TCAD simulation VII

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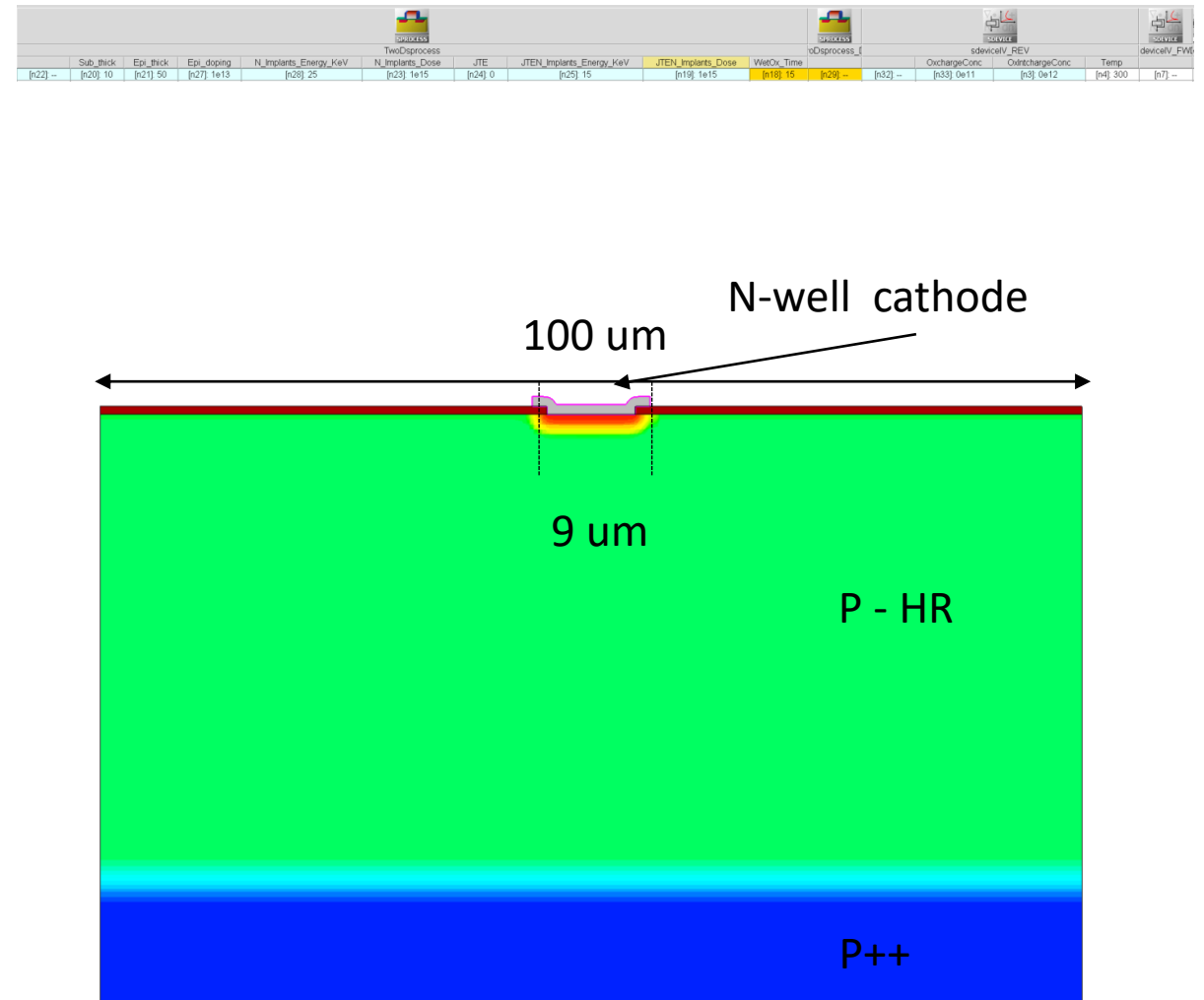
Overview

- **Simulation example of 2D PN junction using SPROCESS and SDEVICE**

- **CV**

TCAD Synopsys Simulation

	Sub_thick	Epi_thick	Epi_doping	N_Implants_Energy_KeV	N_Implants_Dose	JTE	JTEN_Implants_Energy_KeV	JTEN_Implants_Dose	WetOx_Time		OxchargeConc	OxintchargeConc	Temp	
[n22] --	[n20] 10	[n21] 50	[n27] 1e13	[n28] 25	[n23] 1e15	[n24] 0	[n25] 15	[n19] 1e15	[n18] 15	[n29] --	[n32] --	[n33] 0e11	[n3] 0e12	[n4] 300	[n7] --

- SDEVICE simulation of 2D pn junction
  - **CV**

100 um

N-well cathode

9 um

P - HR

P++

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TCAD Synopsys Simulation

- **Effects on the CV with/without JTE**
- **Effects on the CV with/without oxide charge**

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- Simulation example : 2D pn using SPROCESS
- CV : JTE and Oxide charge effects

Thank you

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