

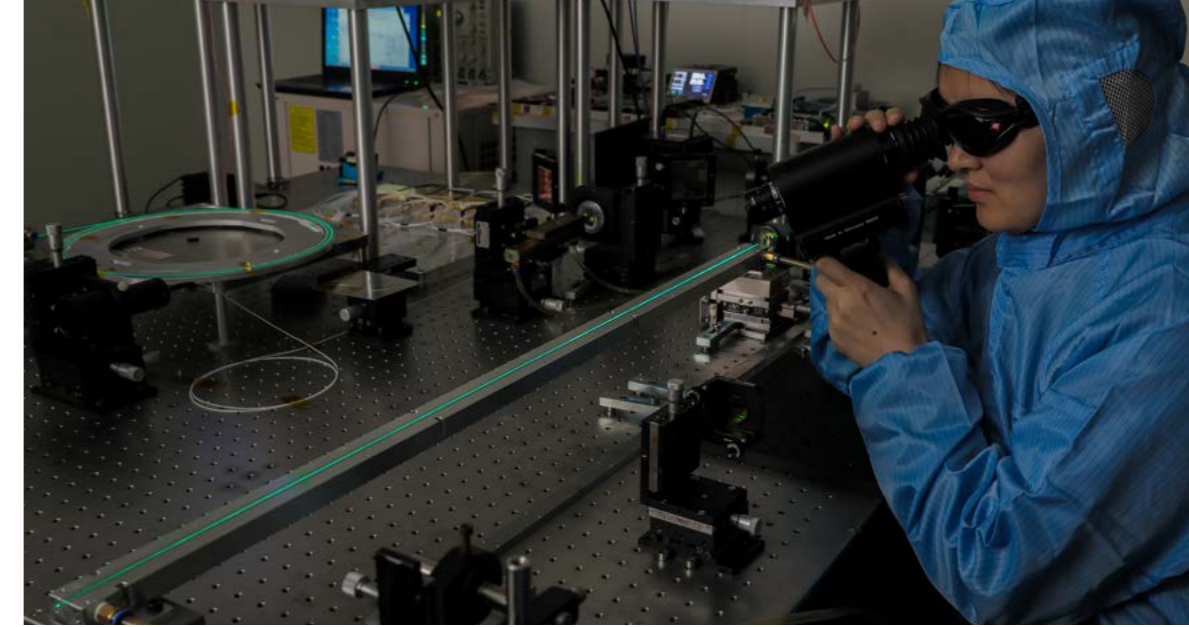
掺镱大模场双包层 PCF 光纤

Ytterbium doped large mode area PCF

产品描述 Product description

基于上海光机所自主创新研发的大尺寸掺镱芯棒，采用毛细管堆垛工艺制备预制棒，经合理的气压控制技术和拉丝工艺制备得到。是应用于 1 μ m 高能脉冲光纤激光器、光纤放大器的有源光纤。可以被广泛的应用于材料加工、军事、医疗和科研等领域。

Based on the large diameter rare-earth doped quartz glass rod independently developed by SIOM, the optical fiber preform was further prepared by capillary stacking method and then the preform was drawn at high temperature by precise pressure control technology. It is an effective active fiber used in 1 μ m high energy pulse fiber laser and fiber amplifier. The PCFs can be widely used in material processing, military, medical and scientific research fields.



产品特性 Product characteristics

- 超大模场面积下的良好模式特性 Good beam quality with large mode area
- 高能脉冲及高峰值功率输出 Handles high peak power and pulse energy
- 高激光功率稳定特性 Better output stability
- 可靠的环境稳定性 High environment stability

产品应用 Product application

- 军事、工业、科研等领域 Military, industrial, scientific research, etc.
- 脉冲光纤激光器和放大器 High average power pulse fiber laser system

Fiber Specifications	LMYDF-PCF
Optical Properties	
Working wavelength (nm)	1030-1080
NA _{cladding}	~0.50
Cladding absorption (dB/m)	3-7dB/m (915nm)
Core attenuation (dB/km)	≤ 80.0 (1200 nm)
Core diameter (μm)	40/75(with option)
Cladding diameter (μm)	~260
Fiber diameter (μm)	~450
Cladding material	Pure silica
Application: MOPA	
High peak power laser	MW-GW
Repetition frequency	KHz-GHz
Pulse width	ns-fs
Optical-optical efficiency	> 50%