## Daniel J Scheeres

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7448165/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	The Rubble-Pile Asteroid Itokawa as Observed by Hayabusa. Science, 2006, 312, 1330-1334.	6.0	761
2	OSIRIS-REx: Sample Return from Asteroid (101955) Bennu. Space Science Reviews, 2017, 212, 925-984.	3.7	426
3	Hayabusa2 arrives at the carbonaceous asteroid 162173 Ryugu—A spinning top–shaped rubble pile. Science, 2019, 364, 268-272.	6.0	410
4	The unexpected surface of asteroid (101955) Bennu. Nature, 2019, 568, 55-60.	13.7	364
5	Touchdown of the Hayabusa Spacecraft at the Muses Sea on Itokawa. Science, 2006, 312, 1350-1353.	6.0	349
6	Exterior gravitation of a polyhedron derived and compared with harmonic and mascon gravitation representations of asteroid 4769 Castalia. Celestial Mechanics and Dynamical Astronomy, 1997, 65, 313.	0.5	322
7	Regolith Migration and Sorting on Asteroid Itokawa. Science, 2007, 316, 1011-1014.	6.0	271
8	Orbits Close to Asteroid 4769 Castalia. Icarus, 1996, 121, 67-87.	1.1	260
9	Radar Imaging of Binary Near-Earth Asteroid (66391) 1999 KW4. Science, 2006, 314, 1276-1280.	6.0	254
10	Scaling forces to asteroid surfaces: The role of cohesion. Icarus, 2010, 210, 968-984.	1.1	249
11	Determination of Shape, Gravity, and Rotational State of Asteroid 433 Eros. Icarus, 2002, 155, 3-17.	1.1	237
12	Dynamics about Uniformly Rotating Triaxial Ellipsoids: Applications to Asteroids. Icarus, 1994, 110, 225-238.	1.1	216
13	Mass and Local Topography Measurements of Itokawa by Hayabusa. Science, 2006, 312, 1344-1347.	6.0	213
14	Characterizing and navigating small bodies with imaging data. Meteoritics and Planetary Science, 2008, 43, 1049-1061.	0.7	209
15	The strength of regolith and rubble pile asteroids. Meteoritics and Planetary Science, 2014, 49, 788-811.	0.7	195
16	Shape model and surface properties of the OSIRIS-REx target Asteroid (101955) Bennu from radar and lightcurve observations. Icarus, 2013, 226, 629-640.	1.1	186
17	Estimating the Mass of Asteroid 253 Mathilde from Tracking Data During the NEAR Flyby. Science, 1997, 278, 2106-2109.	6.0	181
18	Dynamics of rotationally fissioned asteroids: Source of observed small asteroid systems. Icarus, 2011, 214, 161-178.	1.1	179

#	Article	IF	CITATIONS
19	Shape of (101955) Bennu indicative of a rubble pile with internal stiffness. Nature Geoscience, 2019, 12, 247-252.	5.4	179
20	Dynamics of Orbits Close to Asteroid 4179 Toutatis. Icarus, 1998, 132, 53-79.	1.1	176
21	Radar Observations of Asteroid 216 Kleopatra. Science, 2000, 288, 836-839.	6.0	172
22	Radio Science Results During the NEAR-Shoemaker Spacecraft Rendezvous with Eros. Science, 2000, 289, 2085-2088.	6.0	172
23	Formation of asteroid pairs by rotational fission. Nature, 2010, 466, 1085-1088.	13.7	171
24	The OSIRISâ€REx target asteroid (101955) Bennu: Constraints on its physical, geological, and dynamical nature from astronomical observations. Meteoritics and Planetary Science, 2015, 50, 834-849.	0.7	168
25	Evaluation of the Dynamic Environment of an Asteroid: Applications to 433 Eros. Journal of Guidance, Control, and Dynamics, 2000, 23, 466-475.	1.6	167
26	Disruption of kilometre-sized asteroids by energetic collisions. Nature, 1998, 393, 437-440.	13.7	166
27	Nonlinear Mapping of Gaussian Statistics: Theory and Applications to Spacecraft Trajectory Design. Journal of Guidance, Control, and Dynamics, 2006, 29, 1367-1375.	1.6	164
28	Orbital Motion in Strongly Perturbed Environments. , 2012, , .		161
29	Craters, boulders and regolith of (101955) Bennu indicative of an old and dynamic surface. Nature Geoscience, 2019, 12, 242-246.	5.4	161
30	Spin Rate of Asteroid (54509) 2000 PH5 Increasing Due to the YORP Effect. Science, 2007, 316, 274-277.	6.0	147
31	Rotational fission of contact binary asteroids. Icarus, 2007, 189, 370-385.	1.1	142
32	Control of Hovering Spacecraft Near Small Bodies: Application to Asteroid 25143 Itokawa. Journal of Guidance, Control, and Dynamics, 2005, 28, 343-354.	1.6	138
33	The dynamic geophysical environment of (101955) Bennu based on OSIRIS-REx measurements. Nature Astronomy, 2019, 3, 352-361.	4.2	132
34	Episodes of particle ejection from the surface of the active asteroid (101955) Bennu. Science, 2019, 366, .	6.0	129
35	In search of the source of asteroid (101955) Bennu: Applications of the stochastic YORP model. Icarus, 2015, 247, 191-217.	1.1	125
36	Dynamical Configuration of Binary Near-Earth Asteroid (66391) 1999 KW4. Science, 2006, 314, 1280-1283.	6.0	119

#	Article	IF	CITATIONS
37	Orbit Mechanics About Asteroids and Comets. Journal of Guidance, Control, and Dynamics, 2012, 35, 987-997.	1.6	107
38	Radar observations and a physical model of binary near-Earth asteroid 65803 Didymos, target of the DART mission. Icarus, 2020, 348, 113777.	1.1	106
39	Stability Analysis of Planetary Satellite Orbiters: Application to the Europa Orbiter. Journal of Guidance, Control, and Dynamics, 2001, 24, 778-787.	1.6	105
40	The dynamical evolution of uniformly rotating asteroids subject to YORP. Icarus, 2007, 188, 430-450.	1.1	104
41	High-resolution model of Asteroid 4179 Toutatis. Icarus, 2003, 161, 346-355.	1.1	99
42	The operational environment and rotational acceleration of asteroid (101955) Bennu from OSIRIS-REx observations. Nature Communications, 2019, 10, 1291.	5.8	99
43	The role of cohesive forces in particle launching on the Moon and asteroids. Planetary and Space Science, 2011, 59, 1758-1768.	0.9	96
44	Orbital mechanics about small bodies. Acta Astronautica, 2012, 72, 1-14.	1.7	96
45	Stability of the planar full 2-body problem. Celestial Mechanics and Dynamical Astronomy, 2009, 104, 103-128.	0.5	94
46	Stabilizing Motion Relative to an Unstable Orbit: Applications to Spacecraft Formation Flight. Journal of Guidance, Control, and Dynamics, 2003, 26, 62-73.	1.6	93
47	Numerical determination of stability regions for orbital motion in uniformly rotating second degree and order gravity fields. Planetary and Space Science, 2004, 52, 685-692.	0.9	93
48	The geophysical environment of Bennu. Icarus, 2016, 276, 116-140.	1.1	92
49	Control of Hovering Spacecraft Using Altimetry. Journal of Guidance, Control, and Dynamics, 2002, 25, 786-795.	1.6	90
50	Solving Optimal Continuous Thrust Rendezvous Problems with Generating Functions. Journal of Guidance, Control, and Dynamics, 2006, 29, 321-331.	1.6	89
51	Effects of Gravitational Interactions on Asteroid Spin States. Icarus, 2000, 147, 106-118.	1.1	87
52	Radar observations and a physical model of Asteroid 1580 Betulia. Icarus, 2007, 186, 152-177.	1.1	87
53	Landslides and Mass shedding on spinning spheroidal asteroids. Icarus, 2015, 247, 1-17.	1.1	82
54	DEM simulation of rotation-induced reshaping and disruption of rubble-pile asteroids. Icarus, 2012, 218, 876-894.	1.1	79

