

GPS

Key Scintillator Materials for Novel Radiation Detectors

Features

- ✓ Highest light yield in oxide scintillators
- ✓ Excellent performance at high temperature (up to 300 °C)

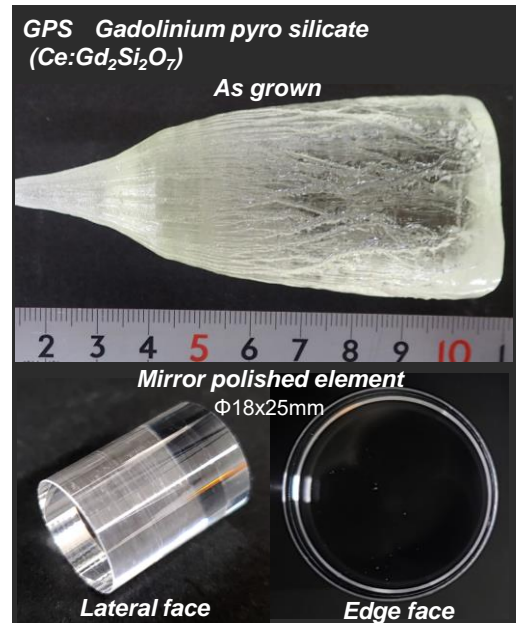
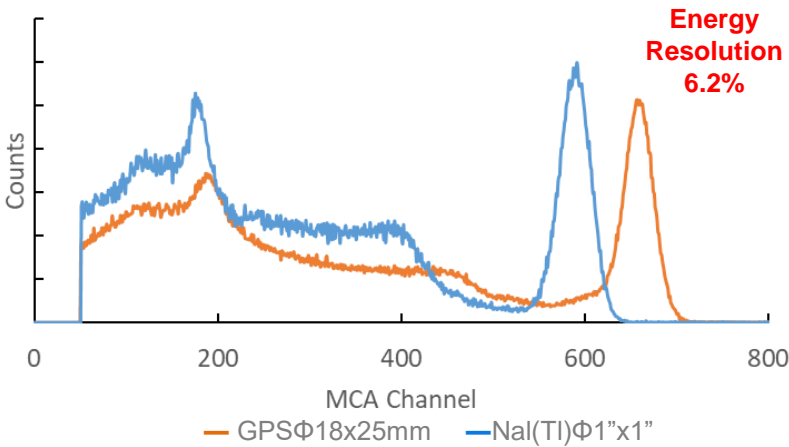
- ✓ No hygroscopicity
- ✓ No self-radiation

Applications

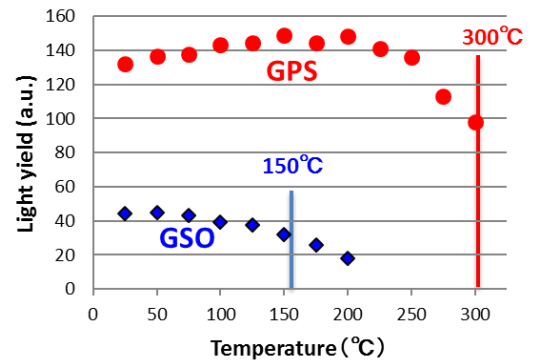
- ✓ SPECT
- ✓ Homeland security
- ✓ Common radiation monitoring

Performance example

Cs-137 spectrum



Temperature response



Comparison of Typical Scintillators

	GPS	GSO	La-GPS	LaBr ₃	NaI:TI
Light yield (NaI=100)	~140	20	~120	160	100
Decay time (ns)	50-130	30-60	50-70	25-30	230
ΔE/E (¹³⁷ Cs, %)	5 - 7	8-10	5 - 7	3-4	7
Density (g/cm ³)	5.5	6.7	~5.3	5.08	3.7
Hygroscopicity	No	No	No	Yes	Yes
Self-radiation	No	No	Little	Yes	No
Temperature quench	300°C	150°C	>150°C	-	-

OXIDE

OXIDE Corporation

1747-1 Maginohara, Mukawa, Hokuto, Yamanashi 408-0302 JAPAN
Tel: +81-551-26-0022, Fax: +81-551-26-0033



✉ Sales@opt-oxide.com



https://www.opt-oxide.com



Oxide Yamanashi

Sales Contact in North America: Specialty Chemicals Dept., Marubeni America Corporation.
Tel: +1 (914) 428-8900, productinfo@marubeni.com