

SISPAD2020 Workshop 1 (updated on Sep. 22)

Combination of TCAD and Machine Learning

Organizer: Satofumi Souma (Kobe Univ.) Co-organizer: Yusuke Noda (Kanazawa Gakuin Univ.)

All presentations are given on the SISPAD 2020 conference website as on-demand video contents.

Abhishek Kumar Singh (Indian Institute of Science)

Unravelling the role of bonding chemistry in connecting electronic and thermal transport by machine learning

Kentaro Kutsukake (RIKEN)

Application of machine learning to optimize sensor positions for accurate monitoring

Yusuke Noda (Kanazawa Gakuin University)

Descriptor extraction for dielectric constants of perovskite-type oxides by machine learning regression and first-principles calculations

Hiu Yung Wong (San Jose State University)

TCAD Augmented Machine Learning: Experience and Techniques

Vihar Georgiev (University of Glasgow)

Neural-Network Approach in Combination with TCAD Simulations for Evaluation of the Device Performance of Si Nanowires Junctionless Transistors

Sung-Min Hong (Gwangju Institute of Science and Technology)

Neural network for the solution of the Poisson equation

Satofumi Souma (Kobe University)

Application of convolutional neural network for nanoscale device simulations based on nonequilibrium Green's function method