#	Article	IF	CITATIONS
55	Solving Relative Two-Point Boundary Value Problems: Spacecraft Formulation Flight Transfers Application. Journal of Guidance, Control, and Dynamics, 2004, 27, 693-704.	1.6	78
56	SIMULATING ASTEROID RUBBLE PILES WITH A SELF-GRAVITATING SOFT-SPHERE DISTINCT ELEMENT METHOD MODEL. Astrophysical Journal, 2011, 727, 120.	1.6	78
57	Radar observations and the shape of near-Earth asteroid 2008 EV5. Icarus, 2011, 212, 649-660.	1.1	77
58	Stability in the Full Two-Body Problem. Celestial Mechanics and Dynamical Astronomy, 2002, 83, 155-169.	0.5	74
59	Multiple Gravity Assists, Capture, and Escape in the Restricted Three-Body Problem. SIAM Journal on Applied Dynamical Systems, 2007, 6, 576-596.	0.7	73
60	Finite-time control for spacecraft body-fixed hovering over an asteroid. IEEE Transactions on Aerospace and Electronic Systems, 2015, 51, 506-520.	2.6	73
61	On the Milankovitch orbital elements for perturbed Keplerian motion. Celestial Mechanics and Dynamical Astronomy, 2014, 118, 197-220.	0.5	71
62	INTERNAL STRUCTURE OF ASTEROIDS HAVING SURFACE SHEDDING DUE TO ROTATIONAL INSTABILITY. Astrophysical Journal, 2015, 808, 63.	1.6	71
63	Escaping Trajectories in the Hill Three-Body Problem and Applications. Journal of Guidance, Control, and Dynamics, 2003, 26, 224-232.	1.6	68
64	Fission and reconfiguration of bilobate comets as revealed by 67P/Churyumov–Gerasimenko. Nature, 2016, 534, 352-355.	13.7	68
65	Design of Science Orbits About Planetary Satellites: Application to Europa. Journal of Guidance, Control, and Dynamics, 2006, 29, 1147-1158.	1.6	67
66	Radar observations of asteroid 25143 Itokawa (1998 SF36). Meteoritics and Planetary Science, 2004, 39, 407-424.	0.7	66
67	Determination of optimal feedback terminal controllers for general boundary conditions using generating functions. Automatica, 2006, 42, 869-875.	3.0	66
68	The Restricted Hill Four-Body Problem with Applications to the Earth–Moon–Sun System. Celestial Mechanics and Dynamical Astronomy, 1998, 70, 75-98.	0.5	65
69	Radar Observations and Physical Model of Asteroid 6489 Golevka. Icarus, 2000, 148, 37-51.	1.1	65
70	Solar Sail Orbit Operations at Asteroids. Journal of Spacecraft and Rockets, 2001, 38, 279-286.	1.3	65
71	The effect of YORP on Itokawa. Icarus, 2007, 188, 425-429.	1.1	65
72	Generalized Model for Solar Sails. Journal of Spacecraft and Rockets, 2005, 42, 182-185.	1.3	64

#	Article	IF	CITATIONS
73	Analytical Nonlinear Propagation of Uncertainty in the Two-Body Problem. Journal of Guidance, Control, and Dynamics, 2012, 35, 497-509.	1.6	64
74	Surface Gravity Fields for Asteroids and Comets. Journal of Guidance, Control, and Dynamics, 2013, 36, 362-374.	1.6	64
75	CONSTRAINTS ON THE PHYSICAL PROPERTIES OF MAIN BELT COMET P/2013 R3 FROM ITS BREAKUP EVENT. Astrophysical Journal Letters, 2014, 789, L12.	3.0	64
76	Lightcurve, Color and Phase Function Photometry of the OSIRIS-REx Target Asteroid (101955) Bennu. Icarus, 2013, 226, 663-670.	1.1	63
77	Almost global asymptotic tracking control for spacecraft body-fixed hovering over an asteroid. Aerospace Science and Technology, 2014, 38, 105-115.	2.5	62
78	Simulation and analysis of the dynamics of binary near-Earth Asteroid (66391) 1999 KW4. Icarus, 2008, 194, 410-435.	1.1	61
79	Satellite Dynamics about Small Bodies: Averaged Solar Radiation Pressure Effects. Journal of the Astronautical Sciences, 1999, 47, 25-46.	0.8	60
80	Nonlinear Semi-Analytic Methods for Trajectory Estimation. Journal of Guidance, Control, and Dynamics, 2007, 30, 1668-1676.	1.6	60
81	Boundedness of Spacecraft Hovering Under Dead-Band Control in Time-Invariant Systems. Journal of Guidance, Control, and Dynamics, 2007, 30, 601-610.	1.6	60
82	Global Patterns of Recent Mass Movement on Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006475.	1.5	60
83	Spacecraft Dynamics in the Vicinity of a Comet. Journal of the Astronautical Sciences, 2002, 50, 35-52.	0.8	60
84	The Yarkovsky and YORP Effects. , 2015, , .		60
85	Correlation of Optical Observations of Objects in Earth Orbit. Journal of Guidance, Control, and Dynamics, 2009, 32, 194-209.	1.6	59
86	Disruption patterns of rotating self-gravitating aggregates: A survey on angle of friction and tensile strength. Icarus, 2016, 271, 453-471.	1.1	58
87	Spacecraft Motion About Slowly Rotating Asteroids. Journal of Guidance, Control, and Dynamics, 2002, 25, 765-775.	1.6	57
88	Radar and optical observations and physical modeling of triple near-Earth Asteroid (136617) 1994 CC. Icarus, 2011, 216, 241-256.	1.1	56
89	Contact Motion on Surface of Asteroid. Journal of Spacecraft and Rockets, 2014, 51, 1857-1871.	1.3	56
90	LONG-TERM STABLE EQUILIBRIA FOR SYNCHRONOUS BINARY ASTEROIDS. Astrophysical Journal Letters, 2011, 736, L19.	3.0	55

#	Article	IF	CITATIONS
91	STRESS AND FAILURE ANALYSIS OF RAPIDLY ROTATING ASTEROID (29075) 1950 DA. Astrophysical Journal Letters, 2015, 798, L8.	3.0	55
92	Mutual Potential of Homogeneous Polyhedra. Celestial Mechanics and Dynamical Astronomy, 2005, 91, 337-349.	0.5	54
93	Simulation of the full two rigid body problem using polyhedral mutual potential and potential derivatives approach. Celestial Mechanics and Dynamical Astronomy, 2006, 96, 317-339.	0.5	54
94	Spectral slope variations for OSIRIS-REx target Asteroid (101955) Bennu: Possible evidence for a fine-grained regolith equatorial ridge. Icarus, 2015, 256, 22-29.	1.1	54
95	Radar Observations of Asteroid 1620 Geographos. Icarus, 1996, 121, 46-66.	1.1	53
96	Relative Equilibria for General Gravity Fields in the Sphere-Restricted Full 2-Body Problem. Celestial Mechanics and Dynamical Astronomy, 2006, 94, 317-349.	0.5	53
97	ROSETTA mission: satellite orbits around a cometary nucleus. Planetary and Space Science, 1998, 46, 649-671.	0.9	52
98	Optimal transfers between unstable periodic orbits using invariant manifolds. Celestial Mechanics and Dynamical Astronomy, 2011, 109, 241-264.	0.5	52
99	Stability of Surface Motion on a Rotating Ellipsoid. Celestial Mechanics and Dynamical Astronomy, 2003, 87, 263-290.	0.5	51
100	Trajectory Estimation for Particles Observed in the Vicinity of (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006363.	1.5	51
101	Heterogeneous mass distribution of the rubble-pile asteroid (101955) Bennu. Science Advances, 2020, 6, .	4.7	50
102	Long-term dynamics of high area-to-mass ratio objects in high-Earth orbit. Advances in Space Research, 2013, 52, 1545-1560.	1.2	49
103	Mutual potential between two rigid bodies with arbitrary shapes and mass distributions. Celestial Mechanics and Dynamical Astronomy, 2017, 127, 369-395.	0.5	49
104	Secular orbit variation due to solar radiation effects: a detailed model for BYORP. Celestial Mechanics and Dynamical Astronomy, 2010, 106, 261-300.	0.5	48
105	Detailed prediction for the BYORP effect on binary near-Earth Asteroid (66391) 1999 KW4 and implications for the binary population. Icarus, 2010, 209, 494-509.	1.1	48
106	New Solar Radiation Pressure Force Model for Navigation. Journal of Guidance, Control, and Dynamics, 2010, 33, 1418-1428.	1.6	47
107	Dynamics of levitating dust particles near asteroids and the Moon. Journal of Geophysical Research E: Planets, 2013, 118, 116-125.	1.5	47
108	Asteroid pairs: A complex picture. Icarus, 2019, 333, 429-463.	1.1	47

#	Article	IF	CITATIONS
109	Effect of density inhomogeneity on YORP: The case of Itokawa. Icarus, 2008, 198, 125-129.	1.1	46
110	Radar and photometric observations and shape modeling of contact binary near-Earth Asteroid (8567) 1996 HW1. Icarus, 2011, 214, 210-227.	1.1	46
111	Small body surface gravity fields via spherical harmonic expansions. Celestial Mechanics and Dynamical Astronomy, 2014, 119, 169-206.	0.5	46
112	Combined effect of YORP and collisions on the rotation rate of small Main Belt asteroids. Icarus, 2011, 214, 622-631.	1.1	45
113	Abrupt alteration of Asteroid 2004 MN4's spin state during its 2029 Earth flyby. Icarus, 2005, 178, 281-283.	1.1	44
114	Coupled orbit–attitude dynamics and relative state estimation of spacecraft near small Solar System bodies. Advances in Space Research, 2016, 57, 1747-1761.	1.2	44
115	Stability of Relative Equilibria in the Full Two-Body Problem. Annals of the New York Academy of Sciences, 2004, 1017, 81-94.	1.8	43
116	The Actual Dynamical Environment About Itokawa. , 2006, , .		43
117	Restricted Full Three-Body Problem: Application to Binary System 1999 KW4. Journal of Guidance, Control, and Dynamics, 2008, 31, 162-171.	1.6	43
118	Object Correlation, Maneuver Detection, and Characterization Using Control Distance Metrics. Journal of Guidance, Control, and Dynamics, 2012, 35, 1312-1325.	1.6	43
119	Correlation of Optical Observations of Earth-Orbiting Objects and Initial Orbit Determination. Journal of Guidance, Control, and Dynamics, 2012, 35, 208-221.	1.6	43
120	Asteroid clusters similar to asteroid pairs. Icarus, 2018, 304, 110-126.	1.1	43
121	Energy and stability in the Full Two Body Problem. Celestial Mechanics and Dynamical Astronomy, 2008, 100, 63-91.	0.5	42
122	The use of invariant manifolds for transfers between unstable periodic orbits of different energies. Celestial Mechanics and Dynamical Astronomy, 2010, 107, 471-485.	0.5	42
123	Stability of Binary Asteroids. Icarus, 2002, 159, 271-283.	1.1	41
124	Geometric Mechanics and the Dynamics of Asteroid Pairs. Annals of the New York Academy of Sciences, 2004, 1017, 11-38.	1.8	41
125	Spacecraft Formation Dynamics and Design. Journal of Guidance, Control, and Dynamics, 2006, 29, 121-133.	1.6	41
126	Robust Capture and Transfer Trajectories for Planetary Satellite Orbiters. Journal of Guidance, Control, and Dynamics, 2006, 29, 342-353.	1.6	41

