Daniel J Scheeres

List of Publications by Citations

452 papers	13,476 citations	59 h-index	98 g-index
504 ext. papers	16,039 ext. citations	4.5 avg, IF	6.94 L-index

#	Paper	IF	Citations
452	The rubble-pile asteroid Itokawa as observed by Hayabusa. *Science*, **2006**, 312, 1330-4	33.3	621
451	Touchdown of the Hayabusa spacecraft at the Muses Sea on Itokawa. *Science*, **2006**, 312, 1350-3	33.3	275
450	OSIRIS-REx: Sample Return from Asteroid (101955) Bennu. *Space Science Reviews*, **2017**, 212, 925-984	7.5	268
449	Hayabusa2 arrives at the carbonaceous asteroid 162173 Ryugu-A spinning top-shaped rubble pile. *Science*, **2019**, 364, 268-272	33.3	254
448	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	1.4	250
447	Orbits Close to Asteroid 4769 Castalia. *Icarus*, **1996**, 121, 67-87	3.8	225
446	The unexpected surface of asteroid (101955) Bennu. *Nature*, **2019**, 568, 55-60	50.4	219
445	Regolith migration and sorting on asteroid Itokawa. *Science*, **2007**, 316, 1011-4	33.3	212
444	Radar imaging of binary near-Earth asteroid (66391) 1999 KW4. *Science*, **2006**, 314, 1276-80	33.3	207
443	Scaling forces to asteroid surfaces: The role of cohesion. *Icarus*, **2010**, 210, 968-984	3.8	200
442	Determination of Shape, Gravity, and Rotational State of Asteroid 433 Eros. *Icarus*, **2002**, 155, 3-17	3.8	184
441	Mass and local topography measurements of Itokawa by Hayabusa. *Science*, **2006**, 312, 1344-7	33.3	182
440	Dynamics about Uniformly Rotating Triaxial Ellipsoids: Applications to Asteroids. *Icarus*, **1994**, 110, 225-238	3.8	175
439	Characterizing and navigating small bodies with imaging data. *Meteoritics and Planetary Science*, **2008**, 43, 1049-1061	2.8	152
438	Radar observations of asteroid 216 kleopatra. *Science*, **2000**, 288, 836-9	33.3	151
437	Estimating the mass of asteroid 253 mathilde from tracking data during the NEAR flyby. *Science*, **1997**, 278, 2106-9	33.3	148
436	Shape model and surface properties of the OSIRIS-REx target Asteroid (101955) Bennu from radar and lightcurve observations. *Icarus*, **2013**, 226, 629-640	3.8	147

435	Formation of asteroid pairs by rotational fission. *Nature*, **2010**, 466, 1085-8	50.4	144
434	Dynamics of Orbits Close to Asteroid 4179 Toutatis. *Icarus*, **1998**, 132, 53-79	3.8	144
433	The strength of regolith and rubble pile asteroids. *Meteoritics and Planetary Science*, **2014**, 49, 788-811	2.8	143
432	Dynamics of rotationally fissioned asteroids: Source of observed small asteroid systems. *Icarus*, **2011**, 214, 161-178	3.8	142
431	Radio science results during the NEAR-shoemaker spacecraft rendezvous with eros. *Science*, **2000**, 289, 2085-8	33.3	140
430	The OSIRIS-REx target asteroid (101955) Bennu: Constraints on its physical, geological, and dynamical nature from astronomical observations. *Meteoritics and Planetary Science*, **2015**, 50, 834-849	2.8	135
429	Evaluation of the Dynamic Environment of an Asteroid: Applications to 433 Eros. *Journal of Guidance, Control, and Dynamics*, **2000**, 23, 466-475	2.1	134
428	Disruption of kilometre-sized asteroids by energetic collisions. *Nature*, **1998**, 393, 437-440	50.4	132
427	Spin rate of asteroid (54509) 2000 PH5 increasing due to the YORP effect. *Science*, **2007**, 316, 274-7	33.3	127
426	Rotational fission of contact binary asteroids. *Icarus*, **2007**, 189, 370-385	3.8	125
425	Nonlinear Mapping of Gaussian Statistics: Theory and Applications to Spacecraft Trajectory Design. *Journal of Guidance, Control, and Dynamics*, **2006**, 29, 1367-1375	2.1	120
424	Craters, boulders and regolith of (101955) Bennu indicative of an old and dynamic surface. *Nature Geoscience*, **2019**, 12, 242-246	18.3	114
423	Orbital Motion in Strongly Perturbed Environments **2012**,		113
422	Control of Hovering Spacecraft Near Small Bodies: Application to Asteroid 25143 Itokawa. *Journal of Guidance, Control, and Dynamics*, **2005**, 28, 343-354	2.1	111
421	Shape of (101955) Bennu indicative of a rubble pile with internal stiffness. *Nature Geoscience*, **2019**, 12, 247-252	18.3	108
420	In search of the source of asteroid (101955) Bennu: Applications of the stochastic YORP model. *Icarus*, **2015**, 247, 191-217	3.8	101
419	Dynamical configuration of binary near-Earth asteroid (66391) 1999 KW4. *Science*, **2006**, 314, 1280-3	33.3	98
418	The dynamic geophysical environment of (101955) Bennu based on OSIRIS-REx measurements. *Nature Astronomy*, **2019**, 3, 352-361	12.1	90

