

# Rostislav Hrubíak

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3108399/publications.pdf>

Version: 2024-02-01

22  
papers

543  
citations

858243

12  
h-index

721071

23  
g-index

24  
all docs

24  
docs citations

24  
times ranked

1009  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Entropy Borides under Extreme Environment of Pressures and Temperatures. <i>Materials</i> , 2022, 15, 3239.	1.3	7
2	Coexistence of vitreous and crystalline phases of H <sub>2</sub> O at ambient temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	3
3	High-pressure high-temperature synthesis and thermal equation of state of high-entropy transition metal boride. <i>AIP Advances</i> , 2021, 11, .	0.6	11
4	Experimental melting curve of zirconium metal to 37 GPa. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 355402.	0.7	10
5	Multimode scanning X-ray diffraction microscopy for diamond anvil cell experiments. <i>Review of Scientific Instruments</i> , 2019, 90, 025109.	0.6	19
6	Real time study of grain enlargement in zirconium under room-temperature compression across the $\hat{\epsilon}$ to $\beta$ phase transition. <i>Scientific Reports</i> , 2019, 9, 15712.	1.6	4
7	Thermochemical reactions of Al-based intermetallic composites to AlN. <i>Combustion and Flame</i> , 2019, 200, 115-124.	2.8	7
8	Surprising Stability of Cubane under Extreme Pressure. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2031-2037.	2.1	12
9	A CO <sub>2</sub> laser heating system for <i>in situ</i> high pressure-temperature experiments at HPCAT. <i>Review of Scientific Instruments</i> , 2018, 89, 083901.	0.6	18
10	Semiconducting cubic titanium nitride in the $\text{Th}_{3/4}\text{P}_4$ structure. <i>Physical Review Materials</i> , 2018, 2, .	0.9	24
11	Microstructures define melting of molybdenum at high pressures. <i>Nature Communications</i> , 2017, 8, 14562.	5.8	55
12	Pressure-induced structural transition in chalcopyrite ZnSiP <sub>2</sub> . <i>Applied Physics Letters</i> , 2017, 110, 182106.	1.5	17
13	Laser-assisted processing of Ni-Al-Co-Ti under high pressure. <i>Materials and Manufacturing Processes</i> , 2017, 32, 1606-1611.	2.7	3
14	Origins of ultralow velocity zones through slab-derived metallic melt. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5547-5551.	3.3	55
15	High-pressure, high-temperature equations of state using nanofabricated controlled-geometry Ni/SiO <sub>2</sub> /Ni double hot-plate samples. <i>Geophysical Research Letters</i> , 2015, 42, 10,239.	1.5	11
16	The laser micro-machining system for diamond anvil cell experiments and general precision machining applications at the High Pressure Collaborative Access Team. <i>Review of Scientific Instruments</i> , 2015, 86, 072202.	0.6	80
17	New developments in laser-heated diamond anvil cell with <i>in situ</i> synchrotron x-ray diffraction at High Pressure Collaborative Access Team. <i>Review of Scientific Instruments</i> , 2015, 86, 072201.	0.6	90
18	Mapping the nebular condensates and the chemical composition of the terrestrial planets. <i>Earth and Planetary Science Letters</i> , 2014, 393, 113-119.	1.8	9

#	ARTICLE	IF	CITATIONS
19	High P-T phase transitions and P-V-T equation of state of hafnium. Journal of Applied Physics, 2012, 111, .	1.1	22
20	The structural and optical properties of ZnO bulk and nanocrystals under high pressure. High Pressure Research, 2012, 32, 354-363.	0.4	23
21	The thermodynamics of several elements at high pressure. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 72-81.	0.7	36
22	Principal component analysis on properties of binary and ternary hydrides and a comparison of metal versus metal hydride properties. Journal of Alloys and Compounds, 2009, 478, 731-735.	2.8	24