Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

A theoretical study of thermoelectric metamaterial[1] JIANWEI CAI, GERALD MAHAN, Department of Physics, Penn State University — An artificial crystalline material with nanoparticles connected by conducting linkers is proposed for thermoelectric application. Such materials can be synthesized with chemical approaches. The advantage of such materials for thermoelectric application will be discussed. A simple theoretical model for such materials is proposed. Basic theoretical results about the band and properties of the materials based on perturbation theory will be presented.

[1]Work funded by NSF DMR-0213623 and the Pennsylvania Ben Franklin Technology Development Fund.

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Date submitted: 27 Nov 2007 Electronic form version 1.4