

Research Summary

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My current work is focused on the research of organic materials based on perylene and dithienopyrrole derivatives, particularly on the homopolymers and copolymers incorporating those blocking units, which are potentially used as electron and hole transporting materials in organic electronic devices, such as solar cell, OFET. My research goal is to design, synthesize and characterize those polymers, study the optical and electronic properties and investigate their structure-property relationships. The devices based on selected materials will be made and mobility of them will be measured. Hopefully some high-performance transporting materials will be obtained, which can be used in photovoltaic and/or transistor devices.