

Piyush M Mehta

List of Publications by Year in descending order

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Version: 2024-02-01

26
papers

577
citations

687363

13
h-index

610901

24
g-index

35
all docs

35
docs citations

35
times ranked

292
citing authors

#	ARTICLE	IF	CITATIONS
1	New density estimates derived using accelerometers on board the CHAMP and GRACE satellites. Space Weather, 2017, 15, 558-576.	3.7	92
2	Comparing Physical Drag Coefficients Computed Using Different Gas-Surface Interaction Models. Journal of Spacecraft and Rockets, 2014, 51, 873-883.	1.9	79
3	Drag Coefficient Model Using the Cercignani-Lampis-Lord Gas-Surface Interaction Model. Journal of Spacecraft and Rockets, 2014, 51, 1544-1563.	1.9	45
4	Modeling satellite drag coefficients with response surfaces. Advances in Space Research, 2014, 54, 1590-1607.	2.6	41
5	Drag coefficient modeling for grace using Direct Simulation Monte Carlo. Advances in Space Research, 2013, 52, 2035-2051.	2.6	40
6	A methodology for reduced order modeling and calibration of the upper atmosphere. Space Weather, 2017, 15, 1270-1287.	3.7	36
7	A Quasi-Physical Dynamic Reduced Order Model for Thermospheric Mass Density via Hermitian Space-Dynamic Mode Decomposition. Space Weather, 2018, 16, 569-588.	3.7	29
8	The SET HASDM Density Database. Space Weather, 2021, 19, e2020SW002682.	3.7	24
9	Benchmarking Forecasting Models for Space Weather Drivers. Space Weather, 2020, 18, e2020SW002496.	3.7	23
10	A New Transformative Framework for Data Assimilation and Calibration of Physical Ionosphere-Thermosphere Models. Space Weather, 2018, 16, 1086-1100.	3.7	19
11	Improving Neutral Density Predictions Using Exospheric Temperatures Calculated on a Geodesic, Polyhedral Grid. Space Weather, 2020, 18, e2019SW002355.	3.7	18
12	Machine-Learned HASDM Thermospheric Mass Density Model With Uncertainty Quantification. Space Weather, 2022, 20, .	3.7	18
13	Sensitivity analysis and probabilistic re-entry modeling for debris using high dimensional model representation based uncertainty treatment. Advances in Space Research, 2017, 59, 193-211.	2.6	15
14	Data-Driven Inference of Thermosphere Composition During Solar Minimum Conditions. Space Weather, 2019, 17, 1364-1379.	3.7	14
15	Qualitative and Quantitative Assessment of the SET HASDM Database. Space Weather, 2021, 19, e2021SW002798.	3.7	14
16	Quantifying the Storm Time Thermospheric Neutral Density Variations Using Model and Observations. Space Weather, 2019, 17, 269-284.	3.7	10
17	The Current State and Future Directions of Modeling Thermosphere Density Enhancements During Extreme Magnetic Storms. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	9
18	Uncertainty quantification techniques for data-driven space weather modeling: thermospheric density application. Scientific Reports, 2022, 12, 7256.	3.3	9

#	ARTICLE	IF	CITATIONS
19	Different Implementations of Diffuse Reflection with Incomplete Accommodation for Drag Coefficient Modeling. Journal of Spacecraft and Rockets, 2014, 51, 1522-1532.	1.9	7
20	Satellite drag coefficient modeling for thermosphere science and mission operations. Advances in Space Research, 2023, 72, 5443-5459.	2.6	7
21	Improved Neutral Density Predictions Through Machine Learning Enabled Exospheric Temperature Model. Space Weather, 2021, 19, .	3.7	6
22	Real-Time Thermospheric Density Estimation from Satellite Position Measurements. Journal of Guidance, Control, and Dynamics, 2020, 43, 1656-1670.	2.8	5
23	Comparison of a Neutral Density Model With the SET HASDM Density Database. Space Weather, 2021, 19, e2021SW002888.	3.7	4
24	Updates and improvements to the satellite drag coefficient Response Surface Modeling toolkit. Advances in Space Research, 2022, 69, 3828-3846.	2.6	4
25	Sensitivity Analysis towards Probabilistic Re-Entry Modeling of Spacecraft and Space Debris. , 2015, , .		3
26	Photometric Data from Nonresolved Objects for Improved Drag and Reentry Prediction. Journal of Spacecraft and Rockets, 2018, 55, 959-970.	1.9	3