

Taewon Park

Ph.D. Student in Electrical Engineering, admitted Autumn 2020

Publications

PUBLICATIONS

- **Roles of temperature, materials, and domain inversion in high-performance, low-bias-drift thin film lithium niobate blue light modulators** *OPTICS EXPRESS*
Celik, O., Ammar, N., Park, T., Stokowski, H. S., Multani, K. K. S., Hwang, A. Y., Gyger, S., Guo, Y., Fejer, M. M., Safavi-Naeini, A. H.
2024; 32 (21): 36160-36170
- **Single-mode squeezed-light generation and tomography with an integrated optical parametric oscillator.** *Science advances*
Park, T., Stokowski, H., Ansari, V., Gyger, S., Multani, K. K., Celik, O. T., Hwang, A. Y., Dean, D. J., Mayor, F., McKenna, T. P., Fejer, M. M., Safavi-Naeini, A.
2024; 10 (11): eadl1814
- **Integrated frequency-modulated optical parametric oscillator.** *Nature*
Stokowski, H. S., Dean, D. J., Hwang, A. Y., Park, T., Celik, O. T., McKenna, T. P., Jankowski, M., Langrock, C., Ansari, V., Fejer, M. M., Safavi-Naeini, A. H.
2024; 627 (8002): 95-100
- **Integrated frequency-modulated optical parametric oscillator** *NATURE*
Stokowski, H. S., Dean, D. J., Hwang, A. Y., Park, T., Celik, O., McKenna, T. P., Jankowski, M., Langrock, C., Ansari, V., Fejer, M. M., Safavi-Naeini, A. H.
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- **Mid-infrared spectroscopy with a broadly tunable thin-film lithium niobate optical parametric oscillator** *OPTICA*
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- **Experimental evaluation of digitally verifiable photonic computing for blockchain and cryptocurrency** *OPTICA*
Pai, S., Park, T., Ball, M., Penkovsky, B., Dubrovsky, M., Abebe, N., Milanizadeh, M., Morichetti, F., Melloni, A., Fan, S., Solgaard, O.
2023; 10 (5): 552-560
- **Experimentally realized in situ backpropagation for deep learning in photonic neural networks.** *Science (New York, N.Y.)*
Pai, S., Sun, Z., Hughes, T. W., Park, T., Bartlett, B., Williamson, I. A., Minkov, M., Milanizadeh, M., Abebe, N., Morichetti, F., Melloni, A., Fan, S., Solgaard, et al
2023; 380 (6643): 398-404
- **Power monitoring in a feedforward photonic network using two output detectors.** *Nanophotonics (Berlin, Germany)*
Pai, S., Valdez, C., Park, T., Milanizadeh, M., Morichetti, F., Melloni, A., Fan, S., Solgaard, O., Miller, D. A.
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- **Power monitoring in a feedforward photonic network using two output detectors** *NANOPHOTONICS*
Pai, S., Valdez, C., Park, T., Milanizadeh, M., Morichetti, F., Melloni, A., Fan, S., Solgaard, O., Miller, D. A. B.
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- **Bias-stable Sub-Volt Visible Electro-optic Modulator in Thin-Film Lithium Niobate**

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- **Tunable dual wavelength laser on thin film lithium niobate**

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- **High-efficiency second harmonic generation of blue light on thin-film lithium niobate.** *Optics letters*

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- **Cascaded optical resonator-based programmable photonic integrated circuits** *OPTICS EXPRESS*

Park, T., Jeong, Y., Yu, K.
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