Corey Oses

List of Publications by Year
in descending order

38 papers	4,032 citations	279701 23 h-index	395590 33 g-index
39 all docs	39 docs citations	39 times ranked	4061 citing authors

#	Article	IF	Citations
1	Physics in the Machine: Integrating Physical Knowledge in Autonomous Phase-Mapping. Frontiers in Physics, 2022, 10, .	1.0	6
2	High-entropy ceramics: Propelling applications through disorder. MRS Bulletin, 2022, 47, 194-202.	1.7	26
3	The Microscopic Diamond Anvil Cell: Stabilization of Superhard, Superconducting Carbon Allotropes at Ambient Pressure. Angewandte Chemie - International Edition, 2022, 61, .	7.2	5
4	The Microscopic Diamond Anvil Cell: Stabilization of Superhard, Superconducting Carbon Allotropes at Ambient Pressure. Angewandte Chemie, 2022, 134, .	1.6	3
5	Automated coordination corrected enthalpies with AFLOW-CCE. Physical Review Materials, 2021, 5, .	0.9	9
6	Carbon stoichiometry and mechanical properties of high entropy carbides. Acta Materialia, 2021, 215, 117051.	3.8	28
7	Tin-pest problem as a test of density functionals using high-throughput calculations. Physical Review Materials, 2021, 5, .	0.9	7
8	Entropy Landscaping of Highâ€Entropy Carbides. Advanced Materials, 2021, 33, e2102904.	11.1	38
9	Settling the matter of the role of vibrations in the stability of high-entropy carbides. Nature Communications, 2021, 12, 5747.	5.8	28
10	The AFLOW Library of Crystallographic Prototypes: Part 3. Computational Materials Science, 2021, 199, 110450.	1.4	16
11	On-the-fly closed-loop materials discovery via Bayesian active learning. Nature Communications, 2020, 11, 5966.	5.8	167
12	High-entropy ceramics. Nature Reviews Materials, 2020, 5, 295-309.	23.3	902
13	Discovery of high-entropy ceramics via machine learning. Npj Computational Materials, 2020, 6, .	3.5	133
14	Machine Learning and High-Throughput Approaches to Magnetism. , 2020, , 351-373.		2
15	The AFLOW Fleet for Materials Discovery. , 2020, , 1785-1812.		4
16	Unavoidable disorder and entropy in multi-component systems. Npj Computational Materials, 2019, 5, .	3.5	61
17	Metallic glasses for biodegradable implants. Acta Materialia, 2019, 176, 297-305.	3.8	25
18	Predicting superhard materials via a machine learning informed evolutionary structure search. Npj Computational Materials, 2019, 5, .	3.5	74

#	Article	IF	Citations
19	Coordination corrected ab initio formation enthalpies. Npj Computational Materials, 2019, 5, .	3.5	38
20	The AFLOW Fleet for Materials Discovery. , 2019, , 1-28.		0
21	AFLOW-QHA3P: Robust and automated method to compute thermodynamic properties of solids. Physical Review Materials, 2019, 3, .	0.9	8
22	The Structure and Composition Statistics of 6A Binary and Ternary Crystalline Materials. Inorganic Chemistry, 2018, 57, 653-667.	1.9	4
23	<i>AFLOW-SYM</i>: platform for the complete, automatic and self-consistent symmetry analysis of crystals. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, 184-203.	0.0	44
24	The AFLOW Fleet for Materials Discovery. , 2018, , 1-28.		9
25	High-entropy high-hardness metal carbides discovered by entropy descriptors. Nature Communications, 2018, 9, 4980.	5.8	604
26	Machine Learning and High-Throughput Approaches to Magnetism. , 2018, , 1-23.		3
27	AFLOW-CHULL: Cloud-Oriented Platform for Autonomous Phase Stability Analysis. Journal of Chemical Information and Modeling, 2018, 58, 2477-2490.	2.5	69
28	Data-driven design of inorganic materials with the Automatic Flow Framework for Materials Discovery. MRS Bulletin, 2018, 43, 670-675.	1.7	35
29	AFLOW-ML: A RESTful API for machine-learning predictions of materials properties. Computational Materials Science, 2018, 152, 134-145.	1.4	72
30	Machine learning modeling of superconducting critical temperature. Npj Computational Materials, 2018, 4, .	3.5	274
31	Accelerated discovery of new magnets in the Heusler alloy family. Science Advances, 2017, 3, e1602241.	4.7	197
32	AFLUX: The LUX materials search API for the AFLOW data repositories. Computational Materials Science, 2017, 137, 362-370.	1.4	56
33	A computational high-throughput search for new ternary superalloys. Acta Materialia, 2017, 122, 438-447.	3.8	70
34	Universal fragment descriptors for predicting properties of inorganic crystals. Nature Communications, 2017, 8, 15679.	5.8	435
35	Combining the AFLOW GIBBS and elastic libraries to efficiently and robustly screen thermomechanical properties of solids. Physical Review Materials, 2017, 1, .	0.9	47
36	Modeling Off-Stoichiometry Materials with a High-Throughput Ab-Initio Approach. Chemistry of Materials, 2016, 28, 6484-6492.	3.2	78

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37	The AFLOW standard for high-throughput materials science calculations. Computational Materials Science, 2015, 108, 233-238.	1.4	244
38	Materials Cartography: Representing and Mining Materials Space Using Structural and Electronic Fingerprints. Chemistry of Materials, 2015, 27, 735-743.	3.2	209