Richard Hervig

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1385602/publications.pdf

Version: 2024-02-01

55 papers	2,689 citations	257450 24 h-index	182427 51 g-index
55 all docs	55 docs citations	55 times ranked	2726 citing authors

#	Article	IF	Citations
1	Shock-induced H loss from pyroxene and maskelynite in a Martian meteorite and the mantle source ÎD of enriched shergottites. Geochimica Et Cosmochimica Acta, 2022, 317, 201-217.	3.9	3
2	Diffusion anisotropy of Ti in zircon and implications for Ti-in-zircon thermometry. Earth and Planetary Science Letters, 2022, 578, 117317.	4.4	15
3	Secondary Ion Mass Spectrometry Reference Materials for Lithium in Carbonaceous Matrices. Geostandards and Geoanalytical Research, 2022, 46, 261-276.	3.1	2
4	A deuterium-poor water reservoir in the asteroid 4 Vesta and the inner solar system. Geochimica Et Cosmochimica Acta, 2021, 297, 203-219.	3.9	19
5	Multi-mode magnesium diffusion in sanidine: Applications for geospeedometry in magmatic systems. Geochimica Et Cosmochimica Acta, 2021, 298, 55-69.	3.9	6
6	Rhyolitic and basaltic reference materials for TC/EA analysis: Investigation of water extraction and D/H ratios. Chemical Geology, 2021, 583, 120486.	3.3	5
7	Quantifying low fluence ion implants in diamond-like carbon film by secondary ion mass spectrometry by understanding matrix effects. Journal of Analytical Atomic Spectrometry, 2021, 36, 194-209.	3.0	3
8	Cooperative formation of porous silica and peptides on the prebiotic Earth. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	6
9	Water on Mars: Insights from apatite in regolith breccia Northwest Africa 7034. Earth and Planetary Science Letters, 2020, 552, 116597.	4.4	9
10	Hydrogen Isotope Composition of a Large Silicic Magma Reservoir Preserved in Quartzâ€Hosted Glass Inclusions of the Bishop Tuff Plinian Eruption. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009358.	2.5	4
11	Magnesium isotopes of the bulk solar wind from Genesis diamondâ€like carbon films. Meteoritics and Planetary Science, 2020, 55, 352-375.	1.6	12
12	Best Practices for Determination of Initial ¹⁰Be/⁹Be in Early Solar System Materials by Secondary Ion Mass Spectrometry. Geostandards and Geoanalytical Research, 2020, 44, 695-710.	3.1	2
13	Best Practices for Determination of Initial Be/Be in Early Solar System Materials by Secondary Ion Mass Spectrometry. Geostandards and Geoanalytical Research, 2020, 44, 695-710.	3.1	2
14	Nitrogen incorporation in silicates and metals: Results from SIMS, EPMA, FTIR, and laser-extraction mass spectrometry. American Mineralogist, 2019, 104, 31-46.	1.9	27
15	Determination of the water content and D/H ratio of the martian mantle by unraveling degassing and crystallization effects in nakhlites. Geochimica Et Cosmochimica Acta, 2019, 266, 382-415.	3.9	18
16	Nitrogen diffusion in silicate minerals, with implications for nitrogen transport and cycling in the lithosphere. Chemical Geology, 2019, 516, 42-58.	3.3	9
17	Analytical Techniques for Probing Small-Scale Layers that Preserve Information on Gasâ€“Solid Interactions. Reviews in Mineralogy and Geochemistry, 2018, 84, 103-175.	4.8	13
18	4. Analytical Techniques for Probing Small-Scale Layers that Preserve Information on Gasâ€“Solid Interactions. , 2018, , 103-176.		0

