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Publications

PUBLICATIONS

● Photoswitchable Binary Nanopore Conductance and Selective Electronic Detection of Single Biomolecules under Wavelength and Voltage Polarity Control ACS NANO
  Hagan, J. T., Gonzalez, A., Shi, Y., Han, G. D., Dwyer, J. R.
  2022; 16 (4): 5537-5544

● Design of phase-transition molecular solar thermal energy storage compounds: compact molecules with high energy densities CHEMICAL COMMUNICATIONS
  Qiu, Q., Gerkman, M. A., Shi, Y., Han, G. D.
  2021; 57 (74): 9458-9461

● Solar energy conversion and storage by photoswitchable organic materials in solution, liquid, solid, and changing phases JOURNAL OF MATERIALS CHEMISTRY C
  Qiu, Q., Shi, Y., Han, G. D.
  2021; 9 (35): 11444-11463

● Sunlight-activated phase change materials for controlled heat storage and triggered release JOURNAL OF MATERIALS CHEMISTRY A
  Shi, Y., Gerkman, M. A., Qiu, Q., Zhang, S., Han, G. D.
  2021; 9 (15): 9798-9808

● Arylazopyrazoles for Long-Term Thermal Energy Storage and Optically Triggered Heat Release below 0 degrees C JOURNAL OF THE AMERICAN CHEMICAL SOCIETY
  Gerkman, M. A., Gibson, R. L., Calbo, J., Shi, Y., Fuchter, M. J., Han, G. D.
  2020; 142 (19): 8688-8695