



# Jahanfar Abouie

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## Publications

### Journals

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- J. abouie, and D. Vashae, "Entanglement in Quantum Dots: Insights from Dynamic Susceptibility and Quantum Fisher Information", Advanced Quantum Technologies, pp. 2400117-2024, doi: [10.1002/qute.202400117](https://doi.org/10.1002/qute.202400117)
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- J. Abouie, and M. H. Zarei, "Partially topological phase in a quantum loop gas model with tension and pressure", Phys. Rev. B, Vol. 108, pp. 165133-2023, doi: [10.1103/PhysRevB.108.165133](https://doi.org/10.1103/PhysRevB.108.165133)
- N. Ahmadi, J. Abouie, R. Haghshenas, and D. Baeriswyl, "Frustrated mixed-spin ladders: Evidence for a bond-order wave phase between rung-singlet and Haldane phases", Phys. Rev. B, Vol. 106, NO. 174419, 2022, doi: [10.1103/PhysRevB.106.174419](https://doi.org/10.1103/PhysRevB.106.174419)
- S. Seyedi, F. Heydarinasab, and J. Abouie, "Frustrated mixed-spin chains: Three-site interactions and flat-band magnons", Phys. Rev. B, Vol. 106, pp. 1-11, 2022, doi:



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- A. N. Zarezad, and J. Abouie, "Transport in two-dimensional Rashba electron systems doped with interacting magnetic impurities", Phys. Rev. B, Vol. 101, NO. 115412, 3, 2020, doi: [10.1103/PhysRevB.101.115412](https://doi.org/10.1103/PhysRevB.101.115412)
- N. Ahmadi, J. Abouie, and D. Baeriswyl, "Topological and nontopological features of generalized Su-Schrieffer-Heeger models", Phys. Rev. B, Vol. 101, NO. 195117, 5, 2020, doi: [10.1103/PhysRevB.101.195117](https://doi.org/10.1103/PhysRevB.101.195117)
- F. Heydarinasab and J. Abouie, "Mixed-spin system with supersolid phases: Magnetocaloric effect and thermal properties", Journal of Physics: Condensed Matter, Vol. 32, NO. 16, 1, 2020, doi: [10.1088/1361-648X/ab61ca](https://doi.org/10.1088/1361-648X/ab61ca)
- S. Abdizadeh, J. Abouie, and Kh. Zakeri, "Dynamical switching of confined skyrmions under circular magnetic field", Phys. Rev. B, Vol. 101, NO. 24409, 1, 2020, doi: [10.1103/PhysRevB.101.024409](https://doi.org/10.1103/PhysRevB.101.024409)
- M. Pouranvari and J. Abouie, "Entanglement conductance as a characterization of a delocalized-localized phase transition in free fermion models", Phys. Rev. B, Vol. 100, -11, 2019, doi: [10.1103/PhysRevB.100.195109](https://doi.org/10.1103/PhysRevB.100.195109)
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- Z. Moradi and J. Abouie, "Entanglement spectrum of fermionic bilayer honeycomb lattice: Hofstadter butterfly", Journal of Statistical Mechanics: Theory and Experiment, Vol. 2016, NO. 113101, 2016, doi: [10.1088/1742-5468/2016/11/113101](https://doi.org/10.1088/1742-5468/2016/11/113101)
- J. Abouie and R. Sepehrinia, "Quantum-classical equivalence and ground state factorization ", EPL, Vol. 113, NO. 37005, , doi: [10.1209/0295-5075/113/37005](https://doi.org/10.1209/0295-5075/113/37005)