Curriculum Vita
November 2025

Instructor: Heungman Park, Associate Professor
Academic Department: Physics and Astronomy

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EDUCATION

Ph.D. - Aug 2010, Physics, Vanderbilt University, Nashville, Tennessee, USA
M.S. - Sep 2005, Physics, Oregon State University, Corvallis, Oregon, USA
B.S. - Feb 2002, Physics, Hanyang University, Seoul, South Korea

TEACHING EXPERIENCE

Aug 2022 – Present, Associate Professor, Department of Physics & Astronomy, East Texas A&M University (formerly, Texas A&M University – Commerce), USA
Aug 2016 – Aug 2022, Assistant Professor, Department of Physics & Astronomy, East Texas A&M University (formerly, Texas A&M University – Commerce), USA

PUBLICATIONS

Publications (recent 10 years)

1. Brian Barker (online MS student), Sahjahan Islam, Dipika Das Ria, **Heungman Park**, "Fluorescence Anisotropy Measurements, Simulations, and Noise Effects in Investigating Exciton Migration and Confinement in Conjugated Polymers", Luminescence Volume 40, Issue 7 July 2025 e70270 , https://doi.org/10.1002/bio.70270, (2025)
2. S. Vaught, **H. Park**, “Exciton confined states in conjugated polymers studied by spectroscopic fluorescence polarization measurements”, AIP Advances 11, 075126 (2021), https://doi.org/10.1063/5.0041066
3. Jake Richter, Moses Nnaji and **Heungman Park**, “Solvent Effect to the Uniformity of Surfactant-Free Salmon-DNA Thin Films”, Polymers 2021, 13(10), 1606 (2021), https://doi.org/10.3390/polym13101606

4. M.J. Deutsch, **H. Park**, “Internal and external quantum yields enhancement in BDMO-PPV by intense illumination”, Synthetic Metals, Vol 269, 116548 (2020), https://doi.org/10.1016/j.synthmet.2020.116548
5. Cole Galey, **H. Park**, “Intermediate states during photodegradation in MEH-PPV solutions and thin films”, AIP Advances 9, 105010 (2019), https://doi.org/10.1063/1.5099382
6. **Heungman Park**, Youngah Karen Kwon, and Laura J. Kaufman, “Complex Photophysical Behaviors Affect Single Conjugated Molecule Optical Anisotropy Measurements”, J. Phys. Chem. C, 123, 3, 1960-1965 (2019), https://doi.org/10.1021/acs.jpcc.8b10916
7. Jaesung Yang, **Heungman Park**, Laura Kaufman, “In-Situ Optical Imaging of the Growth of Conjugated Polymer Aggregates”, Angew. Chem. Int. Ed. 57, 1–6 (2018), https://doi.org/10.1002/anie.201710336
8. Jaesung Yang, **Heungman Park**, L. Kaufman, “Highly Anisotropic Conjugated Polymer Aggregates: Preparation and Quantification of Physical and Optical Anisotropy”, J. Phys. Chem. C 121 (25), pp 13854 (2017), https://doi.org/10.1021/acs.jpcc.7b02257
9. **Heungman Park**, Dat T. Hoang, Keewook Paeng, Jaesung Yang, L. Kaufman, “Conformation-dependent Photostability among and within Single Conjugated Polymers”, Nano Letters 15 (11), pp 7604–7609 (*2015*), https://doi.org/10.1021/acs.nanolett.5b03409
10. **Heungman Park**, Dat T. Hoang, Keewook Paeng, Laura J. Kaufman, “Localizing Exciton Recombination Sites in Conformationally Distinct Single Conjugated Polymers by Super-Resolution Fluorescence Imaging”, ACS Nano, 9 (3), pp 3151–3158, (2015), https://doi.org/10.1021/acsnano.5b00086
11. Keewook Paeng, **Heungman Park**, Dat Tien Hoang, and Laura J. Kaufman, “Ideal probe single-molecule experiments reveal the intrinsic dynamic heterogeneity of a supercooled liquid”, PNAS 1424636112 (2015), https://doi.org/10.1073/pnas.1424636112

RESEARCH GRANTS AND AWARDS

1. 2025 NASA RIA (Research Initiative Award), “Investigating protective transparent flexible films for organic semiconductor optoelectronic devices in the Martian atmospheric environment”, max $300,000 for two years as a sole PI.

2. 2024 NSF REU Site: Summer Research Program for Community College and Liberal Arts College Students in Physics and Astronomy, $334,724 as PI. Award number: 2349111

3. 2022 NSF MRI (Major Research Instrument), as PI: “MRI: Acquisition of a desktop scanning electron microscope (SEM) for research and education in STEM fields at a primarily undergraduate institution.” $144,300, Award Number: 2216001

4. 2021 NSF REU (Research Experiences for Undergraduates), as PI: “REU Site: Summer research program for community college students in Physics and Astronomy at Texas A&M University-Commerce”, $236,704 Award Number: 2050277