Bashar Rizk

List of Publications by Year
in descending order

51 papers	3,481 citations	186265 28 h-index	197818 49 g-index
54 all docs	54 docs citations	54 times ranked	2013 citing authors

#	Article	IF	Citations
1	Development and Flight Performance of the Autonomous Navigation Feature Catalog for OSIRIS-REx Asteroid Sample Collection. , 2022, , .		2
2	Concept of Operations for OSIRIS-REx Optical Navigation Image Planning. , 2022, , .		5
3	Cross-Instrument Comparison of MapCam and OVIRS on OSIRIS-REx. Space Science Reviews, 2022, 218, 5.	8.1	2
4	The Formation of Terraces on Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	14
5	The Use of Digital Terrain Models for Natural Feature Tracking at Asteroid Bennu. Planetary Science Journal, 2022, 3, 100.	3.6	17
6	Ground Testing of Digital Terrain Models to Prepare for OSIRIS-REx Autonomous Vision Navigation Using Natural Feature Tracking. Planetary Science Journal, 2022, 3, 104.	3.6	8
7	Autonomous Navigation Performance Using Natural Feature Tracking during the OSIRIS-REx Touch-and-Go Sample Collection Event. Planetary Science Journal, 2022, 3, 101.	3.6	15
8	Alignment of fractures on Bennuâ€™s boulders indicative of rapid asteroid surface evolution. Nature Geoscience, 2022, 15, 453-457.	12.9	11
9	Near-zero cohesion and loose packing of Bennuâ€™s near subsurface revealed by spacecraft contact. Science Advances, 2022, 8, .	10.3	31
10	Spacecraft sample collection and subsurface excavation of asteroid (101955) Bennu. Science, 2022, 377, 285-291.	12.6	39
11	Disk-resolved photometric modeling and properties of asteroid (101955) Bennu. Icarus, 2021, 357, 113724.	2.5	29
12	A high-resolution global basemap of (101955) Bennu. Icarus, 2021, 357, 113690.	2.5	41
13	A high-resolution normal albedo map of asteroid (101955) Bennu. Icarus, 2021, 355, 114133.	2.5	14
14	Exogenic basalt on asteroid (101955) Bennu. Nature Astronomy, 2021, 5, 31-38.	10.1	57
15	Particle Size-Frequency Distributions of the OSIRIS-REx Candidate Sample Sites on Asteroid (101955) Bennu. Remote Sensing, 2021, 13, 1315.	4.0	33
16	Characterization of Exogenic Boulders on the Near-Earth Asteroid (101955) Bennu from OSIRIS-REx Color Images. Planetary Science Journal, 2021, 2, 114.	3.6	5
17	Regional Photometric Modeling of Asteroid (101955) Bennu. Planetary Science Journal, 2021, 2, 124.	3.6	4
18	Outgassing from the OSIRIS-REx sample return capsule: characterization and mitigation. Acta Astronautica, 2020, 166, 391-399.	3.2	7

