

List of publications of Claudio Verdozzi

Submitted articles

2. M. Gopalakrishna, E. Viñas Boström, C. Verdozzi, *Second Harmonic Generation from Ultracold Bosons in an Optical Cavity*, arXiv:2401.05929 .
1. M. Gopalakrishna, Y. Pavlyukh, C. Verdozzi, *Time resolved optical response of the Dicke's model via the nonequilibrium Green's function approach*, arXiv:2312.13874 .

Published peer-reviewed articles

66. E. Östberg, E. Viñas Böstrom,, C. Verdozzi, *Microscopic theory of current-induced skyrmion transport and its application in disordered spin textures*, Front. Phys. 11:1340288. doi: 10.3389/fphy.2023.1340288 (2024).
65. Z. Zhao, C. Verdozzi, F. Aryasetiawan, *Dynamical exchange-correlation potential formalism for spin-1/2 Heisenberg and Hubbard chains: the antiferromagnetic/half-filled case*, Phys. Rev. B **108**, 235132 (2023).
64. M. Gopalakrishna, E. Viñas Boström, C. Verdozzi, *Photon pumping, photodissociation and dissipation at interplay for the fluorescence of a molecule in a cavity*, SciPost Phys. **15**, 138 (2023).
63. B. Truc, A. A. Sapozhnik, P. Tengdin, E. Viñas Boström, T. Schönenberger, S. Gargiulo, I. Madan, T. LaGrange, A. Magrez, C. Verdozzi, A.l Rubio, H. M. Rønnow, and F. Carbone, *Light-Induced Metastable Hidden Skyrmion Phase in the Mott Insulator Cu₂OSeO₃*, Adv. Mater. 2304197 (2023).
62. K. Prech , P. Johansson, E. Nyholm , G. T. Landi , C. Verdozzi, P. Samuelsson , and P. P. Potts, *Entanglement and thermokinetic uncertainty relations in coherent mesoscopic transport*, Phys. Rev. Research **5**, 023155 (2023).
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60. E. Viñas Boström, A. Rubio and C. Verdozzi, *Microscopic Theory of Light-Induced Ultrafast Skyrmion Excitation in Transition Metal Films*, npj Computational Materials **8**, 62 (2022).
59. J.-P. Joost, N. Schlünzen, S. Hese, M. Bonitz, C. Verdozzi, P. Schmitteckert, M. Hopjan, *Löwdin's symmetry dilemma within Green functions theory for the one-dimensional Hubbard model* , Contrib. Plasma Phys, e202000220 (2022).
58. J. Schmidt, L. Pettersson, C. Verdozzi, S. Botti, and M. A. L. Marques, *Crystal graph attention networks for the prediction of stable materials*, Science Advances **7**, 49 (2021).
57. S. Di Sabatino, C. Verdozzi, and P. Romaniello, *Time dependent reduced density matrix functional theory at strong correlation: insights from a two-site Anderson impurity mode*, Phys. Chem. Chem. Phys. **23**, 16730 (2021).
56. L. Wittenbecher, E. Vinás Boström, J. Vogelsang, S. Lehman, K. A. Dick, C. Verdozzi, D. Zigmantas, and A. Mikkelsen, *Unraveling the Ultrafast Hot Electron Dynamics in Semiconductor Nanowires*, ACS Nano **15**, 1133 (2021).

55. E. Viñas Boström, A. D'Andrea, M. Cini, and C. Verdozzi, *Time-resolved multiphoton effects in the fluorescence spectra of two-level systems at rest and in motion*, Phys. Rev. A **102**, 013719 (2020).
54. E. Viñas Boström, P. Helmer, P. Werner, and C. Verdozzi, *Electron-electron versus electron-phonon interactions in lattice models: Screening effects described by a density functional theory approach*, Phys. Rev. Research **1**, 013017 (2019).
53. E. Boström and C. Verdozzi, *Steering Magnetic Skyrmions with Currents: A Nonequilibrium Green's Function Approach*, Physica Status Solidi **b**, 1800590 (2019).
52. M. Hopjan and C. Verdozzi, *Initial correlated states for the Generalized Kadanoff-Baym Ansatz without adiabatic switching-on of interactions in closed systems*, Eur. Phys. J. Special Topics, e2018-800054-3 (2019).
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47. D. Karlsson, M. Hopjan, and C. Verdozzi, *Systems with disorder, interactions, and out of equilibrium: The exact independent-particle picture from density functional theory*, Phys. Rev. B **97**, 125151 (2018).
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41. D. Karlsson and C. Verdozzi, *Transport of Correlated Electrons through Disordered Chains: A Perspective on Entanglement, Conductance, and Disorder Averaging*, Phys. Rev. B **90**, 201109(R), (2014).

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