417	The dynamical evolution of uniformly rotating asteroids subject to YORP. *Icarus*, **2007**, 188, 430-450	3.8	89
416	Stability Analysis of Planetary Satellite Orbiters: Application to the Europa Orbiter. *Journal of Guidance, Control, and Dynamics*, **2001**, 24, 778-787	2.1	83
415	Orbit Mechanics About Asteroids and Comets. *Journal of Guidance, Control, and Dynamics*, **2012**, 35, 987-997	2.1	80
414	Stabilizing Motion Relative to an Unstable Orbit: Applications to Spacecraft Formation Flight. *Journal of Guidance, Control, and Dynamics*, **2003**, 26, 62-73	2.1	77
413	Episodes of particle ejection from the surface of the active asteroid (101955) Bennu. *Science*, **2019**, 366,	33.3	77
412	Stability of the planar full 2-body problem. *Celestial Mechanics and Dynamical Astronomy*, **2009**, 104, 103-128	1.4	76
411	Control of Hovering Spacecraft Using Altimetry. *Journal of Guidance, Control, and Dynamics*, **2002**, 25, 786-795	2.1	76
410	Effects of Gravitational Interactions on Asteroid Spin States. *Icarus*, **2000**, 147, 106-118	3.8	76
409	The role of cohesive forces in particle launching on the Moon and asteroids. *Planetary and Space Science*, **2011**, 59, 1758-1768	2	75
408	Radar observations and a physical model of Asteroid 1580 Betulia. *Icarus*, **2007**, 186, 152-177	3.8	73
407	Orbital mechanics about small bodies. *Acta Astronautica*, **2012**, 72, 1-14	2.9	71
406	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	2	71
405	Solving Optimal Continuous Thrust Rendezvous Problems with Generating Functions. *Journal of Guidance, Control, and Dynamics*, **2006**, 29, 321-331	2.1	70
404	The geophysical environment of Bennu. *Icarus*, **2016**, 276, 116-140	3.8	70
403	High-resolution model of Asteroid 4179 Toutatis. *Icarus*, **2003**, 161, 346-355	3.8	68
402	Stability in the Full Two-Body Problem. *Celestial Mechanics and Dynamical Astronomy*, **2002**, 83, 155-169	1.4	67
401	The operational environment and rotational acceleration of asteroid (101955) Bennu from OSIRIS-REx observations. *Nature Communications*, **2019**, 10, 1291	17.4	65
400	DEM simulation of rotation-induced reshaping and disruption of rubble-pile asteroids. *Icarus*, **2012**, 218, 876-894	3.8	64

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397	Landslides and Mass shedding on spinning spheroidal asteroids. *Icarus*, **2015**, 247, 1-17	3.8	61
396	Solving Relative Two-Point Boundary Value Problems: Spacecraft Formulation Flight Transfers Application. *Journal of Guidance, Control, and Dynamics*, **2004**, 27, 693-704	2.1	61
395	SIMULATING ASTEROID RUBBLE PILES WITH A SELF-GRAVITATING SOFT-SPHERE DISTINCT ELEMENT METHOD MODEL. *Astrophysical Journal*, **2011**, 727, 120	4.7	59
394	Escaping Trajectories in the Hill Three-Body Problem and Applications. *Journal of Guidance, Control, and Dynamics*, **2003**, 26, 224-232	2.1	59
393	INTERNAL STRUCTURE OF ASTEROIDS HAVING SURFACE SHEDDING DUE TO ROTATIONAL INSTABILITY. *Astrophysical Journal*, **2015**, 808, 63	4.7	58
392	On the Milankovitch orbital elements for perturbed Keplerian motion. *Celestial Mechanics and Dynamical Astronomy*, **2014**, 118, 197-220	1.4	58
391	Fission and reconfiguration of bilobate comets as revealed by 67P/Churyumov-Gerasimenko. *Nature*, **2016**, 534, 352-5	50.4	56
390	Radar observations of asteroid 25143 Itokawa (1998 SF36). *Meteoritics and Planetary Science*, **2004**, 39, 407-424	2.8	56
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388	Radar Observations and Physical Model of Asteroid 6489 Golevka. *Icarus*, **2000**, 148, 37-51	3.8	55
387	Solar Sail Orbit Operations at Asteroids. *Journal of Spacecraft and Rockets*, **2001**, 38, 279-286	1.5	54
386	Lightcurve, Color and Phase Function Photometry of the OSIRIS-REx Target Asteroid (101955) Bennu. *Icarus*, **2013**, 226, 663-670	3.8	53
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364	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	1.4	44

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353	Nonlinear Semi-Analytic Methods for Trajectory Estimation. *Journal of Guidance, Control, and Dynamics*, **2007**, 30, 1668-1676	2.1	39
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