Isabel Perez-Grande

List of Publications by Year
in descending order

58 papers	1,482 citations	331670 21 h-index	330143 37 g-index
59 all docs	59 docs citations	59 times ranked	1277 citing authors

#	Article	IF	Citations
1	The Sunrise Mission. Solar Physics, 2011, 268, 1-34.	2.5	199
2	Optimization of a commercial aircraft environmental control system. Applied Thermal Engineering, 2002, 22, 1885-1904.	6.0	100
3	NOMAD, an Integrated Suite of Three Spectrometers for the ExoMars Trace Gas Mission: Technical Description, Science Objectives and Expected Performance. Space Science Reviews, 2018, 214, 1.	8.1	95
4	The Second Flight of the Sunrise Balloon-borne Solar Observatory: Overview of Instrument Updates, the Flight, the Data, and First Results. Astrophysical Journal, Supplement Series, 2017, 229, 2.	7.7	80
5	Spacecraft thermal control. , 2012, , .		78
6	Science objectives and performances of NOMAD, a spectrometer suite for the ExoMars TGO mission. Planetary and Space Science, 2015, 119, 233-249.	1.7	77
7	Galloping stability of triangular cross-sectional bodies: A systematic approach. Journal of Wind Engineering and Industrial Aerodynamics, 2007, 95, 928-940.	3.9	70
8	Influence of glass properties on the performance of double-glazed facades. Applied Thermal Engineering, 2005, 25, 3163-3175.	6.0	66
9	Galloping instabilities of two-dimensional triangular cross-section bodies. Experiments in Fluids, 2005, 38, 789-795.	2.4	61
10	NOMAD spectrometer on the ExoMars trace gas orbiter mission: part 1â€"design, manufacturing and testing of the infrared channels. Applied Optics, 2015, 54, 8494.	2.1	58
11	NOMAD spectrometer on the ExoMars trace gas orbiter mission: part 2â€"design, manufacturing, and testing of the ultraviolet and visible channel. Applied Optics, 2017, 56, 2771.	2.1	40
12	On the aerodynamics of leading-edge high-lift devices of avian wings. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2005, 219, 63-68.	1.3	33
13	Methane on Mars: New insights into the sensitivity of CH4 with the NOMAD/ExoMars spectrometer through its first in-flight calibration. Icarus, 2019, 321, 671-690.	2.5	32
14	Analytical study of the thermal behaviour and stability of a small satellite. Applied Thermal Engineering, 2009, 29, 2567-2573.	6.0	31
15	Expected performances of the NOMAD/ExoMars instrument. Planetary and Space Science, 2016, 124, 94-104.	1.7	31
16	Correlation of spacecraft thermal mathematical models to reference data. Acta Astronautica, 2018, 144, 305-319.	3.2	27
17	EUSO-TA â€“ First results from a ground-based EUSO telescope. Astroparticle Physics, 2018, 102, 98-111.	4.3	27
18	Optical and radiometric models of the NOMAD instrument part I: the UVIS channel. Optics Express, 2015, 23, 30028.	3.4	26

