

# Investigation of lanthanide-doped APLF scintillators for neutron detection

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New  $^6\text{Li}$  scintillator

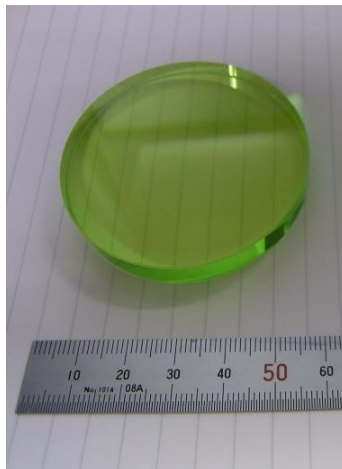
- Fluorescent ion: Pr (3+)

emission 250 nm

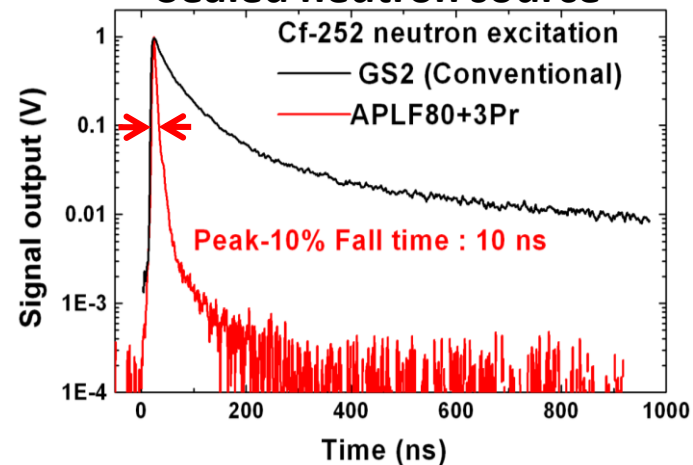
(lifetime  $\tau \propto \lambda^3$ )

- Host: LiF glass

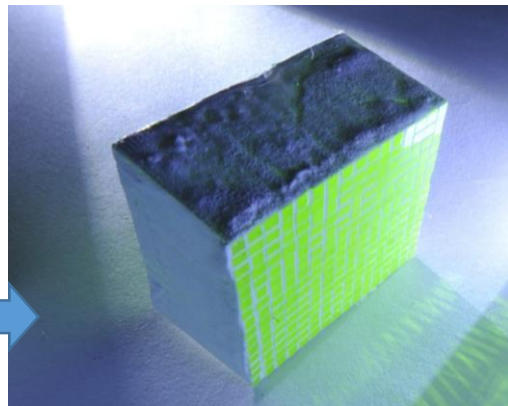
(UV transparent)



## Sealed neutron source



*DS neutrons signal in GEKKO XII fusion experiment*



**APLF80+3Pr Scintillator Array**

