Francesca Tavazza

List of Publications by Year
in descending order

23	1,681	18	24
papers	citations	h-index	g-index
		430874	610901

24	24	24	1833
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent advances and applications of deep learning methods in materials science. Npj Computational Materials, 2022, 8, .	8.7	207
2	Computational scanning tunneling microscope image database. Scientific Data, 2021, 8, 57.	5.3	15
3	High-throughput search for magnetic topological materials using spin-orbit spillage, machine learning, and experiments. Physical Review B, 2021, 103, .	3.2	22
4	Predicting anomalous quantum confinement effect in van der Waals materials. Physical Review Materials, 2021, 5, .	2.4	10
5	Uncertainty Prediction for Machine Learning Models of Material Properties. ACS Omega, 2021, 6, 32431-32440.	3.5	21
6	Cross-property deep transfer learning framework for enhanced predictive analytics on small materials data. Nature Communications, 2021, 12, 6595.	12.8	55
7	The joint automated repository for various integrated simulations (JARVIS) for data-driven materials design. Npj Computational Materials, 2020, 6, .	8.7	181
8	Computational search for magnetic and non-magnetic 2D topological materials using unified spinâ€“orbit spillage screening. Npj Computational Materials, 2020, 6, .	8.7	32
9	High-throughput density functional perturbation theory and machine learning predictions of infrared, piezoelectric, and dielectric responses. Npj Computational Materials, 2020, 6, .	8.7	60
10	Data-driven discovery of 3D and 2D thermoelectric materials. Journal of Physics Condensed Matter, 2020, 32, 475501.	1.8	42
11	Accelerated Discovery of Efficient Solar Cell Materials Using Quantum and Machine-Learning Methods. Chemistry of Materials, 2019, 31, 5900-5908.	6.7	87
12	Materials science in the artificial intelligence age: high-throughput library generation, machine learning, and a pathway from correlations to the underpinning physics. MRS Communications, 2019, 9, 821-838.	1.8	109
13	High-throughput Discovery of Topologically Non-trivial Materials using Spin-orbit Spillage. Scientific Reports, 2019, 9, 8534.	3.3	36
14	Convergence and machine learning predictions of Monkhorst-Pack k-points and plane-wave cut-off in high-throughput DFT calculations. Computational Materials Science, 2019, 161, 300-308.	3.0	68
15	Enhancing materials property prediction by leveraging computational and experimental data using deep transfer learning. Nature Communications, 2019, 10, 5316.	12.8	160
16	Computational screening of high-performance optoelectronic materials using OptB88vdW and TB-mBJ formalisms. Scientific Data, 2018, 5, 180082.	5.3	79
17	Elastic properties of bulk and low-dimensional materials using van der Waals density functional. Physical Review B, 2018, 98, .	3.2	88
18	Machine learning with force-field-inspired descriptors for materials: Fast screening and mapping energy landscape. Physical Review Materials, 2018, 2, .	2.4	90

#	ARTICLE	IF	CITATIONS
19	Evaluation and comparison of classical interatomic potentials through a user-friendly interactive web-interface. Scientific Data, 2017, 4, 160125.	5.3	18
20	High-throughput Identification and Characterization of Two-dimensional Materials using Density functional theory. Scientific Reports, 2017, 7, 5179.	3.3	173
21	Genetic algorithm prediction of two-dimensional group-IV dioxides for dielectrics. Physical Review B, 2017, 95, .	3.2	23
22	Atom Probe Tomography Analysis of Ag Doping in 2D Layered Material (PbSe)₅(Bi₂Se₃)₃. Nano Letters, 2016, 16, 6064-6069.	9.1	8
23	MPInterfaces: A Materials Project based Python tool for high-throughput computational screening of interfacial systems. Computational Materials Science, 2016, 122, 183-190.	3.0	95