Corey Oses

List of Publications by Year
in descending order

38 papers	4,032 citations	279798 23 h-index	395702 33 g-index
39 all docs	39 docs citations	39 times ranked	4061 citing authors

#	Article	IF	Citations
1	High-entropy ceramics. Nature Reviews Materials, 2020, 5, 295-309.	48.7	902
2	High-entropy high-hardness metal carbides discovered by entropy descriptors. Nature Communications, 2018, 9, 4980.	12.8	604
3	Universal fragment descriptors for predicting properties of inorganic crystals. Nature Communications, 2017, 8, 15679.	12.8	435
4	Machine learning modeling of superconducting critical temperature. Npj Computational Materials, 2018, 4, .	8.7	274
5	The AFLOW standard for high-throughput materials science calculations. Computational Materials Science, 2015, 108, 233-238.	3.0	244
6	Materials Cartography: Representing and Mining Materials Space Using Structural and Electronic Fingerprints. Chemistry of Materials, 2015, 27, 735-743.	6.7	209
7	Accelerated discovery of new magnets in the Heusler alloy family. Science Advances, 2017, 3, e1602241.	10.3	197
8	On-the-fly closed-loop materials discovery via Bayesian active learning. Nature Communications, 2020, 11, 5966.	12.8	167
9	Discovery of high-entropy ceramics via machine learning. Npj Computational Materials, 2020, 6, .	8.7	133
10	Modeling Off-Stoichiometry Materials with a High-Throughput Ab-Initio Approach. Chemistry of Materials, 2016, 28, 6484-6492.	6.7	78
11	Predicting superhard materials via a machine learning informed evolutionary structure search. Npj Computational Materials, 2019, 5, .	8.7	74
12	AFLOW-ML: A RESTful API for machine-learning predictions of materials properties. Computational Materials Science, 2018, 152, 134-145.	3.0	72
13	A computational high-throughput search for new ternary superalloys. Acta Materialia, 2017, 122, 438-447.	7.9	70
14	AFLOW-CHULL: Cloud-Oriented Platform for Autonomous Phase Stability Analysis. Journal of Chemical Information and Modeling, 2018, 58, 2477-2490.	5.4	69
15	Unavoidable disorder and entropy in multi-component systems. Npj Computational Materials, 2019, 5, .	8.7	61
16	AFLUX: The LUX materials search API for the AFLOW data repositories. Computational Materials Science, 2017, 137, 362-370.	3.0	56
17	Combining the AFLOW GIBBS and elastic libraries to efficiently and robustly screen thermomechanical properties of solids. Physical Review Materials, 2017, 1, .	2.4	47
18	<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.	0.1	44

#	Article	IF	Citations
19	Coordination corrected ab initio formation enthalpies. Npj Computational Materials, 2019, 5, .	8.7	38
20	Entropy Landscaping of Highâ€Entropy Carbides. Advanced Materials, 2021, 33, e2102904.	21.0	38
21	Data-driven design of inorganic materials with the Automatic Flow Framework for Materials Discovery. MRS Bulletin, 2018, 43, 670-675.	3.5	35
22	Carbon stoichiometry and mechanical properties of high entropy carbides. Acta Materialia, 2021, 215, 117051.	7.9	28
23	Settling the matter of the role of vibrations in the stability of high-entropy carbides. Nature Communications, 2021, 12, 5747.	12.8	28
24	High-entropy ceramics: Propelling applications through disorder. MRS Bulletin, 2022, 47, 194-202.	3.5	26
25	Metallic glasses for biodegradable implants. Acta Materialia, 2019, 176, 297-305.	7.9	25
26	The AFLOW Library of Crystallographic Prototypes: Part 3. Computational Materials Science, 2021, 199, 110450.	3.0	16
27	The AFLOW Fleet for Materials Discovery. , 2018, , 1-28.		9
28	Automated coordination corrected enthalpies with AFLOW-CCE. Physical Review Materials, 2021, 5, .	2.4	9
29	AFLOW-QHA3P: Robust and automated method to compute thermodynamic properties of solids. Physical Review Materials, 2019, 3, .	2.4	8
30	Tin-pest problem as a test of density functionals using high-throughput calculations. Physical Review Materials, 2021, 5, .	2.4	7
31	Physics in the Machine: Integrating Physical Knowledge in Autonomous Phase-Mapping. Frontiers in Physics, 2022, 10, .	2.1	6
32	The Microscopic Diamond Anvil Cell: Stabilization of Superhard, Superconducting Carbon Allotropes at Ambient Pressure. Angewandte Chemie - International Edition, 2022, 61, .	13.8	5
33	The Structure and Composition Statistics of 6A Binary and Ternary Crystalline Materials. Inorganic Chemistry, 2018, 57, 653-667.	4.0	4
34	The AFLOW Fleet for Materials Discovery. , 2020, , 1785-1812.		4
35	Machine Learning and High-Throughput Approaches to Magnetism. , 2018, , 1-23.		3
36	The Microscopic Diamond Anvil Cell: Stabilization of Superhard, Superconducting Carbon Allotropes at Ambient Pressure. Angewandte Chemie, 2022, 134, .	2.0	3

#	Article	IF	Citations
37	Machine Learning and High-Throughput Approaches to Magnetism. , 2020, , 351-373.		2
38	The AFLOW Fleet for Materials Discovery. , 2019, , 1-28.		0