#	Article	IF	CITATIONS
127	Stability Bounds for Three-Dimensional Motion Close to Asteroids. Journal of the Astronautical Sciences, 2002, 50, 389-409.	0.8	41
128	Evolution of NEO rotation rates due to close encounters with Earth and Venus. Icarus, 2004, 170, 312-323.	1.1	40
129	Experimental demonstration of the role of cohesion in electrostatic dust lofting. Geophysical Research Letters, 2013, 40, 1038-1042.	1.5	40
130	The Mechanics of Moving Asteroids. , 2004, , .		39
131	Physical modeling of near-Earth Asteroid (29075) 1950 DA. Icarus, 2007, 190, 608-621.	1.1	39
132	Reduction of Low-Thrust Continuous Controls for Trajectory Dynamics. Journal of Guidance, Control, and Dynamics, 2009, 32, 780-787.	1.6	39
133	Rotational evolution of self-gravitating aggregates with cores of variable strength. Planetary and Space Science, 2018, 157, 39-47.	0.9	39
134	Landmark Navigation Studies and Target Characterization in the Hayabusa Encounter with Itokawa. , 2006, , .		37
135	Computing the effects of YORP on the spin rate distribution of the NEO population. Icarus, 2009, 202, 95-103.	1.1	37
136	The Restricted Hill Full 4-Body Problem: application to spacecraft motion about binary asteroids. Dynamical Systems, 2005, 20, 23-44.	0.2	36
137	The OSIRIS-REx Radio Science Experiment at Bennu. Space Science Reviews, 2018, 214, 1.	3.7	36
138	Detection of Rotational Acceleration of Bennu Using HST Light Curve Observations. Geophysical Research Letters, 2019, 46, 1956-1962.	1.5	36
139	Effect of rotational disruption on the size–frequency distribution of the Main Belt asteroid population. Monthly Notices of the Royal Astronomical Society: Letters, 2014, 439, L95-L99.	1.2	35
140	ANALYSIS OF ASTEROID (216) KLEOPATRA USING DYNAMICAL AND STRUCTURAL CONSTRAINTS. Astrophysical Journal, 2014, 780, 160.	1.6	35
141	Fully Numerical Methods for Continuing Families of Quasi-Periodic Invariant Tori in Astrodynamics. Journal of the Astronautical Sciences, 2018, 65, 157-182.	0.8	35
142	Rotationally induced failure of irregularly shaped asteroids. Icarus, 2019, 317, 354-364.	1.1	35
143	Evolution of Comet Nucleus Rotation. Icarus, 2002, 157, 205-218.	1.1	34
144	Multi-wavelength observations of Asteroid 2100 Ra-Shalom. Icarus, 2008, 193, 20-38.	1.1	34

#	Article	IF	CITATIONS
145	SPIN STATE AND MOMENT OF INERTIA CHARACTERIZATION OF 4179 TOUTATIS. Astronomical Journal, 2013, 146, 95.	1.9	34
146	Interpreting the Cratering Histories of Bennu, Ryugu, and Other Spacecraft-explored Asteroids. Astronomical Journal, 2020, 160, 14.	1.9	34
147	Rotational dynamics of a solar system body under solar radiation torques. Celestial Mechanics and Dynamical Astronomy, 2008, 101, 69-103.	0.5	33
148	Periodic Orbits in Rotating Second Degree and Order Gravity Fields. Research in Astronomy and Astrophysics, 2008, 8, 108-118.	1.1	33
149	Numerical investigation of the dynamical environment of 65803 Didymos. Advances in Space Research, 2017, 59, 1304-1320.	1.2	33
150	The excited spin state of Dimorphos resulting from the DART impact. Icarus, 2021, 370, 114624.	1.1	33
151	Estimating asteroid density distributions from shape and gravity information. Planetary and Space Science, 2000, 48, 965-971.	0.9	32
152	A THREE-DIMENSIONAL MODEL OF TANGENTIAL YORP. Astrophysical Journal, 2014, 794, 22.	1.6	31
153	Prearrival Deployment Analysis of Rovers on Hayabusa2 Asteroid Explorer. Journal of Spacecraft and Rockets, 2018, 55, 797-817.	1.3	31
154	Small Solar System Bodies as granular media. Astronomy and Astrophysics Review, 2019, 27, 1.	9.1	31
155	Near-zero cohesion and loose packing of Bennu's near subsurface revealed by spacecraft contact. Science Advances, 2022, 8, .	4.7	31
156	Statistical Analysis of Control Maneuvers in Unstable Orbital Environments. Journal of Guidance, Control, and Dynamics, 2003, 26, 758-769.	1.6	30
157	General dynamics in the Restricted Full Three Body Problem. Acta Astronautica, 2008, 62, 563-576.	1.7	30
158	Observer-based body-frame hovering control over a tumbling asteroid. Acta Astronautica, 2014, 102, 124-139.	1.7	30
159	Bounded relative orbits about asteroids for formation flying and applications. Acta Astronautica, 2016, 123, 364-375.	1.7	30
160	The Western Bulge of 162173 Ryugu Formed as a Result of a Rotationally Driven Deformation Process. Astrophysical Journal Letters, 2019, 874, L10.	3.0	30
161	Equatorial cavities on asteroids, an evidence of fission events. Icarus, 2018, 304, 192-208.	1.1	29
162	The Effect of C22 on Orbit Energy and Angular Momentum. Celestial Mechanics and Dynamical Astronomy, 1999, 73, 339-348.	0.5	28

#	Article	IF	CITATIONS
163	Secular Motion in a 2nd Degree and Order-Gravity Field with no Rotation. Celestial Mechanics and Dynamical Astronomy, 2001, 79, 183-200.	0.5	28
164	Influence of Unstable Manifolds on Orbit Uncertainty. Journal of Guidance, Control, and Dynamics, 2001, 24, 573-585.	1.6	28
165	Solar-Sail Navigation: Estimation of Force, Moments, and Optical Parameters. Journal of Guidance, Control, and Dynamics, 2007, 30, 660-668.	1.6	28
166	Stability of equilibrium points in the restricted full three-body problem. Acta Astronautica, 2007, 60, 141-152.	1.7	28
167	Minimum energy configurations in the N-body problem and the celestial mechanics of granular systems. Celestial Mechanics and Dynamical Astronomy, 2012, 113, 291-320.	0.5	28
168	Spin-driven evolution of asteroids' top-shapes at fast and slow spins seen from (101955) Bennu and (162173) Ryugu. Icarus, 2020, 352, 113946.	1.1	28
169	Development of a Target Marker for Landing on Asteroids. Journal of Spacecraft and Rockets, 2001, 38, 601-608.	1.3	27
170	Reachability Results for Nonlinear Systems with Ellipsoidal Initial Sets. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 1583-1600.	2.6	27
171	FORMATION OF THE WIDE ASYNCHRONOUS BINARY ASTEROID POPULATION. Astrophysical Journal, 2014, 780, 60.	1.6	27
172	Parametric Study of Ballistic Lander Deployment to Small Bodies. Journal of Spacecraft and Rockets, 2017, 54, 1330-1355.	1.3	27
173	Dynamics in the Phobos environment. Advances in Space Research, 2019, 63, 476-495.	1.2	27
174	Cohesive regolith on fast rotating asteroids. Icarus, 2020, 338, 113443.	1.1	27
175	Post-main-sequence debris from rotation-induced YORP break-up of small bodies – II. Multiple fissions, internal strengths, and binary production. Monthly Notices of the Royal Astronomical Society, 2020, 492, 2437-2445.	1.6	27
176	On-Orbit Operational Range Computation Using Gauss's Variational Equations with J2 Perturbations. Journal of Guidance, Control, and Dynamics, 2014, 37, 608-622.	1.6	26
177	Forced periodic motions by solar radiation pressure around uniformly rotating asteroids. Celestial Mechanics and Dynamical Astronomy, 2016, 126, 405-432.	0.5	26
178	Minimum energy asteroid reconfigurations and catastrophic disruptions. Planetary and Space Science, 2009, 57, 154-164.	0.9	25
179	The classical Laplace plane as a stable disposal orbit for geostationary satellites. Advances in Space Research, 2014, 53, 1219-1228.	1.2	25
180	A revised shape model of asteroid (216) Kleopatra. Icarus, 2018, 311, 197-209.	1.1	25

