A V Malakhov

List of Publications by Year
in descending order

54	4,996	236925 25	206112 48
papers	citations	h-index	g-index

66	66	66	3455
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	12.6	687
2	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	12.6	508
3	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	12.6	475
4	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	12.6	367
5	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	12.6	327
6	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	12.6	326
7	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	12.6	323
8	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	12.6	280
9	Hydrogen Mapping of the Lunar South Pole Using the LRO Neutron Detector Experiment LEND. Science, 2010, 330, 483-486.	12.6	265
10	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	12.6	246
11	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	12.6	215
12	Lunar Exploration Neutron Detector for the NASA Lunar Reconnaissance Orbiter. Space Science Reviews, 2010, 150, 183-207.	8.1	92
13	Dynamic Albedo of Neutrons (DAN) Experiment Onboard NASAâ€™s Mars Science Laboratory. Space Science Reviews, 2012, 170, 559-582.	8.1	87
14	The Dynamic Albedo of Neutrons (DAN) Experiment for NASA's 2009 Mars Science Laboratory. Astrobiology, 2008, 8, 605-612.	3.0	75
15	Hydrogen distribution in the lunar polar regions. Icarus, 2017, 283, 20-30.	2.5	75
16	Testing polar spots of waterâ€rich permafrost on the Moon: LEND observations onboard LRO. Journal of Geophysical Research, 2012, 117, .	3.3	60
17	The Mercury Gamma and Neutron Spectrometer (MGNS) on board the Planetary Orbiter of the BepiColombo mission. Planetary and Space Science, 2010, 58, 116-124.	1.7	54
18	Testing lunar permanently shadowed regions for water ice: LEND results from LRO. Journal of Geophysical Research, 2012, 117, .	3.3	49

#	Article	IF	Citations
19	High spatial resolution studies of epithermal neutron emission from the lunar poles: Constraints on hydrogen mobility. Journal of Geophysical Research, 2012, 117, .	3.3	38
20	Experiment LEND of the NASA Lunar Reconnaissance Orbiter for High-Resolution Mapping of Neutron Emission of the Moon. Astrobiology, 2008, 8, 793-804.	3.0	36
21	A comparative study of LaBr3(Ce3+) and CeBr3 based gamma-ray spectrometers for planetary remote sensing applications. Review of Scientific Instruments, 2016, 87, 085112.	1.3	36
22	Global maps of lunar neutron fluxes from the LEND instrument. Journal of Geophysical Research, 2012, 117, .	3.3	35
23	Local variations of bulk hydrogen and chlorineâ€equivalent neutron absorption content measured at the contact between the Sheepbed and Gillespie Lake units in Yellowknife Bay, Gale Crater, using the DAN instrument onboard Curiosity. Journal of Geophysical Research E: Planets, 2014, 119, 1259-1275.	3.6	33
24	Fine Resolution Epithermal Neutron Detector (FREND) Onboard the ExoMars Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1.	8.1	33
25	Neutron background environment measured by the Mars Science Laboratory's Dynamic Albedo of Neutrons instrument during the first 100 sols. Journal of Geophysical Research E: Planets, 2013, 118, 2400-2412.	3.6	28
26	Data processing of the active neutron experiment DAN for a Martian regolith investigation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 789, 114-127.	1.6	24
27	Hydrogen and chlorine abundances in the Kimberley formation of Gale crater measured by the DAN instrument on board the Mars Science Laboratory Curiosity rover. Journal of Geophysical Research E: Planets, 2016, 121, 836-845.	3.6	23
28	The evidence for unusually high hydrogen abundances in the central part of Valles Marineris on Mars. Icarus, 2022, 374, 114805.	2.5	23
29	LEND neutron data processing for the mapping of the Moon. Journal of Geophysical Research, 2012, 117, .	3.3	18
30	Active neutron sensing of the Martian surface with the DAN experiment onboard the NASA â€œCuriosityâ€• Mars rover: Two types of soil with different water content in the gale crater. Astronomy Letters, 2016, 42, 251-259.	1.0	18
31	The ADRON-RM Instrument Onboard the ExoMars Rover. Astrobiology, 2017, 17, 585-594.	3.0	17
32	Water equivalent hydrogen estimates from the first 200 sols of Curiosityâ€™s traverse (Bradbury) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 experiment. Icarus, 2015, 262, 102-123.	2.5	16
33	The first stage of the â€œBTN-Neutronâ€•space experiment onboard the Russian segment of the International Space Station. Cosmic Research, 2010, 48, 285-299.	0.6	14
34	Evidence for the sequestration of hydrogen-bearing volatiles towards the Moonâ€™s southern pole-facing slopes. Icarus, 2015, 255, 88-99.	2.5	14
35	The variations of neutron component of lunar radiation background from LEND/LRO observations. Planetary and Space Science, 2016, 122, 53-65.	1.7	13
36	Ice Permafrost â€˜â€˜Oasesâ€™â€™ Close to Martian Equator: Planet Neutron Mapping Based on Data of FREND Instrument Onboard TGO Orbiter of Russian-European ExoMars Mission. Astronomy Letters, 2020, 46, 407-421.	1.0	12

