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FACULTATEA DE FIZICĂ
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ATESTAT DE ABILITARE
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Lista de lucrări științifice

A. Articole publicate în reviste ISI

1. D. Bejan, C. Stan, *Influence of spin-orbit interaction, Zeeman effect and light polarization on the electronic and optical properties of pseudo-elliptic quantum rings under magnetic field*, **Philos. Mag.** 100 (2020) 749-767.
2. D. Bejan, C. Stan, O. Toma, *Magnetic field controlled induced transparency by Autler–Townes splitting in pseudo-elliptic quantum ring*, **Eur. Phys. J. B** 92 (2019) 153.
3. D. Bejan, C. Stan, *Aharonov-Bohm oscillations in pseudo-elliptic quantum rings: influence of geometry, eccentricity and electric field*, **Eur. Phys. J. Plus** 134 (2019) 127.
4. D. Bejan, C. Stan, *Oscillatory behaviour in the energy and nonlinear optical rectification spectra of elliptic quantum rings under electric field: influence of impurity and eccentricity*, **Philos. Mag.** 99 (2019) 492-512.
5. D. Bejan, C. Stan, E. C. Niculescu, *Optical properties of an elliptic quantum ring: eccentricity and electric field effects*, **Opt. Mater.** 78 (2018) 207–219.
6. D. Bejan, C. Stan, E. C. Niculescu, *Effects of electric field and light polarization on the electromagnetically induced transparency in an impurity doped quantum ring*, **Opt. Mater.** 75 (2018) 827-840.
7. D. Bejan, C. Trusca, *Effects of electric, magnetic and intense laser fields on the electromagnetically induced transparency in a semi-parabolic quantum well*, **Rom. Rep. Phys.** 70 (2018) 412.
8. D. Bejan, *Donor impurity-related nonlinear optical rectification in a two-dimensional quantum ring under magnetic field*, **Phys. Lett. A** 381 (2017) 3307-3313.

9. E. C. Niculescu, C. Stan, D. Bejan, C. Cartoaje, *Impurity and eccentricity effects on the nonlinear optical rectification in a quantum ring under lateral electric fields*, **J. Appl. Phys.** 122 (2017) 144301
10. D. Bejan, *Effects of electric field and structure on the electromagnetically induced transparency in double quantum dot*, **Opt. Mater.** 67 (2017) 145-154.
11. D. Bejan, *Electromagnetically induced transparency in double quantum dot under intense laser and magnetic fields: from A to E Configuration*, **Eur. Phys. J. B** 90 (2017) 54.
12. D. Bejan, *Exciton effects on the nonlinear optical properties of semiparabolic quantum dot under electric field*, **Eur. Phys. J. Plus** 132 (2017)102.
13. E.C. Niculescu, D. Bejan, *Off-centre impurity-related nonlinear optical absorption, second and third harmonic generation in a two dimensional quantum ring under magnetic field*, **Philos. Mag.** 97 (2017) 2089-2107
14. E.C. Niculescu, M. Cristea, D. Bejan, *Asymmetric Stark shift in an impurity doped dome-shaped quantum dot with wetting layer*, **Chem. Phys.** 483-484 (2017)132-139.
15. D. Bejan, *Impurity-related nonlinear optical rectification in double quantum dot under electric field*, **Phys. Lett. A** 380 (2016) 3836-3842.
16. D. Bejan, *Effects of the structure asymmetry on optical responses in GaAs double quantum dots under intense laser and electric fields*, **Mod. Phys. Lett. B** 30 (2016) 1650361.
17. D. Bejan, E.C. Niculescu, *Intense laser effects on the optical properties of asymmetric GaAs double quantum dots under applied electric field*, **Eur. Phys. J. B** 89 (2016) 138.
18. D. Bejan, E.C. Niculescu, *Electronic and optical properties of asymmetric GaAs double quantum dots in intense laser fields*, **Philos. Mag.** 96 (2016) 1131-1149.
19. D. Bejan, E.C. Niculescu, *The effects of the intense laser and magnetic fields on the group velocity of light in GaAs/Al_{0.3}Ga_{0.7}As near-surface quantum well*, **Physica E** 75 (2016) 149–155.

