



## Hubert Sylwester Stokowski

Postdoctoral Scholar, Applied Physics

 Curriculum Vitae available Online

### Bio

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#### HONORS AND AWARDS

- Stanford Graduate Fellowship 2020-23, Stanford University (05/2020)

#### STANFORD ADVISORS

- Amir Safavi-Naeini, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **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): ead11814
- **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
- **Efficient Photonic Integration of Diamond Color Centers and Thin-Film Lithium Niobate** *ACS PHOTONICS*  
Riedel, D., Lee, H., Herrmann, J. F., Grzesik, J., Ansari, V., Borit, J., Stokowski, H. S., Aghaeimeibodi, S., Lu, H., McQuade, P. J., Melosh, N. A., Shen, Z., Safavi-Naeini, et al  
2023; 10 (12): 4236-4243
- **Mid-infrared spectroscopy with a broadly tunable thin-film lithium niobate optical parametric oscillator** *OPTICA*  
Hwang, A., Stokowski, H. S., Park, T., Jankowski, M., McKenna, T. P., Langrock, C., Mishra, J., Ansari, V., Fejer, M. M., Safavi-Naeini, A. H. 2023; 10 (11): 1535-1542
- **Integrated quantum optical phase sensor in thin film lithium niobate.** *Nature communications*  
Stokowski, H. S., McKenna, T. P., Park, T., Hwang, A. Y., Dean, D. J., Celik, O. T., Ansari, V., Fejer, M. M., Safavi-Naeini, A. H. 2023; 14 (1): 3355
- **Bias-stable Sub-Volt Visible Electro-optic Modulator in Thin-Film Lithium Niobate**  
Celik, O., Ammar, N., Stokowski, H. S., Park, T., Safavi-Naeini, A., IEEE  
IEEE.2023
- **Tunable dual wavelength laser on thin film lithium niobate**  
Lufungula, I., Mayor, F. M., Herrmann, J. F., Park, T., Stokowski, H. S., Hwang, A. Y., De Beeck, C., Atalar, O., Jiang, W., Kuyken, B., Safavi-Naeini, A. H., IEEE  
IEEE.2023
- **Ultra-broadband mid-infrared generation in dispersion-engineered thin-film lithium niobate** *OPTICS EXPRESS*  
Mishra, J., Jankowski, M., Hwang, A. Y., Stokowski, H. S., McKenna, T. P., Langrock, C., Ng, E., Heydari, D., Mabuchi, H., Safavi-Naeini, A. H., Fejer, M. M.

2022; 30 (18): 32752-32760

- **Ultra-low-power second-order nonlinear optics on a chip.** *Nature communications*  
McKenna, T. P., Stokowski, H. S., Ansari, V., Mishra, J., Jankowski, M., Sarabalis, C. J., Herrmann, J. F., Langrock, C., Fejer, M. M., Safavi-Naeini, A. H.  
2022; 13 (1): 4532
- **High-bandwidth CMOS-voltage-level electro-optic modulation of 780 nm light in thin-film lithium niobate** *OPTICS EXPRESS*  
Celik, O., Sarabalis, C. J., Mayor, F. M., Stokowski, H. S., Herrmann, J. F., McKenna, T. P., Lee, N. A., Jiang, W., Multani, K. S., Safavi-Naeini, A. H.  
2022; 30 (13): 23177-23186
- **High-efficiency second harmonic generation of blue light on thin-film lithium niobate.** *Optics letters*  
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2022; 47 (11): 2706-2709
- **Mid-infrared nonlinear optics in thin-film lithium niobate on sapphire** *OPTICA*  
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- **Fully-Resonant Second Harmonic Generation in Periodically Poled Thin-Film Lithium Niobate**  
McKenna, T. P., Stokowski, H. S., Ansari, V., Mishra, J., Jankowski, M., Sarabalis, C. J., Herrmann, J. F., Langrock, C., Fejer, M. M., Safavi-Naeini, A. H., IEEE  
IEEE.2021
- **Mid-infrared nonlinear optics in thin-film lithium niobate on sapphire**  
Mishra, J., McKenna, T. P., Ng, E., Stokowski, H. S., Jankowski, M., Langrock, C., Heydari, D., Mabuchi, H., Safavi-Naeini, A. H., Fejer, M. M., IEEE  
IEEE.2021
- **Optical Parametric Oscillator in Thin-Film Lithium Niobate with a 130  $\mu$ W Threshold**  
Stokowski, H. S., McKenna, T. P., Ansari, V., Mishra, J., Jankowski, M., Sarabalis, C. J., Herrmann, J. F., Langrock, C., Fejer, M. M., Safavi-Naeini, A. H., IEEE  
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- **Determination of Fermi Level Position at the Graphene/GaN Interface Using Electromodulation Spectroscopy** *ADVANCED MATERIALS INTERFACES*  
Herman, A. P., Janicki, L., Stokowski, H. S., Rudzinski, M., Rozbiegala, E., Sobanska, M., Zytewicz, Z. R., Kudrawiec, R.  
2020
- **Development of a Millimeter-Wave Transducer for Quantum Networks**  
Multani, K. S., Stokowski, H., Snively, E., Patel, R., Jiang, W., Lee, N., Welander, P. B., Nanni, E. A., Safavi-Naeini, A. H., IEEE  
IEEE.2020
- **Depletion Layer Built-In Field at (1-100), (0001), and (000-1) GaN/Water Junction and Its Role in Semiconductor Nanowire Water Splitting** *ADVANCED MATERIALS INTERFACES*  
Stokowski, H., Janicki, L., Serafinczuk, J., Siekacz, M., Skierbiszewski, C., Kudrawiec, R.  
2019; 6 (4)
- **Origin and annealing of deep-level defects in GaNAs grown by metalorganic vapor phase epitaxy** *JOURNAL OF APPLIED PHYSICS*  
Gelczuk, L., Stokowski, H., Dabrowska-Szata, M., Kudrawiec, R.  
2016; 119 (18)
- **Bi-induced acceptor level responsible for partial compensation of native free electron density in InP<sub>1-x</sub>Bix dilute bismide alloys** *JOURNAL OF PHYSICS D-APPLIED PHYSICS*  
Gelczuk, L., Stokowski, H., Kopaczek, J., Zhang, L., Li, Y., Wang, K., Wang, P., Wang, S., Kudrawiec, R.  
2016; 49 (11)