



# EPOCH

Preliminary

*Unrivaled New Phosphor for the Brightest White-Light*

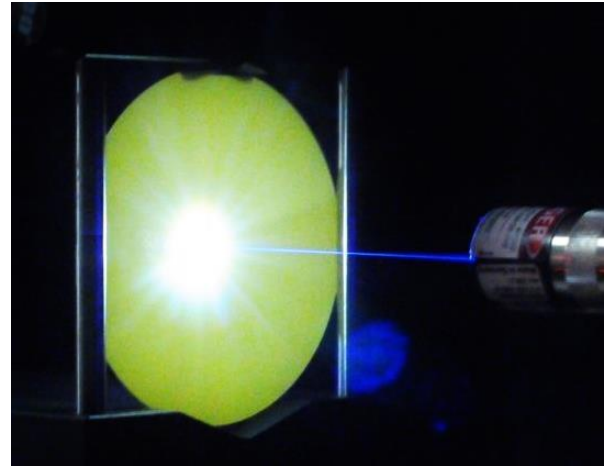
## What's EPOCH?

**EPOCH** is the **BEST Phosphor**

for realizing true white light source with the highest brightness.

**EPOCH** has a chinese-script like structured, crystalline composite consisted of single crystalline Ce:YAG phosphor and light guide. Two materials are continuously tangled with each other without any organic binder, air space, nor boundary layer. Yellow light emitted from Ce:YAG, which is excited by blue LEDs and LDs,

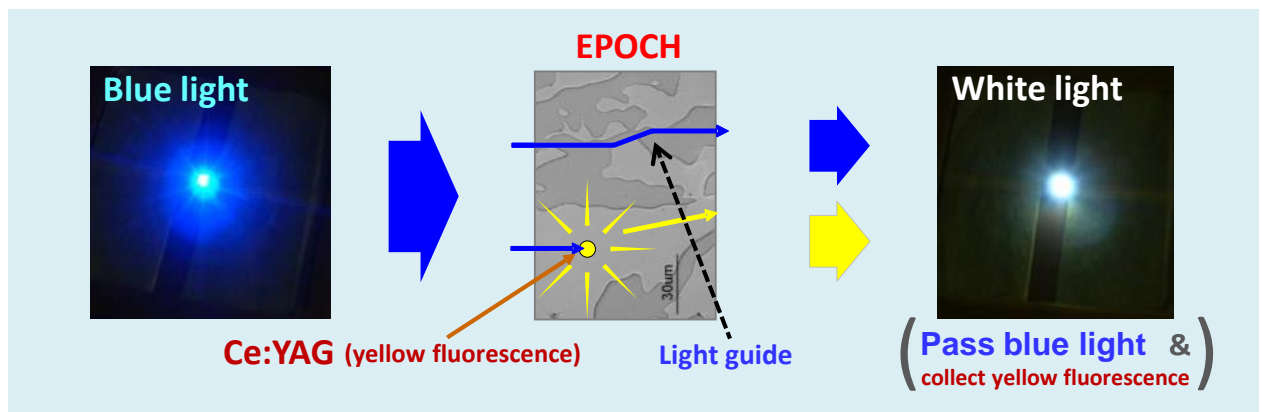
is effectively guided via transparent light guide. Thus, white light emission is obtained in the most efficient way, combined with yellow and blue lights in **EPOCH**.



## Advantages

- ✓ **High Thermal Conductivity**
- ✓ **Ultra Brightness**
- ✓ **High Durability**

## Principle of EPOCH phosphor



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# Measurement example of EPOCH

Ce:YAG structure	EPOCH	single crystal
thermal conductivity (w/mK)	~20	13
mechanical strength	strong	medium
heat resistance	strong	strong
light propagation	zigzag mixing	straight

Table Comparison of advanced Ce:YAG phosphors

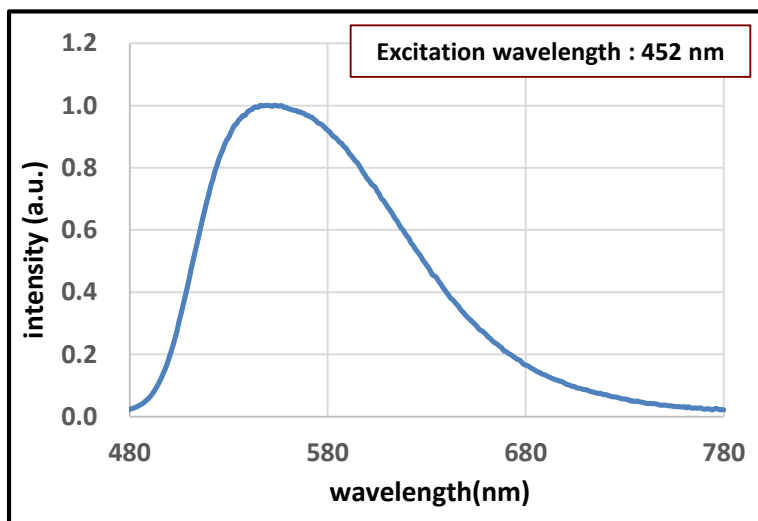


Fig.1 Photoluminescence of EPOCH

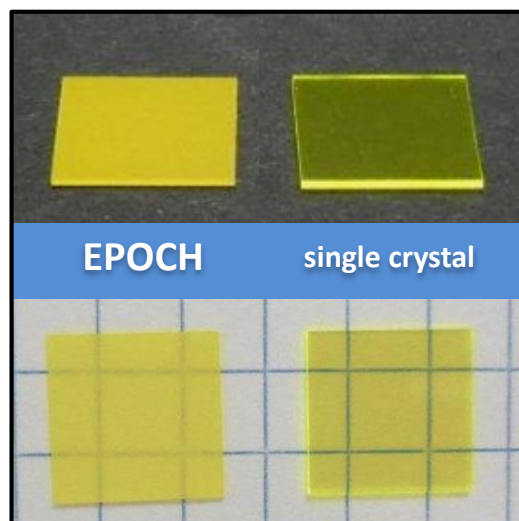
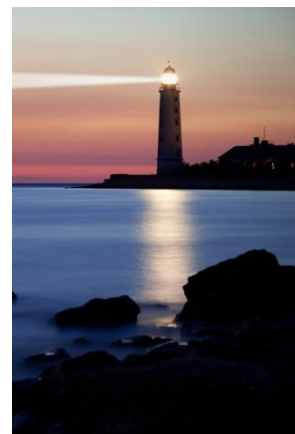


Fig.2 Polished chips

## Applications

- ✓ Automobile headlight
- ✓ Projector
- ✓ Solid-state illumination



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