Attilio Rivoldini

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6523894/publications.pdf

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39	1,957	304743	315739
papers	citations	22 h-index	38 g-index

40	40	40	1678
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The seismicity of Mars. Nature Geoscience, 2020, 13, 205-212.	12.9	194
2	Geodesy constraints on the interior structure and composition of Mars. Icarus, 2011, 213, 451-472.	2.5	183
3	Seismic detection of the martian core. Science, 2021, 373, 443-448.	12.6	169
4	Thickness and structure of the martian crust from InSight seismic data. Science, 2021, 373, 438-443.	12.6	140
5	Enceladus's and Dione's floating ice shells supported by minimum stress isostasy. Geophysical Research Letters, 2016, 43, 10,088.	4.0	126
6	A Geophysical Perspective on the Bulk Composition of Mars. Journal of Geophysical Research E: Planets, 2018, 123, 575-611.	3.6	97
7	Pre-mission InSights on the Interior of Mars. Space Science Reviews, 2019, 215, 1.	8.1	85
8	The interior structure of Mercury and its core sulfur content. Icarus, 2009, 201, 12-30.	2.5	75
9	Mercuryâ€™s inner core size and core-crystallization regime. Icarus, 2015, 248, 254-268.	2.5	72
10	Interior structure of terrestrial planets: Modeling Mars' mantle and its electromagnetic, geodetic, and seismic properties. Journal of Geophysical Research, 2005, 110, .	3.3	68
11	The interior structure of Mercury constrained by the low-degree gravity field and the rotation of Mercury. Earth and Planetary Science Letters, 2013, 377-378, 62-72.	4.4	66
12	A new ab initio equation of state of hcp-Fe and its implication on the interior structure and mass-radius relations of rocky super-Earths. Icarus, 2018, 313, 61-78.	2.5	66
13	The Rotation and Interior Structure Experiment on the InSight Mission to Mars. Space Science Reviews, 2018, 214, 1.	8.1	64
14	Lunar Seismology: An Update on Interior Structure Models. Space Science Reviews, 2019, 215, 1.	8.1	60
15	InSight Constraints on the Global Character of the Martian Crust. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	45
16	Geophysical and cosmochemical evidence for a volatile-rich Mars. Earth and Planetary Science Letters, 2022, 578, 117330.	4.4	42
17	Pressure and Composition Effects on Sound Velocity and Density of Coreâ€Forming Liquids: Implication to Core Compositions of Terrestrial Planets. Journal of Geophysical Research E: Planets, 2019, 124, 2272-2293.	3.6	39
18	Detection of the Chandler Wobble of Mars From Orbiting Spacecraft. Geophysical Research Letters, 2020, 47, e2020GL090568.	4.0	37

#	Article	IF	Citations
19	Future Mars geophysical observatories for understanding its internal structure, rotation, and evolution. Planetary and Space Science, 2012, 68, 123-145.	1.7	32
20	The effect of tides and an inner core on the forced longitudinal libration of Mercury. Earth and Planetary Science Letters, 2012, 333-334, 83-90.	4.4	31
21	Mercury's Crustal Thickness Correlates With Lateral Variations in Mantle Melt Production. Geophysical Research Letters, 2020, 47, e2020GL087261.	4.0	24
22	Challenges on Mercury's Interior Structure Posed by the New Measurements of its Obliquity and Tides. Geophysical Research Letters, 2021, 48, e2020GL089895.	4.0	24
23	The role of Mercuryâ€™s core density structure on its longitudinal librations. Icarus, 2013, 225, 62-74.	2.5	21
24	The Thermoâ€Chemical Evolution of Mars With a Strongly Stratified Mantle. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006613.	3.6	20
25	Simulations of Seismic Wave Propagation on Mars. Space Science Reviews, 2017, 211, 571-594.	8.1	19
26	Obliquity of Mercury: Influence of the precession of the pericenter and of tides. Icarus, 2017, 291, 136-159.	2.5	18
27	Hydrostatic Interfaces in Bodies With Nonhydrostatic Lithospheres. Journal of Geophysical Research E: Planets, 2019, 124, 1410-1432.	3.6	17
28	MSS/1: Singleâ€Station and Singleâ€Event Marsquake Inversion. Earth and Space Science, 2020, 7, e2020EA001118.	2.6	16
29	Mars precession rate determined from radiometric tracking of the InSight Lander. Planetary and Space Science, 2021, 199, 105208.	1.7	15
30	Mercury's Interior Structure Constrained by Density and Pâ€Wave Velocity Measurements of Liquid Feâ€Siâ€C Alloys. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006651.	3.6	14
31	The Fe-FeSi phase diagram at Mercuryâ€™s core conditions. Nature Communications, 2022, 13, 387.	12.8	13
32	Liquid properties in the Fe-FeS system under moderate pressure: Tool box to model small planetary cores. American Mineralogist, 2018, , .	1.9	12
33	Bayesian inversion of the Martian structure using geodynamic constraints. Geophysical Journal International, 2021, 226, 1615-1644.	2.4	12
34	Seismic Velocity Variations in a 3D Martian Mantle: Implications for the InSight Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006755.	3.6	10
35	Exoplanet interiors and habitability. Advances in Physics: X, 2019, 4, 1630316.	4.1	9
36	Thermal expansion of liquid Fe-S alloy at high pressure. Earth and Planetary Science Letters, 2021, 563, 116884.	4.4	8

#	Article	IF	Citations
37	Interior Structure and Evolution of Mars. , 2014, , 379-396.		6
38	Forward Modeling of the Phobos Tides and Applications to the First Martian Year of the InSight Mission. Earth and Space Science, 2021, 8, e2021EA001669.	2.6	4
39	Low Velocity Zones in the Martian Upper Mantle Highlighted by Sound Velocity Measurements. Geophysical Research Letters, 2021, 48, e2021GL093977.	4.0	4