

Silicon nanocrystal light emitting diodes

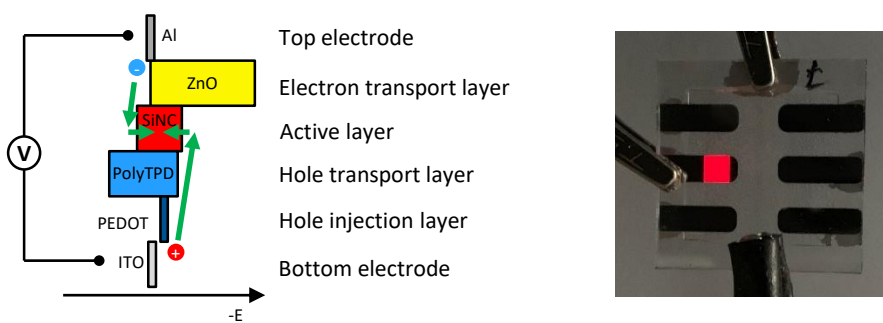
Why Silicon for LEDs?

Silicon nanocrystals (SiNCs) are a hybrid inorganic/organic material as a non-toxic alternative to OLED and current QLED materials.

We do:

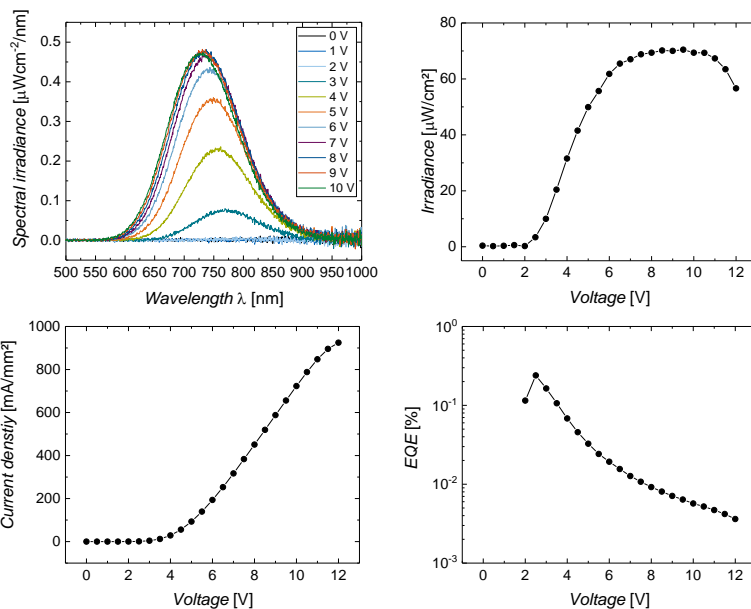
- LED fabrication with various functional molecules on SiNCs
- Performance and lifetime measurements
- Device engineering
- Material and surface characterization
- Microscopy

SiNC-LED working schematic

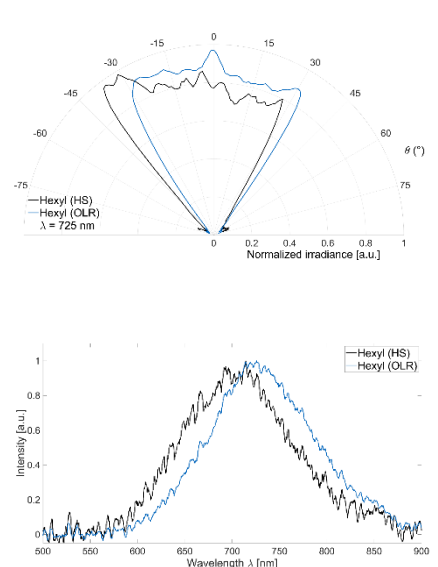


Typical measurements of SiNC-LEDs

Spectrum, LED intensity and quantum efficiency



Viewing-angle measurement



If you are interested and for further information on current research topics, please get in contact with me, josef.mock@tum.de