

Lista de lucrări științifice

Conferențiar dr. Iulia Ghiu

1. **Iulia Ghiu**, Mohamed Bourennane, and Anders Karlsson, *Entanglement-assisted local transformations between inequivalent classes of three-particle entangled states*, Physics Letters A **287**, 12-18 (2001).

2. **Iulia Ghiu**, *Asymmetric quantum telecloning of d-level systems and broadcasting of entanglement to different locations using the "many-to-many" communication protocol*, Physical Review A **67**, 012323 (2003).

3. **Iulia Ghiu** and Anders Karlsson, *Broadcasting of entanglement at a distance using linear optics and telecloning of entanglement*, Physical Review A **72**, 032331 (2005).

4. **Iulia Ghiu**, *Telebroadcasting of entangled two-spin-1/2 states*, Romanian Journal of Physics **50**, 117 - 125 (2005).

5. **Iulia Ghiu**, Mohamed Bourennane, and Anders Karlsson, *An upper bound on the maximal probability for successful conversion of multipartite pure entangled states*, Romanian Reports in Physics **57**, 283 – 294 (2005).

6. **Iulia Ghiu** and G. Björk, *Asymmetric two-output quantum processor in any dimension*, Romanian Journal of Physics **53**, 725 – 737 (2008).

7. **Iulia Ghiu**, *Applications of the Nielsen's theorem*, Romanian Journal of Physics **53**, 1117 – 1122 (2008).

8. M. Boca, **Iulia Ghiu**, P. Marian, and T. A. Marian, *Quantum Chernoff bound as a measure of nonclassicality for one-mode Gaussian states*, Physical Review A **79**, 014302 (2009).

9. **Iulia Ghiu**, *Local transformations of superpositions of entangled states*, Physics Letters A **373**, 922-926 (2009).

10. G. Björk, J. Söderholm, L. L. Sanchez-Soto, A. B. Klimov, **Iulia Ghiu**, P. Marian, and T. A. Marian, *Quantum degrees of polarization*, Optics Communications **283**, 4440 – 4447 (2010).

11. **Iulia Ghiu**, G. Björk, P. Marian, and T. A. Marian, *Probing light polarization with the quantum Chernoff bound*, Physical Review A **82**, 023803 (2010).

12. **Iulia Ghiu**, *Comment on Entanglement transformation between two-qubit mixed states by LOCC [Phys. Lett. A **373**, 3610 (2009)]*, Physics Letters A **374**, 4633 (2010).

13. **Iulia Ghiu**, *A new method of construction of all sets of mutually unbiased bases for two-qubit systems*, Journal of Physics: Conference Series **338**, 012008 (2012).

14. **Iulia Ghiu**, Tudor Isdrăilă, and Șerban Suciuc, *Imperfect many-to-many teleportation*, Romanian Journal of Physics **57**, 564 – 570 (2012).

15. **Iulia Ghiu**, *Generalized telebroadcasting of entanglement*, Romanian Journal of Physics **57**, 1046 – 1052 (2012).

16. **Iulia Ghiu**, *Non-optimal cloning of qubits at a distance*, Proceedings of the Romanian Academy, Series A **13**, 42 – 45 (2012).
17. **Iulia Ghiu**, *Generation of all sets of mutually unbiased bases for three-qubit systems*, Physica Scripta **T153**, 014027 (2013).
18. **Iulia Ghiu**, P. Marian, and T. A. Marian, *Measures of non-Gaussianity for one-mode field states*, Physica Scripta **T153**, 014028 (2013).
19. P. Marian, **Iulia Ghiu**, and T. A. Marian, *Gaussification through decoherence*, Physical Review A **88**, 012316 (2013).
20. **Iulia Ghiu**, *Asymmetric telecloning using non-maximally entangled channels*, Romanian Reports in Physics **65**, 721–727 (2013).
21. Cristian Ghiu and **Iulia Ghiu**, *Construction of the mutually orthogonal extraordinary supersquares*, Central European Journal of Mathematics **12**, 337 – 348 (2014).
22. Peter Adam, Vladimir A. Andreev, **Iulia Ghiu**, Aurelian Isar, Margarita A. Man’ko, and Vladimir I. Man’ko, *Wigner functions and spin tomograms for qubit states*, Journal of Russian Laser Research **35**, 3 – 13 (2014).
23. **Iulia Ghiu**, *Quantum Chernoff bound as a measure of efficiency of quantum cloning for mixed states*, Physica Scripta **T160**, 014013 (2014).
24. **Iulia Ghiu**, Paulina Marian, and Tudor A. Marian, *Loss of non-Gaussianity for damped photon-subtracted thermal states*, Physica Scripta **T160**, 014014 (2014).
25. **Iulia Ghiu** and Cristian Ghiu, *The correspondence between mutually unbiased bases and mutually orthogonal extraordinary supersquares*, Reports on Mathematical Physics **73**, 49 – 63 (2014).
26. Peter Adam, Vladimir A. Andreev, **Iulia Ghiu**, Aurelian Isar, Margarita A. Man’ko, and Vladimir I. Man’ko, *Finite phase space, Wigner functions, and tomography for two-qubit states*, Journal of Russian Laser Research **35**, 427 – 436 (2014).
27. P. Marian, **Iulia Ghiu**, and T. A. Marian, *Decay of Gaussian correlations in local thermal reservoirs*, Physica Scripta **90**, 074041 (2015).
28. **Iulia Ghiu** and Cristian Ghiu, *Extraordinary subgroups needed for the construction of mutually unbiased bases for the dimension $d = 8$* , Romanian Journal of Physics **60**, 847 – 852 (2015).
29. **Iulia Ghiu**, Cristian Ghiu, and Aurelian Isar, *Quantum Chernoff degree of polarization of the Werner state*, Proceedings of the Romanian Academy, Series A **16**, 499 – 504 (2015).
30. **Iulia Ghiu** and Aurelian Isar, *The analytical expression of the Chernoff polarization of the Werner state*, Romanian Journal of Physics **61**, 768 – 773 (2016).
31. **Iulia Ghiu**, *Entanglement versus quantum degree of polarization*, Romanian Reports in Physics **70**, 104 (2018).
32. **Iulia Ghiu**, P. Marian, and T. A. Marian, *Modification of polarization through de-Gaussification*, Physical Review A **98**, 033826 (2018).
33. R. Grimaudo, A. Isar, T. Mihaescu, **Iulia Ghiu**, A. Messina, *Dynamics of quantum discord of two coupled spin-1/2’s subjected to time-dependent magnetic fields*, Results in Physics **13**, 102147 (2019).
34. **Iulia Ghiu**, *Simultaneous sorting many quDits using different input ports*, Quantum Information Processing **18**, 285 (2019).

35. A. Croitoru, **Iulia Ghiu**, A. Isar, *Dynamics of quantum coherence in Gaussian open systems*, Romanian Reports in Physics **72**, 102 (2020).

36. **Iulia Ghiu**, R. Grimaudo, T. Mihaescu, A. Isar, A. Messina, *Quantum correlation dynamics in controlled two-coupled-qubit systems*, Entropy **22**, 785 (2020).

37. **Iulia Ghiu**, *Determining the output port from the distance*, Romanian Reports in Physics **72**, 115 (2020).

38. **Iulia Ghiu**, *The quantum affinity of qubits subjected to noisy quantum channels*, Romanian Reports in Physics **73**, 119 (2021).