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List of Publications by Year
in descending order

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92	5,975	117571 34	71651 76
papers	citations	h-index	g-index

104	104	104	4215
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Constraining the Internal Structures of Venus and Mars from the Gravity Response to Atmospheric Loading. Planetary Science Journal, 2022, 3, 164.	1.5	6
2	Geodesy, Geophysics and Fundamental Physics Investigations of the BepiColombo Mission. Space Science Reviews, 2021, 217, 1.	3.7	25
3	Gravity, Geodesy and Fundamental Physics with BepiColomboâ€™s MORE Investigation. Space Science Reviews, 2021, 217, 1.	3.7	28
4	Comparison of light-time formulations in the post-Newtonian framework for the BepiColombo MORE experiment. Classical and Quantum Gravity, 2021, 38, 227001.	1.5	8
5	The BepiColombo solar conjunction experiments revisited. Classical and Quantum Gravity, 2021, 38, 055002.	1.5	11
6	The depth of Jupiterâ€™s Great Red Spot constrained by Juno gravity overflights. Science, 2021, 374, 964-968.	6.0	18
7	The Determination of the Rotational State and Interior Structure of Venus with VERITAS. Planetary Science Journal, 2021, 2, 220.	1.5	18
8	A small spacecraft to probe the interior of the Jovian moon Europa: Europa Tomography Probe (ETP) system design. Acta Astronautica, 2020, 166, 137-146.	1.7	0
9	Jupiter's Gravity Field Halfway Through the Juno Mission. Geophysical Research Letters, 2020, 47, e2019GL086572.	1.5	79
10	Analysis of Cassini radio tracking data for the construction of INPOP19a: A new estimate of the Kuiper belt mass. Astronomy and Astrophysics, 2020, 640, A7.	2.1	16
11	Hardware Prototyping and Validation of a W-Î”DOR Digital Signal Processor. Applied Sciences (Switzerland), 2019, 9, 2909.	1.3	3
12	On the determination of Jupiter's satellite-dependent Love numbers from Juno gravity data. Planetary and Space Science, 2019, 175, 34-40.	0.9	10
13	Measurement and implications of Saturnâ€™s gravity field and ring mass. Science, 2019, 364, .	6.0	148
14	Saturn's Deep Atmospheric Flows Revealed by the Cassini Grand Finale Gravity Measurements. Geophysical Research Letters, 2019, 46, 616-624.	1.5	65
15	Titan's cold case files - Outstanding questions after Cassini-Huygens. Planetary and Space Science, 2018, 155, 50-72.	0.9	37
16	A suppression of differential rotation in Jupiterâ€™s deep interior. Nature, 2018, 555, 227-230.	13.7	165
17	Measurement of Jupiterâ€™s asymmetric gravity field. Nature, 2018, 555, 220-222.	13.7	177
18	Jupiterâ€™s atmospheric jet streams extend thousands of kilometres deep. Nature, 2018, 555, 223-226.	13.7	189

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19	An analysis of the geodesy and relativity experiments of BepiColombo. Icarus, 2018, 301, 9-25.	1.1	30
20	Estimating Jupiterâ€™s Gravity Field Using Juno Measurements, Trajectory Estimation Analysis, and a Flow Model Optimization. Astronomical Journal, 2017, 154, 2.	1.9	10
21	Jupiterâ€™s interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft. Science, 2017, 356, 821-825.	6.0	229
22	Jupiter gravity field estimated from the first two Juno orbits. Geophysical Research Letters, 2017, 44, 4694-4700.	1.5	74
23	The determination of the post-Newtonian parameter Î³ during the cruise phase of BepiColombo. Classical and Quantum Gravity, 2017, 34, 075002.	1.5	29
24	Survey of Capabilities and Applications of Accurate Clocks: Directions for Planetary Science. Space Science Reviews, 2017, 212, 1433-1451.	3.7	7
25	The Juno Gravity Science Instrument. Space Science Reviews, 2017, 213, 205-218.	3.7	32
26	Titan's Topography and Shape at the End of the Cassini Mission. Geophysical Research Letters, 2017, 44, 11,754.	1.5	78
27	The effect of Jupiter oscillations on Juno gravity measurements. Icarus, 2017, 282, 174-182.	1.1	15
28	Sensitivity study of systematic errors in the BepiColombo relativity experiment. , 2016, , .		4
29	The rotational dynamics of Titan from Cassini RADAR images. Icarus, 2016, 275, 183-192.	1.1	15
30	Optimizing Data Volume Return for Ka-Band Deep Space Links Exploiting Short-Term Radiometeorological Model Forecast. IEEE Transactions on Antennas and Propagation, 2016, 64, 235-250.	3.1	26
31	Probing the depth of Jupiterâ€™s Great Red Spot with the Juno gravity experiment. Icarus, 2016, 267, 232-242.	1.1	20
32	Rhea gravity field and interior modeling from Cassini data analysis. Icarus, 2016, 264, 264-273.	1.1	34
33	Testing general relativity during the cruise phase of the BepiColombo mission to Mercury. , 2015, , .		6
34	Coupling radio propagation and weather forecast models to maximize Ka-band channel transmission rate for interplanetary missions. , 2015, , .		0
35	Quantum tests of the Einstein Equivalence Principle with the STEâ€“QUEST space mission. Advances in Space Research, 2015, 55, 501-524.	1.2	151
36	Evaluation of deep space Ka-band data transfer using radiometeorological forecast models. , 2014, , .		3

