NCN at Illinois Tools





NCN@Illinois Tool Support

We have identified a list of tools for which we commit the following level of service:

- monitor support tickets, questions, and wishlists and provide a response within one business day.
- fix simple bugs within a week.
- move long term projects and tool improvement requests to a public wish list.

The overall support structure and philosophy of the NCN and nanoHUB is <u>described in a different page</u>.

NCN@Illinois Supported Educational Tools

- <u>Effect of Doping on Semiconductors</u> Java applet for class room and use and homework assignments
- <u>Illinois Solid State Electronic Devices Classes Tools</u> Tools to complement Illinois Solid State Electronic Devices Classes
- nanogromacs Intro Implementation of the popular molecular dynamics software suite GROMACS
- nanoJoule Metallic Single Wall Carbon Nanotube Joule IV Simulation
- <u>PN Junction Long-Base Depletion Approximation</u> Approximately calculates a number of electrical properties of a pn-type junction.

NCN@Illinois Supported Research Tools

• BioMOCA Suite - Simulates ion flow through a channel.

- <u>Boltzmann Transport Simulator for CNTs</u> Simulates Electron transport in Singlewalled carbon nanotubes.
- <u>Carbon nanotube based fixed-fixed NEMS</u> Simulates pull-in behavior of Carbon nanotube based NEMS with fixed-fixed boundary conditions.
- <u>Carbon nanotube based NEMS with cantilever structure</u> Simulates pull-in behavior of Carbon nanotube based NEMS with cantilever boundary conditions.

Links to: Tools, Questions and Answers, and Wishlists

User can post questions or send support tickets where they essentially ask for new features in tools or suggest improvements. With the limited resources we have available we want to manage these tool suggestions publicly. Eventually we believe that each tool will have its own "Wishlist". For now we summarize the tool improvement wishes here.

Tool	Questions	Wishlist
Effect of Doping on	<u>Questions</u>	<u>Wishes</u>
<u>Semiconductors</u>		
BioMOCA Suite	<u>Questions</u>	Wishes
Effect of Doping on	<u>Questions</u>	Wishes
<u>Semiconductors</u>		
Illinois Solid State Electronic	<u>Questions</u>	Wishes
Devices Classes Tools		
nanogromacs_Intro	<u>Questions</u>	<u>Wishes</u>
<u>nanoJoule</u>	<u>Questions</u>	<u>Wishes</u>
PN Junction Long-Base	<u>Questions</u>	<u>Wishes</u>
Depletion Approximation		
Boltzmann Transport Simulator	<u>Questions</u>	<u>Wishes</u>
for CNTs		
Carbon nanotube based fixed-	<u>Questions</u>	<u>Wishes</u>
fixed NEMS		
Carbon nanotube based NEMS	<u>Questions</u>	Wishes
with cantilever structure		



Help to Answer Questions – Declare an Interest

To help us with answering questions related to the tools listed on this page, add the following tags to the "Open Questions of Interest" (see the screen shot at right) section in the "My Questions" box on myHUB. Once you add the tags, whenever you visit myHUB, you will see a list of questions that have been posted related to your interests and you can answer or add

NCN AT ILLINOIS TOOLS

comments or simply follow the discussion on any of them.

tool:dopingsilicon

tool:deviceelectron

tool:nanogromacsdemo

tool:swntjiv

tool:pnlongbasedda

tool:cntbte

tool:CNTNEMSFF

tool:CNTNEMSCANT