#	Article	IF	CITATIONS
181	Disaggregation of small, cohesive rubble pile asteroids due to YORP. Icarus, 2018, 304, 183-191.	1.1	25
182	Deconstructing Castalia: Evaluating a Postimpact State. Icarus, 1999, 139, 383-386.	1.1	24
183	Radar observations of Itokawa in 2004 and improved shape estimation. Meteoritics and Planetary Science, 2005, 40, 1563-1574.	0.7	24
184	Physical properties of near-Earth Asteroid (33342) 1998 WT24. Icarus, 2008, 195, 614-621.	1.1	24
185	Radar observations and a physical model of Asteroid 4660 Nereus, a prime space mission target. Icarus, 2009, 201, 153-166.	1.1	24
186	Ballistic Deployment of Science Packages on Binary Asteroids. Journal of Guidance, Control, and Dynamics, 2013, 36, 700-709.	1.6	24
187	Simulation of Nonspherical Asteroid Landers: Contact Modeling and Shape Effects on Bouncing. Journal of Spacecraft and Rockets, 2020, 57, 109-130.	1.3	24
188	Fundamental limits on spacecraft orbit uncertainty and distribution propagation. Journal of the Astronautical Sciences, 2006, 54, 505-523.	0.8	23
189	Morphology driven density distribution estimation for small bodies. Icarus, 2014, 233, 179-193.	1.1	23
190	Sensitivity Analysis of the OSIRIS-REx Terminator Orbits to Maneuver Errors. Journal of Guidance, Control, and Dynamics, 2017, 40, 81-95.	1.6	23
191	Dynamical Evolution of Simulated Particles Ejected From Asteroid Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006229.	1.5	23
192	Predictions for the Dynamical States of the Didymos System before and after the Planned DART Impact. Planetary Science Journal, 2022, 3, 157.	1.5	23
193	Changes in Rotational Angular Momentum due to Gravitational Interactions between Two Finite Bodies*. Celestial Mechanics and Dynamical Astronomy, 2001, 81, 39-44.	O.5	22
194	Binary Asteroid Observation Orbits from a Global Dynamical Perspective. SIAM Journal on Applied Dynamical Systems, 2006, 5, 252-279.	0.7	22
195	Dynamic limits on planar libration-orbit coupling around an oblate primary. Celestial Mechanics and Dynamical Astronomy, 2013, 115, 365-396.	0.5	22
196	Solar-Sail Orbital Motion About Asteroids and Binary Asteroid Systems. Journal of Guidance, Control, and Dynamics, 2018, 41, 1947-1962.	1.6	22
197	Doubly synchronous binary asteroid mass parameter observability. Icarus, 2020, 341, 113439.	1.1	22
198	Linear stability of a self-gravitating ring. Celestial Mechanics and Dynamical Astronomy, 1991, 51, 83-103.	0.5	21

#	Article	IF	CITATIONS
199	The restricted P + 2 body problem. Acta Astronautica, 1993, 29, 237-248.	1.7	21
200	Transformation of spherical harmonic coefficients to ellipsoidal harmonic coefficients. Astronomy and Astrophysics, 2002, 387, 1114-1122.	2.1	21
201	Dynamics and Control for Surface Exploration of Small Bodies. , 2008, , .		21
202	Radar observations and a physical model of contact binary Asteroid 4486 Mithra. Icarus, 2010, 208, 207-220.	1.1	21
203	Improving Space Object Catalog Maintenance Through Advances in Solar Radiation Pressure Modeling. Journal of Guidance, Control, and Dynamics, 2015, 38, 1366-1381.	1.6	21
204	Assessing possible mutual orbit period change by shape deformation of Didymos after a kinetic impact in the NASA-led Double Asteroid Redirection Test. Advances in Space Research, 2019, 63, 2515-2534.	1.2	21
205	A satellite orbit drift in binary near-Earth asteroids (66391) 1999 KW4 and (88710) 2001 SL9 — Indication of the BYORP effect. Icarus, 2021, 360, 114321.	1.1	21
206	Modified granular impact force laws for the OSIRIS-REx touchdown on the surface of asteroid (101955) Bennu. Monthly Notices of the Royal Astronomical Society, 2021, 507, 5087-5105.	1.6	21
207	Energy and Stress Distributions in Ellipsoids. Icarus, 2002, 159, 314-321.	1.1	20
208	Interferometric Observatories in Earth Orbit. Journal of Guidance, Control, and Dynamics, 2004, 27, 297-301.	1.6	20
209	Analysis of Capture Trajectories into Periodic Orbits About Libration Points. Journal of Guidance, Control, and Dynamics, 2008, 31, 1344-1351.	1.6	20
210	Interplanetary Transfers Between Halo Orbits: Connectivity Between Escape and Capture Trajectories. Journal of Guidance, Control, and Dynamics, 2010, 33, 803-813.	1.6	20
211	Recursive computation of mutual potential between two polyhedra. Celestial Mechanics and Dynamical Astronomy, 2013, 117, 245-262.	0.5	20
212	Deployment of a lander on the binary asteroid (175706) 1996 FG3, potential target of the european MarcoPolo-R sample return mission. Acta Astronautica, 2013, 89, 60-70.	1.7	20
213	Association of optical tracklets from a geosynchronous belt survey via the direct Bayesian admissible region approach. Advances in Space Research, 2014, 53, 295-308.	1.2	20
214	Locating Large Solar Power Satellites in the Geosynchronous Laplace Plane. Journal of Guidance, Control, and Dynamics, 2015, 38, 489-505.	1.6	20
215	Physical models for the normal YORP and diurnal Yarkovsky effects. Monthly Notices of the Royal Astronomical Society, 2016, 458, 3977-3989.	1.6	20
216	Radar observations of asteroid 1998 ML14. Meteoritics and Planetary Science, 2001, 36, 1225-1236.	0.7	19

#	Article	IF	CITATIONS
217	The Dynamical Environment About Asteroid 25143 Itokawa, Target of the Hayabusa Mission. , 2004, , .		19
218	Averaged rotational dynamics of an asteroid in tumbling rotation under the YORP torque. Celestial Mechanics and Dynamical Astronomy, 2010, 106, 301-337.	0.5	19
219	Implications of cohesive strength in asteroid interiors and surfaces and its measurement. Progress in Earth and Planetary Science, 2018, 5, .	1.1	19
220	An overview of the LIDAR observations of asteroid 25143 Itokawa. Advances in Space Research, 2007, 40, 187-192.	1.2	18
221	Dynamical Characterization and Stabilization of Large Gravity-Tractor Designs. Journal of Guidance, Control, and Dynamics, 2008, 31, 501-521.	1.6	18
222	Circular and zero-inclination solutions for optical observations of Earth-orbiting objects. Celestial Mechanics and Dynamical Astronomy, 2010, 106, 157-182.	0.5	18
223	Small-Body Postrendezvous Characterization via Slow Hyperbolic Flybys. Journal of Guidance, Control, and Dynamics, 2011, 34, 1815-1827.	1.6	18
224	Shape Dependence of the Kinetic Deflection of Asteroids. Journal of Guidance, Control, and Dynamics, 2017, 40, 2417-2431.	1.6	18
225	Delta-V-Based Analysis of Spacecraft Pursuit–Evasion Games. Journal of Guidance, Control, and Dynamics, 2021, 44, 1961-1971.	1.6	18
226	Control of a satellite formation for imaging applications. , 0, , .		17
227	Design of Spacecraft Formation Orbits Relative to a Stabilized Trajectory. Journal of Guidance, Control, and Dynamics, 2005, 28, 782-794.	1.6	17
228	Radar and optical observations and physical modeling of near-Earth Asteroid 10115 (1992 SK). Icarus, 2006, 181, 145-155.	1.1	17
229	Maximizing Payload Mass Fractions of Spacecraft for Interplanetary Electric Propulsion Missions. Journal of Spacecraft and Rockets, 2006, 43, 822-827.	1.3	17
230	Stability of Sun-Synchronous Orbits in the Vicinity of a Comet. Journal of Guidance, Control, and Dynamics, 2009, 32, 1550-1559.	1.6	17
231	Temporarily Captured Asteroids as a Pathway to Affordable Asteroid Retrieval Missions. Journal of Guidance, Control, and Dynamics, 2015, 38, 2132-2145.	1.6	17
232	Dynamics of rotationally fissioned asteroids: non-planar case. Monthly Notices of the Royal Astronomical Society, 2016, 461, 3982-3992.	1.6	17
233	Systematic Structure and Sinks in the YORP Effect. Astronomical Journal, 2019, 157, 105.	1.9	17
234	New Class of Optimal Plane Change Maneuvers. Journal of Guidance, Control, and Dynamics, 2003, 26, 750-757.	1.6	16

