

Session Title:	[Mo1A] Inverse Design for Metamaterials I
Session Date:	August 5 (Mon.), 2024
Session Time:	10:30-12:00
Session Room:	Room A (102-103)
Session Chair(s)	Prof. Sunae So (Korea Univ., Korea)

[Mo1A-1] [Invited] 10:30-11:00

Adjoint Sensitivity Analysis based Photonic Structure Efficiency Prediction and Data Augmentation

Chanik Kang, Dongjin Seo (Hanyang Univ., Korea), Svetlana Boriskina (Massachusetts Inst. of Tech., USA), and Haejun Chung (Hanyang Univ., Korea)

[Mo1A-2] 11:00-11:15

Deep Learning-Based Metasurface Design Platform with Self-Data Generation

Ki Won Jeong and Yun Seon Do (Kyungpook Nat'l Univ., Korea)

[Mo1A-3] 11:15-11:30

Mutative Evolution for Calculating Maximally Localized Wannier Functions in Photonic Crystals

Dayeong Lee, Gitae Lee, Seungkyun Park, Hyungchul Park, Namkyoo Park, and Sunkyu Yu (Seoul Nat'l Univ., Korea)

[Mo1A-4] 11:30-11:45

Incoherent Meta-imaging System for Noise-robust Object Recognition

Jungmin Kim (Univ. of Wisconsin-Madison, USA), Nanfang Yu (Columbia Univ., USA), and Zongfu Yu (Univ. of Wisconsin-Madison, USA)

[Mo1A-5] 11:45-12:00

Artificial Intelligence-enhanced Metasurfaces for the Instantaneous Measurement of Dispersive Refractive Index

Seokho Lee, Trevon Badloe, Younghwan Yang, and Junsuk Rho (POSTECH, Korea)