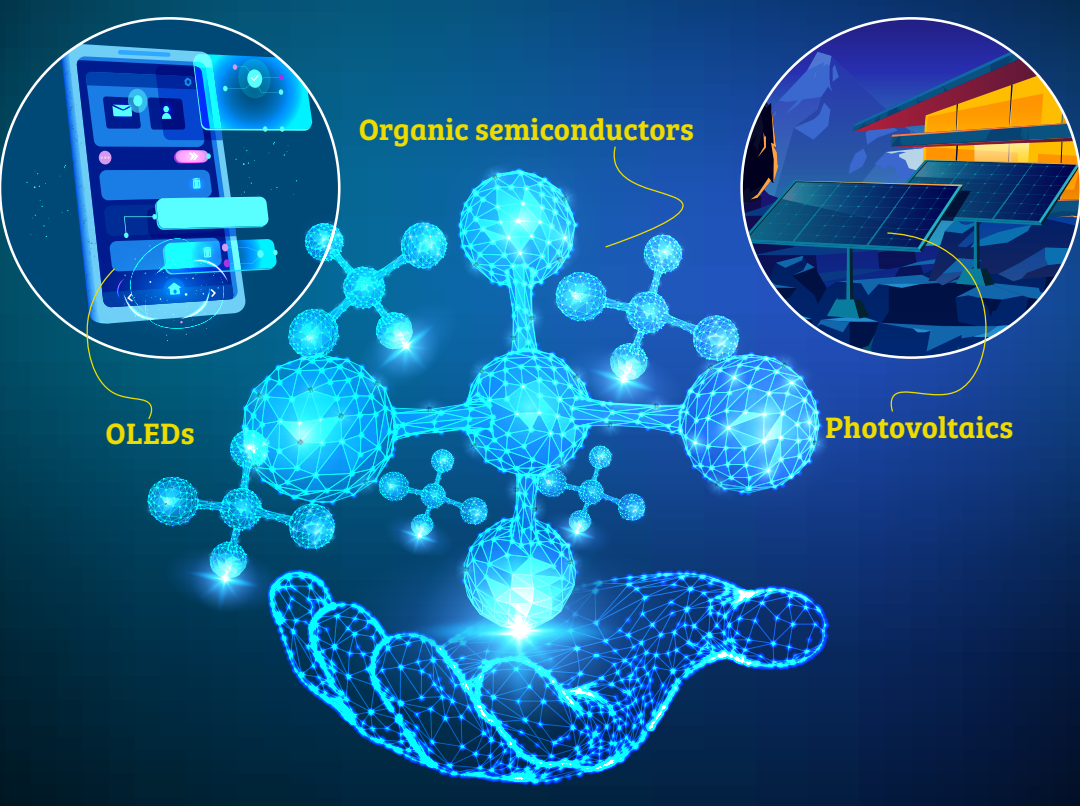
Fundamental Mechanisms of Charge Transport in Organic Semiconductors

