Ryan Park

List of Publications by Year
in descending order

74 papers	4,524 citations	117625 34 h-index	102487 66 g-index
82 all docs	82 docs citations	82 times ranked	3521 citing authors

#	Article	IF	Citations
1	The Psyche Topography and Geomorphology Investigation. Space Science Reviews, 2022, 218, 1.	8.1	4
2	Distinguishing the Origin of Asteroid (16) Psyche. Space Science Reviews, 2022, 218, 17.	8.1	13
3	Ganymede's Ionosphere Observed by a Dualâ€Frequency Radio Occultation With Juno. Geophysical Research Letters, 2022, 49, .	4.0	9
4	Determining the Relative Cratering Ages of Regions of Psycheâ€™s Surface. Space Science Reviews, 2022, 218, 1.	8.1	4
5	The JPL Planetary and Lunar Ephemerides DE440 and DE441. Astronomical Journal, 2021, 161, 105.	4.7	177
6	Estimating Asteroid Mass from Optically Tracked Radio Beacons. Journal of Spacecraft and Rockets, 2021, 58, 444-455.	1.9	2
7	Replenishment of Nearâ€Surface Water Ice by Impacts Into Ceres' Volatileâ€Rich Crust: Observations by Dawn's Gamma Ray and Neutron Detector. Geophysical Research Letters, 2021, 48, e2021GL094223.	4.0	2
8	A Recipe for the Geophysical Exploration of Enceladus. Planetary Science Journal, 2021, 2, 157.	3.6	14
9	Reduced Nonlinear Model for Orbit Uncertainty Propagation and Estimation. Journal of Guidance, Control, and Dynamics, 2021, 44, 1578-1592.	2.8	3
10	Ephemeris and hazard assessment for near-Earth asteroid (101955) Bennu based on OSIRIS-REx data. Icarus, 2021, 369, 114594.	2.5	28
11	Performance of Earth Troposphere Calibration Measurements With the Advanced Water Vapor Radiometer for the Juno Gravity Science Investigation. Radio Science, 2021, 56, .	1.6	6
12	The Mercury gravity field, orientation, love number, and ephemeris from the MESSENGER radiometric tracking data. Icarus, 2020, 335, 113386.	2.5	30
13	Detection of the Chandler Wobble of Mars From Orbiting Spacecraft. Geophysical Research Letters, 2020, 47, e2020GL090568.	4.0	37
14	Heterogeneous mass distribution of the rubble-pile asteroid (101955) Bennu. Science Advances, 2020, 6, .	10.3	50
15	Photometry of Particles Ejected From Active Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006381.	3.6	23
16	Trajectory Estimation for Particles Observed in the Vicinity of (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006363.	3.6	51
17	Evidence of non-uniform crust of Ceres from Dawnâ€™s high-resolution gravity data. Nature Astronomy, 2020, 4, 748-755.	10.1	30
18	Impact-driven mobilization of deep crustal brines on dwarf planet Ceres. Nature Astronomy, 2020, 4, 741-747.	10.1	50