#	Article	IF	CITATIONS
235	Constraints on the perturbed mutual motion in Didymos due to impact-induced deformation of its primary after the DART impact. Monthly Notices of the Royal Astronomical Society, 2017, 472, 1641-1648.	1.6	16
236	Bounded relative motion under zonal harmonics perturbations. Celestial Mechanics and Dynamical Astronomy, 2017, 127, 527-548.	0.5	16
237	The shape and surface environment of 2016 HO <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e398" altimg="si127.svg"&gt;<mml:msub><mml:mrow /&gt;<mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:mrow </mml:msub>, Icarus, 2021, 357, 114249.</mml:math 	1.1	16
238	Binary asteroid orbit expansion due to continued YORP spin-up of the primary and primary surface particle motion. Icarus, 2009, 201, 135-152.	1.1	15
239	Evolution of angular velocity for defunct satellites as a result of YORP: An initial study. Advances in Space Research, 2015, 56, 237-251.	1.2	15
240	Tractable Expressions for Nonlinearly Propagated Uncertainties. Journal of Guidance, Control, and Dynamics, 2015, 38, 1146-1151.	1.6	15
241	Matching asteroid population characteristics with a model constructed from the YORP-induced rotational fission hypothesis. Icarus, 2016, 277, 381-394.	1.1	15
242	Design of Bounded Relative Trajectories in the Earth Zonal Problem. Journal of Guidance, Control, and Dynamics, 2017, 40, 3075-3087.	1.6	15
243	Rotational states and shapes of Ryugu and Bennu: Implications for interior structure and strength. Planetary and Space Science, 2021, 204, 105268.	0.9	15
244	Internal rubble properties of asteroid (101955) Bennu. Icarus, 2021, 370, 114665.	1.1	15
245	A numerical model of cohesion in planetary rings. Icarus, 2011, 212, 719-735.	1.1	14
246	Orbital Targeting Using Reduced Eccentric Anomaly Low-Thrust Coefficients. Journal of Guidance, Control, and Dynamics, 2011, 34, 820-831.	1.6	14
247	Linearized Lambert's Problem Solution. Journal of Guidance, Control, and Dynamics, 2016, 39, 2205-2218.	1.6	14
248	Rolling resistance of a spherical pod on a granular bed. Granular Matter, 2017, 19, 1.	1.1	14
249	The Formation of Terraces on Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	14
250	Libration-induced Orbit Period Variations Following the DART Impact. Planetary Science Journal, 2021, 2, 242.	1.5	14
251	THE EFFECT OF THE DUST SIZE DISTRIBUTION ON ASTEROID POLARIZATION. Astronomical Journal, 2009, 138, 1557-1562.	1.9	13
252	Applications of the admissible region to space-based observations. Advances in Space Research, 2013, 52, 696-704.	1.2	13

#	Article	IF	CITATIONS
253	Human exploration of near earth asteroids: Mission analysis for chemical and electric propulsion. Acta Astronautica, 2014, 104, 313-323.	1.7	13
254	Adaptive Reachability Analysis to Achieve Mission Objectives in Strongly Non-Keplerian Systems. Journal of Guidance, Control, and Dynamics, 2015, 38, 468-477.	1.6	13
255	Stable motions around triangular libration points in the real Earth–Moon system. Monthly Notices of the Royal Astronomical Society, 2015, 454, 4172-4181.	1.6	13
256	Maneuver Detection with Event Representation Using Thrust Fourier Coefficients. Journal of Guidance, Control, and Dynamics, 2016, 39, 1080-1091.	1.6	13
257	The Influence of Reactive Torques on Comet Nucleus Rotation. Celestial Mechanics and Dynamical Astronomy, 2003, 86, 249-275.	0.5	12
258	Close proximity operations at small bodies: orbiting, hovering, and hopping. , 2004, , 313-336.		12
259	Bounds on Rotation Periods of Disrupted Binaries in the Full 2-Body Problem. Celestial Mechanics and Dynamical Astronomy, 2004, 89, 127-140.	0.5	12
260	Saturn Trojans: a dynamical point of view. Monthly Notices of the Royal Astronomical Society, 2014, 437, 1420-1433.	1.6	12
261	Effect of Dynamical Accuracy for Uncertainty Propagation of Perturbed Keplerian Motion. Journal of Guidance, Control, and Dynamics, 2015, 38, 2287-2300.	1.6	12
262	The YORP effect on the GOES 8 and GOES 10 satellites: A case study. Advances in Space Research, 2018, 61, 122-144.	1.2	12
263	Scaling behavior of cohesive self-gravitating aggregates. Physical Review E, 2018, 98, .	0.8	12
264	Identifying heteroclinic connections using artificial neural networks. Acta Astronautica, 2019, 161, 192-199.	1.7	12
265	Higher-Order Corrections for Frozen Terminator Orbit Design. Journal of Guidance, Control, and Dynamics, 2020, 43, 1642-1655.	1.6	12
266	Orbit insertion strategy of Hayabusa2's rover with large release uncertainty around the asteroid Ryugu. Astrodynamics, 2020, 4, 309-329.	1.5	12
267	Particle Ejection Contributions to the Rotational Acceleration and Orbit Evolution of Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006284.	1.5	12
268	Autonomous Exploration of a Small Near-Earth Asteroid. Journal of Guidance, Control, and Dynamics, 2021, 44, 701-718.	1.6	12
269	The effect of planetary flybys on singly synchronous binary asteroids. Icarus, 2021, 367, 114554.	1.1	12
270	First-Order Analytical Solution for Spacecraft Motion About (433) Eros. Journal of Guidance, Control, and Dynamics, 2004, 27, 290-293.	1.6	11

#	Article	IF	CITATIONS
271	Close Proximity Operations for Implementing Mitigation Strategies. , 2004, , .		11
272	Polyhedral Potential and Variational Integrator Computation of the Full Two Body Problem. , 2006, , .		11
273	Essential Thrust-Fourier-Coefficient Set of Averaged Gauss Equations for Orbital Mechanics. Journal of Guidance, Control, and Dynamics, 2014, 37, 1236-1249.	1.6	11
274	Close proximity dynamics and control about asteroids. , 2014, , .		11
275	The lift-off velocity on the surface of an arbitrary body. Celestial Mechanics and Dynamical Astronomy, 2016, 125, 1-31.	0.5	11
276	Relative Equilibria in the Spherical, Finite Density Three-Body Problem. Journal of Nonlinear Science, 2016, 26, 1445-1482.	1.0	11
277	Hybrid Method for Uncertainty Propagation of Orbital Motion. Journal of Guidance, Control, and Dynamics, 2018, 41, 240-254.	1.6	11
278	High-fidelity Modeling of Rotationally Fissioned Asteroids. Planetary Science Journal, 2020, 1, 25.	1.5	11
279	Global Solution for the Optimal Feedback Control of the Underactuated Heisenberg System. IEEE Transactions on Automatic Control, 2008, 53, 2638-2642.	3.6	10
280	LAPLACE PLANE MODIFICATIONS ARISING FROM SOLAR RADIATION PRESSURE. Astrophysical Journal, 2014, 786, 45.	1.6	10
281	Identifying and Estimating Mismodeled Dynamics via Optimal Control Policies and Distance Metrics. Journal of Guidance, Control, and Dynamics, 2014, 37, 1512-1523.	1.6	10
282	Tracking Maneuvering Satellite Using Thrust-Fourier-Coefficient Event Representation. Journal of Guidance, Control, and Dynamics, 2016, 39, 2554-2562.	1.6	10
283	Stability in the Full Two-Body Problem. , 2002, , 155-169.		10
284	The Effect of C 22 on Orbit Energy and Angular Momentum. , 1999, , 339-348.		10
285	Deflection of Spacecraft Trajectories as a New Test of General Relativity. Physical Review Letters, 2001, 86, 2942-2945.	2.9	9
286	Solutions of optimal feedback control problems with general boundary conditions using Hamiltonian dynamics and generating functions. , 2004, , .		9
287	Spacecraft Descent and Translation in the Small-body Fixed Frame. , 2004, , .		9
288	Estimating Parameterized Post-Newtonian Parameters from Spacecraft Radiometric Tracking Data. Journal of Spacecraft and Rockets, 2005, 42, 559-568.	1.3	9

