

Universitatea Babeș-Bolyai
 Facultatea de Fizică
 Departamentul de Fizică Biomoleculară
CS 1 Dr. Liviu Zarbo

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Mesoscopic Spin Hall Effect, Liviu Zarbo, University of Delaware (2007).

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. J. Wunderlich, K. Olejník, L. P. Zârbo, V. P. Amin, J. Sinova, T. Jungwirth, Spin Injection Hall effect, Spin Current, second edition (2017), <https://doi.org/10.1093/oso/9780198787075.003.0016>.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. H. Kurebayashi, Jairo Sinova, D. Fang, A. C. Irvine, J. Wunderlich, V. Novak, R. P. Campion, B. L. Gallagher, E. K. Vehstedt, L. P. Zarbo, K. Vyborny, A. J. Ferguson, T. Jungwirth, *An anti-damping spin-orbit torque originating from the Berry curvature*, Nature Nanotechnology **9**, 211 (2014).
2. Gonzalez-Zalba, MF, Ciccarelli, C., Zarbo, LP, Irvine, AC, Campion, RC, Gallagher, BL, Jungwirth, T, Ferguson, AJ, Wunderlich, J., *Reconfigurable Boolean Logic Using Magnetic Single-Electron Transistors*, PLOS ONE, **10**, 4, e0125142 (2015).
3. Hang Li, H. Gao, Liviu P. Zârbo, K. Výborný, Xuhui Wang, Ion Garate, Fatih Doğan, A. Čejchan, Jairo Sinova, T. Jungwirth, and Aurélien Manchon, *Intraband and interband spin-orbit torques in noncentrosymmetric ferromagnets*, Phys. Rev. B **91**, 134402 (2015).
4. Application of fluorescence spectroscopy using classical right angle technique in white wine classification, Scientific Reports, **9**, 18250 (2019).
5. Crystal and Molecular structure of ostarine and andarine, Journal of Molecular Structure, **1199**, 126973 (2020).
6. New solid forms of the diuretic compound 4-Chloro Salicylic Acid-5-Sulfonamide, Journal of Molecular Structure, **1241**, 130682 (2021).
7. Quantum transport through a quantum dot side-coupled to a Majorana bound state pair in presence of electron-phonon interaction, Levente Máthé, Doru Sticlet, Liviu P. Zârbo, Phys. Rev. B **105**, 155409 (2022).
8. Adrian Calborean, Sergiu Macavei, Mihaela Mocan, Catalin Ciuce, Adriana Bintintan, Adrian Cordos, Cosmin Pestean, Romeo Chira, Liviu Zarbo, Lucian Barbu-Tudoran, George Dindelegan, Felix Nickel, Bogdan Mocan, Valeriu Surlin & Vasile Bintintan
 Scientific Reports volume 12, Article number: 760 (2022)
9. Daria Gusenkova, Francesco Valenti, Martin Spiecker, Simon Günzler, Patrick Paluch, Dennis Rieger,

Larisa-Milena Pioraş-Țimbolmaş, Liviu P. Zârbo, Nicola Casali, Ivan Colantoni, Angelo Cruciani, Stefano Pirro, Laura Cardani, Alexandru Petrescu, Wolfgang Wernsdorfer, Patrick Winkel, and Ioan M. Pop, "Operating in a deep underground facility improves the locking of gradiometric fluxonium qubits at the sweet spots", Appl. Phys. Lett. 120, 054001 (2022) <https://doi.org/10.1063/5.0075909>

10. Perhaița, I., Mureșan, L.E., Garabagiu, S. et al. Structural and electrical charge transport properties in oxygen-deficient $\text{PbTiO}_3-\delta$ ceramics. J Aust Ceram Soc (2023). <https://doi.org/10.1007/s41779-023-00895-7>

11. Máthé L, Kovács-Krausz Z, Botiz I, Grosu I, El Anouz K, El Allati A, Zârbo LP. Phonon-Assisted Tunneling through Quantum Dot Systems Connected to Majorana Bound States. Nanomaterials. 2023; 13(10):1616. <https://doi.org/10.3390/nano13101616>.

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

- Reviste

- Selecție cu maximum 20 lucrări în volume de conferințe

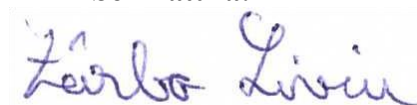
1. T. Murariu, A. Păstrăv, C. Tripon, C. Morari, E. Pușchiță and L. P. Zârbo, "A roadmap for building quantum key distribution devices," 2022 21st RoEduNet Conference: Networking in Education and Research (RoEduNet), Sovata, Romania, 2022, pp. 1-6, doi: 10.1109/RoEduNet57163.2022.9921102.

E. Brevete obținute în întreaga activitate

1.

Data: 8.04.2024

Semnătura:

A handwritten signature in blue ink that reads "Zârbo Liviu".