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37	The exploration of Titan with an orbiter and a lake probe. Planetary and Space Science, 2014, 104, 78-92.	0.9	26
38	The Gravity Field and Interior Structure of Enceladus. Science, 2014, 344, 78-80.	6.0	339
39	Astra: Interdisciplinary study on enhancement of the end-to-end accuracy for spacecraft tracking techniques. Acta Astronautica, 2014, 94, 699-707.	1.7	62
40	A rigid and weathered ice shell on Titan. Nature, 2013, 500, 550-552.	13.7	71
41	Mercury's gravity field from the first six months of MESSENGER data. Planetary and Space Science, 2013, 81, 55-64.	0.9	15
42	The Tides of Titan. Science, 2012, 337, 457-459.	6.0	237
43	Same beam interferometry as a tool for the investigation of the lunar interior. Planetary and Space Science, 2012, 74, 194-201.	0.9	13
44	Environments in the Outer Solar System. Space Science Reviews, 2010, 153, 11-59.	3.7	8
45	Gravity Field, Shape, and Moment of Inertia of Titan. Science, 2010, 327, 1367-1369.	6.0	177
46	The cross-link tecnique for deep space missions. , 2009, , .		1
47	Matter wave explorer of gravity (MWXG). Experimental Astronomy, 2009, 23, 611-649.	1.6	30
48	MORE: An advanced tracking experiment for the exploration of Mercury with the mission BepiColombo. Acta Astronautica, 2009, 65, 666-675.	1.7	67
49	Spaceâ€time localization of inner heliospheric plasma turbulence using multiple spacecraft radio links. Space Weather, 2009, 7, .	1.3	6
50	Can Cassini detect a subsurface ocean in Titan from gravity measurements?. Icarus, 2008, 194, 711-720.	1.1	34
51	A nonâ€hydrostatic Rhea. Geophysical Research Letters, 2008, 35, .	1.5	22
52	Reducing antenna mechanical noise in precision spacecraft tracking. Radio Science, 2008, 43, .	0.8	14
53	The measurement of Titan rotational state by means of SAR imaging. , 2008, , .		1
54	Titan's Rotation Reveals an Internal Ocean and Changing Zonal Winds. Science, 2008, 319, 1649-1651.	6.0	178

