Errricos C Pavlis

List of Publications by Year
in descending order

91 papers	3,051 citations	186265 28 h-index	161849 54 g-index
101 all docs	101 docs citations	101 times ranked	1161 citing authors

#	Article	IF	Citations
1	A confirmation of the general relativistic prediction of the Lenseâ€“Thirring effect. Nature, 2004, 431, 958-960.	27.8	417
2	Test of General Relativity and Measurement of the Lense-Thirring Effect with Two Earth Satellites. Science, 1998, 279, 2100-2103.	12.6	200
3	Gravity model development for TOPEX/POSEIDON: Joint Gravity Models 1 and 2. Journal of Geophysical Research, 1994, 99, 24421.	3.3	184
4	High-accuracy zenith delay prediction at optical wavelengths. Geophysical Research Letters, 2004, 31, .	4.0	164
5	The GEMâ€T2 Gravitational Model. Journal of Geophysical Research, 1990, 95, 22043-22071.	3.3	162
6	A new gravitational model for the Earth from satellite tracking data: GEMâ€T1. Journal of Geophysical Research, 1988, 93, 6169-6215.	3.3	159
7	Tectonic motion and deformation from satellite laser ranging to LAGEOS. Journal of Geophysical Research, 1990, 95, 22013-22041.	3.3	127
8	A test of general relativity using the LARES and LAGEOS satellites and a GRACE Earth gravity model. European Physical Journal C, 2016, 76, 120.	3.9	105
9	The ILRS: approaching 20Âyears and planning for the future. Journal of Geodesy, 2019, 93, 2161-2180.	3.6	105
10	Improved mapping functions for atmospheric refraction correction in SLR. Geophysical Research Letters, 2002, 29, 53-1-53-4.	4.0	99
11	Determination of frame-dragging using Earth gravity models from CHAMP and GRACE. New Astronomy, 2006, 11, 527-550.	1.8	70
12	Towards a One Percent Measurement of Frame Dragging by Spin with Satellite Laser Ranging to LAGEOS, LAGEOS 2 and LARES and GRACE Gravity Models. Space Science Reviews, 2009, 148, 71-104.	8.1	65
13	A geopotential model from satellite tracking, altimeter, and surface gravity data: GEM-T3. Journal of Geophysical Research, 1994, 99, 2815-2839.	3.3	62
14	Testing General Relativity and gravitational physics using the LARES satellite. European Physical Journal Plus, 2012, 127, 1.	2.6	59
15	Laser geodetic satellites: a high-accuracy scientific tool. Journal of Geodesy, 2019, 93, 2181-2194.	3.6	55
16	Testing gravitational physics with satellite laser ranging. European Physical Journal Plus, 2011, 126, 1.	2.6	52
17	DPOD2005: An extension of ITRF2005 for Precise Orbit Determination. Advances in Space Research, 2009, 44, 535-544.	2.6	47
18	Contemporary global horizontal crustal motion. Geophysical Journal International, 1994, 119, 511-520.	2.4	38

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19	Gravitomagnetism and Its Measurement with Laser Ranging to the LAGEOS Satellites and GRACE Earth Gravity Models. Astrophysics and Space Science Library, 2010, , 371-434.	2.7	37
20	Fundamental Physics and General Relativity with the LARES and LAGEOS satellites. Nuclear Physics, Section B, Proceedings Supplements, 2013, 243-244, 180-193.	0.4	35
21	New high-resolution model developed for earth's gravitational field. Eos, 1998, 79, 113-113.	0.1	34
22	The GAVDOS Mean Sea Level and Altimeter Calibration Facility: Results for Jason-1. Marine Geodesy, 2004, 27, 631-655.	2.0	34
23	On the measurement of the Lenseâ€“Thirring effect using the nodes of the LAGEOS satellites, in reply to â€œOn the reliability of the so-far performed tests for measuring the Lenseâ€“Thirring effect with the LAGEOS satellitesâ€•by L. Iorio. New Astronomy, 2005, 10, 636-651.	1.8	33
24	Measuring the relativistic perigee advance with satellite laser ranging. Classical and Quantum Gravity, 2002, 19, 4301-4309.	4.0	32
25	LAGEOS II perigee rate and eccentricity vector excitations residuals and the Yarkovskyâ€“Schach effect. Planetary and Space Science, 2004, 52, 699-710.	1.7	31
26	A ray-tracing technique for improving Satellite Laser Ranging atmospheric delay corrections, including the effects of horizontal refractivity gradients. Journal of Geophysical Research, 2007, 112, .	3.3	30
27	Expected orbit determination performance for the TOPEX/Poseidon mission. IEEE Transactions on Geoscience and Remote Sensing, 1993, 31, 333-354.	6.3	29
28	Monte Carlo simulations of the LARES space experiment to test General Relativity and fundamental physics. Classical and Quantum Gravity, 2013, 30, 235009.	4.0	29
29	Systematic errors in SLR data and their impact on the ILRS products. Journal of Geodesy, 2019, 93, 2357-2366.	3.6	29
30	Comparison of GPS S/C orbits determined from GPS and SLR tracking data. Advances in Space Research, 1995, 16, 55-58.	2.6	28
31	On the possibility of measuring the Lenseâ€“Thirring effect with a LAGEOSâ€“LAGEOS IIâ€“OPTIS mission. Classical and Quantum Gravity, 2004, 21, 2139-2151.	4.0	28
32	A new laser-ranged satellite for General Relativity and space geodesy: I. An introduction to the LARES2 space experiment. European Physical Journal Plus, 2017, 132, 1.	2.6	28
33	Phenomenology of the Lense-Thirring effect in the Solar System: Measurement of frame-dragging with laser ranged satellites. New Astronomy, 2012, 17, 341-346.	1.8	27
34	An improved test of the general relativistic effect of frame-dragging using the LARES and LAGEOS satellites. European Physical Journal C, 2019, 79, 1.	3.9	27
35	THE IMPACT OF TIDAL ERRORS ON THE DETERMINATION OF THE LENSEâ€“THIRRING EFFECT FROM SATELLITE LASER RANGING. International Journal of Modern Physics D, 2002, 11, 599-618.	2.1	26
36	Prospects in the orbital and rotational dynamics of the Moon with the advent of sub-centimeter lunar laser ranging. Advances in Space Research, 2008, 42, 1378-1390.	2.6	23

