

Function - Material - Application - Issue (No.2)

Function	Materials	Expected Features	Application	Competing Materials	Technical Issues	Others
Fluorescent (Luminous)	ZnS: Ag, Cl Y ₂ O ₃ S: Eu ZnO:Zn Rare earth: Eu Al ₂ O ₃ : Cr	<ul style="list-style-type: none"> High performance Braun tube for color TV and fluorescent lamp New technology and products using electro-luminescence 	Braun tube for color TV, fluorescent lamp, Braun tube for display, solid rador oscillator	Liquid crystal	<ul style="list-style-type: none"> Expansion of applications by using synthesis of superfine powders, vaporization and CVD Developing high value added products 	
O P T I	Al ₂ O ₃ , MgO, PLZT	<ul style="list-style-type: none"> Energy conservation by application to high voltage emitter New technology and products to be developed by using electro-optic function 	Emitter for high voltage sodium lamp, crucible, window for detecting high temp. IR ray		<ul style="list-style-type: none"> High quality material by controlling micro structure 	<ul style="list-style-type: none"> Ensuring high purity, active alumina material
C A L	PLZT	<ul style="list-style-type: none"> Development of opto-electronic technology and products by the use of new functional materials 	Optical memory, optical shutter, display, transparent piezoelectric speaker	Liquid crystal	<ul style="list-style-type: none"> Raw powders having even composition distribution Sintering process having less remaining pores instead of hot press 	<ul style="list-style-type: none"> Exploring demand and application
Photo-sensitive	Glass containing silver halid, CaF ₂ , sodalite	<ul style="list-style-type: none"> New technology and products to be developed by the use of photochromic material 	Optical memory, display device, screen memory device		<ul style="list-style-type: none"> Big fading velocity Small temperature dependency Application technology 	
Photo-reflective	Thin Metal Oxide film	<ul style="list-style-type: none"> Contributes toward energy saving & improves living environment 	Thermic ray reflector glass		<ul style="list-style-type: none"> Development & realization of new reflective film 	<ul style="list-style-type: none"> Measures against public nuisance
Photo-conductive	SiO ₂ fiber, multi-component glass fiber	<ul style="list-style-type: none"> Applicable to transmitting media due to low transmission loss 	Opto-communication fiber	Plastic fiber	<ul style="list-style-type: none"> Technology for application system 	<ul style="list-style-type: none"> Ge source research network for fiber optics