#	Article	IF	CITATIONS
289	Fundamental Constraints on Uncertainty Evolution in Hamiltonian Systems. IEEE Transactions on Automatic Control, 2007, 52, 686-691.	3.6	9
290	Control of Science Orbits About Planetary Satellites. Journal of Guidance, Control, and Dynamics, 2009, 32, 223-231.	1.6	9
291	Dynamics of Symplectic Subvolumes. SIAM Journal on Applied Dynamical Systems, 2009, 8, 180-201.	0.7	9
292	Dynamics of the Jupiter Trojans with Saturn's perturbation in the present configuration of the two planets. Celestial Mechanics and Dynamical Astronomy, 2014, 119, 119-142.	0.5	9
293	Maneuver Detection and Reconstruction of Stationkeeping Spacecraft at GEO using the Optimal Control-Based Estimator. IFAC-PapersOnLine, 2015, 48, 216-221.	0.5	9
294	On the \$\$a\$\$ a and \$\$g\$\$ g families of orbits in the Hill problem with solar radiation pressure and their application to asteroid orbiters. Celestial Mechanics and Dynamical Astronomy, 2015, 121, 365-384.	0.5	9
295	The Dynamics of Formation Flight About a Stable Trajectory. Journal of the Astronautical Sciences, 2002, 50, 269-287.	0.8	9
296	Evolution of an Asteroid Family under YORP, Yarkovsky, and Collisions. Astronomical Journal, 2020, 160, 128.	1.9	9
297	Deflection of spacecraft trajectories as a new test of general relativity: Determining the parametrized post-Newtonian parametersl²andl³. Physical Review D, 2004, 69, .	1.6	8
298	On The Concept Of Periapsis In Hill's Problem. Celestial Mechanics and Dynamical Astronomy, 2004, 90, 165-178.	0.5	8
299	Applied Reachability for Space Situational Awareness and Safety in Spacecraft Proximity Operations. , 2009, , .		8
300	Applications of V-Infinity Leveraging Maneuvers to Endgame Strategies for Planetary Moon Orbiters. Journal of Guidance, Control, and Dynamics, 2011, 34, 1298-1310.	1.6	8
301	Relative Equilibria in the Full N-Body Problem with Applications to the Equal MassÂProblem. Mathematics for Industry, 2016, , 31-81.	0.4	8
302	Attractive Sets to Unstable Orbits Using Optimal Feedback Control. Journal of Guidance, Control, and Dynamics, 2016, 39, 2725-2739.	1.6	8
303	Lift-Off Velocity on Solar-System Small Bodies. Journal of Guidance, Control, and Dynamics, 2017, 40, 1990-2005.	1.6	8
304	Dynamics and Control of Surface Exploration Robots on Asteroids. Lecture Notes in Control and Information Sciences, 2009, , 135-150.	0.6	8
305	Navigation for low-cost missions to small solar-system bodies. Acta Astronautica, 1995, 35, 211-220.	1.7	7

7

#	Article	IF	CITATIONS
307	Formation Flight with Generating Functions: Solving the Relative Boundary Value Problem. , 2002, , .		7
308	Astrodynamics Science About Itokawa, Gravity and Ephemeris. , 2006, , .		7
309	Models for the Comet Dynamical Environment. Journal of Guidance, Control, and Dynamics, 2007, 30, 1445-1454.	1.6	7
310	On the rotation of comet Borrelly's nucleus. Celestial Mechanics and Dynamical Astronomy, 2008, 102, 133-147.	0.5	7
311	Stresses in accreted planetary bodies. International Journal of Solids and Structures, 2008, 45, 540-550.	1.3	7
312	Optimal Timing of Control-Law Updates for Unstable Systems with Continuous Control. Journal of Guidance, Control, and Dynamics, 2009, 32, 878-887.	1.6	7
313	Optimal tracking and formation keeping near a general Keplerian orbit under nonlinear perturbations. Advances in Space Research, 2014, 54, 1019-1028.	1.2	7
314	Event Representation-Based Orbit Determination Across Unknown Space Events. Journal of Guidance, Control, and Dynamics, 2015, 38, 2351-2365.	1.6	7
315	Obliquity dependence of the tangential YORP. Astronomy and Astrophysics, 2016, 592, A115.	2.1	7
316	The effect of asteroid topography on surface ablation deflection. Advances in Space Research, 2017, 59, 1144-1155.	1.2	7
317	Orbital Stability Regions for Hypothetical Natural Satellites of (101955) Bennu. Journal of Spacecraft and Rockets, 2019, 56, 789-800.	1.3	7
318	GOES spin state diversity and the implications for GEO debris mitigation. Acta Astronautica, 2020, 167, 212-221.	1.7	7
319	Optimal Control of Sampled Linear Systems With Control-Linear Noise. , 2020, 4, 650-655.		7
320	Limiting Behavior of Asteroid Obliquity and Spin Using a Semi-analytic Thermal Model of the YORP Effect. Astronomical Journal, 2021, 162, 8.	1.9	7
321	Multi-Objective Optimization of Covariance and Energy for Asteroid Transfers. Journal of Guidance, Control, and Dynamics, 2021, 44, 1253-1265.	1.6	7
322	Precise Model for Small-Body Thermal Radiation Pressure Acting on Spacecraft. Journal of Guidance, Control, and Dynamics, 2017, 40, 2432-2441.	1.6	7
323	Solving Two-Point Boundary Value Problems Using Generating Functions: Theory and Applications to Astrodynamics. Elsevier Astrodynamics Series, 2006, , 53-105.	0.4	6
324	Computation and Applications of an Orbital Dynamics Symplectic State Transition Matrix. Journal of Guidance, Control, and Dynamics, 2009, 32, 1111-1123.	1.6	6

#	Article	IF	CITATIONS
325	State Transition Matrix Approximation Using a Generalized Averaging Method. Journal of Guidance, Control, and Dynamics, 2009, 32, 1781-1794.	1.6	6
326	A perturbation theory. Acta Astronautica, 2010, 67, 27-37.	1.7	6
327	Object Correlation, Maneuver Detection, and Maneuver Characterization using Control Effort Metrics with Uncertain Boundary Conditions and Measurements. , 2010, , .		6
328	Combined optimal control and state estimation for the purposes of maneuver detection and reconstruction. , 2014, , .		6
329	Estimation of Dynamics of Space Objects from Visual Feedback during Proximity Operations. , 2014, , .		6
330	Autonomous Maneuver Planning at Small Bodies via Mission Objective Reachability Analysis. , 2014, , .		6
331	Hill Stability in the Full 3-Body Problem. Proceedings of the International Astronomical Union, 2014, 9, 134-137.	0.0	6
332	Reachability Using Arbitrary Performance Indices. IEEE Transactions on Automatic Control, 2015, 60, 1099-1103.	3.6	6
333	Dynamics of the Jupiter Trojans with Saturn's perturbation when the two planets are in migration. Celestial Mechanics and Dynamical Astronomy, 2016, 125, 451-484.	0.5	6
334	Orbit determination across unknown maneuvers using the essential Thrust-Fourier-Coefficients. Acta Astronautica, 2016, 118, 90-95.	1.7	6
335	Coldstone radar evidence for short-axis mode non-principal-axis rotation of near-Earth asteroid (214869) 2007 PA8. Icarus, 2017, 286, 314-329.	1.1	6
336	A Radial Axial-symmetric Intermediary Model for the Roto-orbital Motion. Journal of the Astronautical Sciences, 2018, 65, 1-28.	0.8	6
337	Hybrid Differential Dynamic Programming in the Circular Restricted Three-Body Problem. Journal of Guidance, Control, and Dynamics, 2019, 42, 963-975.	1.6	6
338	Spin state evolution of asteroid (367943) Duende during its 2013 earth flyby. Icarus, 2020, 340, 113518.	1.1	6
339	Drag Coefficient Model to Track Variations due to Attitude and Orbital Motion. Journal of Guidance, Control, and Dynamics, 2020, 43, 1915-1926.	1.6	6
340	The surface sensitivity of rubble-pile asteroids during a distant planetary encounter: Influence of asteroid shape elongation. Icarus, 2021, 358, 114205.	1.1	6
341	A Drag Coefficient Modeling Approach Using Spatial and Temporal Fourier Expansions for Orbit Determination. Journal of the Astronautical Sciences, 2020, 67, 1139-1168.	0.8	6
342	Observation and Maneuver Detection for Cislunar Vehicles. Journal of the Astronautical Sciences, 2021, 68, 826-854.	0.8	6

#	Article	IF	CITATIONS
343	Geophysical and orbital environments of asteroid 469219 2016 HO3. Astrodynamics, 2023, 7, 31-50.	1.5	6
344	Solutions of the optimal feedback control problem using hamiltonian dynamics and generating functions. , 0, , .		5
345	Optimal motion planning for dual-spacecraft interferometry. IEEE Transactions on Aerospace and Electronic Systems, 2007, 43, 723-737.	2.6	5
346	Metrics on the space of bounded Keplerian orbits and space situational awareness. , 2009, , .		5
347	Third-Body-Driven vs. One-Impulse Plane Changes. Journal of the Astronautical Sciences, 2009, 57, 545-559.	0.8	5
348	Long-term Dynamics of HAMR Objects in HEO. , 2012, , .		5
349	A Nonlinear Observer Design for a Rigid Body in the Proximity of a Spherical Asteroid. , 2013, , .		5
350	EQUILIBRIUM ROTATION STATES OF DOUBLY SYNCHRONOUS BINARY ASTEROIDS. Astrophysical Journal Letters, 2016, 833, L23.	3.0	5
351	Observational investigation of the 2013 near-Earth encounter by asteroid (367943) Duende. Icarus, 2020, 340, 113519.	1.1	5
352	Averaged Solar Torque Rotational Dynamics for Defunct Satellites. Journal of Guidance, Control, and Dynamics, 2021, 44, 749-766.	1.6	5
353	Optimal fuel-image motion planning for a class of dual spacecraft formations. , 0, , .		4
354	Dynamically Relevant Local Coordinates for Halo Orbits. , 2008, , .		4
355	Asteroid surface probes: A low-cost approach for the in situ exploration of small solar system objects. , 2009, , .		4
356	Correlation of Optical Observations of Earth-Orbiting Objects by Means of Probability Distributions. , 2010, , .		4
357	Dynamics of a Tethered Observatory at Jupiter. Journal of Guidance, Control, and Dynamics, 2012, 35, 195-207.	1.6	4
358	Sandcastles in space. Nature, 2014, 512, 139-140.	13.7	4
359	Averaging analyses for spacecraft orbital motions around asteroids. Acta Mechanica Sinica/Lixue Xuebao, 2014, 30, 294-300.	1.5	4
360	Optimal Formation Reconfigurations Subject to Hill Three-Body Dynamics. Journal of Guidance, Control, and Dynamics, 2014, 37, 700-705.	1.6	4

