

<b>Poster No.</b>	<b>Abstract Title</b>	<b>Corresponding Author</b>	<b>Primary Topic</b>
<b>P-1</b>	Using Density Functional Theory to Engineer Direct Gap Germanium-Tin Alloy	<b>Christopher Darmody</b>	1) Ab Initio & Density Functional Theory
<b>P-2</b>	The Role of Surface Termination Geometry on the Ground-State and Optical Properties of Silicon Nano-Crystals: A Density Functional Theory Study	<b>Mahdi Pourfath</b>	1) Ab Initio & Density Functional Theory
<b>P-3</b>	Diffusion-Drift Modeling of Carbon-Based Nanowire FETs	<b>Mario Ancona</b>	3) Device Modeling & Simulation
<b>P-4</b>	Advanced TCAD Simulation of Local Mismatch in 14nm CMOS Technology FinFETs	<b>E. M. Bazizi</b>	3) Device Modeling & Simulation
<b>P-5</b>	Impact of Backplane Configuration on the Statistical Variability in 22nm FDSOI CMOS	<b>E. M. Bazizi</b>	3) Device Modeling & Simulation
<b>P-6</b>	Leakage Reduction in Stacked Sub-10nm Double-Gate FinFETs	<b>Woo-Suhl Cho</b>	3) Device Modeling & Simulation
<b>P-7</b>	Multi-Subband Ensemble Monte Carlo Simulation of Si Nanowire MOSFETs	<b>Luca Donetti</b>	3) Device Modeling & Simulation
<b>P-8</b>	Electrical Characteristic of InGaAs Multiple-Gate MOSFET Devices	<b>Cheng-Hao Huang</b>	3) Device Modeling & Simulation
<b>P-9</b>	A Self-Consistent Solution of Poisson, Schrödinger and Boltzmann Equations for GaAs Devices by Deterministic Solver	<b>Zeinab Kargar</b>	3) Device Modeling & Simulation

<b>P-10</b>	Impact of Deep P-Well Structure on Single Event Latchup in Bulk CMOS	<b>Takashi Kato</b>	3) Device Modeling & Simulation
<b>P-11</b>	Layout-induced stress effects on the performance and variation of FinFETs	<b>Choong Mok Lee</b>	3) Device Modeling & Simulation
<b>P-12</b>	Influence of mechanical strain in Si and Ge p-type double-gate MOSFETs	<b>Manel Moussavou</b>	3) Device Modeling & Simulation
<b>P-13</b>	Multi-Subband Interface Roughness Scattering using 3D Finite Element Monte Carlo with 2D Schrödinger Equation for Simulations of sub-16nm FinFETs	<b>Daniel Nagy</b>	3) Device Modeling & Simulation
<b>P-14</b>	Critical Distance Method for the Tail Part of the Threshold Voltage Distribution	<b>Sungman Rhee</b>	3) Device Modeling & Simulation
<b>P-15</b>	Physical Simulation of Si-Based Resistive Random-Access Memory Devices	<b>Toufik Sadi</b>	3) Device Modeling & Simulation
<b>P-16</b>	Computational design of low power consumption FET based on locally strained graphene: interplay between the pseudo magnetic field effect and substrate induced bandgap opening	<b>Satofumi Souma</b>	3) Device Modeling & Simulation
<b>P-17</b>	Integrated Modeling Platform for High-k/Alternate Channel Material Heterostructure Stacks	<b>Dhirendra Vaidya</b>	3) Device Modeling & Simulation
<b>P-18</b>	Bipolar Monte Carlo Simulation of Hot Carriers in III-N LEDs	<b>Pyry Kivisaari</b>	4) Electronic Transport in Semiconductor Materials & Devices
<b>P-19</b>	Simulation of Indirect-Direct Transformation Phenomenon of Germanium under Uniaxial and Biaxial Strain along Arbitrary Orientations	<b>Ziyang Xiao</b>	4) Electronic Transport in Semiconductor Materials & Devices

