Stanford



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Senior Research Scientist-Physical, Ginzton, E.L. Laboratory

Bio

ACADEMIC APPOINTMENTS

- Senior Research Scientist-Physical, Ginzton, E.L. Laboratory

ADMINISTRATIVE APPOINTMENTS

- Executive Director, Stanford Photonics Research Center, (2021- present)

Teaching

COURSES

2026-27

- AI-Augmented Research and Development: Foundations and Practice: EE 292M (Aut)

Publications

PUBLICATIONS

- **Sensitivity analysis and optimization of sub-wavelength optical gratings using adjoints** *OPTICS EXPRESS*
  Niederberger, A. C. R., Fattal, D. A., Gauger, N. R., Fan, S., Beausoleil, R. G.
  2014; 22 (11): 12971-12981

- **Specification of photonic circuits using quantum hardware description language** *Theo Murphy Discussion Meeting on Principles and Applications of Quantum Control Engineering*
  Tezak, N., Niederberger, A., Pavlichin, D. S., Sarma, G., Mabuchi, H.
  ROYAL SOC.2012: 5270–90