

LUMI STACK DESIGNER • OLED | OPV

Design the full device stack

From material selection to HOMO/LUMO diagram, in minutes.

Start from a validated template, choose the material for every layer from the Lumora catalogue or your own, set thickness and dopant concentration, and watch the **energy-level diagram and physics checks update instantly**. When the stack is right, quote every layer in one click or export it as a PDF.

Built-in templates and device classes

Blue MR-TADF (DABNA), blue phosphorescent (Flrpic/mCP), green phosphorescent (Ir(ppy)₃), green TADF (4CzIPN/CBP), red TADF, red phosphorescent (Ir(piq)₂(acac)), white tandem and hyperfluorescence. Device classes cover top-emission, tandem, inverted (n-i-p), strong microcavity, flexible, transparent, QLED, **OPV** and perovskite PV/LED.

What it does for you

- ✓ **Reads the band diagram for you.** Injection barriers, exciton confinement by the EBL and HBL, and carrier balance are visible at a glance, with emitter levels drawn inside the host.
- ✓ **Lints your architecture.** Every edit is checked against OLED device-physics rules, so problems surface before you enter the cleanroom.
- ✓ **Links every layer to a real material.** Hosts, dopants, blocking and transport layers map to purchasable products, so a design becomes a quotation in one click.
- ✓ **Carries a paper into the tool.** Paste a device figure from any publication and LUMI rebuilds it as an editable stack, matched to catalogue materials.

The demonstration to ask for at the booth: bring a device structure from a paper you are working from. We will paste the figure into LUMI, rebuild the stack live, swap one layer, and show you what it does to the energy landscape before you order a single gram.



Open the tool

Design your stack with LUMI

From device concept to a validated stack in minutes, not weeks.

www.lumorachemicals.com