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37	Next generation of scintillation detector based on cerium bromide crystal for space application in the gamma-ray spectrometer of the Mercurian gamma-ray and neutron spectrometer. Instruments and Experimental Techniques, 2016, 59, 569-577.	0.5	7
38	Results from the dynamic albedo of neutrons (DAN) passive mode experiment: Yellowknife Bay to Amargosa Valley (Sols 201â€“753). Icarus, 2018, 299, 513-537.	2.5	7
39	Neutron components of radiation environment in the near-Earth and near-Mars space. Planetary and Space Science, 2009, 57, 1993-1995.	1.7	6
40	Monitoring of the time and spatial distribution of neutron-flux spectral density outside the Russian segment of the International Space Station based on data from the BTN-Neutron space experiment. Cosmic Research, 2017, 55, 110-123.	0.6	6
41	Results from radiation environment measurements aboard ExoMars Trace Gas Orbiter in Mars science orbit in May 2018â€“December 2019. Icarus, 2021, 361, 114264.	2.5	6
42	Test facility for nuclear planetology instruments. Physics of Particles and Nuclei Letters, 2016, 13, 224-233.	0.4	5
43	Mars Science Laboratory Dynamic Albedo of Neutrons passive mode data and results from sols 753 to 1292: Pahrump Hills to Naukluft Plateau. Icarus, 2019, 330, 75-90.	2.5	4
44	Physical calibration of the LEND space-based neutron telescope: the sensitivity and the angular resolution. Instruments and Experimental Techniques, 2016, 59, 578-591.	0.5	3
45	ADRON-LR Instrument for Active Neutron Sensing of the Lunar Matter Composition. Solar System Research, 2021, 55, 529-536.	0.7	3
46	High Resolution Map of Water in the Martian Regolith Observed by FREND Neutron Telescope Onboard ExoMars TGO. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	3
47	Possible application of scintillation detectors with semiconductor PMT for cosmic-neutron and gamma-ray detection. Physics of Atomic Nuclei, 2016, 79, 694-699.	0.4	2
48	Dynamic Albedo of Neutrons (DAN) Experiment Onboard NASAâ€™s Mars Science Laboratory. , 2012, , 559-582.		1
49	Physical Calibrations of the FREND Instrument Installed Onboard TGO Martian Orbiter. Cosmic Research, 2022, 60, 23-37.	0.6	1
50	Observed diurnal variations in Mars Science Laboratory Dynamic Albedo of Neutrons passive mode data. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 892, 70-83.	1.6	0
51	Study of the Microphonics for Prospective Space-Based Neutron and Gamma-Ray Detectors and Methods for its Suppression. Cosmic Research, 2018, 56, 208-212.	0.6	0
52	Promising Neutron Detector with Anticoincidence Protection. Physics of Particles and Nuclei Letters, 2019, 16, 93-99.	0.4	0
53	Lunar Exploration Neutron Detector for the NASA Lunar Reconnaissance Orbiter. , 2009, , 183-207.		0
54	Numerical modeling of mapping of Marian epithermal neutron emission: Applications to FREND investigation onboard ESAâ€™s Trace Gas Orbiter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, , 166997.	1.6	0