<b>P-20</b>	Towards atomistic dopant profiling using SCM measurements	<b>Samira Aghaei</b>	5) New Algorithms for Process & Device Modeling
<b>P-21</b>	Numerical Simulation of Percolation Model for Time Dependent Dielectric Breakdown (TDDB) under “Non-uniform” Trap Distribution	<b>Seongwook Choi</b>	5) New Algorithms for Process & Device Modeling
<b>P-22</b>	A moving mesh method for device simulation	<b>Koichi Fukuda</b>	5) New Algorithms for Process & Device Modeling
<b>P-23</b>	Lithography Process Model Building Using Locally Linear Embedding	<b>Pardeep Kumar</b>	5) New Algorithms for Process & Device Modeling
<b>P-24</b>	TCAD Analysis of FinFET Stress Engineering for CMOS Technology Scaling	<b>Amaury Gendron-Hansen</b>	6) Process & Equipment Modeling & Simulation
<b>P-25</b>	Factors that Influence Delamination at the Bottom of Open TSVs	<b>Santo Papaleo</b>	6) Process & Equipment Modeling & Simulation
<b>P-26</b>	Implication of Hysteretic Selector Device on the Biasing Scheme of a Cross-point Memory Array	<b>Ahmedullah Aziz</b>	7) Physical-Level Circuit Simulation
<b>P-27</b>	Intrinsic and Extrinsic Stability of Ovonic-Switching Devices	<b>Massimo Rudan</b>	7) Physical-Level Circuit Simulation
<b>P-28</b>	Power-Performance-Area Engineering of 5nm Nanowire Library Cells	<b>Victor Moroz</b>	8) Simulation of Nano- & Quantum Devices
<b>P-29</b>	Application of Pauli Master Equation to Nanoscale Silicon FinFET Transport under Uniaxial Stress: a Direct Solution Approach	<b>Kai Xiu</b>	8) Simulation of Nano- & Quantum Devices

<b>P-30</b>	Simulation of thermal crosstalk of resistive switching memory in three-dimensional (3D) crossbar structure	<b>Nianduan Lu</b>	9) Simulation of Novel Devices
<b>P-31</b>	Sandwiched-Gate Inverter: Novel Device Structure for Future Logic Gates	<b>Myunghwan Ryu</b>	9) Simulation of Novel Devices
<b>P-32</b>	Improving the Performance of a Non-Volatile Magnetic Flip Flop by Exploiting the Spin Hall Effect	<b>Thomas Windbacher</b>	9) Simulation of Novel Devices
<b>P-33</b>	Kinetic Monte Carlo and Drift-Diffusion simulations to investigate the effects of interfaces in organic photovoltaic cells including a realistic blend morphology	<b>Alessio Gagliardi</b>	10) Simulation of Photovoltaic & Other Green Technologies
<b>P-34</b>	Tuneable enhancement of the thermoelectric Seebeck coefficient in externally gated semiconductor nanomembranes	<b>Adithya Kommini</b>	10) Simulation of Photovoltaic & Other Green Technologies
<b>P-35</b>	TCAD Simulation Methodology for 3-D Electro-Physical and Advanced Optical Analysis	<b>Patrik Príbytný</b>	10) Simulation of Photovoltaic & Other Green Technologies
<b>P-36</b>	Design Optimal Built-in Snubber in Trench Field Plate Power MOSFET for Superior EMI and Efficiency Performance	<b>Jingjing Chen</b>	11) Simulation of Power Devices
<b>P-37</b>	An Enhanced Specialized SiC Power MOSFET Simulation System	<b>Zeynep Dilli</b>	11) Simulation of Power Devices
<b>P-38</b>	Transient 3-D TCAD Simulation of Multiple Snapback Event in Mixed-Mode Test for Mutual Relation between Protection Devices	<b>Hyungcheol Kwon</b>	11) Simulation of Power Devices
<b>P-39</b>	Mechanical properties of homogeneous and heterogeneous layered 2D materials	<b>Robert Elder</b>	12) Simulation of Sensors Biosensors & Electromechanical System