#	Article	IF	Citations
19	Hemispherical differences in the shape and topography of asteroid (101955) Bennu. Science Advances, 2020, 6, .	10.3	57
20	Variations in color and reflectance on the surface of asteroid (101955) Bennu. Science, 2020, 370, .	12.6	84
21	Asteroid (101955) Bennuâ€™s weak boulders and thermally anomalous equator. Science Advances, 2020, 6, .	10.3	83
22	Photometry of Particles Ejected From Active Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006381.	3.6	23
23	Bennuâ€™s near-Earth lifetime of 1.75 million years inferred from craters on its boulders. Nature, 2020, 587, 205-209.	27.8	62
24	Assessing stereophotoclinometry by modeling a physical wall representing asteroid Bennu. Planetary and Space Science, 2020, 193, 105077.	1.7	10
25	In situ evidence of thermally induced rock breakdown widespread on Bennuâ€™s surface. Nature Communications, 2020, 11, 2913.	12.8	62
26	Interpreting the Cratering Histories of Bennu, Ryugu, and Other Spacecraft-explored Asteroids. Astronomical Journal, 2020, 160, 14.	4.7	34
27	Ground and In-Flight Calibration of the OSIRIS-REx Camera Suite. Space Science Reviews, 2020, 216, 12.	8.1	57
28	Successful Use of Microporous Polytetrafluoroethylene Flexible Thin Sheets in NASAâ€™s OSIRIS-REx Mission. , 2019, , .		0
29	OSIRIS-REx low-velocity particles during outbound cruise. Advances in Space Research, 2019, 63, 672-691.	2.6	6
30	The operational environment and rotational acceleration of asteroid (101955) Bennu from OSIRIS-REx observations. Nature Communications, 2019, 10, 1291.	12.8	99
31	Properties of rubble-pile asteroid (101955) Bennu from OSIRIS-REx imaging and thermal analysis. Nature Astronomy, 2019, 3, 341-351.	10.1	188
32	Craters, boulders and regolith of (101955) Bennu indicative of an old and dynamic surface. Nature Geoscience, 2019, 12, 242-246.	12.9	161
33	Shape of (101955) Bennu indicative of a rubble pile with internal stiffness. Nature Geoscience, 2019, 12, 247-252.	12.9	179
34	The unexpected surface of asteroid (101955) Bennu. Nature, 2019, 568, 55-60.	27.8	364
35	Episodes of particle ejection from the surface of the active asteroid (101955) Bennu. Science, 2019, 366, .	12.6	129
36	OSIRIS-REx Contamination Control Strategy and Implementation. Space Science Reviews, 2018, 214, 1.	8.1	50

#	Article	IF	Citations
37	OCAMS: The OSIRIS-REx Camera Suite. Space Science Reviews, 2018, 214, 1.	8.1	119
38	Overcoming the Challenges Associated with Imageâ€Based Mapping of Small Bodies in Preparation for the OSIRISâ€REx Mission to (101955) Bennu. Earth and Space Science, 2018, 5, 929-949.	2.6	26
39	OSIRIS-REx: Sample Return from Asteroid (101955) Bennu. Space Science Reviews, 2017, 212, 925-984.	8.1	426
40	Rounded boulders on Itokawa as clues to geological processes in the early solar system. Planetary and Space Science, 2015, 119, 181-184.	1.7	4
41	Lightcurve, Color and Phase Function Photometry of the OSIRIS-REx Target Asteroid (101955) Bennu. Icarus, 2013, 226, 663-670.	2.5	63
42	DISR imaging and the geometry of the descent of the Huygens probe within Titan's atmosphere. Planetary and Space Science, 2007, 55, 1896-1935.	1.7	70
43	Rain, winds and haze during the Huygens probe's descent to Titan's surface. Nature, 2005, 438, 765-778.	27.8	529
44	The Descent Imager/Spectral Radiometer (DISR) Experiment on the Huygens Entry Probe of Titan. Space Science Reviews, 2002, 104, 469-551.	8.1	58
45	Private life of an integrating sphere: the radiant homogeneity of the Descent Imagerâ€“Spectral Radiometer calibration sphere. Applied Optics, 2001, 40, 2095.	2.1	5
46	Small comets: Naked-eye visibility. Geophysical Research Letters, 1997, 24, 3121-3124.	4.0	5
47	Effects of sizeâ€dependent emissivity on maximum temperatures during micrometeorite entry. Journal of Geophysical Research, 1991, 96, 1303-1314.	3.3	30
48	Sublimation and reformation of Icy grains in the primitive solar nebula. Icarus, 1991, 94, 333-344.	2.5	104
49	Solar heating of the Uranian mesopause by dust of ring origin. Icarus, 1990, 88, 429-447.	2.5	18
50	Thermal evolution of Titan's atmosphere. Icarus, 1989, 80, 370-389.	2.5	29
51	PHOTOGRAMMETRIC PROCESSING OF OSIRIS-REX IMAGES OF ASTEROID (101955) BENNU. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, V-3-2020, 587-594.	0.0	4