#	Article	IF	Citations
19	Optical and radiometric models of the NOMAD instrument part II: the infrared channels - SO and LNO. Optics Express, 2016, 24, 3790.	3.4	25
20	A thermoeconomic analysis of a commercial aircraft environmental control system. Applied Thermal Engineering, 2005, 25, 309-325.	6.0	24
21	Effects of non condensable gas in an ammonia loop heat pipe operating up to 125ÂÂ°C. Applied Thermal Engineering, 2014, 66, 474-484.	6.0	23
22	Surface tension and microgravity. European Journal of Physics, 2014, 35, 055010.	0.6	22
23	Uncertainty calculation for spacecraft thermal models using a generalized SEA method. Acta Astronautica, 2018, 151, 691-702.	3.2	19
24	Cosmic ray oriented performance studies for the JEM-EUSO first level trigger. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 866, 150-163.	1.6	17
25	Meteor studies in the framework of the JEM-EUSO program. Planetary and Space Science, 2017, 143, 245-255.	1.7	17
26	Thermal calibration of the MEDA-TIRS radiometer onboard NASA's Perseverance rover. Acta Astronautica, 2021, 182, 144-159.	3.2	17
27	Quasi-autonomous thermal model reduction for steady-state problems in space systems. Applied Thermal Engineering, 2016, 105, 456-466.	6.0	16
28	Simplified analysis of the thermal behavior of a spinning satellite flying over Sun-synchronous orbits. Applied Thermal Engineering, 2017, 125, 1146-1156.	6.0	16
29	First observations of speed of light tracks by a fluorescence detector looking down on the atmosphere. Journal of Instrumentation, 2018, 13, P05023-P05023.	1.2	15
30	Selection of extreme environmental conditions, albedo coefficient and Earth infrared radiation, for polar summer Long Duration Balloon missions. Acta Astronautica, 2018, 148, 276-284.	3.2	15
31	Nonlinear analysis of a simple model of temperature evolution inÂaÂsatellite. Nonlinear Dynamics, 2009, 58, 405-415.	5.2	14
32	Gas turbine turbocharged by a steam turbine: a gas turbine solution increasing combined power plant efficiency and power. Applied Thermal Engineering, 2003, 23, 1913-1929.	6.0	12
33	Transient thermal analysis during the ascent phase of a balloon-borne payload. Comparison with SUNRISE test flight measurements. Applied Thermal Engineering, 2009, 29, 1507-1513.	6.0	12
34	A global thermal analysis of multizone resistance furnaces with specular and diffuse samples. Journal of Crystal Growth, 2002, 246, 37-54.	1.5	11
35	Gust wind tunnel study on ballast pick-up by high-speed trains. Experiments in Fluids, 2012, 52, 105-121.	2.4	11
36	Real data-based thermal environment definition for the ascent phase of Polar-Summer Long Duration Balloon missions from Esrange (Sweden). Acta Astronautica, 2020, 170, 235-250.	3.2	11

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37	TASEC-Lab: A COTS-based CubeSat-like university experiment for characterizing the convective heat transfer in stratospheric balloon missions. Acta Astronautica, 2022, 196, 244-258.	3.2	8
38	Thermal control of SUNRISE, a balloon-borne solar telescope. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2011, 225, 1037-1049.	1.3	6
39	Comparative study of the effect of several trains on the rotation motion of ballast stones. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 71-88.	2.0	6
40	Calculation of linear conductances for thermal lumped models by means of the CMF method. Acta Astronautica, 2020, 173, 76-85.	3.2	6
41	On the onset of turbulence in natural convection on inclined plates. Experimental Thermal and Fluid Science, 2011, 35, 68-72.	2.7	4
42	On the Circulation and the Position of the Forward Stagnation Point on Airfoils. International Journal of Mechanical Engineering Education, 2007, 35, 65-75.	1.0	3
43	Pumped fluid loops. , 2012, , 237-261.		3
44	Galloping instabilities of Z-shaped shading louvers. Indoor and Built Environment, 2017, 26, 1198-1213.	2.8	3
45	Thermal Analysis of the Solar Orbiter PHI Electronics Unit. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 186-195.	4.7	3
46	A free convection heat transfer correlation for very thin horizontal wires in rarefied atmospheres. Experimental Thermal and Fluid Science, 2021, 122, 110295.	2.7	3
47	Ascent phase thermal analysis of Long Duration Balloons. Acta Astronautica, 2022, 195, 416-429.	3.2	3
48	Use of turbulence generators as stall-delaying devices in flight at low Reynolds numbers. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2008, 222, 1007-1013.	1.3	2
49	Thermal control design. , 2012, , 327-338.		2
50	Thermal mathematical models. , 2012, , 339-348.		1
51	Performance analysis of the MEDA's Thermal InfraRed Sensor (TIRS) on board the Mars 2020. , 2017, , .		1
52	Analysis of the temperature field in compound samples heated in multizone resistance furnaces. Advances in Space Research, 2003, 32, 251-257.	2.6	0
53	Experimental Study on the Ballast Pick-Up Problem in High Speed Trains. , 2010, , .		0
54	Thermal control surfaces. , 2012, , 87-110.		0

#	Article	IF	Citations
55	Mechanical interfaces. , 2012, , 157-173.		0
56	Phase change capacitors. , 2012, , 209-223.		0
57	Thermal control testing. , 2012, , 349-371.		0
58	Experimental determination of the onset of turbulence on inclined plates using hot wire velocity measurements. , 2010, , .		0