Scott Keene
Ph.D. Student in Materials Science and Engineering, admitted Autumn 2015

Publications

PUBLICATIONS

- **Mechanisms for Enhanced State Retention and Stability in Redox-Gated Organic Neuromorphic Devices** *ADVANCED ELECTRONIC MATERIALS*
  Keene, S., Melianas, A., van de Burgt, Y., Salleo, A.
  2019; 5 (2)

- **The Mechanism of Dedoping PEDOT:PSS by Aliphatic Polyamines**. *The journal of physical chemistry. C, Nanomaterials and interfaces*
  van der Pol, T. P., Keene, S. T., Saes, B. W., Meskers, S. C., Salleo, A., van de Burgt, Y., Janssen, R. A.
  2019; 123 (39): 24328–37

- **Parallel programming of an ionic floating-gate memory array for scalable neuromorphic computing**. *Science (New York, N.Y.)*
  2019

- **High-Throughput Open-Air Plasma Activation of Metal-Oxide Thin Films with Low Thermal Budget** *ACS APPLIED MATERIALS & INTERFACES*
  Tak, Y., Hilt, F., Keene, S., Kim, W., Dauskardt, R. H., Salleo, A., Kim, H.
  2018; 10 (43): 37223–32

- **Molecularly selective nanoporous membrane-based wearable organic electrochemical device for noninvasive cortisol sensing**. *Science advances*
  Parlak, O., Keene, S. T., Marais, A., Curto, V. F., Salleo, A.
  2018; 4 (7): eaar2904

- **Optimized pulsed write schemes improve linearity and write speed for low-power organic neuromorphic devices** *JOURNAL OF PHYSICS D-APPLIED PHYSICS*
  Keene, S. T., Melianas, A., Fuller, E. J., van de Burgt, Y., Talin, A., Salleo, A.
  2018; 51 (22)

- **Organic Electronics for Neuromorphic Computing** *NATURE ELECTRONICS*
  Burgt, Y. v., Melianas, A., Keene, S. T., Malliaras, G., Salleo, A.
  2018; 1 (7): 386-397

- **Enhanced Cell-Chip Coupling by Rapid Femtosecond Laser Patterning of Soft PEDOT:PSS Biointerfaces** *ACS APPLIED MATERIALS & INTERFACES*
  Santoro, F., van de Burgt, Y., Keene, S., Cui, B., Salleo, A.
  2017; 9 (45): 39116–21

- **Hierarchical Aerographite nano-microtubular tetrapodal networks based electrodes as lightweight supercapacitor** *NANO ENERGY*
  2017; 34: 570-577

- **A non-volatile organic electrochemical device as a low-voltage artificial synapse for neuromorphic computing**. *Nature materials*
  2017

- **Electronic control of H+ current in a bioprotonic device with Gramicidin A and Alamethicin** *NATURE COMMUNICATIONS*
  Hemmatian, Z., Keene, S., Josberger, E., Miyake, T., Arboleda, C., Soto-Rodriguez, J., Baneyx, F., Rolandi, M.
  2016; 7: 12981

- **Proton mediated control of biochemical reactions with bioelectronic pH modulation**. *Scientific reports*
Deng, Y., Miyake, T., Keene, S., Josberger, E. E., Rolandi, M. 
2016; 6: 24080-?

- **An enzyme logic bioprotonic transducer** _APL MATERIALS_  
Miyake, T., Josberger, E. E., Keene, S., Deng, Y., Rolandi, M.  
2015; 3 (1)

- **Taking electrons out of bioelectronics: bioprotonic memories, transistors, and enzyme logic** _JOURNAL OF MATERIALS CHEMISTRY C_  
Hemmatian, Z., Miyake, T., Deng, Y., Josberger, E. E., Keene, S., Kautz, R., Zhong, C., Jin, J., Rolandi, M.  
2015; 3 (25): 6407-6412