Stanford

Mina R Bionta

Associate Scientist, SLAC National Accelerator Laboratory

Bio

EDUCATION AND CERTIFICATIONS

- Postdoc, Massachusetts Institute of Technology (MIT)
- Postdoc, Institut national de la recherche scientifique - centre Énergie Matériaux Télécommunications (INRS-EMT), Université du Québec
- PhD, Université Toulouse III - Paul Sabatier , Physics
- BS, Stanford University , Physics, minor in French

LINKS

- Personal Website: https://www.minabionta.com/

Professional

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Member, Association for Women in Science (2020 - present)
- Member, American Physical Society (2012 - present)
- Senior Member, Optica (2012 - present)

Publications

PUBLICATIONS

- **Tracking ultrafast solid-state dynamics using high harmonic spectroscopy** *PHYSICAL REVIEW RESEARCH*
  Bionta, M. R., Haddad, E., Leblanc, A., Gruson, V., Lassonde, P., Ibrahim, H., Chaillou, J., Emond, N., Otto, M. R., Jimenez-Galan, A., Silva, R. F., Ivanov, M., Siwick, et al
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- **On-chip sampling of optical fields with attosecond resolution** *NATURE PHOTONICS*
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- **Wavelength and shape dependent strong-field photoemission from silver nanotips** *NEW JOURNAL OF PHYSICS*
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- **Spectral encoding method for measuring the relative arrival time between x-ray/optical pulses** *REVIEW OF SCIENTIFIC INSTRUMENTS*
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- **Achieving few-femtosecond time-sorting at hard X-ray free-electron lasers** *NATURE PHOTONICS*
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- **Uncovering extreme nonlinear dynamics in solids through time-domain field analysis** *PHYSICAL REVIEW B*
  Keathley, P. D., Jensen, S. B., Yeung, M., Bionta, M. R., Madsen, L. B.
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- **Electron Emission Regimes of Planar Nano Vacuum Emitters** *IEEE TRANSACTIONS ON ELECTRON DEVICES*
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- **Impact of DC bias on weak optical-field-driven electron emission in nano-vacuum-gap detectors** *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*
  Turchetti, M., Bionta, M. R., Yang, Y., Ritzkowsky, F., Candido, D. R., Flatte, M. E., Berggren, K. K., Keathley, P. D.
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- **Single-Photon Single-Flux Coupled Detectors** *NANO LETTERS*
  Onen, M., Turchetti, M., Butters, B. A., Bionta, M. R., Keathley, P. D., Berggren, K. K.
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- **Temporal characterization of femtosecond laser pulses using tunneling ionization in the UV, visible, and mid-IR ranges** *SCIENTIFIC REPORTS*
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- **Phase-matching-free pulse retrieval based on transient absorption in solids** *OPTICS EXPRESS*
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- **Laser wakefield acceleration with high-power, few-cycle mid-IR lasers**
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- **Probing the phase transition in VO₂ using few-cycle 1.8 μm pulses** *PHYSICAL REVIEW B*
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- **2.5 TW, two-cycle IR laser pulses via frequency domain optical parametric amplification** *OPTICS EXPRESS*
  Gruson, V., Ernotte, G., Lassonde, P., Laramee, A., Bionta, M. R., Chaker, M., Di Mauro, L., Corkum, P. B., Ibrahim, H., Schmidt, B. E., Legare, F.
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- **First results on laser-induced field emission from a CNT-based nanotip**
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- **Laser-induced electron emission from a tungsten nanotip: identifying above threshold photoemission using energy-resolved laser power dependencies** *JOURNAL OF MODERN OPTICS*
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- **X-ray-optical cross-correlator for gas-phase experiments at the Linac Coherent Light Source free-electron laser** *APPLIED PHYSICS LETTERS*

  Schorb, S., Gorkhover, T., Cryan, J. P., Glownia, J. M., Bionta, M. R., Coffee, R. N., Erk, B., Boll, R., Schmidt, C., Rolles, D., Rudenko, A., Rouzee, A., Swiggers, et al

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