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19	Advanced Pointing Imaging Camera (APIC) for planetary science and mission opportunities. Planetary and Space Science, 2020, 194, 105095.	1.7	10
20	Resonance locking in giant planets indicated by the rapid orbital expansion of Titan. Nature Astronomy, 2020, 4, 1053-1058.	10.1	87
21	Observations, Meteorites, and Models: A Preflight Assessment of the Composition and Formation of (16) Psyche. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006296.	3.6	61
22	Efficient method for approximating nonlinear dynamics: applications to uncertainty propagation and estimation. , 2020, , .		1
23	Modeling the Uncertainties of Solar System Ephemerides for Robust Gravitational-wave Searches with Pulsar-timing Arrays. Astrophysical Journal, 2020, 893, 112.	4.5	49
24	Recoverability of Known Near-Earth Asteroids. Astronomical Journal, 2020, 160, 250.	4.7	2
25	Tectonic analysis of fracturing associated with occator crater. Icarus, 2019, 320, 49-59.	2.5	21
26	The central pit and dome at Cerealia Facula bright deposit and floor deposits in Occator crater, Ceres: Morphology, comparisons and formation. Icarus, 2019, 320, 159-187.	2.5	28
27	The First Two Years of juno Spacecraft Astrometry with the Very Long Baseline Array. , 2019, , .		1
28	Surface Roughness and Gravitational Slope Distributions of Vesta and Ceres. Journal of Geophysical Research E: Planets, 2019, 124, 14-30.	3.6	12
29	High-resolution shape model of Ceres from stereophotoclinometry using Dawn Imaging Data. Icarus, 2019, 319, 812-827.	2.5	51
30	Morphological Indicators of a Mascon Beneath Ceres's Largest Crater, Kerwan. Geophysical Research Letters, 2018, 45, 1297-1304.	4.0	15
31	The rotational elements of Mars and its satellites. Planetary and Space Science, 2018, 152, 107-115.	1.7	13
32	The Ceres gravity field, spin pole, rotation period and orbit from the Dawn radiometric tracking and optical data. Icarus, 2018, 299, 411-429.	2.5	65
33	Search for OH 18 cm Radio Emission from 1I/2017 U1 with the Green Bank Telescope. Astronomical Journal, 2018, 155, 185.	4.7	11
34	Floorâ€Fractured Craters on Ceres and Implications for Interior Processes. Journal of Geophysical Research E: Planets, 2018, 123, 3188-3204.	3.6	13
35	The NANOGrav 11 Year Data Set: Pulsar-timing Constraints on the Stochastic Gravitational-wave Background. Astrophysical Journal, 2018, 859, 47.	4.5	331
36	Psyche Science Operations Concept: Maximize Reuse to Minimize Risk. , 2018, , .		5

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37	The geology of the Nawish quadrangle of Ceres: The rim of an ancient basin. Icarus, 2018, 316, 114-127.	2.5	6
38	Power Laws of Topography and Gravity Spectra of the Solar System Bodies. Journal of Geophysical Research E: Planets, 2018, 123, 2038-2064.	3.6	21
39	Breakthrough Listen Observations of 1I/â€²Oumuamua with the GBT. Research Notes of the AAS, 2018, 2, 9.	0.7	17
40	Precession of Mercuryâ€™s Perihelion from Ranging to the MESSENGER Spacecraft. Astronomical Journal, 2017, 153, 121.	4.7	134
41	Jupiter gravity field estimated from the first two Juno orbits. Geophysical Research Letters, 2017, 44, 4694-4700.	4.0	74
42	Constraints on Ceres' Internal Structure and Evolution From Its Shape and Gravity Measured by the Dawn Spacecraft. Journal of Geophysical Research E: Planets, 2017, 122, 2267-2293.	3.6	117
43	The interior structure of Ceres as revealed by surface topography. Earth and Planetary Science Letters, 2017, 476, 153-164.	4.4	117
44	SURFACE ALBEDO AND SPECTRAL VARIABILITY OF CERES. Astrophysical Journal Letters, 2016, 817, L22.	8.3	42
45	An improved JPL Mars gravity field and orientation from Mars orbiter and lander tracking data. Icarus, 2016, 274, 253-260.	2.5	134
46	A partially differentiated interior for (1) Ceres deduced from its gravity field and shape. Nature, 2016, 537, 515-517.	27.8	169
47	Dawn arrives at Ceres: Exploration of a small, volatile-rich world. Science, 2016, 353, 1008-1010.	12.6	178
48	Cratering on Ceres: Implications for its crust and evolution. Science, 2016, 353, .	12.6	135
49	The Deep-space Positioning System Concept: Automating Complex Navigation Operations Beyond the Earth. , 2016, , .		4
50	Gravity field of the Orientale basin from the Gravity Recovery and Interior Laboratory Mission. Science, 2016, 354, 438-441.	12.6	38
51	Composition and structure of the shallow subsurface of Ceres revealed by craterÂmorphology. Nature Geoscience, 2016, 9, 538-542.	12.9	118
52	VERY LONG BASELINE ARRAY ASTROMETRIC OBSERVATIONS OF MARS ORBITERS. Astronomical Journal, 2015, 150, 121.	4.7	11
53	Improved detection of tides at Europa with radiometric and optical tracking during flybys. Planetary and Space Science, 2015, 112, 10-14.	1.7	17
54	New constraints on Mars rotation determined from radiometric tracking of the Opportunity Mars Exploration Rover. Icarus, 2014, 229, 340-347.	2.5	41

