

# Zachary M Geballe

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5318546/publications.pdf>

Version: 2024-02-01

18

papers

1,383

citations

840728

11

h-index

839512

18

g-index

18

all docs

18

docs citations

18

times ranked

1273

citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for Superconductivity above 260 K in Lanthanum Superhydride at Megabar Pressures. <i>Physical Review Letters</i> , 2019, 122, 027001.	7.8	891
2	Synthesis and Stability of Lanthanum Superhydrides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 688-692.	13.8	202
3	Dynamics and superconductivity in compressed lanthanum superhydride. <i>Physical Review B</i> , 2018, 98, .	3.2	85
4	New Calcium Hydrides with Mixed Atomic and Molecular Hydrogen. <i>Journal of Physical Chemistry C</i> , 2018, 122, 19370-19378.	3.1	38
5	Origin of temperature plateaus in laser-heated diamond anvil cell experiments. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	34
6	Synthesis and Stability of Lanthanum Superhydrides. <i>Angewandte Chemie</i> , 2018, 130, 696-700.	2.0	22
7	Raman spectroscopy on hydrogenated graphene under high pressure. <i>Carbon</i> , 2020, 156, 549-557.	10.3	18
8	Thermal conductivity near the bottom of the Earth's lower mantle: Measurements of pyrolite up to 120 GPa and 2500 K. <i>Earth and Planetary Science Letters</i> , 2020, 536, 116161.	4.4	18
9	A Spectroscopic Study of the Insulator-Metal Transition in Liquid Hydrogen and Deuterium. <i>Advanced Science</i> , 2020, 7, 1901668.	11.2	15
10	Red-green luminescence in indium gallium nitride alloys investigated by high pressure optical spectroscopy. <i>Applied Physics Letters</i> , 2012, 100, 162103.	3.3	14
11	Comment on "Evidence of a first-order phase transition to metallic hydrogen". <i>Physical Review B</i> , 2017, 96, .	3.2	12
12	Solid phases of FeSi to 47 GPa and 2800 K: New data. <i>American Mineralogist</i> , 2014, 99, 720-723.	1.9	11
13	Latent heat method to detect melting and freezing of metals at megabar pressures. <i>Physical Review Materials</i> , 2021, 5, .	2.4	6
14	Helium-hydrogen immiscibility at high pressures. <i>Journal of Chemical Physics</i> , 2019, 150, 114504.	3.0	5
15	Modulation calorimetry in diamond anvil cells. I. Heat flow models. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	4
16	AC calorimetry of H <sub>2</sub> O at pressures up to 9 GPa in diamond anvil cells. <i>Journal of Applied Physics</i> , 2017, 121, 245901.	2.5	3
17	High-pressure synthesis and thermodynamic stability of $PdH_{1-x}$ up to 8 GPa. <i>Physical Review B</i> , 2021, 103, .	2.5	1
18	Modulation calorimetry in diamond anvil cells. II. Joule-heating design and prototypes. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	2