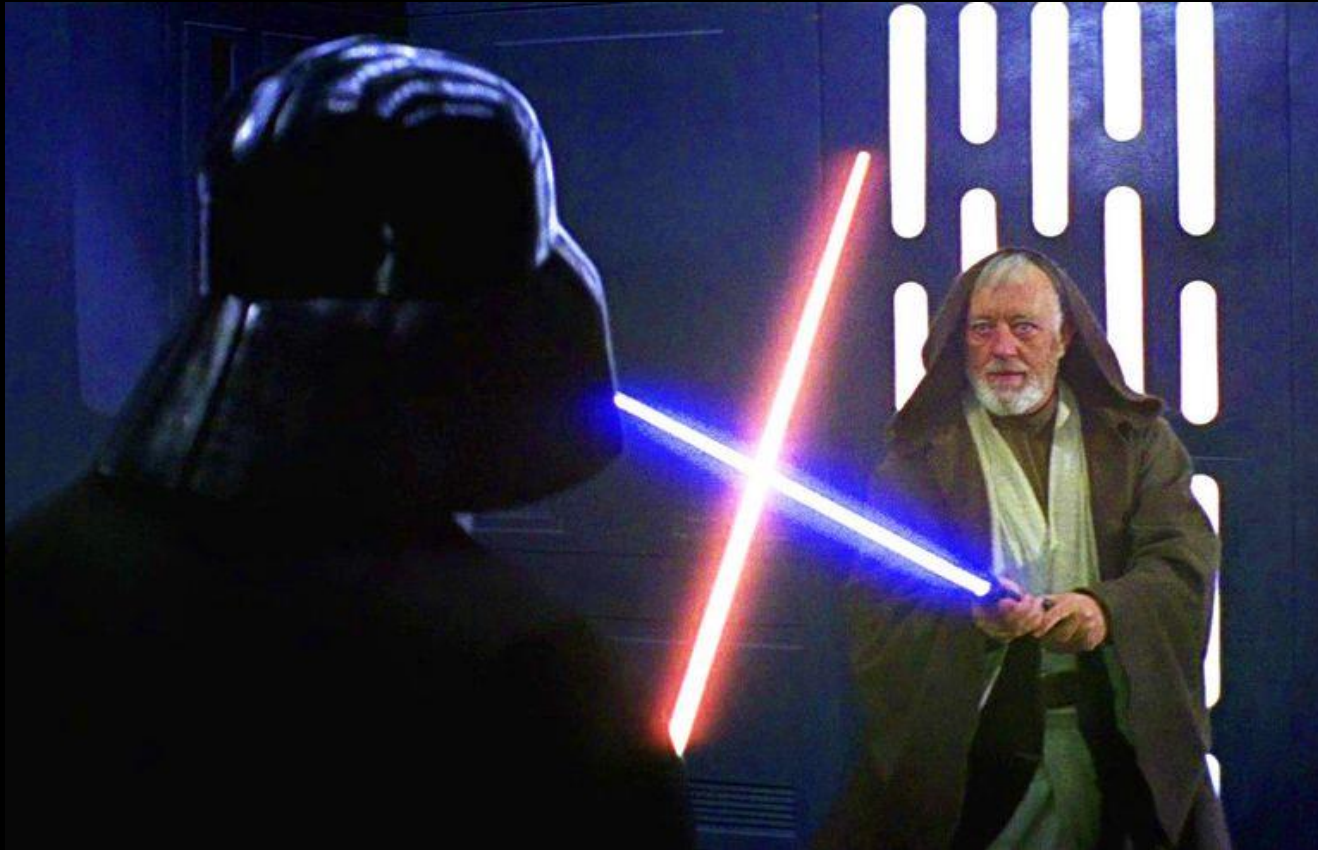


Often, you need a better blue laser diode to survive.



