

List of Publications

1. M. Rosini, C. Jacoboni, S. Ossicini, “*Monte Carlo simulation of electron transport in Si/SiO₂ superlattices: Vertical transport enhanced by a parallel field*” Phys. Rev. B **66**, 155332 (2002)
2. M. Rosini, C. Jacoboni, S. Ossicini “*Monte Carlo simulation of electron transport in Si/SiO₂ superlattices*” Optical properties of nanocrystals, Proceedings of the SPIE **4808**, (2002)
3. M. Rosini, C. Jacoboni, S. Ossicini “*Monte Carlo analysis of electron heating in Si/SiO₂ superlattices*” Physica E **16**, 455-460 (2003)
4. M. Rosini, C. Jacoboni, S. Ossicini “*Semiclassical and Quantum transport in Si/SiO₂ superlattices*”, J. Comp. El. **2**, 417 (2003)
5. P. Bordone, A. Bertoni, M. Rosini, C. Jacoboni *Coherent transport in coupled quantum wires assisted by surface acoustic waves* Semicond. Sci. Technol. **19**, S412 (2004)
6. M. Rosini, A. Bertoni, P. Bordone, C. Jacoboni *Single Electron Transport and Entanglement Induced by a Surface Acoustic Waves versus Free Ballistic Propagation in Coupled Quantum Wires*, J. Comp. El. **3**, 443 (2005)
7. V. Ya. Aleskin, L. Reggiani, M. Rosini *Frequency dependence of shot noise in coherent resonant diodes*, Acta Phys. Pol. A **107**, 298 (2005)
8. M. Rosini, L. Reggiani *Noise and diffusion in superlattices within the Wannier-Stark approach*, AIP conf. proc. **780**, 769 (2005)
9. M. Rosini, V. Ya. Aleskin, A. Reklaitis, L. Reggiani *The puzzle of shot noise suppression in a series of N tunnel barriers*, AIP conf. proc. **800**, 183 (2005)
10. V. Ya. Aleskin, M. Rosini, L. Reggiani *Shot Noise Suppression as Indicator of Coherent Tunneling in Resonant Diodes*, AIP conf. proc. **800**, 153 (2005)
11. M. Rosini, L. Reggiani *Drift and diffusion in superlattices under Wannier-Stark regime*, Phys. Rev. B **72**, 195304 (2005)
12. M. Rosini, L. Reggiani *Drift and diffusion in superlattices within Wannier-Stark approach*, Springer proc. in phys. series, **110**, 333 (2006)
13. V. Ya. Aleshkin, L. Reggiani, M. Rosini *A Comparative Analysis of Sequential and Coherent Tunneling Models in Resonant Diodes*, Phys. Rev. B **73**, 165320 (2006)
14. E. Cancellieri, M. Rosini, A. Bertoni, G. Ferrari and C. Jacoboni, *Conductance of Meandering Wires*, J. Comp. El. **6**, 73 (2007)
15. D. Ercolani, E. Cancellieri, M. Rosini, G. Biasiol, C. Jacoboni and L. Sorba, *Transport anisotropy in high mobility In_{0.75}Ga_{0.25}As 2DEGs*, AIP Conf. Proc. **893**, 463 (2007)
16. M. Rosini and L. Reggiani, *Drift, diffusion and noise in hopping systems*, Nanoscale and Microscale Thermophysical Engineering **11**, 137 (2007)
17. M. Rosini and L. Reggiani, *A Monte Carlo investigation of noise and diffusion of particles obeying asymmetric exclusion processes*, J. Phys.: Cond. Matt. **19**, 036226 (2007)
18. G. Gomila, M. Rosini and L. Reggiani, *Impedance field and transition from thermal to shot noise in CdZnTe semi-insulating Ohmic detectors*, PRB **75**, 045209 (2007)
19. M. Rosini, A. Guida and L. Reggiani, *Noise and diffusion of particles obeying asymmetric exclusion processes*, AIP conf. proc. **922**, 463 (2007)
20. M. Rosini, E. Cancellieri, D. Ercolani, G. Biasiol, C. Jacoboni, and L. Sorba, *Transport anisotropy in 2D electron gases*, Physica E **40**, 1932 (2008)

21. A. Guida, L. Reggiani, M. Rosini, *Electron Transport in Superlattices for interacting Wannier-Stark levels*, Physica Status Solidi C **5**, 186 (2008)
22. E. Cancellieri, M. Rosini, P. Bordone, C. Jacoboni, *Roughness Effect on Electron Transport Through Quantum Wires*, Physica Status Solidi C **5**, 127 (2008)
23. M. Rosini R. Magri and P. Kratzer, *Adsorption of Indium on a InAs wetting layer deposited on the GaAs(001) surface*, Phys. Rev. B **77**, 165323 (2008)
24. D. Ercolani, G. Biasiol, E. Cancellieri, M. Rosini, C. Jacoboni, F. Carillo, S. Heun, L. Sorba and F. Nolting, *Transport anisotropy in $\text{In}_{0.75}\text{Ga}_{0.25}\text{As}$ two dimensional electron gases*, Phys. Rev. B **77**, 235307 (2008)
25. A. Guida, L. Reggiani, M. Rosini, *High-field transport in semiconductor superlattices for interacting Wannier-Stark levels*, Superl. and Microstruct. **44**, 249 (2008)
26. M. Rosini, M. C. Righi, and R. Magri, *Indium diffusion on a InAs wetting layer deposited on the GaAs(001) surface*, PRB, under review