Ashley G Davies

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8017794/publications.pdf

Version: 2024-02-01

89 papers	2,790 citations	172457 29 h-index	214800 47 g-index
91 all docs	91 docs citations	91 times ranked	1436 citing authors

#	Article	IF	Citations
1	High-Temperature Silicate Volcanism on Jupiter's Moon Io. , 1998, 281, 87-90.		198
2	Io in the near infrared: Near-Infrared Mapping Spectrometer (NIMS) results from the Galileo flybys in 1999 and 2000. Journal of Geophysical Research, 2001, 106, 33053-33078.	3.3	185
3	Thermal signature, eruption style, and eruption evolution at Pele and Pillan on Io. Journal of Geophysical Research, 2001, 106, 33079-33103.	3.3	121
4	Io's Volcanism: Thermo-Physical Models of Silicate Lava Compared with Observations of Thermal Emission. Icarus, 1996, 124, 45-61.	2.5	101
5	The distribution of sulfur dioxide and other infrared absorbers on the surface of Io. Geophysical Research Letters, 1997, 24, 2479-2482.	4.0	92
6	Recent geological and hydrological activity on Mars: The Tharsis/Elysium corridor. Planetary and Space Science, 2008, 56, 985-1013.	1.7	92
7	A Close-Up Look at Io from Galileo's Near-Infrared Mapping Spectrometer. Science, 2000, 288, 1201-1204.	12.6	86
8	New estimates for Io eruption temperatures: Implications for the interior. Icarus, 2007, 192, 491-502.	2.5	81
9	Io: Volcanic thermal sources and global heat flow. Icarus, 2012, 219, 701-722.	2.5	77
10	Loki, Io: A periodic volcano. Geophysical Research Letters, 2002, 29, 84-1-84-4.	4.0	73
11	Stealth plumes on Io. Geophysical Research Letters, 1995, 22, 3293-3296.	4.0	67
12	The summer 1997 eruption at Pillan Patera on Io: Implications for ultrabasic lava flow emplacement. Journal of Geophysical Research, 2001, 106, 33105-33119.	3.3	60
13	Observations and temperatures of Io's Pele Patera from Cassini and Galileo spacecraft images. Icarus, 2004, 169, 65-79.	2.5	58
14	Hot spots on Io: Initial results from Galileo's near infrared mapping spectrometer. Geophysical Research Letters, 1997, 24, 2439-2442.	4.0	53
15	Keck AO observations of Io in and out of eclipse. Icarus, 2004, 169, 250-263.	2.5	53
16	Two Small Transiting Planets and a Possible Third Body Orbiting HD 106315. Astronomical Journal, 2017, 153, 255.	4.7	51
17	Io: Loki Patera as a magma sea. Journal of Geophysical Research, 2006, 111, .	3.3	48
18	Evaluation of sulfur flow emplacement on Io from Galileo data and numerical modeling. Journal of Geophysical Research, 2001, 106, 33161-33174.	3.3	47

#	Article	IF	Citations
19	Enceladus: A hypothesis for bringing both heat and chemicals to the surface. Icarus, 2012, 221, 53-62.	2.5	46
20	Multi-instrument remote and in situ observations of the Erebus Volcano (Antarctica) lava lake in 2005: A comparison with the Pele lava lake on the jovian moon Io. Journal of Volcanology and Geothermal Research, 2008, 177, 705-724.	2.1	44
21	Silicate Cooling Model Fits to Galileo NIMS Data of Volcanism on Io. Icarus, 2000, 148, 211-225.	2.5	43
22	The polar contribution to the heat flow of Io. Icarus, 2004, 169, 264-270.	2.5	40
23	Temperature, age and crust thickness distributions of Loki Patera on Io fromGalileoNIMS data: Implications for resurfacing mechanism. Geophysical Research Letters, 2003, 30, .	4.0	39
24	Volcanic activity at Tvashtar Catena, Io. Icarus, 2005, 179, 235-251.	2.5	38
25	The thermal signature of volcanic eruptions on Io and Earth. Journal of Volcanology and Geothermal Research, 2010, 194, 75-99.	2.1	38
26	Sensor web enables rapid response to volcanic activity. Eos, 2006, 87, 1.	0.1	37
27	Exploring the limits of identifying sub-pixel thermal features using ASTER TIR data. Journal of Volcanology and Geothermal Research, 2010, 189, 225-237.	2.1	36
28	Volcanism on Io: Estimation of eruption parameters from Galileo NIMS data. Journal of Geophysical Research, 2003, 108, .	3.3	34
29	Ioâ€™s Volcanic Activity from Time Domain Adaptive Optics Observations: 2013â€“2018. Astronomical Journal, 2019, 158, 29.	4.7	32
30	Near-infrared monitoring of Io and detection of a violent outburst on 29 August 2013. Icarus, 2014, 242, 352-364.	2.5	31
31	Cooling rate of some active lavas determined using an orbital imaging spectrometer. Journal of Geophysical Research, 2010, 115, .	3.3	30
32	Io: Heat flow from small volcanic features. Icarus, 2015, 245, 379-410.	2.5	30
33	The heartbeat of the volcano: The discovery of episodic activity at Prometheus on Io. Icarus, 2006, 184, 460-477.	2.5	29
34	Io: Heat flow from dark paterae. Icarus, 2011, 212, 236-261.	2.5	29
35	Geology and topography of Ra Patera, Io, in the Voyager era: Prelude to eruption. Geophysical Research Letters, 1997, 24, 2467-2470.	4.0	26
36	Multi-phase volcanic resurfacing at Loki Patera on Io. Nature, 2017, 545, 199-202.	27.8	26