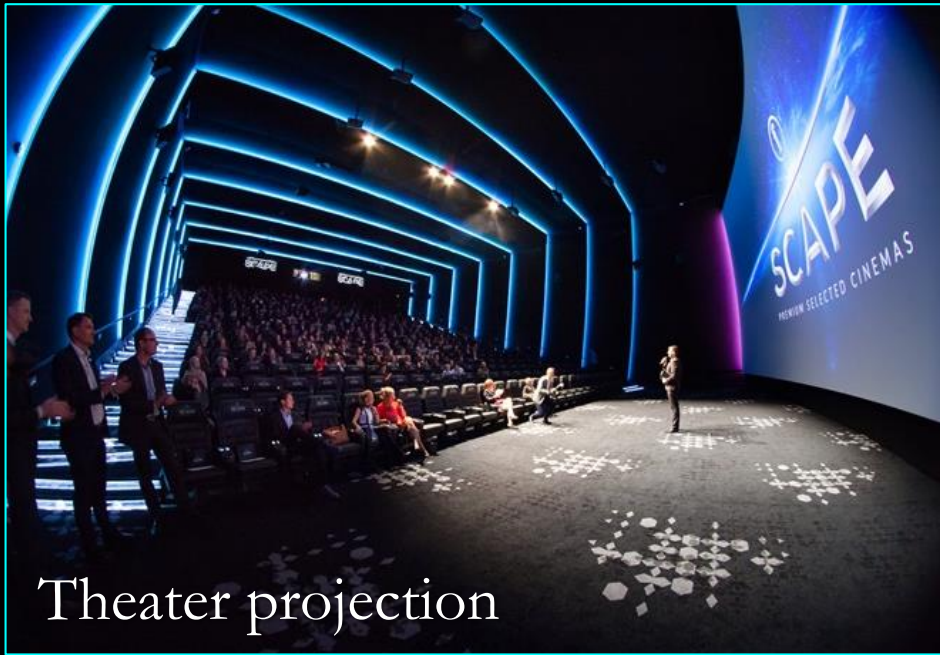
# LaPor

A **L**aser company with **P**orous technology

Prof. Jung Han, co founder

Ge Yuan, co founder





Theater projection



Visible light communication (VLC)

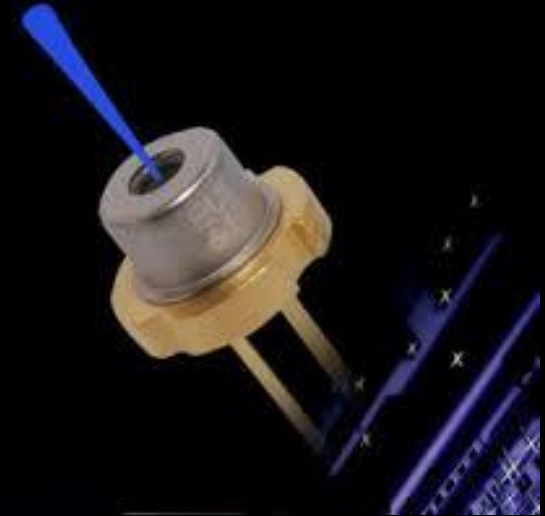
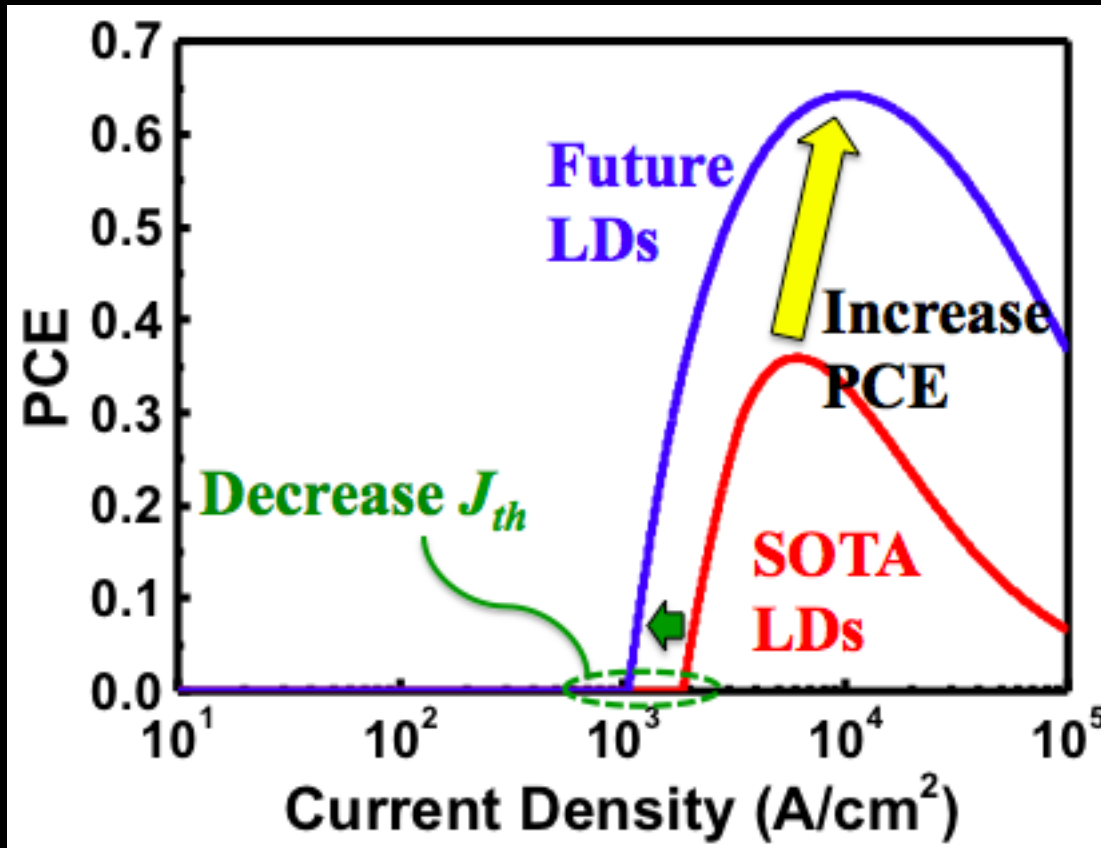


