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Experiența profesională

2002-2018 Profesor universitar, Facultatea de Științe aplicate, Departamentul de Fizică (UPB)
1997-2002 Conferențiar, Departamentul de Fizica (UPB)
1990-1997 Șef lucrări, Catedra de Fizică (Institutul Politehnic Bucuresti)
1977-1990 Asistent universitar, Catedra de Fizică (IPB)
1975- 1977 Cercetător științific, Sectorul de Fizică Teoretică, Inst. de Fizică și Tehnologia Materialelor, Măgurele-București
1971-1975 Fizician, Laboratorul de fenomene de transport și neechilibru în semiconductori, Institutul de Fizică, București

Diplome și premii

2012 Premiul Academiei Romane "Ștefan Procopiu"
2011 Conducător de doctorat, Domeniul de doctorat: Științe exacte – Fizică, Școala doctorală de Științe Aplicate, UPB
1986 Doctor în Fizică, Institutul de Fizică și Tehnologia Aparatelor cu Radiații (IFTAR), Măgurele-București
1966-1971 Licența în Fizica corpului solid, Facultatea de Fizică, Universitatea București

Publicații

14 cărți-manuale universitare; o monografie

118 lucrări în reviste cotate ISI; 19 publicații în proceedings la conferințe internaționale dintre care cele mai relevante sunt:

1. E. C. Niculescu, "Binding energy of a double donor in a parabolic quantum well", Phys. Lett. A **197**, p.330 -334 (1995).
2. E. C. Niculescu, "1s – 2p transitions between hydrogenic states in GaAs low-dimensional systems under external fields", Superlatt. Microstruct. **29**, p. 386-393 (2001).
3. E. C. Niculescu, "Electric field effects on the magnetoexcitons in quantum wells", Superlatt. Microstruct. **33**, pp. 103-115, (2003).

4. A. Radu, E. C. Niculescu, *Intense THz laser effects on off-axis donor impurities in GaAs-AlGaAs coaxial quantum well wires*, Phys. Lett A, **374**, 1755-1761 (2010).
5. E. C. Niculescu, A. Radu, *Laser-induced diamagnetic anisotropy of coaxial nanowires*, Curr. Appl. Phys., **10**, 1354-1359, (2010).
6. E. C. Niculescu, L. M. Burileanu, A. Radu, A. Lupaşcu. *Anisotropic optical absorption in quantum well wires induced by high-frequency laser fields*, J. Lumin., **131**, 1113-1120 (2011).
7. E. C. Niculescu *Dielectric mismatch effect on the photoionization cross section and intersublevel transitions in GaAs nanodots*, Opt. Commun., **284**, 3298-3303 (2011).
8. E. C. Niculescu, *Laser dressed donor impurities in free-standing GaAs films under an electric field*, Journal of Luminescence, **132**, 585-591 (2012).
9. Niculescu E.C. *Radiative lifetime of barbell excitons in semiparabolic double quantum wells under intense laser fields*, Journal of Luminescence **143** pp. 254-261 (2013)
10. Niculescu E.C., Cristea, M. *Impurity states and photoionization cross section in CdSe/ZnS core-shell nanodots with dielectric confinement* Journal of Luminescence **135** pp. 120-127 (2013)
11. A. Radu, E. C. Niculescu, M. Cristea, *Dielectric Modulation of Nonlinear Optical Properties in ZnO Quantum Dots under Intense Laser Fields*, Science of Advanced Materials, Vol. 7, no. 11, pp. 2285-2296 (2015)
12. Bejan, D. Niculescu E. C *Electronic and optical properties of asymmetric GaAs double quantum dots in intense laser fields* Phil. Mag. Vol 96 pp.1131-1149 (2016)
13. Niculescu E.C., Bejan, D., *Off-centre impurity-related nonlinear optical absorption, second and third harmonic generation in a two-dimensional quantum ring under magnetic field*, Phil. Mag, **97** pp. 2089-2107 (2017)
14. Niculescu E.C., Stan, C., Cristea, M., Truscă, C., *Magnetic-field dependence of the impurity states in a dome-shaped quantum dot*, Chemical Physics **493**, pp. 32-41 (2017)
15. Niculescu E.C., Stan, C., Tiriba, G., Truşcă, C., *Magnetic field control of absorption coefficient and group index in an impurity doped quantum disc*, European Physical Journal B **90** (5),100 (2017)
16. Niculescu E. C., *Electric field effect on the impurity-related electromagnetically induced transparency in a quantum disk under non-resonant, intense laser radiation*, Chemical Physics **487**, pp. 16-22 (2017)
17. Niculescu E. C, *Electromagnetically induced transparency in an asymmetric double quantum well under non-resonant, intense laser fields*, Optical Materials, **64** pp. 540-547, (2017)
18. Niculescu, E.C., Cristea, M., Bejan, D., *Asymmetric Stark shift in an impurity doped dome-shaped quantum dot with wetting layer*, Chemical Physics **483-484**, pp. 132-139 (2017)
19. Niculescu, E.C., Stan, C., Bejan D., Cartoaje C., *Impurity and eccentricity effects on the nonlinear optical rectification in a quantum ring under lateral electric fields*, Journal of Applied Physics **122** (14), 144301 (2017).

1203 citări (autocitățile excluse)

Indice H = 21

Referent la reviste din străinătate cotate ISI

Physics Letters A, Physica E, Physica B, International Journal of Quantum Chemistry, Superlattices and Microstructures, Current Applied Physics, European Physical Journal B, Journal of Luminescence, Optics Communications, Journal of Vacuum Science and Technology, Optical Materials, Physica Status Solidi B.