

Publications in the LAST 5 YEARS

- N. Tit: “Large Configuration-Induced Band-Gap Fluctuations in $\text{GaN}_x\text{As}_{1-x}$ Alloys”, *J. Phys. D: Appl. Phys.* **39** (2006) 2514-2521.
- N. Tit and A. Murat: “Strain-Induced Band-Mixing Effects in ZnS/CdS (001) Superlattices”, *Int. J. Mod. Phys. B* **22** (2008) 1997-2008.
- N. Tit and I.M. Obaidat: “Electronic Band Structures of the Strained $(\text{ZnSe})_m(\text{CdSe})_n$ (001) Superlattices”, *Int. J. Mod. Phys. B* **22** (2008) 4937-4950.
- N. Tit and I.M. Obaidat: “Tight-Binding Method for Quantum-Confinement Energy Calculations in the CdSe/ZnSe Multiple-Quantum Wells”, *Int. J. Mod. Phys. C* **19** (2008) 1635-1645.
- N. Tit and I.M. Obaidat: “Charge Confinements in CdSe/ZnSe Symmetric Double-Quantum Wells”, *J. Phys.: Condens. Matter* **20** (2008) 165205 (10pp).
- N. Tit and I.M. Obaidat: “Insights on the Bound States in the Strained CdSe/ZnSe Single-Quantum Wells”, *Int. J. Mod. Phys. B* **22** (2008) 2055-2069.
- N. Tit and I.M. Obaidat: “Confinement Behaviors of Charge Carriers in Strained CdTe-ZnTe Single-Quantum Wells”, *Physica E* **41** (2008) 23-30.
- N. Tit and I.M. Obaidat: “Coupling Behaviors and Decoupling Transitions of CdTe/ZnTe Symmetric versus Asymmetric Double-Quantum Wells”, *J. Comp. Theo. Nanoscience* **6** (2009) 195-205.
- N. Tit and I.M. Obaidat: “Transition Behaviors from Coupled-to-Uncoupled CdTe/ZnTe Symmetric versus Asymmetric Double-Quantum Wells”, *Microelectronics Journal* **40** (2009) 523-526.
- I.M. Obaidat and N. Tit: “Quantum-Confinement versus Strain Effects in the Zn(Cd)S(Se) Family of Superlattices”, *Microelectronics Journal* **40** (2009) 527-529.
- N. Tit and I.M. Obaidat: A **Book-CHAPTER**: “Rules Governing the Confinements in Semiconductor Quantum Wells”, as Chapter 2 in a Book on: “Advances in Condensed Matter Physics”, Ed. A.H. Reshak (Research Signpost, Kerala, India, 2009) pp. 27-54 [[http: /
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- N. Tit, I.M. Obaidat and H. Alawadhi: “Origins of Bandgap Bowing in Compound-Semiconductor Common-Cation Ternary Alloys”, *J. Phys.: Condens. Matter* **21** (2009) 075802 (6pp).
- N. Tit, I.M. Obaidat and H. Alawadhi: “Absence of the Bowing Character in the Common-Anion II-VI Ternary Alloys”, *J. Alloys & Compounds* **481** (2009) 340-344.
- N. Tit, I.M. Obaidat and H. Alawadhi: “Effect of Bond Ionicity on the Bandgap Bowing in Compound Semiconductor Alloys”, *J. Comp. Theo. Nanoscience* **6** (2009) 1646-1653.
- N. Tit, I.M. Obaidat and H. Alawadhi: “Existence or Absence of Bandgap Bowing in Compound Semiconductor Ternary Alloys”, Proceedings of the Microscopy of Semiconducting Materials (MSM-XVII), Oxford, UK, during 17-20 March 2009. *J. Phys.: Conf. Series* **209** (2010) 012024 (4 pp).
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- N. Tit, N. Amrane, and A.H. Reshak: “Comparison of Bowing Behaviors between III-V and II-VI Common-Cation Semiconductor Ternary Alloys”, *J. Electron. Mat.* **39** (2009) 178-186.
- N. Tit, N. Amrane, and A.H. Reshak: “Bandgap Characters in GaAs-based Ternary Alloys”, *Crystal Res. Technol.* **45** (2010) 59-69.
- N. Tit, N. Amrane, and A.H. Reshak: “Electronegativity Effects on the Bandgap Bowing Characters in Compound-Semiconductor Ternary Alloys”, Proceedings of the International Conference on Nanotechnology & Advanced Materials, Bahrain 4-7 May 2009. *Int. J. Nanoscience* (2010) in press.
- N. Tit, Z.H. Yamani, J. Graham and A. Ayesh: “Origins of the Visible-Light Emissions in Silicon Nanocrystals Coated with Hydrogen”, *J. Luminescence* **130** (2010) 2226-2237.
- N. Tit, Z.H. Yamani, J. Graham and A. Ayesh: “Effects of the Passivating Coating on the Properties of Silicon Nanocrystals”, *Mat. Chem. Phys.* **124** (2010) 927-935.
- N. Tit: “Nitrogen-Electronegativity-Induced Bowing Character in the Ternary Zincblende $\text{Ga}_{1-x}\text{In}_x\text{N}$ Alloys”, *J. Alloys & Compounds* **503** (2010) 529-537.