Information storage



Automobile headlamp

# Problem: the **low efficiency** of blue lasers

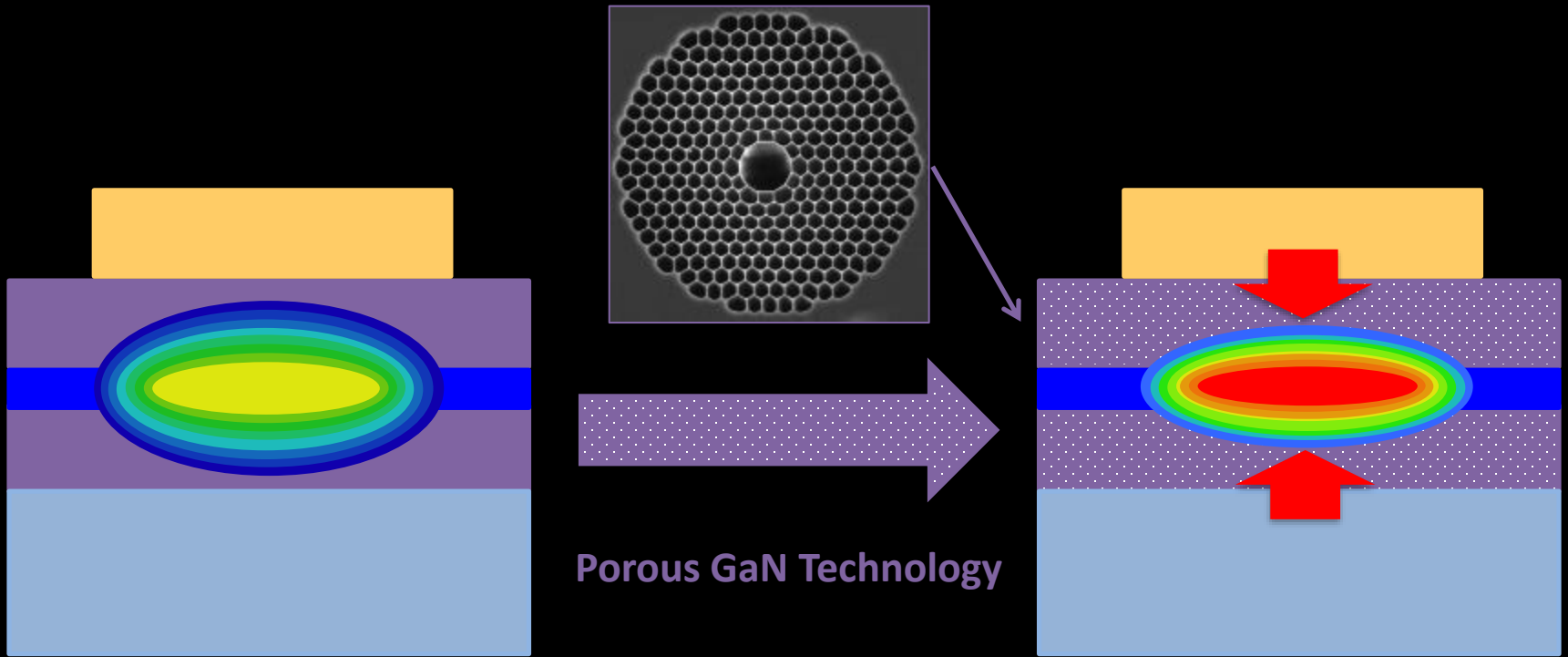


$\eta_{stim}$  and  $\eta_{ext}$  lost  $\sim 50\%$

The efficiency terms for state-of-the-art (SOTA) blue laser diodes

	$\eta_{inj}$	$\eta_{stim}$	$\eta_{ext}$	$\eta_J$	$PCE_{LD}$
SOTA blue LD	$\sim 97\%$	$\sim 65\%$	$\sim 66\%$	$\sim 80\%$	$\sim 34\%$

# Solution: **Porous GaN technology**



Regular blue LD,  $\eta \sim 30\%$

**porous GaN LD,  $\eta \sim 60\%$**

**Porous GaN 3X** the optical field and **2X** the efficiency

# Proof of concept (POC) in the lab

