

Thomas Davison

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1816445/publications.pdf>

Version: 2024-02-01

36
papers

1,126
citations

279798

23
h-index

395702

33
g-index

36
all docs

36
docs citations

36
times ranked

1164
citing authors

#	ARTICLE	IF	CITATIONS
1	Ejecta distribution and momentum transfer from oblique impacts on asteroid surfaces. <i>Icarus</i> , 2022, 374, 114793.	2.5	26
2	Influence of the projectile geometry on the momentum transfer from a kinetic impactor and implications for the DART mission. <i>International Journal of Impact Engineering</i> , 2022, 162, 104147.	5.0	22
3	Chondrule formation via impact jetting in the icy outer solar system. <i>Icarus</i> , 2022, 384, 115110.	2.5	1
4	Assessing the survivability of biomarkers within terrestrial material impacting the lunar surface. <i>Icarus</i> , 2021, 354, 114026.	2.5	4
5	Jetting during oblique impacts of spherical impactors. <i>Icarus</i> , 2021, 360, 114365.	2.5	9
6	Impactor material records the ancient lunar magnetic field in antipodal anomalies. <i>Nature Communications</i> , 2021, 12, 6543.	12.8	4
7	Benchmarking impact hydrocodes in the strength regime: Implications for modeling deflection by a kinetic impactor. <i>Icarus</i> , 2020, 338, 113446.	2.5	32
8	The effects of asteroid layering on ejecta mass-velocity distribution and implications for impact momentum transfer. <i>Planetary and Space Science</i> , 2020, 180, 104756.	1.7	29
9	Morphological Diversity of Impact Craters on Asteroid (16) Psyche: Insight From Numerical Models. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006466.	3.6	8
10	A steeply-inclined trajectory for the Chicxulub impact. <i>Nature Communications</i> , 2020, 11, 1480.	12.8	55
11	Precise radiometric age establishes Yarrabubba, Western Australia, as Earth's oldest recognised meteorite impact structure. <i>Nature Communications</i> , 2020, 11, 300.	12.8	44
12	The effects of impacts on the cooling rates of iron meteorites. <i>Meteoritics and Planetary Science</i> , 2019, 54, 1604-1618.	1.6	25
13	The role of asteroid strength, porosity and internal friction in impact momentum transfer. <i>Icarus</i> , 2019, 329, 282-295.	2.5	54
14	Stress-Strain Evolution During Peak-Ring Formation: A Case Study of the Chicxulub Impact Structure. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 396-417.	3.6	30
15	Enhancement of Impact Heating in Pressure-Strengthened Rocks in Oblique Impacts. <i>Geophysical Research Letters</i> , 2019, 46, 13678-13686.	4.0	10
16	Investigating shock processes in bimodal powder compaction through modelling and experiment at the mesoscale. <i>International Journal of Solids and Structures</i> , 2019, 163, 211-219.	2.7	3
17	Post-impact thermal structure and cooling timescales of Occator crater on asteroid 1 Ceres. <i>Icarus</i> , 2019, 320, 110-118.	2.5	44
18	Mesoscale simulations of shock compaction of a granular ceramic: effects of mesostructure and mixed-cell strength treatment. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2018, 26, 035009.	2.0	4

#	ARTICLE	IF	CITATIONS
19	Interrogating heterogeneous compaction of analogue materials at the mesoscale through numerical modeling and experiments. AIP Conference Proceedings, 2018, , .	0.4	0
20	Defining the mechanism for compaction of the CV chondrite parent body. Geology, 2017, 45, 559-562.	4.4	15
21	A numerical assessment of simple airblast models of impact airbursts. Meteoritics and Planetary Science, 2017, 52, 1542-1560.	1.6	24
22	Evidence for an impact-induced magnetic fabric in Allende, and exogenous alternatives to the core dynamo theory for Allende magnetization. Meteoritics and Planetary Science, 2017, 52, 2132-2146.	1.6	36
23	Impact-induced compaction of primitive solar system solids: The need for mesoscale modelling and experiments. Procedia Engineering, 2017, 204, 405-412.	1.2	12
24	Collisional history of asteroid Itokawa. Geology, 2017, 45, 819-822.	4.4	26
25	Hidden secrets of deformation: Impact-induced compaction within a CV chondrite. Earth and Planetary Science Letters, 2016, 452, 133-145.	4.4	24
26	MESOSCALE MODELING OF IMPACT COMPACTION OF PRIMITIVE SOLAR SYSTEM SOLIDS. Astrophysical Journal, 2016, 821, 68.	4.5	36
27	Pressure-temperature evolution of primordial solar system solids during impact-induced compaction. Nature Communications, 2014, 5, 5451.	12.8	103
28	The effect of impact obliquity on shock heating in planetesimal collisions. Meteoritics and Planetary Science, 2014, 49, 2252-2265.	1.6	17
29	Lobate and flow-like features on asteroid Vesta. Planetary and Space Science, 2014, 103, 24-35.	1.7	42
30	The early impact histories of meteorite parent bodies. Meteoritics and Planetary Science, 2013, 48, 1894-1918.	1.6	49
31	Thermal consequences of impacts in the early solar system. Meteoritics and Planetary Science, 2013, 48, 2559-2576.	1.6	39
32	Post-impact thermal evolution of porous planetesimals. Geochimica Et Cosmochimica Acta, 2012, 95, 252-269.	3.9	65
33	The size-frequency distribution of elliptical impact craters. Earth and Planetary Science Letters, 2011, 310, 1-8.	4.4	46
34	Numerical modeling of oblique hypervelocity impacts on strong ductile targets. Meteoritics and Planetary Science, 2011, 46, 1510-1524.	1.6	61
35	Numerical modelling of heating in porous planetesimal collisions. Icarus, 2010, 208, 468-481.	2.5	99
36	The effect of the oceans on the terrestrial crater size-frequency distribution: Insight from numerical modeling. Meteoritics and Planetary Science, 2007, 42, 1915-1927.	1.6	28