#	Article	IF	CITATIONS
361	Human exploration of near Earth Asteroids: Architecture of proximity operations. Acta Astronautica, 2015, 110, 18-28.	1.7	4
362	Precise Solar Radiation Pressure Models for Small-Body Orbiters: Applications to OSIRIS-REx Spacecraft. Journal of Guidance, Control, and Dynamics, 2017, 40, 1638-1650.	1.6	4
363	Constraints on bounded motion and mutual escape for the full 3-body problem. Celestial Mechanics and Dynamical Astronomy, 2017, 128, 131-148.	0.5	4
364	Spacecraft Rendezvous and Pursuit/Evasion Analysis Using Reachable Sets. , 2018, , .		4
365	Geotechnical Properties of Asteroids Affecting Surface Operations, Mining, and In Situ Resource Utilization Activities. , 2018, , 439-476.		4
366	Bouncing Return Trajectory Design for Precise Lander Deployment to Asteroids. Journal of Guidance, Control, and Dynamics, 2022, 45, 121-137.	1.6	4
367	Laboratory experiments with self-cohesive powders: Application to the morphology of regolith on small asteroids. Planetary and Space Science, 2021, 207, 105321.	0.9	4
368	Optimal Spacecraft Guidance With Asynchronous Measurements and Noisy Impulsive Controls. , 2021, 5, 1813-1818.		4
369	Dynamic stabilization of L2 periodic orbits using attitude-orbit coupling effects. Journal of Aerospace Engineering, Sciences and Applications, 2012, 4, 73-81.	0.3	4
370	Changes in Rotational Angular Momentum Due to Gravitational Interactions Between Two Finite Bodies. , 2001, , 39-44.		4
371	A numerical simulation approach to the crater-scaling relationships in low-speed impacts under microgravity. Icarus, 2022, 377, 114882.	1.1	4
372	Periodic Orbits in the Restricted Full Three-Body , 2005, , .		3
373	Optimal formation control for imaging and fuel usage with terminal imaging constraints. , 0, , .		3
374	Extended applications of generating functions to optimal feedback control problems. , 0, , .		3
375	Nonlinear Semi-Analytic Method for Spacecraft Navigation. , 2006, , .		3
376	The Dynamics of NEO Binary Asteroids. Proceedings of the International Astronomical Union, 2006, 2, 177-190.	0.0	3
377	Reachability set subspace computation for nonlinear systems using sampling methods. , 2011, , .		3
378	Periodic Orbits of a Hill-Tether Problem Originated from Collinear Points. Journal of Guidance, Control, and Dynamics, 2012, 35, 222-233.	1.6	3

#	Article	IF	CITATIONS
379	General Solar Radiation Pressure Model for Global Positioning System Orbit Determination. Journal of Guidance, Control, and Dynamics, 2014, 37, 325-330.	1.6	3
380	Applications of Symplectic Topology to Orbit Uncertainty and Spacecraft Navigation. Journal of the Astronautical Sciences, 2014, 59, 63-83.	0.8	3
381	Hill Stability of Configurations in the Full N-Body Problem. Proceedings of the International Astronomical Union, 2015, 10, 128-134.	0.0	3
382	Variation of delivered impulse as a function of asteroid shape. , 2015, , .		3
383	Efficiently evaluating reachable sets in the circular restricted 3-body problem. IEEE Transactions on Aerospace and Electronic Systems, 2015, 51, 454-467.	2.6	3
384	Looking into the evolution of granular asteroids in the Solar System. EPJ Web of Conferences, 2017, 140, 14004.	0.1	3
385	A New Equilibrium State for Singly Synchronous Binary Asteroids. Astrophysical Journal Letters, 2018, 857, L5.	3.0	3
386	Nonlinear Attractive and Reachable Sets Under Optimal Control in Three-Body Problem. Journal of Guidance, Control, and Dynamics, 2018, 41, 1766-1775.	1.6	3
387	Stability of the Euler resting N-body relative equilibria. Celestial Mechanics and Dynamical Astronomy, 2018, 130, 1.	0.5	3
388	Dynamics and Stability of Sun-Driven Transfers from Low Earth to Geosynchronous Orbit. Journal of Guidance, Control, and Dynamics, 2018, 41, 2002-2010.	1.6	3
389	Disassociation energies for the finite-density N-body problem. Celestial Mechanics and Dynamical Astronomy, 2020, 132, 1.	0.5	3
390	Minimum Bounds on Multispacecraft ΔV Optimal Cooperative Rendezvous. Journal of Guidance, Control, and Dynamics, 2020, 43, 2333-2348.	1.6	3
391	Inverting gas-surface interaction parameters from Fourier drag-coefficient estimates for a given atmospheric model. Advances in Space Research, 2021, 68, 1902-1927.	1.2	3
392	Radar and Optical Study of Defunct Geosynchronous Satellites. Journal of the Astronautical Sciences, 2021, 68, 728-749.	0.8	3
393	Debris and Sample Transport About Asteroids. , 1998, , .		3
394	The Dynamics about Asteroid (101955) Bennu. , 2022, , .		3
395	The Effect of C22 on Orbit Energy and Angular Momentum. International Astronomical Union Colloquium, 1999, 172, 339-348.	0.1	2
396	Optimal Placement of Statistical Maneuvers in an Unstable Orbital Environment. , 2002, , .	_	2

#	Article	IF	CITATIONS
397	Optimal Plane Changes Using Third-Body Forces. Annals of the New York Academy of Sciences, 2004, 1017, 255-266.	1.8	2
398	Spacecraft Formation Dynamics and Design. , 2004, , .		2
399	Identifying Safe Zones for Planetary Satellite Orbiters. , 2004, , .		2
400	Globally Optimal Feedback Control Law of the Underactuated Heisenberg System by Generating Functions. , 2006, , .		2
401	Bifurcations and dynamical evolution of eigenvalues of Hamiltonian systems. Physica D: Nonlinear Phenomena, 2006, 213, 66-75.	1.3	2
402	Spacecraft Dynamics in the Vicinity of a Comet in a Rotating Frame. , 2008, , .		2
403	Io Exploration with Electrodynamic Tethers. , 2008, , .		2
404	A secondâ€order optimization algorithm using quadric control updates for multistage optimal control problems. Optimal Control Applications and Methods, 2009, 30, 525-536.	1.3	2
405	Analytical Estimates of Gravity Field via Flybys. , 2010, , .		2
406	LQR performance index distribution with uncertain boundary conditions. , 2011, , .		2
407	Identifying and Quantifying Mis-Modeled Dynamics via Optimal Control Problem Distance Metrics. , 2012, , .		2
408	Efficiently Locating Impact and Escape Scenarios in Spacecraft Reachability Sets. , 2012, , .		2
409	Jovian Capture of a Spacecraft with a Self-Balanced Electrodynamic Bare Tether. Journal of Spacecraft and Rockets, 2014, 51, 1401-1412.	1.3	2
410	Optimal Deployment of Solar Radiation Pressure Enhancement Devices for Space Debris Mitigation. , 2018, , .		2
411	An optimization approach for observation association with systemic uncertainty applied to electro-optical systems. Advances in Space Research, 2018, 61, 2709-2724.	1.2	2
412	Gravitational Force Model Aliasing with Nongravitational Force Coefficients in Dynamic Prediction. Journal of Guidance, Control, and Dynamics, 2020, 43, 1984-1997.	1.6	2
413	Reachability of a Passive Solar Sail in Earth Orbit. Journal of Guidance, Control, and Dynamics, 2021, 44, 360-369.	1.6	2
414	Seismic waves in the asteroid environment. EPJ Web of Conferences, 2021, 249, 13001.	0.1	2

