

Update 2017/08/01

New feature: a combined temperature-voltage sweep can be done using the keyword “Temperature-Voltage” in the field <SweepType> of <SweepParameters> (see the example of code below). In this case, the simulation can be parallelized. <Threads> defines the number of parallel threads. Its optimal value should be the number of cpu cores available (if the available memory is sufficient) . Within each parallel temperature sweep, a serial voltage sweep is performed.

```
<SweepParameters>
  <SweepType>Temperature-Voltage</SweepType>
  <MinV> 50</MinV>
  <MaxV> 60</MaxV>
  <DeltaV> 2</DeltaV>

  <MinT> 25</MinT>
  <MaxT> 300</MaxT>
  <DeltaT> 25</DeltaT>

  <Threads>12</Threads> <!-- Parallelization for Temperature-Voltage sweep
-->
</SweepParameters>
```

Note that for such voltage-temperature sweep, <Maximum_Number_of_Threads> in <Simulation_Parameter> should be set to 1 (combined parallelization will result in lower performances)

```
<Simulation_Parameter>
  ...
  <Maximum_Number_of_Threads>1</Maximum_Number_of_Threads>
</Simulation_Parameter>
```

At the end of the simulation, current and gain maps can be displayed.

From:
<https://nextnano-docu.northeurope.cloudapp.azure.com/dokuwiki/> - **nextnano.NEGF - Software for Quantum Transport**

Permanent link:
https://nextnano-docu.northeurope.cloudapp.azure.com/dokuwiki/doku.php?id=qcl:list_of_updates&rev=1501569286

Last update: **2017/08/01 07:34**