Piyush M Mehta

List of Publications by Year
in descending order

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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	Satellite drag coefficient modeling for thermosphere science and mission operations. Advances in Space Research, 2023, 72, 5443-5459.	2.6	7
2	Updates and improvements to the satellite drag coefficient Response Surface Modeling toolkit. Advances in Space Research, 2022, 69, 3828-3846.	2.6	4
3	Machineâ€Learned HASDM Thermospheric Mass Density Model With Uncertainty Quantification. Space Weather, 2022, 20, .	3.7	18
4	Uncertainty quantification techniques for data-driven space weather modeling: thermospheric density application. Scientific Reports, 2022, 12, 7256.	3.3	9
5	The SET HASDM Density Database. Space Weather, 2021, 19, e2020SW002682.	3.7	24
6	Qualitative and Quantitative Assessment of the SET HASDM Database. Space Weather, 2021, 19, e2021SW002798.	3.7	14
7	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
8	Comparison of a Neutral Density Model With the SET HASDM Density Database. Space Weather, 2021, 19, e2021SW002888.	3.7	4
9	Improved Neutral Density Predictions Through Machine Learning Enabled Exospheric Temperature Model. Space Weather, 2021, 19, .	3.7	6
10	Improving Neutral Density Predictions Using Exospheric Temperatures Calculated on a Geodesic, Polyhedral Grid. Space Weather, 2020, 18, e2019SW002355.	3.7	18
11	Real-Time Thermospheric Density Estimation from Satellite Position Measurements. Journal of Guidance, Control, and Dynamics, 2020, 43, 1656-1670.	2.8	5
12	Benchmarking Forecasting Models for Space Weather Drivers. Space Weather, 2020, 18, e2020SW002496.	3.7	23
13	Dataâ€Driven Inference of Thermosphere Composition During Solar Minimum Conditions. Space Weather, 2019, 17, 1364-1379.	3.7	14
14	Quantifying the Storm Time Thermospheric Neutral Density Variations Using Model and Observations. Space Weather, 2019, 17, 269-284.	3.7	10
15	Photometric Data from Nonresolved Objects for Improved Drag and Reentry Prediction. Journal of Spacecraft and Rockets, 2018, 55, 959-970.	1.9	3
16	A New Transformative Framework for Data Assimilation and Calibration of Physical Ionosphereâ€Thermosphere Models. Space Weather, 2018, 16, 1086-1100.	3.7	19
17	A Quasiâ€Physical Dynamic Reduced Order Model for Thermospheric Mass Density via Hermitian Spaceâ€Dynamic Mode Decomposition. Space Weather, 2018, 16, 569-588.	3.7	29
18	New density estimates derived using accelerometers on board the CHAMP and GRACE satellites. Space Weather, 2017, 15, 558-576.	3.7	92

#	Article	IF	Citations
19	A methodology for reduced order modeling and calibration of the upper atmosphere. Space Weather, 2017, 15, 1270-1287.	3.7	36
20	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
21	Sensitivity Analysis towards Probabilistic Re-Entry Modeling of Spacecraft and Space Debris. , 2015, , .		3
22	Modeling satellite drag coefficients with response surfaces. Advances in Space Research, 2014, 54, 1590-1607.	2.6	41
23	Comparing Physical Drag Coefficients Computed Using Different Gasâ€“Surface Interaction Models. Journal of Spacecraft and Rockets, 2014, 51, 873-883.	1.9	79
24	Different Implementations of Diffuse Reflection with Incomplete Accommodation for Drag Coefficient Modeling. Journal of Spacecraft and Rockets, 2014, 51, 1522-1532.	1.9	7
25	Drag Coefficient Model Using the Cercignaniâ€“Lampisâ€“Lord Gasâ€“Surface Interaction Model. Journal of Spacecraft and Rockets, 2014, 51, 1544-1563.	1.9	45
26	Drag coefficient modeling for grace using Direct Simulation Monte Carlo. Advances in Space Research, 2013, 52, 2035-2051.	2.6	40