#	Article	IF	CITATIONS
415	Expansion Maps: Designing Relative Trajectories on Quasi-Periodic Orbits. Journal of Guidance, Control, and Dynamics, 2021, 44, 457-468.	1.6	2
416	The Feasibility of Targeting Chaotic Regions in the GNSS Regime. Journal of the Astronautical Sciences, 2021, 68, 553-584.	0.8	2
417	Effects of Orbit Variations and J2 Perturbations on a Class of Earth-Orbiting Interferometric Observatories. Journal of the Astronautical Sciences, 2005, 53, 147-166.	0.8	2
418	NAVIGATION OF SPACECRAFT IN UNSTABLE ORBITAL ENVIRONMENTS. , 2003, , .		2
419	Formulation of a Hamiltonian Cauchy Problem for Solving Optimal Feedback Control Problems. , 0, , .		1
420	Solving optimal feedback control problems by the Hamilton-Jacobi theory. , 2006, , .		1
421	Optimal Formation Design for Imaging and Fuel Usage. Journal of Guidance, Control, and Dynamics, 2007, 30, 1511-1515.	1.6	1
422	The eccentric frame decomposition of central force fields. Celestial Mechanics and Dynamical Astronomy, 2008, 100, 43-62.	0.5	1
423	Trajectory Control for General Solar Sails. , 2008, , .		1
424	Characterization of Spacecraft and Debris Trajectory Stability within Binary Asteroid Systems. , 2008, ,		1
425	Examining Groundtrack Geometry Transitions by Evaluating the Number of Longitude-Rate Zeros. Journal of Guidance, Control, and Dynamics, 2008, 31, 1516-1521.	1.6	1
426	Optimal timing of control law updates for unstable systems with continuous control. , 2008, , .		1
427	Correlation of multiple singular observations and initial state estimation by means of probability distributions of high codimension. , 2011, , .		1
428	Perturbation Theory for Hamilton's Principal Function. Journal of Guidance, Control, and Dynamics, 2011, 34, 1129-1142.	1.6	1
429	Computational Efficiency of Symplectic Integrators for Space Debris Orbit Propagation. , 2012, , .		1
430	Understanding and Utilizing Properties of Phase Space near a Periodic Orbit for the Jupiter Europa Orbiter. , 2012, , .		1
431	Optimal Formation Reconfiguration by Using Generating Functions: Applications to the Hill Three-Body Problem. , 2012, , .		1
432	Fourier Coefficient Selection for Low-Thrust Control Shaping. Journal of Guidance, Control, and Dynamics, 2013, 36, 1783-1786.	1.6	1

#	Article	IF	CITATIONS
433	Granular cohesion and fast rotators in the NEA population. , 2013, , .		1
434	Laplace Plane Dynamics with Solar Radiation Pressure in the Vicinity of an Asteroid. , 2014, , .		1
435	Long-Life Europa Geodesy Orbits Accounting for Navigation Uncertainties. Journal of Guidance, Control, and Dynamics, 2014, 37, 413-424.	1.6	1
436	Estimation of Asteroid Landing Trajectories Via Line-Of-Sight Measurements. , 2014, , .		1
437	Failure mode diagram of rubble pile asteroids: Application to (25143) asteroid Itokawa. Proceedings of the International Astronomical Union, 2015, 10, 122-127.	0.0	1
438	Analytical solution for the normal emission portion of the averaged Yarkovsky–O'Keefe–Radzvieskii–Paddack coefficient for a single facet. Monthly Notices of the Royal Astronomical Society, 2015, 446, 4029-4038.	1.6	1
439	Energy dissipation end states of the sphere restricted planar three-body problem with collisional interaction. Monthly Notices of the Royal Astronomical Society, 2016, 463, 794-801.	1.6	1
440	Optimization of Hybrid Method for Uncertainty Propagation of Non-Keplerian Motion. , 2016, , .		1
441	Reactive and Robust Paradigms for Autonomous Mission Design at Small Bodies. Journal of Guidance, Control, and Dynamics, 2017, 40, 333-343.	1.6	1
442	Small solar system bodies as granular systems. EPJ Web of Conferences, 2017, 140, 14011.	0.1	1
443	Representing dynamics in the eccentric Hill system using a neural network architecture. Astrodynamics, 2019, 3, 301-324.	1.5	1
444	Study of the roto-orbital motion using intermediaries: numerical experiments. Celestial Mechanics and Dynamical Astronomy, 2019, 131, 1.	0.5	1
445	Sensitivity of Optimal Control Problems Arising from their Hamiltonian Structure. Journal of the Astronautical Sciences, 2020, 67, 539-551.	0.8	1
446	Generalized Spacecraft Formation Design through Exploitation of Quasi-Periodic Tori Families. , 2020,		1
447	Resonance-Averaged Solar Torque Dynamics for Tumbling Satellites. Journal of Guidance, Control, and Dynamics, 0, , 1-12.	1.6	1
448	Numerical Method of Symplectic State Transition Matrix and Application to Fully Perturbed Earth Orbit. Transactions of the Japan Society for Aeronautical and Space Sciences, 2010, 53, 105-113.	0.4	1
449	Analysis of Cohesion in Fast-spinning Small Bodies. Planetary Science Journal, 2021, 2, 229.	1.5	1
450	The Earth-Moon L <sub>2</sub> Quasi-Halo Orbit Family: Characteristics and Manifold Applications. ,		1

2022, , .

#	Article	IF	CITATIONS
451	Characterizing doubly-averaged dynamical models in medium earth orbit. Acta Astronautica, 2022, 194, 126-126.	1.7	1
452	Issues of Landing on Near Earth Asteroids. , 1996, , 54.		0
453	A Test of General Relativity: Estimating PPN parameters γ and β from Spacecraft Radiometric Tracking Data. Nuclear Physics, Section B, Proceedings Supplements, 2004, 134, 181-183.	0.5	0
454	Orbit Design for General Relativity Experiments: Heliocentric and Mercury-centric Cases. , 2004, , .		0
455	Relative Equilibria for General Gravity Fields in the Sphere-Restricted Full Two-Body Problem. Annals of the New York Academy of Sciences, 2005, 1065, 375-390.	1.8	0
456	Optimal Control of Spacecraft Orbital Maneuvers by the Hamilton-Jacobi Theory. , 2006, , .		0
457	Realistic Models for the Comet Dynamical Environment. , 2006, , .		Ο
458	General Dynamics in the Restricted Full Three-Body Problem. , 2006, , .		0
459	Fundamental constraints on uncertainty evolution in Hamiltonian systems. , 2006, , .		Ο
460	Dynamics of symplectic subvolumes. , 2007, , .		0
461	Nonlinear Semi-Analytic Methods for Spacecraft Trajectory Design, Control, and Navigation. AIP Conference Proceedings, 2007, , .	0.3	Ο
462	Preliminary Analysis of Space Transportation Systems with Spaceports Around Libration Points. , 2008, , .		0
463	Analytical reachability results for a class of nonlinear systems with ellipsoidal initial sets. , 2009, , .		Ο
464	The Modeling and Dynamics of Small Asteroids as Physical Bodies. , 2009, , .		0
465	Equivalent Average Trajectory Dynamics Using the Reduced Low-Thrust Coefficients. , 2010, , .		Ο
466	Implications of electrostatics and cohesion for asteroid surface exploration. , 2011, , .		0
467	Optimal reachability sets using Generalized Independent Parameters. , 2011, , .		0
468	Studies of 3D dust motion about asteroids. , 2012, , .		0

Studies of 3D dust motion about asteroids. , 2012, , . 468

#	Article	IF	CITATIONS
469	Analytical Metrics for Asteroid Mitigation. , 2014, , .		0
470	Linearized Lambert's Solution for Computationally Efficient Applications. , 2014, , .		0
471	Spherical Harmonic Potentials within the Brillouin Sphere. , 2014, , .		Ο
472	Dynamics of Satellites Around Asteroids in Presence of Solar Radiation Pressure. Proceedings of the International Astronomical Union, 2015, 10, 259-264.	0.0	0
473	Abstraction Predictive Control for Chaotic Spacecraft Orbit Design**This work was supported by a NASA Space Technology Research Fellowship, grant #NNX12AM40H IFAC-PapersOnLine, 2015, 48, 178-184.	0.5	0
474	Drag-perturbed bounded relative trajectories in low Earth orbit: A semi-analytical approach. Acta Astronautica, 2018, 153, 229-239.	1.7	0
475	Differential Dynamic Programming in the Three-Body Problem. , 2018, , .		Ο
476	YORP equilibria: ways out of YORP cycles. Proceedings of the International Astronomical Union, 2018, 14, 15-15.	0.0	0
477	Leveraging Artificial Neural Networks to Systematically Explore Solar Gravity Driven Transfers in the Martian System. Journal of the Astronautical Sciences, 2019, 66, 282-321.	0.8	0
478	Estimation of Stochastic Events for Vehicles in NRHOs. , 2020, , .		0
479	Series Expansion Form of an Approximate State Transition Matrix for Fully Perturbed Orbits. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2010, 8, Pd_53-Pd_60.	0.1	0
480	King-Hele orbit theory for periodic orbit and attitude variations. Monthly Notices of the Royal Astronomical Society, 2020, 501, 1168-1187.	1.6	0
481	Robust Spacecraft Guidance with Control-Dependent Noise: Analysis and Application. , 2022, , .		0
482	Estimation of Binary Asteroid Gravity Using Mutual Orbit Observations. , 2022, , .		0
483	A framework to estimate local atmospheric densities with reduced drag oefficient biases. Space Weather, 0, , .	1.3	0
484	Electrostatic Lofting Conditions for Supercharged Dust. Astrophysical Journal, 2022, 931, 122.	1.6	0