Session Title:	[We1A] Inverse Design in Integrated Photonics I
Session Date:	August 7 (Wed.), 2024
Session Time:	09:00-10:30
Session Room:	Room A (102-103)
Session Chairs	TBA

[We1A-1] [Invited]   09:00-09:30

Lithium Niobate Photonic Circuits for Programmable Photonic Devices and Optimized Nonlinear Optics

Hyounghan Kwon (KIST, Korea)

[We1A-2]   09:30-09:45

Deep Learning-based Inverse Design Enabling a Highly Efficient Multimode Interference Coupler

Menglong Luo and Sang-Shin Lee (Kwangwoon Univ., Korea)

[We1A-3]   09:45-10:00

Extraction of Silicon Photonic Wafer-Scale Process Variability using ML-Enhanced Algorithm

Shruti Pandey, Tarun Arumugham, Anjana James, Ashitosh Velamuri, Arnab Goswami (Centre for Programmable Photonic Integrated Circuits and Systems, India), Gan Yih Loong, Ng Chew Yan (SilTerra Malaysia, Malaysia), Deleep R. Nair, Anjan Chakravorty, and Bijoy Krishna Das (Centre for Programmable Photonic Integrated Circuits and Systems, India)

[We1A-4]   10:00-10:15

Application of Super-Resolution Techniques to Photonic Integrated Circuit Design

Shota Toyota and Hiroshi Fukuda (Chitose Inst. of Science and Tech., Japan)

[We1A-5]   10:15-10:30

Dimensionality Reduction in the Design Domain of Photonic Crystal Waveguides for Deep Neural Networks by Implementing Transfer Learning

Junhyeong Kim, Berkay Neseli, Hyo-Hoon Park, and Hamza Kurt (KAIST, Korea)