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37	The terrestrial reference frame and the dynamic Earth. Eos, 2001, 82, 273-279.	0.1	21
38	An improved error assessment for the GEMâ€T1 Gravitational Model. Journal of Geophysical Research, 1991, 96, 20023-20040.	3.3	18
39	PROBING GRAVITY IN NEO'S WITH HIGH-ACCURACY LASER-RANGED TEST MASSES. International Journal of Modern Physics D, 2007, 16, 2271-2285.	2.1	18
40	The Earth's frame-dragging via laser-ranged satellites: A Response to â€œSome considerations on the present-day results for the detection of frame-dragging after the final outcome of GP-Bâ€•by Iorio L.. Europhysics Letters, 2011, 96, 30002.	2.0	17
41	Rapid response quality control service for the laser ranging tracking network. Journal of Geodesy, 2019, 93, 2335-2344.	3.6	17
42	A new laser-ranged satellite for General Relativity and space geodesy: II. Monte Carlo simulations and covariance analyses of the LARES 2 experiment. European Physical Journal Plus, 2017, 132, 1.	2.6	14
43	Scientific objectives of current and future WEGENER activities. Tectonophysics, 1998, 294, 177-223.	2.2	13
44	Analysis of the angle-only orbit determination for optical tracking strategy of Korea GEO satellite, COMS. Advances in Space Research, 2015, 56, 1056-1066.	2.6	13
45	Preliminary orbital analysis of the LARES space experiment. European Physical Journal Plus, 2015, 130, 1.	2.6	13
46	Future global SLR network evolution and its impact on the terrestrial reference frame. Journal of Geodesy, 2018, 92, 625-635.	3.6	12
47	Satellite Laser-Ranging as a Probe of Fundamental Physics. Scientific Reports, 2019, 9, 15881.	3.3	12
48	The goals, achievements, and tools of modern geodesy. , 2009, , 15-88.		12
49	Dynamical Determination of Origin and Scale in the Earth System from Satellite Laser Ranging. International Association of Geodesy Symposia, 2002, , 36-41.	0.4	11
50	Studies on the materials of LARES 2 satellite. Journal of Geodesy, 2019, 93, 2437-2446.	3.6	10
51	COSMIC:Geodetic Applications in Improving Earth's Gravity Model. Terrestrial, Atmospheric and Oceanic Sciences, 2000, 11, 365.	0.6	10
52	Modernizing and expanding the NASA Space Geodesy Network to meet future geodetic requirements. Journal of Geodesy, 2019, 93, 2263-2273.	3.6	9
53	Reply to â€œA comment on â€œA test of general relativity using the LARES and LAGEOS satellites and a GRACE Earth gravity model, by I. Ciufolini et al.â€â€• European Physical Journal C, 2018, 78, 880.	3.9	8
54	Tropospheric water vapor from solar spectrometry and comparison with Jason microwave radiometer measurements. Journal of Geophysical Research, 2006, 111, .	3.3	7

