the Retrieved Column O/N <sub>2</sub> Ratio From the Ionospheric Connection Explorer (ICON): Evidence of the Impacts of Nonmigrating Tides. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029575.	2.4	7
42	Variations in the ionosphere-thermosphere system from tides, ultra-fast Kelvin waves, and their interactions. <i>Advances in Space Research</i> , 2019, 64, 1841-1853.	2.6	6
43	New NASA Missions Focus on Terrestrial Forcing of the Space Environment. <i>Bulletin of the American Meteorological Society</i> , 2019, 100, 2153-2156.	3.3	5
44	Daily Variability in the Terrestrial UV Airglow. <i>Atmosphere</i> , 2020, 11, 1046.	2.3	4
45	The August 2011 URSI World Day campaign: Initial results. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2015, 134, 47-55.	1.6	3