#	Article	IF	Citations
37	Io: Heat flow from dark volcanic fields. Icarus, 2009, 204, 239-253.	2.5	25
38	Map of Ioâ€™s volcanic heat flow. Icarus, 2015, 262, 67-78.	2.5	25
39	Onboard Science Processing Concepts for the HyspIRI Mission. IEEE Intelligent Systems, 2009, 24, 12-19.	4.0	24
40	Two new, rare, high-effusion outburst eruptions at Rarog and Heno Paterae on Io. Icarus, 2014, 242, 365-378.	2.5	24
41	The geothermal gradient of Io: Consequences for lithosphere structure and volcanic eruptive activity. Icarus, 2011, 211, 623-635.	2.5	23
42	Global near-IR maps from Gemini-N and Keck in 2010, with a special focus on Janus Patera and Kanehekili Fluctus. Icarus, 2014, 242, 379-395.	2.5	23
43	Post-solidification cooling and the age of Io's lava flows. Icarus, 2005, 176, 123-137.	2.5	22
44	Estimating eruption temperature from thermal emission spectra of lava fountain activity in the Erta'Ale (Ethiopia) volcano lava lake: Implications for observing Io's volcanoes. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	22
45	Extreme volcanism on Io: Latest insights at the end of Galileo era. Eos, 2003, 84, 313.	0.1	21
46	Io: Charting thermal emission variability with the Galileo NIMS Io Thermal Emission Database (NITED): Loki Patera. Geophysical Research Letters, 2012, 39, .	4.0	21
47	Optimized Autonomous Space In-Situ Sensor Web for Volcano Monitoring. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010, 3, 541-546.	4.9	20
48	The variability of volcanic activity at Zamama, Culann, and Tupan Patera on Io as seen by the Galileo Near Infrared Mapping Spectrometer. Icarus, 2011, 215, 401-416.	2.5	20
49	Three decades of Loki Patera observations. Icarus, 2017, 297, 265-281.	2.5	19
50	Variability and geologic associations of volcanic activity on Io in 2001â€“2016. Icarus, 2018, 312, 267-294.	2.5	19
51	Magmatic gas percolation through the old lava dome of El Misti volcano. Bulletin of Volcanology, 2017, 79, 46.	3.0	18
52	Charting thermal emission variability at Pele, Janus Patera and Kanehekili Fluctus with the Galileo NIMS Io Thermal Emission Database (NITED). Icarus, 2012, 221, 466-470.	2.5	17
53	Upper bound on Io's heat flow. Journal of Geophysical Research, 2001, 106, 33021-33024.	3.3	16
54	Io: Eruptions at Pillan, and the time evolution of Pele and Pillan from 1996 to 2015. Icarus, 2016, 264, 198-212.	2.5	15

