

Abstract submitted to the
ARW Workshop on Correlated Thermoelectrics:
Properties and Applications of Thermoelectric Materials
September 20 - 26, 2008 Hvar, Croatia

Thermoelectricity in double-barrier structure with the resonant tunneling

Sergei P. Kruchinin, Vladimir N. Ermakov

Bogolyubov Institute for Theoretical Physics, NASU, Kiev 03143, Ukraine

Submitted : 01-09-2008

Study of charge transport in molecules is fundamental interest with potential application in molecular electronics. STM to study the thermoelectric phenomena in molecular nanosystems [1]. Conception of resonant tunneling have been used for explanation of thermoelectrical phenomenon in molecular nanosystems [2].

[1] P. Reddy, S.Jang, R.Segelmen, A. Mayundar Science, **315**, 1568 (2007)

[2] V.N. Ermakov, S.P. Kruchinin, H. Hori, A. Fujiwara, Int. Journal of Modern physics B, **21** 1827 (2007)