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55	Gravity field expansion in ellipsoidal harmonic and polyhedral internal representations applied to Vesta. Icarus, 2014, 240, 118-132.	2.5	48
56	Harmonic and statistical analyses of the gravity and topography of Vesta. Icarus, 2014, 240, 161-173.	2.5	18
57	The Vesta gravity field, spin pole and rotation period, landmark positions, and ephemeris from the Dawn tracking and optical data. Icarus, 2014, 240, 103-117.	2.5	98
58	Highâ€resolution lunar gravity fields from the GRAIL Primary and Extended Missions. Geophysical Research Letters, 2014, 41, 1452-1458.	4.0	103
59	Lunar interior properties from the GRAIL mission. Journal of Geophysical Research E: Planets, 2014, 119, 1546-1578.	3.6	185
60	The Scientific Measurement System of the Gravity Recovery and Interior Laboratory (GRAIL) Mission. Space Science Reviews, 2013, 178, 25-55.	8.1	32
61	Gravity Field of the Moon from the Gravity Recovery and Interior Laboratory (GRAIL) Mission. Science, 2013, 339, 668-671.	12.6	389
62	The JPL lunar gravity field to spherical harmonic degree 660 from the GRAIL Primary Mission. Journal of Geophysical Research E: Planets, 2013, 118, 1415-1434.	3.6	143
63	Gravity Recovery and Interior Laboratory Simulations of Static and Temporal Gravity Field. Journal of Spacecraft and Rockets, 2012, 49, 390-400.	1.9	22
64	Dawn at Vesta: Testing the Protoplanetary Paradigm. Science, 2012, 336, 684-686.	12.6	422
65	Detecting tides and gravity at Europa from multiple close flybys. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	16
66	The Dawn Gravity Investigation at Vesta and Ceres. Space Science Reviews, 2011, 163, 461-486.	8.1	62
67	The Dawn Gravity Investigation at Vesta and Ceres. , 2011, , 461-486.		3
68	Trajectory Reconstruction of a Sounding Rocket Using Intertial Measurement Unit and Landmark Data. Journal of Spacecraft and Rockets, 2010, 47, 1003-1009.	1.9	2
69	Estimating Small-Body Gravity Field from Shape Model and Navigation Data. Journal of Guidance, Control, and Dynamics, 2010, 33, 212-221.	2.8	54
70	Nonlinear Semi-Analytic Methods for Trajectory Estimation. Journal of Guidance, Control, and Dynamics, 2007, 30, 1668-1676.	2.8	60
71	Nonlinear Semi-Analytic Methods for Spacecraft Trajectory Design, Control, and Navigation. AIP Conference Proceedings, 2007, , .	0.4	0
72	Nonlinear Mapping of Gaussian Statistics: Theory and Applications to Spacecraft Trajectory Design. Journal of Guidance, Control, and Dynamics, 2006, 29, 1367-1375.	2.8	164

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73	Estimating Parameterized Post-Newtonian Parameters from Spacecraft Radiometric Tracking Data. Journal of Spacecraft and Rockets, 2005, 42, 559-568.	1.9	9
74	Deflection of spacecraft trajectories as a new test of general relativity: Determining the parametrized post-Newtonian parametersÎ²andÎ³. Physical Review D, 2004, 69, .	4.7	8