#	Article	IF	Citations
55	A 2020 Observational Perspective of Io. Annual Review of Earth and Planetary Sciences, 2021, 49, 643-678.	11.0	15
56	Volcanic history, geologic analysis and map of the Prometheus Patera region on Io. Journal of Volcanology and Geothermal Research, 2009, 187, 93-105.	2.1	14
57	Atmospheric control of the cooling rate of impact melts and cryolavas on Titanâ€™s surface. Icarus, 2010, 208, 887-895.	2.5	14
58	Nature, distribution and origin of CO2 on Enceladus. Icarus, 2019, 317, 491-508.	2.5	14
59	Automated Volcano Monitoring Using Multiple Space and Ground Sensors. Journal of Aerospace Information Systems, 2020, 17, 214-228.	1.4	14
60	Discovery of a Powerful, Transient, Explosive Thermal Event at Marduk Fluctus, Io, in Galileo NIMS Data. Geophysical Research Letters, 2018, 45, 2926-2933.	4.0	13
61	Onboard Product Generation on Earth Observing One: A Pathfinder for the Proposed Hyspiri Mission Intelligent Payload Module. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 257-264.	4.9	12
62	Observing Iceland's EyjafjallajÃ¶kull 2010 eruptions with the autonomous NASA Volcano Sensor Web. Journal of Geophysical Research: Solid Earth, 2013, 118, 1936-1956.	3.4	12
63	Keck observations of eruptions on Io in 2003â€“2005. Icarus, 2016, 274, 284-296.	2.5	12
64	Space-based Sensorweb monitoring of wildfires in Thailand. , 2011, , .		10
65	The NASA Volcano Sensor Web, advanced autonomy and the remote sensing of volcanic eruptions: a review. Geological Society Special Publication, 2016, 426, 137-158.	1.3	10
66	Advanced Pointing Imaging Camera (APIC) for planetary science and mission opportunities. Planetary and Space Science, 2020, 194, 105095.	1.7	10
67	Cryolava flow destabilization of crustal methane clathrate hydrate on Titan. Icarus, 2016, 274, 23-32.	2.5	9
68	Enceladusâ€™ near-surface CO2 gas pockets and surface frost deposits. Icarus, 2018, 302, 18-26.	2.5	8
69	Determination of eruption temperature of Io's lavas using lava tube skylights. Icarus, 2016, 278, 266-278.	2.5	7
70	Rapid Response to Volcanic Eruptions with an Autonomous Sensor Web: The Nyamulagira Eruption of 2006. , 2008, , .		6
71	A novel technology for measuring the eruption temperature of silicate lavas with remote sensing: Application to Io and other planets. Journal of Volcanology and Geothermal Research, 2017, 343, 1-16.	2.1	6
72	Phase Behavior of Clathrate Hydrates in the Ternary H₂Oâ€“NH₃â€“Cyclopentane System. ACS Earth and Space Chemistry, 2020, 4, 526-534.	2.7	6

#	Article	IF	Citations
73	Resolving Ioâ€™s Volcanoes from a Mutual Event Observation at the Large Binocular Telescope. Planetary Science Journal, 2021, 2, 227.	3.6	5
74	Cage occupancy of methane clathrate hydrates in the ternary H2Oâ€“NH3â€“CH4 system. Chemical Communications, 2020, 56, 12391-12394.	4.1	4
75	<title>Real-time decision making on EO-1 using onboard science analysis</title>. , 2005, 5657, 47.		1
76	Onboard classification of hyperspectral data on the Earth Observing One mission. , 2009, , .		1
77	Onboard processing of multispectral and hyperspectral data of volcanic activity for future Earth-orbiting and planetary missions. , 2010, , .		1
78	Onboard instrument processing concepts for the HyspIRI mission. , 2010, , .		1
79	Automatic estimation of volcanic ash plume height using WorldView-2 imagery. , 2012, , .		1
80	Near-vertical supersonic and shock-free gas/magma flow at ionian volcanoes: Application to Pillan. Icarus, 2013, 226, 1171-1176.	2.5	1
81	Cautionary Analysis of Spectral Radiance from Ioâ€™s Active Volcanoes Derived from Galileo Near-Infrared Mapping Spectrometer Data. Astronomical Journal, 2022, 163, 2.	4.7	1
82	Reply to the â€˜Comment on Cage occupancy of methane clathrate hydrates in the ternary H₂Oâ€“NH₃â€“CH₄ systemâ€™ by S. Alavi and J. Ripmeester, Chem. Commun., 2022, 58, DOI: 10.1039/D1CC06526B. Chemical Communications, 2022, 58, 4099-4102.	4.1	1
83	Linking satellites via Earth hot spots and the Internet to form ad hoc constellations. , 2005, 5659, 301.		0
84	Sensor Web operations: Rapid data acquisition and product generation during a volcanic crisis. , 2008, , .		0
85	Autonomous Sensorweb Operations for Integrated Space In Situ Monitoring of Volcanic Activity. , 2010, , .		0
86	Eruptive Center (Io). , 2014, , 1-8.		0
87	Shield Volcano (Io). , 2014, , 1-6.		0
88	Shield Volcano (Io). , 2015, , 1929-1933.		0
89	Eruptive Center (Io). , 2015, , 714-720.		0