A NACIOUCIAN		chasing Info Libra		-			Estas V C	L.	Due Course in	
AMERICAN	STITUTE CONTEPENCEDFOCEEQINGS						Enter Your Search		Run Search in Current Issue	
* PHYSIC				pioc		90				
me About	Authors	Conf Organizers	Permissions	Terms of Use	Volume:	Page/Article:	Retriev	/e Search	Browse	
IP Conf. Proc. / Vo	olume 893 / I:	ssue 1							PREV NEX	
-	inles	Theory of Ir	elastic T	ransport	and Local					
-	-	ic Gold Wir				🔼 You	are not logged i	n. Log in		
icating ii			63							
HYSICS OF S	EMICON	10, 2007 Volun DUCTORS: 28th 2006; doi:10.106	International		on the Physics of	f				
ssue Date: 10	April 2007	,								
ABSTRACT	۲									
Thomas Fred	eriksen. N	lagnus Paulsson.	Mads Brandby	vge, and Antti-I	Pekka Jauho	виут	HIS ARTICLE		(US\$24)	
Thomas Frederiksen, Magnus Paulsson, Mads Brandbyge, and Antti-Pekka Jauho MIC — Department of Micro and Nanotechnology, NanoDTU, Technical University of Denmark, Ørsteds						irsteds				
Plads, Bldg. 34	45E, DK-28	00 Lyngby, Denma	rk			PDF			<u></u>	
We present the	eoretical c	alculations of the	inelastic trans	port properties	in atomic gold wir		notea 🔳 CiteULi	ke 🗗 del.icio.	us 📕	
Our method is	based on	a combination of	density function	onal theory and	l non-equilibrium	BibSond	omy			
Green's functions. The vibrational spectra for extensive series of wire geometries have been										
calculated using SIESTA, and the corresponding effects in the conductance are analyzed. In						In 🎽 CIT	ATION	MySCITA	TION	
particular, we focus on the heating of the active vibrational modes. By a detailed comparison						rison 🖂 EM				
with experiments we are able to estimate an order of magnitude for the external damping of the active vibrations. ©2007 American Institute of Physics						of 🛕 ERI				
the active vibr	ations. ©2	2007 American Ins	stitute of Phys	ICS		BLC	OG THIS ARTICLE		FRIENDLY	
Permalink:	http://lir	nk.aip.org/link/?AF	PCPCS/893/72	7/1						
						KEY\	KEYWORDS and PACS			
						Keyw	vords			
							on transport the	ory, gold, den	sity functional	
						electro	on transport the , Green's functi		sity functional	
						electro	, Green's functi		sity functional	
						electro theory PAC	, Green's functi		sity functional	
						electro theory PAC:	, Green's functi	on methods		
						electro theory PAC:	, Green's functi 3 72.10.Bg	on methods		
						electro theory PACS	, Green's functi S 72.10.Bg General formu transport theo 72.15.Eb	on methods lation of elec ry	etronic	
						electro theory PAC:	, Green's functi S 72.10.Bg General formu transport theo	lation of electry	stronic duction in	
						electro theory PAC:	, Green's functi 5 72.10.Bg General formu transport theo 72.15.Eb Electrical and	lation of electry	stronic duction in	
						electro theory PAC:	, Green's functi S 72.10.Bg General formu transport theo 72.15.Eb Electrical and crystalline met 71.15.Mb Density function	Iation of electry thermal conc als and alloy	stronic duction in /s local density	
						electro theory PAC:	, Green's functi S 72.10.Bg General formu transport theo 72.15.Eb Electrical and crystalline met 71.15.Mb Density function approximation corrections (ca	iation of electry thermal conc als and alloy onal theory, gradient ar	stronic duction in rs local density nd other	
						electro theory PAC:	, Green's functi S 72.10.Bg General formu transport theo 72.15.Eb Electrical and crystalline mel 71.15.Mb Density function	lation of electry thermal conc als and alloy onal theory, , gradient ar	stronic duction in rs local density nd other	

Copyright@2009 American Institute of Physics Copyright Statement : Rights & Permissions : Permitted/Prohibited Uses