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55	The effect of the motion of the Sun on the light-time in interplanetary relativity experiments. Classical and Quantum Gravity, 2008, 25, 045013.	1.5	17
56	DETERMINING TITAN'S SPIN STATE FROMCASSINIRADAR IMAGES. Astronomical Journal, 2008, 135, 1669-1680.	1.9	78
57	PROBING SPACEâ€"TIME IN THE SOLAR SYSTEM: FROM CASSINI TO BEPICOLOMBO. International Journal of Modern Physics D, 2007, 16, 2117-2126.	0.9	34
58	Mass and interior of Enceladus from Cassini data analysis. Icarus, 2007, 190, 175-178.	1.1	18
59	Gravity field and interior of Rhea from Cassini data analysis. Icarus, 2007, 190, 585-593.	1.1	43
60	The BepiColombo Laser Altimeter (BELA): Concept and baseline design. Planetary and Space Science, 2007, 55, 1398-1413.	0.9	80
61	Hyperion's sponge-like appearance. Nature, 2007, 448, 50-53.	13.7	90
62	SMART-1 mission to the Moon: Status, first results and goals. Advances in Space Research, 2006, 37, 6-13.	1.2	84
63	Small Mission Design for Testing In-Orbit an Electrodynamic Tether Deorbiting System. Journal of Spacecraft and Rockets, 2006, 43, 883-892.	1.3	21
64	The Cassini solar Faraday rotation experiment. Advances in Space Research, 2005, 36, 1587-1594.	1.2	14
65	SMART-1 after lunar capture: First results and perspectives. Journal of Earth System Science, 2005, 114, 689-697.	0.6	9
66	Linear Stability Analysis of Electrodynamic Tethers. Journal of Guidance, Control, and Dynamics, 2005, 28, 843-849.	1.6	7
67	Spacecraft Doppler tracking: Noise budget and accuracy achievable in precision radio science observations. Radio Science, 2005, 40, n/a-n/a.	0.8	149
68	Precise Cassini Navigation During Solar Conjunctions Through Multifrequency Plasma Calibrations. Journal of Guidance, Control, and Dynamics, 2004, 27, 251-257.	1.6	38
69	Cassini Radio Science. Space Science Reviews, 2004, 115, 1-70.	3.7	75
70	SMART-1 mission to the moon: Technology and science goals. Advances in Space Research, 2003, 31, 2323-2333.	1.2	33
71	A test of general relativity using radio links with the Cassini spacecraft. Nature, 2003, 425, 374-376.	13.7	1,547
72	The Cassini solar conjunction experiment: a new test of general relativity. , 2003, , .		5

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73	Stochastic Gravitational Wave Background: Upper Limits in the 10â^'6to 10â^'3Hz Band. Astrophysical Journal, 2003, 599, 806-813.	1.6	89
74	The Cassini gravitational wave experiment. , 2003, 4856, 90.		17
75	satellite de-orbiting by means of electrodynamic tethers part i: general concepts and requirements. Acta Astronautica, 2002, 50, 399-406.	1.7	43
76	SATELLITE DE-ORBITING BY MEANS OF ELECTRODYNAMIC TETHERS PART II: SYSTEM CONFIGURATION AND PERFORMANCE. Acta Astronautica, 2002, 50, 407-416.	1.7	27
77	The Huygens Doppler Wind Experiment ' Titan Winds Derived from Probe Radio Frequency Measurements. Space Science Reviews, 2002, 104, 613-640.	3.7	37
78	Advanced radio science instrumentation for the mission BepiColombo to Mercury. Planetary and Space Science, 2001, 49, 1597-1608.	0.9	64
79	Stability and control of electrodynamic tethers for de-orbiting applications. Acta Astronautica, 2001, 48, 491-501.	1.7	65
80	Doppler measurement of the solar gravitational deflection. Classical and Quantum Gravity, 1999, 16, 1487-1502.	1.5	50
81	Current-voltage characteristic of the TSS-1R satellite: Comparison with isotropic and anisotropic models. Geophysical Research Letters, 1998, 25, 749-752.	1.5	26
82	Plasma waves in the sheath of the TSS-1R satellite. Geophysical Research Letters, 1998, 25, 421-424.	1.5	8
83	Microsatellites and space station for science and technology utilisation. Acta Astronautica, 1996, 39, 605-616.	1.7	1
84	The RETE experiment for the TSS-1 mission. Il Nuovo Cimento Della SocietÃ Italiana Di Fisica C, 1994, 17, 101-121.	0.2	15
85	Doppler experiments with Cassini radio system. Il Nuovo Cimento Della SocietÃ Italiana Di Fisica C, 1992, 15, 1193-1198.	0.2	10
86	The rotation of LAGEOS. Journal of Geophysical Research, 1991, 96, 2431-2440.	3.3	59
87	Spacecraft Doppler tracking with a VLBI antenna. Il Nuovo Cimento Della SocietÃ Italiana Di Fisica C, 1990, 13, 169-176.	0.2	1
88	Effect of particle drag on the LAGEOS node and measurement of the gravitomagnetic field. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1990, 105, 573-588.	0.2	6
89	Interaction of a hollow-cathode source with an ionospheric plasma. Advances in Space Research, 1990, 10, 147-150.	1.2	0
90	Differential Doppler tracking of interplanetary spacecraft. Il Nuovo Cimento Della SocietÃ Italiana Di Fisica C, 1987, 10, 235-246.	0.2	4

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91	Parallel proton heating in the solar wind by oblique AlfvÃ©n waves. Il Nuovo Cimento Della SocietÃ Italiana Di Fisica C, 1986, 9, 1035-1044.	0.2	3
92	Doppler search for a gravitational background radiation with two spacecraft. General Relativity and Gravitation, 1985, 17, 1043-1058.	0.7	6