

Daniel R Hummer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/764269/publications.pdf>

Version: 2024-02-01

31
papers

1,047
citations

430442

18
h-index

454577

30
g-index

33
all docs

33
docs citations

33
times ranked

1519
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultralow viscosity of carbonate melts at high pressures. <i>Nature Communications</i> , 2014, 5, 5091.	5.8	124
2	Thermal expansion of anatase and rutile between 300 and 575 K using synchrotron powder X-ray diffraction. <i>Powder Diffraction</i> , 2007, 22, 352-357.	0.4	102
3	Forearc carbon sink reduces long-term volatile recycling into the mantle. <i>Nature</i> , 2019, 568, 487-492.	13.7	97
4	Electrical and thermal transport properties of iron and iron-silicon alloy at high pressure. <i>Geophysical Research Letters</i> , 2013, 40, 5377-5381.	1.5	89
5	Network analysis of mineralogical systems. <i>American Mineralogist</i> , 2017, 102, 1588-1596.	0.9	63
6	Origin of Nanoscale Phase Stability Reversals in Titanium Oxide Polymorphs. <i>Journal of Physical Chemistry C</i> , 2009, 113, 4240-4245.	1.5	62
7	Synthesis and crystal chemistry of Fe ³⁺ -bearing (Mg,Fe ³⁺)(Si,Fe ³⁺)O ₃ perovskite. <i>American Mineralogist</i> , 2012, 97, 1915-1921.	0.9	47
8	Data-Driven Discovery in Mineralogy: Recent Advances in Data Resources, Analysis, and Visualization. <i>Engineering</i> , 2019, 5, 397-405.	3.2	47
9	Carbon mineral ecology: Predicting the undiscovered minerals of carbon. <i>American Mineralogist</i> , 2016, 101, 889-906.	0.9	46
10	Cobalt mineral ecology. <i>American Mineralogist</i> , 2017, 102, 108-116.	0.9	43
11	Speciation of Cu^{2+} -DOPA on Nanorutile as a Function of pH and Surface Coverage Using Surface-Enhanced Raman Spectroscopy (SERS). <i>Langmuir</i> , 2012, 28, 17322-17330.	1.6	32
12	The effect of oxidation on the mineralogy and magnetic properties of olivine. <i>American Mineralogist</i> , 2019, 104, 694-702.	0.9	32
13	Chromium mineral ecology. <i>American Mineralogist</i> , 2017, 102, 612-619.	0.9	31
14	In situ observations of particle size evolution during the hydrothermal crystallization of TiO ₂ : A time-resolved synchrotron SAXS and WAXS study. <i>Journal of Crystal Growth</i> , 2012, 344, 51-58.	0.7	30
15	Exploring Carbon Mineral Systems: Recent Advances in C Mineral Evolution, Mineral Ecology, and Network Analysis. <i>Frontiers in Earth Science</i> , 2020, 8, .	0.8	29
16	Analysis and visualization of vanadium mineral diversity and distribution. <i>American Mineralogist</i> , 2018, 103, 1080-1086.	0.9	28
17	Using Visual Exploratory Data Analysis to Facilitate Collaboration and Hypothesis Generation in Cross-Disciplinary Research. <i>ISPRS International Journal of Geo-Information</i> , 2017, 6, 368.	1.4	27
18	Global earth mineral inventory: A data legacy. <i>Geoscience Data Journal</i> , 2021, 8, 74-89.	1.8	21

#	ARTICLE	IF	CITATIONS
19	Single-Site and Monolayer Surface Hydration Energy of Anatase and Rutile Nanoparticles Using Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2013, 117, 26084-26090.	1.5	18
20	The Co-Evolution of Fe-Oxides, Ti-Oxides, and Other Microbially Induced Mineral Precipitates In Sandy Sediments: Understanding the Role of Cyanobacteria In Weathering and Early Diagenesis. <i>Journal of Sedimentary Research</i> , 2015, 85, 1213-1227.	0.8	16
21	Evidence for the oxidation of Earth's crust from the evolution of manganese minerals. <i>Nature Communications</i> , 2022, 13, 960.	5.8	15
22	Habitability of hydrothermal systems at Jezero and Gusev Craters as constrained by hydrothermal alteration of a terrestrial mafic dike. <i>Chemie Der Erde</i> , 2020, 80, 125613.	0.8	12
23	Deep Carbon through Deep Time. , 2019, , 620-652.		10
24	AN EXPERIMENTAL LOOK AT THE TAPHONOMY OF CYANOBACTERIAL MATS IN SILICICLASTIC SEDIMENTS. <i>Palaios</i> , 2017, 32, 725-738.	0.6	7
25	Applications of time-resolved synchrotron X-ray diffraction to cation exchange, crystal growth and biomineralization reactions. <i>Mineralogical Magazine</i> , 2008, 72, 179-184.	0.6	4
26	Crystal structure of abelsonite, the only known crystalline geoporphyrin. <i>American Mineralogist</i> , 2017, , .	0.9	4
27	Corrections to "Thermal expansion of anatase and rutile between 300 and 575 K using synchrotron powder X-ray diffraction" [Powder Diffr. 22, 352-357 (2007)]. <i>Powder Diffraction</i> , 2008, 23, 267-267.	0.4	3
28	MinKin: A kinetic modeling program for the precipitation, dissolution, and phase transformation of minerals in aqueous solution. <i>Chemical Geology</i> , 2015, 405, 112-122.	1.4	3
29	Fractal distribution of mineral species among the crystallographic point groups. <i>American Mineralogist</i> , 2021, 106, 1574-1579.	0.9	2
30	Rowleyite, $[\text{Na}(\text{NH}_4, \text{K})_9\text{Cl}_4][\text{V}_2^{5+}, 4+(\text{P}, \text{As})\text{O}_8]_6 \cdot n[\text{H}_2\text{O}, \text{Na}, \text{NH}_4, \text{K}, \text{Cl}]_z$; a new mineral with a microporous framework structure. <i>American Mineralogist</i> , 2017, , .	0.9	1
31	ECOLOGY AND EVOLUTION OF MANGANESE MINERALS: IMPLICATIONS FOR THE REDOX HISTORY OF EARTH AND LIFE. , 2018, , .		1