Edward B Bierhaus

List of Publications by Year
in descending order

46 papers	3,017 citations	201674 27 h-index	233421 45 g-index
47 all docs	47 docs citations	47 times ranked	1872 citing authors

#	Article	IF	Citations
1	Global geologic map of asteroid (101955) Bennu indicates heterogeneous resurfacing in the past 500,000Âyears. Icarus, 2022, 381, 114992.	2.5	13
2	Geologic Context of the OSIRIS-REx Sample Site from High-resolution Topography and Imaging. Planetary Science Journal, 2022, 3, 75.	3.6	10
3	Crater population on asteroid (101955) Bennu indicates impact armouring and a young surface. Nature Geoscience, 2022, 15, 440-446.	12.9	20
4	The Formation of Terraces on Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	14
5	Low surface strength of the asteroid Bennu inferred from impact ejecta deposit. Nature Geoscience, 2022, 15, 447-452.	12.9	19
6	Assessing the Sampleability of Bennuâ€™s Surface for the OSIRIS-REx Asteroid Sample Return Mission. Space Science Reviews, 2022, 218, 20.	8.1	12
7	The morphometry of small impact craters on Bennu: Relationships to geologic units, boulders, and impact armoring. Icarus, 2022, 384, 115058.	2.5	3
8	Near-zero cohesion and loose packing of Bennuâ€™s near subsurface revealed by spacecraft contact. Science Advances, 2022, 8, .	10.3	31
9	Spacecraft sample collection and subsurface excavation of asteroid (101955) Bennu. Science, 2022, 377, 285-291.	12.6	39
10	Bennu regolith mobilized by TAGSAM: Expectations for the OSIRIS-REx sample collection event and application to understanding naturally ejected particles. Icarus, 2021, 355, 114142.	2.5	14
11	Spectral analysis of craters on (101955) Bennu. Icarus, 2021, 357, 114252.	2.5	6
12	Particle Size-Frequency Distributions of the OSIRIS-REx Candidate Sample Sites on Asteroid (101955) Bennu. Remote Sensing, 2021, 13, 1315.	4.0	33
13	Validation of Stereophotoclinometric Shape Models of Asteroid (101955) Bennu during the OSIRIS-REx Mission. Planetary Science Journal, 2021, 2, 82.	3.6	17
14	Lucy Mission to the Trojan Asteroids: Science Goals. Planetary Science Journal, 2021, 2, 171.	3.6	54
15	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.	4.4	21
16	Internal rubble properties of asteroid (101955) Bennu. Icarus, 2021, 370, 114665.	2.5	15
17	Outgassing from the OSIRIS-REx sample return capsule: characterization and mitigation. Acta Astronautica, 2020, 166, 391-399.	3.2	7
18	Digital terrain mapping by the OSIRIS-REx mission. Planetary and Space Science, 2020, 180, 104764.	1.7	81

#	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	The Morphometry of Impact Craters on Bennu. Geophysical Research Letters, 2020, 47, e2020GL089672.	4.0	20
22	Bennuâ€™s near-Earth lifetime of 1.75 million years inferred from craters on its boulders. Nature, 2020, 587, 205-209.	27.8	62
23	Global Patterns of Recent Mass Movement on Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006475.	3.6	60
24	Global shape modeling using the OSIRIS-REx scanning Laser Altimeter. Planetary and Space Science, 2019, 177, 104688.	1.7	32
25	The operational environment and rotational acceleration of asteroid (101955) Bennu from OSIRIS-REx observations. Nature Communications, 2019, 10, 1291.	12.8	99
26	The dynamic geophysical environment of (101955) Bennu based on OSIRIS-REx measurements. Nature Astronomy, 2019, 3, 352-361.	10.1	132
27	Properties of rubble-pile asteroid (101955) Bennu from OSIRIS-REx imaging and thermal analysis. Nature Astronomy, 2019, 3, 341-351.	10.1	188
28	Craters, boulders and regolith of (101955) Bennu indicative of an old and dynamic surface. Nature Geoscience, 2019, 12, 242-246.	12.9	161
29	Shape of (101955) Bennu indicative of a rubble pile with internal stiffness. Nature Geoscience, 2019, 12, 247-252.	12.9	179
30	Impact craters on Pluto and Charon indicate a deficit of small Kuiper belt objects. Science, 2019, 363, 955-959.	12.6	116
31	The global surface roughness of 25143 Itokawa. Icarus, 2019, 325, 141-152.	2.5	13
32	Secondary craters and ejecta across the solar system: Populations and effects on impactâ€craterâ€“based chronologies. Meteoritics and Planetary Science, 2018, 53, 638-671.	1.6	35
33	OSIRIS-REx Contamination Control Strategy and Implementation. Space Science Reviews, 2018, 214, 1.	8.1	50
34	Revised recommended methods for analyzing crater sizeâ€frequency distributions. Meteoritics and Planetary Science, 2018, 53, 891-931.	1.6	55
35	The OSIRIS-REx Spacecraft and the Touch-and-Go Sample Acquisition Mechanism (TAGSAM). Space Science Reviews, 2018, 214, 1.	8.1	92
36	OSIRIS-REx: Sample Return from Asteroid (101955) Bennu. Space Science Reviews, 2017, 212, 925-984.	8.1	426

#	Article	IF	Citations
37	The OSIRIS-REx Laser Altimeter (OLA) Investigation and Instrument. Space Science Reviews, 2017, 212, 899-924.	8.1	97
38	TAGSAM: A gas-driven system for collecting samples from solar system bodies. , 2016, , .		5
39	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.	1.6	168
40	Craters and ejecta on Pluto and Charon: Anticipated results from the New Horizons flyby. Icarus, 2015, 246, 165-182.	2.5	30
41	Geology before Pluto: Pre-encounter considerations. Icarus, 2015, 246, 65-81.	2.5	29
42	Improved techniques for sizeâ€“frequency distribution analysis in the planetary sciences: Application to blocks on 25143 Itokawa. Icarus, 2015, 247, 77-80.	2.5	10
43	The role of ejecta in the small crater populations on the mid-sized saturnian satellites. Icarus, 2012, 218, 602-621.	2.5	46
44	Constraints on Europa's surface properties from primary and secondary crater morphology. Journal of Geophysical Research, 2010, 115, .	3.3	21
45	THE IMPORTANCE OF SECONDARY CRATERING TO AGE CONSTRAINTS ON PLANETARY SURFACES. Annual Review of Earth and Planetary Sciences, 2006, 34, 535-567.	11.0	228
46	Secondary craters on Europa and implications for cratered surfaces. Nature, 2005, 437, 1125-1127.	27.8	112