### Res. Asst. ALPEREN GÖVDELİ

### **Personal Information**

Email: agovdeli@metu.edu.tr

Web: https://avesis.metu.edu.tr/agovdeli

#### **Education Information**

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Graduate School of Natural and Applied Sciences, Turkey 2016 - 2018

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, Turkey 2011 - 2016

### **Dissertations**

Postgraduate, Integrated optical modulators based on photonic crystals, Middle East Technical University, Graduate School of Natural and Applied Sciences, 2018

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. Isotropic gap formation, localization, and waveguiding in mesoscale Yukawa-potential amorphous structures
  - Sarihan M. C., Govdeli A., Lan Z., Yilmaz Y. B., Erdil M., Wang Y., Aras M. S., Yanik C., Panoiu N. C., Wong C. W., et al. Communications Physics, vol.7, no.1, 2024 (SCI-Expanded)
- II. On-Chip Switch and Add/Drop Multiplexer Design With Left-Handed Behavior in Photonic Crystals GÖVDELİ A., KOCAMAN S.
  - IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, vol.26, no.2, 2020 (SCI-Expanded)
- III. Integrated Optical Modulator Based on Transition between Photonic Bands Gövdeli A., Sarihan M. C., Karaca U., Kocaman S. SCIENTIFIC REPORTS, vol.8, 2018 (SCI-Expanded)
- IV. Zero average index design via perturbation of hexagonal photonic crystal lattice Moradi S., GÖVDELİ A., KOCAMAN S.
   OPTICAL MATERIALS, vol.73, pp.577-584, 2017 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. Localization and isotropic gap formation in chip-scale Yukawa potential metastructures
  Sarihan M. C., GÖVDELİ A., Lan Z., Yilmaz Y. B., ERDİL M., Aras M. S., Yanik C., Panoiu N. C., Wong C. W., KOCAMAN S.
  2023 Conference on Lasers and Electro-Optics, CLEO 2023, California, United States Of America, 7 12 May 2023
- II. On-chip flexible waveguides with amorphous structures in the near-infrared Smihan M. C., GÖVDELİ A., Yilmazl Y. B., Erdal M., Aras M. S., Yanik C., Wong C. W., KOCAMAN S. Conference on Lasers and Electro-Optics (CLEO), San-Jose, Costa Rica, 10 - 15 May 2020
- III. Tunable integrated optical modulator with dynamical photonic band transition of photonic crystals GÖVDELİ A., KOCAMAN S.

Conference on Silicon Photonics XIV, San-Francisco, Costa Rica, 4 - 06 February 2019, vol.10923

# IV. Integrated optical modulators with zero index metamaterials based on photonic crystal slab waveguides

Yildirim M., GÖVDELİ A., KOCAMAN S.

Conference on Integrated Optics - Devices, Materials, and Technologies XXIII, San-Francisco, Costa Rica, 4 - 07 February 2019, vol.10921

### V. Band-to-Band Transition Based On-Chip Optical Modulator

GÖVDELİ A., Sarihan M. C., Karaca U., KOCAMAN S.

31st Annual IEEE Photonics Conference (IPC) of the IEEE-Photonics-Society, Preston, United Kingdom, 30 September - 04 October 2018

### VI. Hybrid Integration of Broadband Silicon Modulators and InGaAs Photodetectors

Karaca U., GÖVDELİ A., KOCAMAN S.

31st Annual IEEE Photonics Conference (IPC) of the IEEE-Photonics-Society, Preston, United Kingdom, 30 September - 04 October 2018

# VII. Asymmetric Band Gaps in Amorphous Photonic Materials

Sarihan M. C., GÖVDELİ A., Aras M. S., Yanik C., Wong C. W., KOCAMAN S.

31st Annual IEEE Photonics Conference (IPC) of the IEEE-Photonics-Society, Preston, United Kingdom, 30 September - 04 October 2018

### **Metrics**

Publication: 11 Citation (WoS): 29 Citation (Scopus): 35 H-Index (WoS): 3 H-Index (Scopus): 3