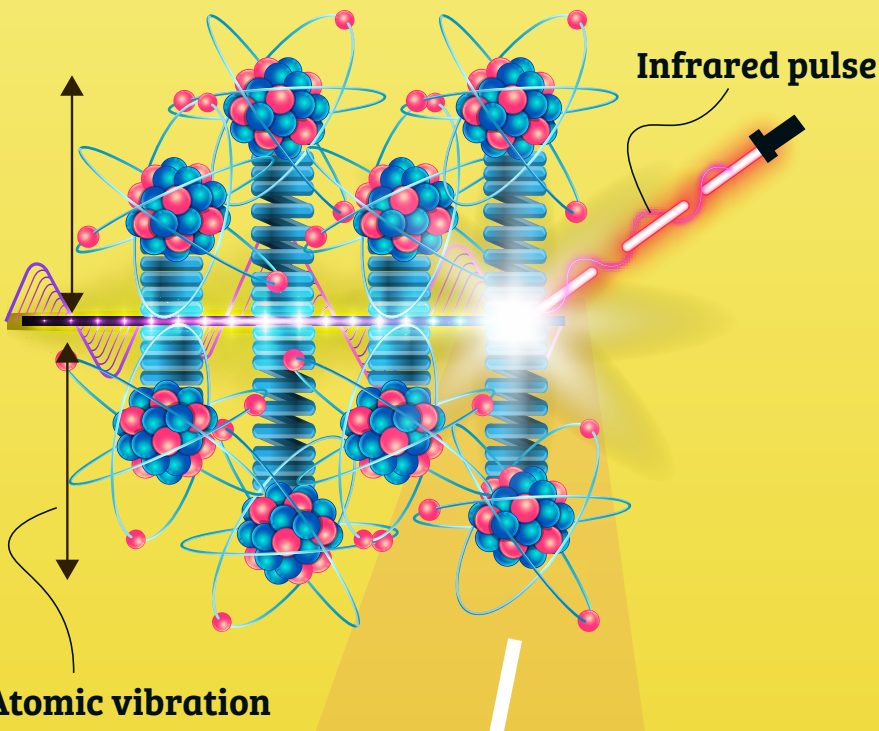
Organic semiconductors are important materials for a variety of applications including display devices and solar cells



Organic semiconductor structures can be endlessly fine-tuned to change their properties

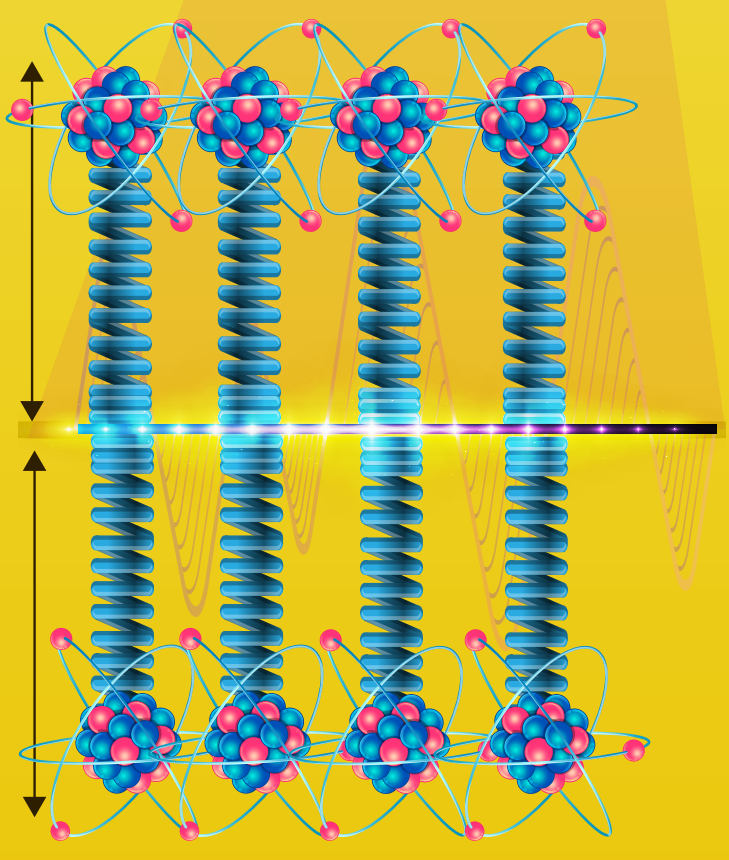
A better understanding of structure-property relationships is required to exploit the versatility of organic semiconductors

Infrared active vibrations (IRAVs) of organic semiconductors are studied using advanced ultrafast time-resolved infrared spectroscopies



Time-resolved infrared (TRIR) and two-dimensional infrared (2D-IR) spectroscopies

Changes in structure and charge distribution



IRAVs originate from the strong coupling of charge redistribution to nuclear motion

Ultrafast time-resolved infrared spectroscopy can be used to study structure - property relationships in organic semiconductors and related molecules

Chemical Science
PICK OF THE WEEK
Mechanisms of IR Amplification in Radical Cation Polarons
Parker and Anderson *et al.* (2020) | DOI: 10.1039/C9SC05717J
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