Stanford



Joseph Lucero

Ph.D. Student in Chemistry, admitted Autumn 2021

Curriculum Vitae available Online

Bio

LINKS

- My Personal Website: https://jnelucero.com

Publications

PUBLICATIONS

- **An Experimentally Validated Electro-Thermal EV Battery Pack Model Incorporating Cycle-Life Aging and Cell-to-Cell Variations** *IEEE TRANSACTIONS ON TRANSPORTATION ELECTRIFICATION*
  Lucero, J. N. E., Sujan, V. A., Onori, S.
  2024; 10 (4): 8122-8136

- **Comparing Mass-Preserving Numerical Methods for the Lithium-Ion Battery Single Particle Model**
  Lucero, J. N. E., Xu, L., Onori, S.
  ELSEVIER.2024: 426-431

- **A MC-based anthropomorphic test case for commissioning model-based dose calculation in interstitial breast 192-Ir HDR brachytherapy.** *Medical physics*
  Peppa, V., Thomson, R. M., Enger, S. A., Fonseca, G. P., Lee, C., Lucero, J. N., Mourtada, F., Siebert, F. A., Vijande, J., Papagiannis, P.
  2023; 50 (7): 4675-4687

- **Bayesian Information Engine that Optimally Exploits Noisy Measurements.** *Physical review letters*
  Saha, T. K., Lucero, J. N., Ehrich, J., Sivak, D. A., Bechhoefer, J.
  2022; 129 (13): 130601

- **Maximizing power and velocity of an information engine** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Saha, T. K., Lucero, J. N. E., Ehrich, J., Sivak, D. A., Bechhoefer, J.
  2021; 118 (20)

- **Maximal fluctuation exploitation in Gaussian information engines** *PHYSICAL REVIEW E*
  Lucero, J., Ehrich, J., Bechhoefer, J., Sivak, D. A.
  2021; 104 (4): 16

- **Nonequilibrium Energy Transduction in Stochastic Strongly Coupled Rotary Motors** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*
  Lathouwers, E., Lucero, J. N. E., Sivak, D. A.
  2020; 11 (13): 5273-5278

- **Optimal control of rotary motors** *PHYSICAL REVIEW E*
  Lucero, J. N. E., Mehdizadeh, A., Sivak, D. A.
  2019; 99 (1): 012119