

a) teza de doctorat

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b) cărți și capitole în cărți

- 1) Cornel I. Nistor, Călin Galeriu, Prelucrarea automată a datelor fizice și metode numerice, Editura Universității din București, București, 1996, ISBN 973-575- 079-1.
- 2) Călin Galeriu, Foundations of Java Programming, Lulu Press, Research Triangle, 2020, ISBN 978-1-4478-7353-2.
- 3) Florin Enache, Cristina Despina-Stoian, Bogdan Belega, Daniel Constantin, Amado Ștefan, Călin Galeriu, FIZICĂ, Culegere de probleme tip grilă pentru admitere în Academia Tehnică Militară “Ferdinand I”, Editura Academiei Tehnice Militare “Ferdinand I”, București, 2025, ISBN 978-973-640-356-9.

c) articole / studii în extenso, publicate în reviste din fluxul științific internațional principal, indexate ISI (Science Citation Index Expanded)

A) Magneți moleculari

- 1) C.P. Landee, M.M. Turnbull, C. Galeriu, J. Giantsidis, F.M. Woodward, Magnetic properties of a molecular-based spin-ladder system: $(5\text{IAP})_2\text{CuBr}_4 \cdot \text{H}_2\text{O}$, *Physical Review B* **63**, 100402 (2001).
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- 5) C.P. Landee, A. Delcheva, C. Galeriu, G. Pena, M.M. Turnbull, R.D. Willett, Molecularbased quantum magnets: the isotropic spin ladder Cu(quinoxaline)Br₂, *Polyhedron* **22**, 2325 (2003).
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- B) Structura electronică a semiconductorilor
- 1) L.C. Lew Yan Voon, C. Galeriu, M. Willatzen, Comment on 'Confined states in twodimensional flat elliptic quantum dots and elliptic quantum wires', *Physica E* **18**, 547 (2003).
 - 2) C. Galeriu, L. C. Lew Yan Voon, R. Melnik, M. Willatzen, Modeling a nanowire superlattice using the finite difference method in cylindrical polar coordinates, *Computer Physics Communications* **157**, 147 (2004).
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 - 5) R. V. N. Melnik, B. Lassen, L. C. Lew Yan Voon, M. Willatzen, C. Galeriu, Nonlinear strain models in the analysis of quantum dot molecules, *Nonlinear Analysis - Theory, Methods & Applications* **63**, 2165 (2005).
- C) Fizică educațională
- 1) C. Galeriu, An Arduino Controlled Photogate, *The Physics Teacher* **51**, 156 (2013).
 - 2) C. Galeriu, S. Edwards, G. Esper, An Arduino Investigation of Simple Harmonic Motion, *The Physics Teacher* **52**, 157 (2014).
 - 3) C. Galeriu, C. Letson, G. Esper, An Arduino Investigation of the RC Circuit, *The Physics Teacher* **53**, 285 (2015).
 - 4) C. Galeriu, An Arduino Investigation of Newton's Law of Cooling, *The Physics Teacher* **56**, 618 (2018).
 - 5) C. Galeriu, An Arduino Investigation of the Temperature Dependence of the Speed of Sound in Air, *The Physics Teacher* **60**, 284 (2022).
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 - 7) C. Galeriu, G. Esper, and C. Miron, Nuclear Physics with MightyOhm: Evidence of Radiation Scattering, *The Physics Teacher* **62** (9), 731 (2024).
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- D) Teoria relativității restrânse

- 1) C. Galeriu, Time-Symmetric Action-at-a-Distance Electrodynamics and the Structure of Space-Time, *Physics Essays* **13** (4), 597 (2000).
- 2) C. Galeriu, Electric charge in hyperbolic motion: the early history, *Archive for History of Exact Sciences* **71** (4), 363 (2017).
- 3) C. Galeriu, Electric charge in hyperbolic motion: the special conformal transformation solution, *European Journal of Physics* **40**, 065203 (2019).
- 4) C. Galeriu, A derivation of the Doppler factor in the Liénard-Wiechert potentials, *European Journal of Physics* **42**, 055203 (2021).
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d) publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate

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- 2) Călin Galeriu, The illusion of acceleration in the retarded Liénard-Wiechert electromagnetic field, in Kyle Ewing (Ed.), *Spacetime Conference 2024*, Minkowski Institute Press, Montreal, 2025, ISBN 978-1-998902-44-6, pp. 19-49.

e) alte lucrări și contribuții științifice, publicate în reviste din fluxul științific internațional secundar, neindexate ISI (Science Citation Index Expanded), sau postate pe arXiv

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- 2) C. Galeriu, Magnetostatics Analysis, Design, and Construction of a Loudspeaker, *The Physics Teacher* **48**, 537 (2010).
- 3) C. Galeriu, Nintendo DS Lite Consoles in the Mathematics Classroom, *Far East Journal of Mathematical Education* **9**, 81 (2012).

- 4) C. Galeriu, Hikaru no Go: The Maths Moves, *SYMmetry plus* **57**, 2 (2015).
 - 5) C. Galeriu, A microscopic model for the self-inductance of an ideal solenoid, arXiv:2511.10677 (2025).
- B) Teoria relativității restrânse
- 1) C. Galeriu, An Introduction to Minkowski Space, *Mathematical Spectrum* **36**, 5 (2003).
 - 2) C. Galeriu, Addition of velocities and electromagnetic interaction: geometrical derivations using 3D Minkowski diagrams, *Apeiron* **10**, 1 (2003).
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 - 4) C. Galeriu, A derivation of two homogenous Maxwell equations, *Apeiron* **11**, 303 (2004).
 - 5) C. Galeriu, Relativistic Point Particles and Classical Elastic Strings, arXiv:1711.03568 (2017).
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 - 8) C. Galeriu, Special conformal transformations in electrodynamics: mathematical foundations, *Revista Brasileira de Ensino de Fisica* **47**, e20240396 (2025).
 - 9) C. Galeriu, Time-Symmetric Action-at-a-Distance Electrodynamics and the Principle of Action and Reaction for Particles at Relative Rest, arXiv:2508.18428 (2025).