#	Article	IF	Citations
19	Terrestrial exposure of a fresh Martian meteorite causes rapid changes in hydrogen isotopes and water concentrations. Scientific Reports, 2018, 8, 12385.	3.3	24
20	Understanding heterogeneity in Genesis diamond-like carbon film using SIMS analysis of implants. Journal of Materials Science, 2017, 52, 11282-11305.	3.7	7
21	Tracking Radionuclide Fractionation in the First Atomic Explosion Using Stable Elements. Analytical Chemistry, 2017, 89, 9877-9883.	6.5	9
22	Determining the Elemental and Isotopic Composition of the Pre-solar Nebula from Genesis Data Analysis: The Case of Oxygen. Astrophysical Journal Letters, 2017, 851, L12.	8.3	15
23	Hydrogen isotopic composition of the Martian mantle inferred from the newest Martian meteorite fall, Tissint. Meteoritics and Planetary Science, 2016, 51, 2073-2091.	1.6	29
24	Analyzing nitrogen in natural and synthetic silicate glasses by secondary ion massÂspectrometry. Chemical Geology, 2016, 447, 27-39.	3.3	13
25	Diffusion kinetics of Cr in spinel: Experimental studies and implications for 53Mnâ€“53Cr cosmochronology. Geochimica Et Cosmochimica Acta, 2016, 175, 20-35.	3.9	16
26	Ion Implants as Matrixâ€Appropriate Calibrators for Geochemical Ion Probe Analyses. Geostandards and Geoanalytical Research, 2015, 39, 265-276.	3.1	18
27	Tracing hydrocarbons in gas shale using lithium and boron isotopes: Denver Basin USA, Wattenberg Gas Field. Chemical Geology, 2015, 417, 404-413.	3.3	20
28	176Luâ€“176Hf geochronology of garnet I: experimental determination of the diffusion kinetics of Lu3+ and Hf4+ in garnet, closure temperatures and geochronological implications. Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	80
29	Normal-incidence Electron Gun alignment method for negative ion analysis on insulators by magnetic sector SIMS. Nuclear Instruments & Methods in Physics Research B, 2013, 295, 50-54.	1.4	7
30	Light element distributions (N, B, Li) in Baltic Basin bentonites record organic sources. Geochimica Et Cosmochimica Acta, 2013, 120, 582-599.	3.9	30
31	Unifying natural and laboratory chemical weathering with interfacial dissolutionâ€“reprecipitation: A study based on the nanometer-scale chemistry of fluidâ€“silicate interfaces. Chemical Geology, 2012, 294-295, 203-216.	3.3	234
32	Calibrating Ti concentrations in quartz for SIMS determinations using NIST silicate glasses and application to the TitaniQ geothermobarometer. American Mineralogist, 2011, 96, 1100-1106.	1.9	25
33	Neodymium diffusion in orthopyroxene: Experimental studies and applications to geological and planetary problems. Geochimica Et Cosmochimica Acta, 2011, 75, 4684-4698.	3.9	21
34	Ultrahydrous stishovite from high-pressure hydrothermal treatment of SiO₂. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20918-20922.	7.1	36
35	Analytical Methods in Diffusion Studies. Reviews in Mineralogy and Geochemistry, 2010, 72, 107-170.	4.8	35
36	4. Analytical Methods in Diffusion Studies. , 2010, , 107-170.		0

#	Article	IF	Citations
37	Lithium isotope analysis of olivine by SIMS: Calibration of a matrix effect and application to magmatic phenocrysts. Chemical Geology, 2009, 258, 5-16.	3.3	55
38	Hydrogen partitioning between nominally anhydrous upper mantle minerals and melt between 3 and 5ÂGPa and applications to hydrous peridotite partial melting. Chemical Geology, 2009, 262, 42-56.	3.3	154
39	Hydrogen partitioning between melt, clinopyroxene, and garnet at 3ÂGPa in a hydrous MORB with 6Âwt.% H2O. Contributions To Mineralogy and Petrology, 2008, 156, 607-625.	3.1	64
40	Intracrystalline boron isotope partitioning in illite-smectite: Testing the geothermometer. American Mineralogist, 2007, 92, 1958-1965.	1.9	23
41	Useful ion yields for Cameca IMS 3f and 6f SIMS: Limits on quantitative analysis. Chemical Geology, 2006, 227, 83-99.	3.3	71
42	Crystal-size dependence of illite-smectite isotope equilibration with changing fluids. Clays and Clay Minerals, 2006, 54, 531-540.	1.3	16
43	Rare earth diffusion kinetics in garnet: Experimental studies and applications. Geochimica Et Cosmochimica Acta, 2005, 69, 2385-2398.	3.9	158
44	Lithium and boron isotopes in illite-smectite: The importance of crystal size. Geochimica Et Cosmochimica Acta, 2005, 69, 5705-5716.	3.9	162
45	Boron isotope composition of coals: a potential tracer of organic contaminated fluids. Applied Geochemistry, 2004, 19, 1625-1636.	3.0	77
46	Isotopic and elemental partitioning of boron between hydrous fluid and silicate melt. American Mineralogist, 2002, 87, 769-774.	1.9	196
47	Analytical techniques for volatiles: A case study using intermediate (andesitic) glasses. American Mineralogist, 2002, 87, 1077-1089.	1.9	83
48	Anomalous fractionation of sulfur isotopes during sputtering. Rapid Communications in Mass Spectrometry, 2002, 16, 1774-1778.	1.5	18
49	The influence of organic matter on the boron isotope geochemistry of the gulf coast sedimentary basin, USA. Chemical Geology, 2001, 174, 445-461.	3.3	72
50	Explosive Basaltic Volcanism from Cerro Negro Volcano: Influence of Volatiles on Eruptive Style. Science, 1997, 277, 1639-1642.	12.6	255
51	Chapter 2. ANALYTICAL METHODS FOR VOLATILES IN GLASSES. , 1994, , 67-122.		47
52	Petrogenesis and volatile stratigraphy of the Bishop Tuff: Evidence from melt inclusion analysis. Journal of Geophysical Research, 1992, 97, 15129-15150.	3.3	84
53	Cause of chemical zoning in the Bishop (California) and Bandelier (New Mexico) magma chambers. Earth and Planetary Science Letters, 1992, 111, 97-108.	4.4	84
54	Microanalysis of oxygen isotopes in insulators by secondary ion mass spectrometry. International Journal of Mass Spectrometry and Ion Processes, 1992, 120, 45-63.	1.8	88

#	Article	IF	Citations
55	Melt-vapor solubilities and elemental partitioning in peraluminous granite-pegmatite systems: experimental results with Macusani glass at 200 MPa. Contributions To Mineralogy and Petrology, 1988, 99, 360-373.	3.1	208