20. E.C. Niculescu, D. Bejan, *Nonlinear optical properties of GaAs pyramidal quantum dots: effects of elliptically polarized radiation, impurity, and magnetic applied fields*, **Physica E** 74 (2015) 51–58
21. D. Bejan, *Calculated surface, image and quantum well states in Ag/Cu(111) system*, **Physica B**, 424(2013) 32-38.
22. D. Bejan, *Image surfaces states in copper calculated with fourier grid hamiltonian method*, **Rom. Rep. Phys.** 64 (2012) 426-435.
23. G. Raseev, D. Bejan, *Multipole surface plasmon resonance of an aluminium surface*, **Opt. Commun.** 283(2010) 3976-3984
24. D. Bejan, G. Raseev, *Desorption induced by femtosecond laser: nonlinear regime through indirect coupling*, **J. Opt. Adv. Mat.** 8 (2006) 1331-1340.
25. D. Bejan, *Photodesorption of molecular adsorbats from metallic surfaces*, **J. Opt. Adv. Mat.** 6 (2004) 359-384.
26. D. Bejan, G. Raseev, *Laser-matter interaction at solid-gas interface in the $\vec{A} \cdot \vec{p}$ gauge: linear and surface terms in desorption*, **Surf. Sci.** 528 (2003) 163-170.
27. G. Raseev and D. Bejan, *Laser-matter interaction at solid-gas interface in the $\vec{A} \cdot \vec{p}$ gauge: linear, surface and quadratic terms*, **Surf. Sci.** 528 (2003) 196-203.
28. D. Bejan, G. Raseev and M. Monnerville, *Desorption induced by hot electrons: wave packet calculations of CO on Cu surfaces*, **Surf. Sci.** 470 (2001) 293-310.
29. D. Bejan and G. Raseev, *Non-equilibrium electron distribution in metals*, **Phys. Rev. B** 55, (1997) 4250-4256.

B. Articole publicate în reviste BDI

1. D. Bejan, *Nonlinearity in desorption from metallic surfaces II*, **Rom. Rep. Phys.** 58 (2006) 529-538.

2. D. Bejan, *Nonlinearity in desorption from metallic surfaces I*, **Rom. Rep. Phys.** 58 (2006) 519-528.
3. D. Bejan, *Ballistic distribution for hot electrons in metals*, **Rom. Rep. Phys.** 58 (2006) 149-157.
4. G. Raseev and D. Bejan, *Laser matter interaction at gas-solid interface: Electromagnetic fields from electron density*, **Rom. Rep. Phys.** 57 (2005) 947-956.
5. D. Bejan, *Nonthermal distribution of hot electron in metals*, **Rom. Rep. Phys.** 57 (2005) 229-238.
6. M. C. Valsangiacom, M. Bulinski, G. Schinteie, V. Kuncser, D. Bejan, G. Filoti, I. Iova, *Optical and electronic properties of mixed Fe-Sn doped PVA*, **Rom. Rep. Phys.** 55 (2003) 283-286.
7. D. Bejan, *On Optical Spectra of Octahedral Ni²⁺ Complexes*, **Rom.Rep.Phys.** 45 (1993) 413.

C. Cărți publicate

1. O. Toma, D. Bejan, M. Bazavan, I. Ioniță, *Wave optics, Practical works, exercises and problems*, **Editura Universității din București**, 2020.
2. Bejan, *Introducere în spectroscopia atomică*, **Editura Universității din București**, 2013.
3. D. Bejan, M. Bazavan, I. Ioniță, O. Toma, *Lucrări practice de optică fizică*, **Editura Universității din București**, 2013.
4. D. Bejan, M. Bazavan, I. Ioniță, O. Toma, M. Bulinski, I. Gruia, *Lucrări practice de optică geometrică*, **Editura Universității din București**, 2013.
5. D. Bejan, *Structura și caracterizarea suprafețelor*, **Editura Universității din București**, 2007.
6. F. Iova, D. Bejan, I. Ioniță, Ath. Truția, *Lucrări practice de spectroscopie optică*, **Editura Universității din București**, 1996.