Achievement:

- Criteria for **exceeding traditional ray optic light trapping limit** is identified
- To achieve unprecedented light trapping, the solar cell must have an **elevated local density of optical states** (LDOS)
- Many potential structures identified which meet this criteria and can be used for **design of new highly absorbing solar cells**

Significance:

New solar cell structures can now be easily designed that **absorb more light** than has been traditionally thought possible. This could allow for significant reduction of material usage and cost, as well as **unprecedented efficiencies**.