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55	A new laser-ranged satellite for General Relativity and space geodesy: IV. Thermal drag and the LARES 2 space experiment. European Physical Journal Plus, 2018, 133, 1.	2.6	6
56	The effect of earth orientation errors in baseline determination. Bulletin Geodesique, 1983, 57, 273-282.	0.4	5
57	On the geodetic applications of simultaneous range differences to LAGEOS. Journal of Geophysical Research, 1985, 90, 9431.	3.3	5
58	Improvements in the accuracy of Goddard Earth Models (GEM). Geodynamic Series, 1993, , 191-212.	0.1	5
59	The Contribution of LARES to Global Climate Change Studies With Geodetic Satellites. , 2015, , .		5
60	Overview of the ILRS Contribution to the Development of ITRF2013. International Association of Geodesy Symposia, 2015, , 101-108.	0.4	5
61	Quality assessment of LARES satellite ranging data: LARES contribution for improving the terrestrial reference frame. , 2015, , .		5
62	The Laser Retroreflector Experiment on GPS-35 and 36. International Association of Geodesy Symposia, 1996, , 154-158.	0.4	5
63	Contribution of LARES and geodetic satellites on environmental monitoring. , 2015, , .		4
64	Transitioning the NASA SLR network to Event Timing Mode for reduced systematics, improved stability and data precision. Journal of Geodesy, 2019, 93, 2345-2355.	3.6	4
65	GAVDOS: A satellite radar altimeter calibration and sea-level monitoring site on the island of Gavdos, Crete. Elsevier Oceanography Series, 2003, 69, 258-264.	0.1	3
66	Permanent facility for calibration/validation of satellite altimetry: GAVDOS. , 2004, 5569, 14.		3
67	PROBING GRAVITY IN NEO'S WITH HIGH-ACCURACY LASER-RANGED TEST MASSES. , 2009, , 399-413.		3
68	LARES satellite thermal forces and a test of general relativity. , 2016, , .		3
69	GGOS Working Group on Ground Networks Communications. , 2007, , 719-726.		3
70	A High-Resolution Geoid for the Establishment of the GAVDOS Multi-Satellite Calibration Site. International Association of Geodesy Symposia, 2001, , 347-354.	0.4	3
71	The ILRS EOP Time Series. Artificial Satellites, 2010, 45, 41-48.	0.7	3
72	The determination of present-day tectonic motions from laser ranging to LAGEOS. , 1990, , 221-240.		2

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73	The role of laser determined orbits in geodesy and geophysics. Advances in Space Research, 1991, 11, 111-118.	2.6	2
74	An alternative procedure for the estimation of the altimeter bias for the Jason-1 satellite using the dedicated calibration site at Gavdos. Proceedings of SPIE, 2008, , .	0.8	2
75	LARES mission operations. , 2015, , .		2
76	Gravity Field Estimation from Future Space Missions: TOPEX/POSEIDON, Gravity Probe B, and Aristoteles. International Association of Geodesy Symposia, 1992, , 51-61.	0.4	2
77	Introduction To The Special Issue Of The Symposium Evolving Geodesy. Surveys in Geophysics, 2001, 22, 427-429.	4.6	1
78	Dragging of inertial frames, fundamental physics, and satellite laser ranging. , 2014, , 157-186.		1
79	Monitoring global climate change using SLR data from LARES and other geodetic satellites. Proceedings of SPIE, 2016, , .	0.8	1
80	El NiÃ±o effects on earth rotation parameters from LAGEOS and LARES orbital analysis. , 2017, , .		1
81	Plate Motions and Deformation from Lageos. International Association of Geodesy Symposia, 1990, , 21-29.	0.4	1
82	Preliminary Results from the Joint GSFC/DMA Gravity Model Project. International Association of Geodesy Symposia, 1996, , 92-110.	0.4	1
83	Effects of Climate Change on Earthâ€™s Parameters - An Example of Exabyte-sized System. , 2016, , .		1
84	Validation of improved atmospheric refraction models for Satellite Laser Ranging (SLR). , 2007, , 844-852.		1
85	European radar altimeter calibration and sea-level monitoring site for Jason-1 and Envisat at the island of Gavdos, Crete, Greece. , 2003, 4880, 52.		0
86	Orbital predictions for the LARES satellite mission: The International Space Time Analysis Research Center (ISTARC). , 2015, , .		0
87	Preface to the second special issue on Laser Ranging. Journal of Geodesy, 2019, 93, 2159-2160.	3.6	0
88	Tests of General Relativity with the LARES Satellites. Fundamental Theories of Physics, 2019, , 467-479.	0.3	0
89	Geodetic Applications of the ROCSAT-3/COSMIC Mission. International Association of Geodesy Symposia, 2000, , 214-217.	0.4	0
90	Towards a One Percent Measurement of Frame Dragging by Spin with Satellite Laser Ranging to LAGEOS, LAGEOS 2 and LARES and GRACE Gravity Models. Space Sciences Series of ISSI, 2009, , 71-104.	0.0	0

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91	Long wavelength geopotential and tidal modeling for geodynamics and ocean dynamics: GEM-T3 and GEM-T3S. Geophysical Monograph Series, 1994, , 9-19.	0.1	0