Department of Physics

Optical Studies of two-dimensional materials

The overall accomplishment of my research is to prepare novel optoelectronic materials for optical spectroscopic investigations and optoelectronic applications. The materials we are working on includes solution processable perovskites, organics and van der Waals layered materials.

Techniques used in study

My primary techniques are absorption, steady-state and transient photoluminescence, circular dichroism, circularly polarized luminescence spectroscopies. Fabrication systems and optoelectrical measurement systems for light-emitting diodes, solar cells and transistors.

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Background: PhD in Physics

National Chiao Tung University

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Ministry of Science and Technology





Publications

- Journal of Materials Chemistry C 8, 12951 (2020).
- Solar Energy 199, 308 (2020).
- J. Mater. Chem. C 7, 8634 (2019).
- ACS Appl. Mater. Interfaces 11, 30176 (2019).
- Sol. RRL 3, 1900071 (2019).
- ChemSusChem 11, 2429 (2018).
- ChemSusChem 10, 2778 (2017).
- Advanced Materials 28, 8029 (2016).
- ACS Appl. Mat. Inter. 7, 18899 (2015).

