

# Alan Rempel

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/735899/publications.pdf>

Version: 2024-02-01

34  
papers

1,987  
citations

393982

19  
h-index

377514

34  
g-index

39  
all docs

39  
docs citations

39  
times ranked

2330  
citing authors

#	ARTICLE	IF	CITATIONS
1	NMR Characterization of unfrozen brine vein distribution and structure in model packed beds. Cold Regions Science and Technology, 2022, 199, 103572.	1.6	1
2	Improving the passive survivability of residential buildings during extreme heat events in the Pacific Northwest. Applied Energy, 2022, 321, 119323.	5.1	8
3	A Monte Carlo Model of Gas-Liquid-Hydrate Three-phase Coexistence Constrained by Pore Geometry in Marine Sediments. Frontiers in Earth Science, 2021, 8, .	0.8	1
4	Extensive Frost Weathering Across Unglaciated North America During the Last Glacial Maximum. Geophysical Research Letters, 2021, 48, e2020GL090305.	1.5	19
5	Diurnal expansion and contraction of englacial fracture networks revealed by seismic shear wave splitting. Communications Earth & Environment, 2021, 2, .	2.6	3
6	Estimating Permeability of Partially Frozen Soil Using Floating Random Walks. Water Resources Research, 2021, 57, e2021WR030598.	1.7	2
7	A Monte Carlo Approach to Approximating the Effects of Pore Geometry on the Phase Behavior of Soil Freezing. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002117.	1.3	10
8	Frost Resilience of Stabilized Earth Building Materials. Geosciences (Switzerland), 2019, 9, 328.	1.0	12
9	Glacier sliding, seismicity and sediment entrainment. Annals of Glaciology, 2019, 60, 182-192.	2.8	31
10	Comment on "Friction at the bed does not control fast glacier flow". Science, 2019, 363, .	6.0	13
11	On the Importance of Advective Versus Diffusive Transport in Controlling the Distribution of Methane Hydrate in Heterogeneous Marine Sediments. Journal of Geophysical Research: Solid Earth, 2018, 123, 5394-5411.	1.4	18
12	Freeze-on limits bed strength beneath sliding glaciers. Nature Communications, 2018, 9, 3242.	5.8	19
13	Characteristics of secondary slip fronts associated with slow earthquakes in Cascadia. Earth and Planetary Science Letters, 2017, 463, 212-220.	1.8	23
14	Imaging Shear Strength Along Subduction Faults. Geophysical Research Letters, 2017, 44, 11,329.	1.5	9
15	Submarine landslides triggered by destabilization of high-saturation hydrate anomalies. Geochemistry, Geophysics, Geosystems, 2017, 18, 2429-2445.	1.0	28
16	Intrinsic Evaporative Cooling by Hygroscopic Earth Materials. Geosciences (Switzerland), 2016, 6, 38.	1.0	18
17	Dehydration-induced porosity waves and episodic tremor and slip. Geochemistry, Geophysics, Geosystems, 2016, 17, 442-469.	1.0	41
18	Modeling relative frost weathering rates at geomorphic scales. Earth and Planetary Science Letters, 2016, 453, 87-95.	1.8	49

#	ARTICLE	IF	CITATIONS
19	Mega-earthquakes rupture flat megathrusts. <i>Science</i> , 2016, 354, 1027-1031.	6.0	86
20	Frost for the trees: Did climate increase erosion in unglaciated landscapes during the late Pleistocene?. <i>Science Advances</i> , 2015, 1, e1500715.	4.7	70
21	Initiation and growth of martian ice lenses. <i>Icarus</i> , 2015, 251, 191-210.	1.1	52
22	Indirect measurement of interfacial melting from macroscopic ice observations. <i>Physical Review E</i> , 2014, 89, 060401.	0.8	5
23	Rocks, Clays, Water, and Salts: Highly Durable, Infinitely Rechargeable, Eminently Controllable Thermal Batteries for Buildings. <i>Geosciences (Switzerland)</i> , 2013, 3, 63-101.	1.0	33
24	Hydromechanical Processes in Freezing Soils. <i>Vadose Zone Journal</i> , 2012, 11, vzt2012.0045.	1.3	36
25	A model for the diffusive growth of hydrate saturation anomalies in layered sediments. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	43
26	Frost heave. <i>Journal of Glaciology</i> , 2010, 56, 1122-1128.	1.1	64
27	A theory for iceâ€till interactions and sediment entrainment beneath glaciers. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	86
28	The physics of premelted ice and its geophysical consequences. <i>Reviews of Modern Physics</i> , 2006, 78, 695-741.	16.4	593
29	Premelting dynamics in a continuum model of frost heave. <i>Journal of Fluid Mechanics</i> , 2004, 498, 227-244.	1.4	194
30	Isotopic diffusion in polycrystalline ice. <i>Journal of Glaciology</i> , 2003, 49, 397-406.	1.1	16
31	Anomalous diffusion of multiple impurity species: Predicted implications for the ice core climate records. <i>Journal of Geophysical Research</i> , 2002, 107, ECV 3-1-ECV 3-12.	3.3	29
32	Possible displacement of the climate signal in ancient ice by premelting and anomalous diffusion. <i>Nature</i> , 2001, 411, 568-571.	13.7	124
33	Interfacial Premelting and the Thermomolecular Force: Thermodynamic Buoyancy. <i>Physical Review Letters</i> , 2001, 87, 088501.	2.9	86
34	Formation and accumulation of gas hydrate in porous media. <i>Journal of Geophysical Research</i> , 1997, 102, 10151-10164.	3.3	165