



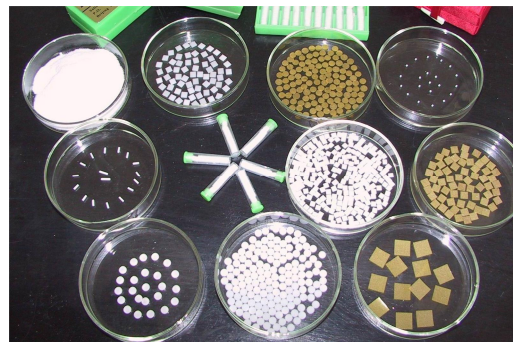
We are committed to supply of all types of substrates to microelectronics industry  
为微电子工业提供各类优质基层材料

### Chips of LiF: (Mg, Cu, P) Thermoluminescent Dosimeter

#### 热释光辐射剂量探测片

Thermoluminescence detector TLD is a kind of solid detector. It is the use of heating method, make detector by radiation energy stored in the form of light released, the luminous its strength in a certain range and exposure is proportional. This principle is used for dose measurement.

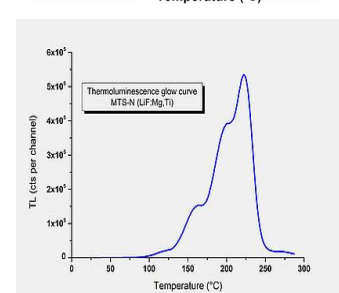
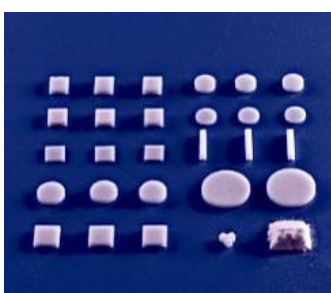
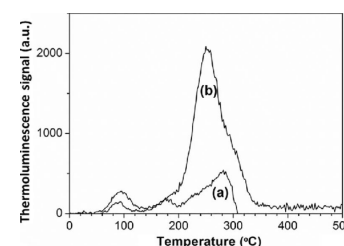
GR-200 series LiF:Mg,Cu,P TLD has an extreme low detectable threshold, and is near air or tissue equivalent. It's unique features make it an ideal environmental, personal and medical dosimeter per it's high sensitivity, Especially in the radioactive field of low background environment, it behaves better than other kind of TLDs for dose monitoring.



### Specifications For Chips of LiF 热释光辐射剂量探测片规格

Part no 型号	Type 型号	Shape 类型	Application 用途
GR-200A	Natural LiF(Mg,Cu,P)	Round Chip 圆片	personal use; Environmental X-rays, $\gamma$ rays dosimetry 个人; 环境 X-射线, $\gamma$ 射线剂量测量
GR-200	Natural LiF(Mg,Cu,P)	Square Chip 方片	personal use; Environmental X-rays, $\gamma$ rays dosimetry 个人; 环境 X-射线, $\gamma$ 射线剂量测量
GR-200P	Natural LiF(Mg,Cu,P)	powder 粉末	personal use; Environmental X-rays, $\gamma$ rays dosimetry 个人; 环境 X-射线, $\gamma$ 射线剂量测量
GR-200F	Natural LiF(Mg,Cu,P)	Skin(beta) 薄膜	$\beta$ dosimetry $\beta$ 剂量测量
GR-200T	Natural LiF(Mg,Cu,P)	Capillary Tube 毛细管	personal use; Environmental X-rays, $\gamma$ rays dosimetry 个人; 环境 X-射线, $\gamma$ 射线剂量测量
GR-200R	Natural LiF(Mg,Cu,P)	Rod 棒	personal use; Environmental X-rays, $\gamma$ rays dosimetry 个人; 环境 X-射线, $\gamma$ 射线剂量测量
GR-206	6LiF(Mg,Cu,P) (enriched Li-6)	various sizes 各种规格	Mixing field neutron measurement 混合场中子测量
GR-207	7LiF(Mg,Cu,P) (enriched Li-7)	various sizes 各种规格	Mixed field $\gamma$ -ray dosimetry 混合场 $\gamma$ 射线剂量测量
GR-100	LiF(Mg,Ti)	Round/Square Chip、powder 圆、方片、粉末	X-rays, $\gamma$ rays dosimetry X-射线 $\gamma$ 射线剂量测量
GR-100M	LiF(Mg,Ti-M)	Round/Square Chip、powder 圆、方片、粉末	X-rays, $\gamma$ rays dosimetry X-射线 $\gamma$ 射线剂量测量

Parameter 参数	GR-200A	GR-100M	GR-100
Linear dose range[Gy]线性范围[Gy]	$10^{-7}$ ~12	$5 \times 10^{-5}$ -500	$10^{-4}$ ~8
Detectable threshold[Gy]探测阈[Gy]	$\sim 10^{-7}$	$1.1 \times 10^{-5}$	$1.4 \times 10^{-5}$
Relative TL sensitivity to TLD-100	65	5	1.3
Consistency 一致性	<3%	<5%	<5%
Energy dependence (photon: 30keV ~3MeV) 能量响应	<20%	<20%	<30%



**CQTGROUP 杭州中晶电子科技有限公司**  
**HANGZHOU FREQCONTROL ELECTRONIC TECHNOLOGY LTD.**  
 Head office : # 1106-1 , Crystal International Business Center(CIBC), No.198  
 Wuxing Rd ,Qianjiang new city Hangzhou, P.R.China Post code: 310006  
 TEL: 0086-571-85803723 85803731 85803732 FAX: 0086-571-85803724  
 E-mail: [sales@csimc-freqcontrol.com](mailto:sales@csimc-freqcontrol.com) [www.csimc-freqcontrol.com](http://www.csimc-freqcontrol.com)

