Lorenzo Stella

List of Publications by Year
in descending order

38 papers	1,190 citations	516710 16 h-index	377865 34 g-index
38 all docs	38 docs citations	38 times ranked	1855 citing authors

#	Article	IF	Citations
1	Real-space grids and the Octopus code as tools for the development of new simulation approaches for electronic systems. Physical Chemistry Chemical Physics, 2015, 17, 31371-31396.	2.8	376
2	Performance of Nonlocal Optics When Applied to Plasmonic Nanostructures. Journal of Physical Chemistry C, 2013, 117, 8941-8949.	3.1	103
3	Picosecond metrology of laser-driven proton bursts. Nature Communications, 2016, 7, 10642.	12.8	80
4	Strong electronic correlation in the hydrogen chain: A variational Monte Carlo study. Physical Review B, 2011, 84, .	3.2	73
5	Generalized Langevin equation: An efficient approach to nonequilibrium molecular dynamics of open systems. Physical Review B, 2014, 89, .	3.2	54
6	Evaluation of La_{1â^'x}Sr_xMnO₃ (0 â‰¤ x < 0.4) synthesised via a modified solâ€“gel method as mediators for magnetic fluid hyperthermia. CrystEngComm, 2016, 18, 407-416.	2.6	52
7	Optimization by quantum annealing: Lessons from simple cases. Physical Review B, 2005, 72, .	3.2	50
8	A multiconfigurational time-dependent Hartree-Fock method for excited electronic states. I. General formalism and application to open-shell states. Journal of Chemical Physics, 2011, 134, 244101.	3.0	48
9	Modelling non-adiabatic processes using correlated electron-ion dynamics. European Physical Journal B, 2010, 77, 305-329.	1.5	33
10	State of the art in composition, fabrication, characterization, and modeling methods of cement-based thermoelectric materials for low-temperature applications. Renewable and Sustainable Energy Reviews, 2021, 137, 110361.	16.4	24
11	The Investigation of Floryâ€“Huggins Interaction Parameters for Amorphous Solid Dispersion Across the Entire Temperature and Composition Range. Pharmaceutics, 2019, 11, 420.	4.5	23
12	Robust nonadiabatic molecular dynamics for metals and insulators. Journal of Chemical Physics, 2007, 127, 214104.	3.0	21
13	Applications of the generalized Langevin equation: Towards a realistic description of the baths. Physical Review B, 2015, 91, .	3.2	21
14	Monte Carlo studies of quantum and classical annealing on a double well. Physical Review B, 2006, 73, .	3.2	19
15	A multiconfigurational time-dependent Hartree-Fock method for excited electronic states. II. Coulomb interaction effects in single conjugated polymer chains. Journal of Chemical Physics, 2011, 134, 244102.	3.0	18
16	Drug-Rich Phases Induced by Amorphous Solid Dispersion: Arbitrary or Intentional Goal in Oral Drug Delivery?. Pharmaceutics, 2021, 13, 889.	4.5	17
17	Nonequilibrium processes from generalized Langevin equations: Realistic nanoscale systems connected to two thermal baths. Physical Review B, 2016, 93, .	3.2	14
18	Quantum annealing of an Ising spin-glass by Greenâ€™s function Monte Carlo. Physical Review E, 2007, 75, 036703.	2.1	13

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19	Correlated electron-ion dynamics in metallic systems. Computational Materials Science, 2008, 44, 16-20.	3.0	12
20	Synthesis, characterisation and study of magnetocaloric effects (enhanced and reduced) in manganate perovskites. Materials Research Bulletin, 2017, 88, 69-77.	5.2	12
21	Ionic liquids tethered to a preorganised 1,2-diamide motif for extraction of lanthanides. Green Chemistry, 2019, 21, 2583-2588.	9.0	12
22	An introduction to zwitterionic salts. Green Chemistry, 2017, 19, 4007-4011.	9.0	11
23	Multicharge zwitterionic molecules: Hydration, kosmotropicity and anti-fouling potential. Journal of Colloid and Interface Science, 2020, 562, 391-399.	9.4	10
24	Effect of Phlorotannins from Brown Seaweeds on the In Vitro Digestibility of Pig Feed. Animals, 2020, 10, 2193.	2.3	9
25	Analog of Rabi oscillations in resonant electron-ion systems. Journal of Chemical Physics, 2011, 134, 194105.	3.0	8
26	Projected equations of motion approach to hybrid quantum/classical dynamics in dielectric-metal composites. Physical Review B, 2016, 94, .	3.2	8
27	c-number quantum generalized Langevin equation for an open system. Physical Review B, 2016, 94, .	3.2	8
28	Mixing regime simulation and cellulose particle tracing in a stacked frame photocatalytic reactor. Chemical Engineering Journal, 2017, 313, 301-308.	12.7	8
29	Development and Optimization of an Immobilized Photocatalytic System within a Stacked Frame Photoreactor (SFPR) Using Light Distribution and Fluid Mixing Simulation Coupled with Experimental Validation. Industrial & Engineering Chemistry Research, 2019, 58, 2727-2740.	3.7	8
30	Improving the crystallinity and magnetocaloric effect of the perovskite La_{0.65}Sr_{0.35}MnO₃ using microwave irradiation. CrystEngComm, 2017, 19, 3776-3791.	2.6	7
31	Characterization and Performance Enhancement of Cement-Based Thermoelectric Materials. Polymers, 2022, 14, 2311.	4.5	7
32	Theory of phonon dissipation in the conduction of stressed Au nanowires. Surface Science, 2004, 566-568, 430-435.	1.9	6
33	Optimization through quantum annealing: theory and some applications. Contemporary Physics, 2006, 47, 195-208.	1.8	6
34	Nonequilibrium generalised Langevin equation for the calculation of heat transport properties in model 1D atomic chains coupled to two 3D thermal baths. Journal of Chemical Physics, 2017, 146, 164103.	3.0	6
35	Rocking Behaviour of Multi-Block Columns Subjected to Pulse-Type Ground Motion Accelerations. Open Construction and Building Technology Journal, 2016, 10, 150-157.	0.7	6
36	On transition rates in surface hopping. Journal of Chemical Physics, 2012, 137, 234113.	3.0	4

#	Article	IF	Citations
37	An excitonic model for the electronâ€“hole plasma relaxation in proton-irradiated insulators. European Physical Journal D, 2021, 75, 1.	1.3	3
38	Modelling a Bistable System Strongly Coupled to a Debye Bath: A Quasiclassical Approach Based on the Generalised Langevin Equation. Computational Methods in Science and Technology, 2017, 23, .	0.3	0