Christian R Trott

List of Publications by Year
in descending order

18 papers	4,198 citations	840776 11 h-index	1125743 13 g-index
18 all docs	18 docs citations	18 times ranked	1775 citing authors

#	Article	IF	Citations
1	LAMMPS - a flexible simulation tool for particle-based materials modeling at the atomic, meso, and continuum scales. Computer Physics Communications, 2022, 271, 108171.	7.5	3,106
2	Kokkos: Enabling manycore performance portability through polymorphic memory access patterns. Journal of Parallel and Distributed Computing, 2014, 74, 3202-3216.	4.1	623
3	Kokkos 3: Programming Model Extensions for the Exascale Era. IEEE Transactions on Parallel and Distributed Systems, 2022, 33, 805-817.	5.6	127
4	Kokkos: Enabling Performance Portability Across Manycore Architectures. , 2013, , .		60
5	Mixed Barrier Model for the Mixed Glass Former Effect in Ion Conducting Glasses. Physical Review Letters, 2009, 102, 145902.	7.8	50
6	The development of Mellanox/NVIDIA GPUDirect over InfiniBandâ€"a new model for GPU to GPU communications. Computer Science - Research and Development, 2011, 26, 267-273.	2.7	44
7	Multithreaded sparse matrix-matrix multiplication for many-core and GPU architectures. Parallel Computing, 2018, 78, 33-46.	2.1	38
8	Network forming units in alkali borate and borophosphate glasses and the mixed glass former effect. RSC Advances, 2011, 1, 1370.	3.6	32
9	Investigation of the Structures of Sodium Borophosphate Glasses by Reverse Monte Carlo Modeling to Examine the Origins of the Mixed Glass Former Effect. Journal of Physical Chemistry C, 2012, 116, 1503-1511.	3.1	31
10	The Kokkos EcoSystem: Comprehensive Performance Portability for High Performance Computing. Computing in Science and Engineering, 2021, 23, 10-18.	1.2	30
11	Reverse Monte Carlo modeling of ion conducting network glasses: An evaluation based on molecular dynamics simulations. Physical Chemistry Chemical Physics, 2010, 12, 10444.	2.8	17
12	Molecular Dynamics Simulations of Clathrate Hydrates on Specialised Hardware Platforms. Energies, 2012, 5, 3526-3533.	3.1	16
13	SNAP: Strong Scaling High Fidelity Molecular Dynamics Simulations on Leadership-Class Computing Platforms. Lecture Notes in Computer Science, 2014, , 19-34.	1.3	10
14	mdspan in C++: A Case Study in the Integration of Performance Portable Features into International Language Standards. , 2019, , .		6
15	Profiling and Debugging Support for the Kokkos Programming Model. Lecture Notes in Computer Science, 2018, , 743-754.	1.3	4
16	Evaluating the feasibility of using memory content similarity to improve system resilience. , 2013, , .		3
17	Revisiting Online Autotuning for Sparse-Matrix Vector Multiplication Kernels on Next-Generation Architectures. , 2017, , .		1
18	Towards High Performance Resilience Using Performance Portable Abstractions. Lecture Notes in Computer Science, 2021, , 451-465.	1.3	0