

Crystal Growth in Medical/LD & LED Lighting

Taiwan Applied Crystal Co., LTD

Company Profile

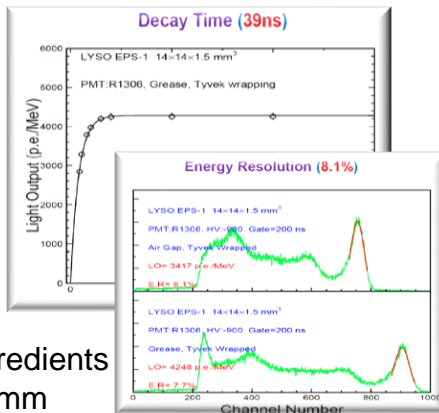
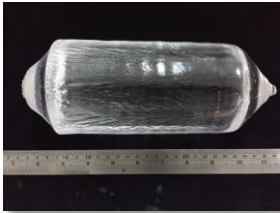
Taiwan Applied Crystal (TAC) was founded in 2012 and tailored on equipment manufacturing for crystal growth with Czochralski (Cz) approach and new phosphor material development. With built-in technology that grows high-quality scintillator for Positron Emission Tomography (PET) and Ce:YAG/Ce:LuAG for high power LED and LD lighting ◦

Technology was built and developed through Industry-Academics collaboration between TAC and National Sun Yat-Sen University (NSYSU), Kaohsiung, Taiwan.



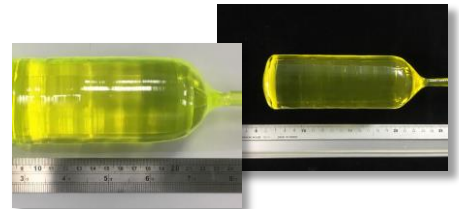
Crystal Products by TAC

Ca²⁺ dopant Ce:LYSO



- Ca²⁺ doped patent ingredients
- Diameter range 70-80mm
- Light Output is superior to standard sample (~30000 photons/MeV) about 110~115%
- Decay Time 39ns
- Energy Resolution 8.1%

Single Crystal Phosphor (Ce:Lu_xY_{1-x}AG)



- Ce concentration range: 0.2~6 mol.%
- Diameter range: 50~65mm
- With 450nm blue LD excitation, Ce:YAG peak wavelength range 530~550nm ◦ Ce:LuAG peak wavelength range 515~525nm ◦
- Crystal can be post process as pixel, plate, powder by request ◦
- Hybrid crystal phosphor can be applied on existing LD lighting and laser projector without 2nd optical design modification.

Expertise on Scintillator/Phosphor Crystal

Patent technology with Ca²⁺ doped into Ce:LYSO

One stop service for crystal growth, cutting, lapping, polishing, assembly

OEM for Scintillator or Phosphor Crystal Growth

Customized for various single/poly crystal phosphor products

Contact: Jack W.C. Lin
email: jacklin@tacystal.com
Phone: +886935865478
Web: www.tacystal.com



台灣應用晶體股份有限公司
Taiwan Applied Crystal Co., LTD.