Alessandro Gabbana

List of Publications by Year in Descending Order

23 papers	**222** citations	**9** h-index	**14** g-index
25 ext. papers	**280** ext. citations	**3.5** avg, IF	**3.54** L-index

#	Paper	IF	Citations
23	A Lattice Boltzmann Method for relativistic rarefied flows in (2+1) dimensions. *Journal of Computational Science*, **2021**, 51, 101320	3.4	1
22	A non-equilibrium bounce-back boundary condition for thermal multispeed LBM. *Journal of Computational Science*, **2021**, 53, 101364	3.4	3
21	Quantum computation of thermal averages in the presence of a sign problem. *Physical Review D*, **2020**, 101,	4.9	4
20	ThunderX2 Performance and Energy-Efficiency for HPC Workloads. *Computation*, **2020**, 8, 20	2.2	5
19	Dissipative hydrodynamics of relativistic shock waves in a quark gluon plasma: Comparing and benchmarking alternate numerical methods. *Physical Review C*, **2020**, 101,	2.7	4
18	Relativistic lattice Boltzmann methods: Theory and applications. *Physics Reports*, **2020**, 863, 1-63	27.7	12
17	Energy-Efficiency Tuning of a Lattice Boltzmann Simulation Using MERIC. *Lecture Notes in Computer Science*, **2020**, 169-180	0.9	2
16	Early Performance Assessment of the ThunderX2 Processor for Lattice Based Simulations. *Lecture Notes in Computer Science*, **2020**, 187-198	0.9	2
15	Beyond moments: relativistic lattice Boltzmann methods for radiative transport in computational astrophysics. *Monthly Notices of the Royal Astronomical Society*, **2020**, 498, 3374-3394	4.3	6
14	Probing bulk viscosity in relativistic flows. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2020**, 378, 20190409	3	2
13	Relativistic dissipation obeys Chapman-Enskog asymptotics: Analytical and numerical evidence as a basis for accurate kinetic simulations. *Physical Review E*, **2019**, 99, 052126	2.4	8
12	Optimization of lattice Boltzmann simulations on heterogeneous computers. *International Journal of High Performance Computing Applications*, **2019**, 33, 124-139	1.8	19
11	Numerical evidence of electron hydrodynamic whirlpools in graphene samples. *Computers and Fluids*, **2018**, 172, 644-650	2.8	4
10	Early Experience on Using Knights Landing Processors for Lattice Boltzmann Applications. *Lecture Notes in Computer Science*, **2018**, 519-530	0.9	3
9	Software and DVFS Tuning for Performance and Energy-Efficiency on Intel KNL Processors. *Journal of Low Power Electronics and Applications*, **2018**, 8, 18	1.7	9
8	Design and Optimizations of Lattice Boltzmann Methods for Massively Parallel GPU-Based Clusters. *Advances in Computer and Electrical Engineering Book Series*, **2018**, 54-114	0.3	
7	Prospects for the Detection of Electronic Preturbulence in Graphene. *Physical Review Letters*, **2018**, 121, 236602	7.4	11

LIST OF PUBLICATIONS

6	Evaluation of DVFS techniques on modern HPC processors and accelerators for energy-aware applications. *Concurrency Computation Practice and Experience*, **2017**, 29, e4143	1.4	22
5	Towards a unified lattice kinetic scheme for relativistic hydrodynamics. *Physical Review E*, **2017**, 95, 053304	2.4	17
4	Kinetic approach to relativistic dissipation. *Physical Review E*, **2017**, 96, 023305	2.4	15
3	Massively parallel lattice Boltzmann codes on large GPU clusters. *Parallel Computing*, **2016**, 58, 1-24	1	44
2	Performance and portability of accelerated lattice Boltzmann applications with OpenACC. *Concurrency Computation Practice and Experience*, **2016**, 28, 3485-3502	1.4	26
1	Benchmarking MIC architectures with Monte Carlo simulations of spin glass systems **2013**,		3