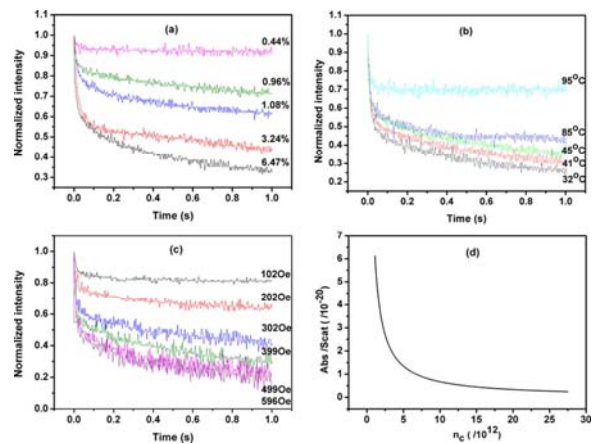
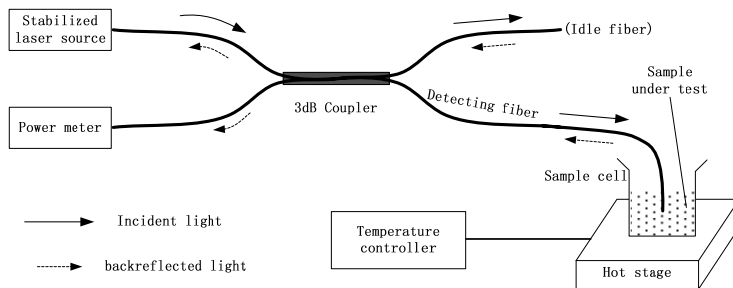


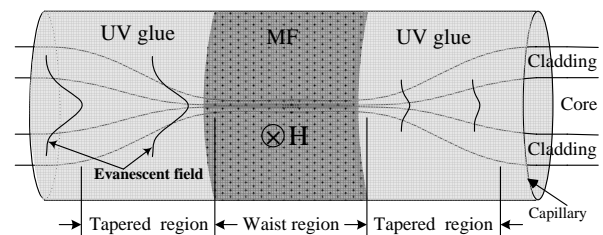
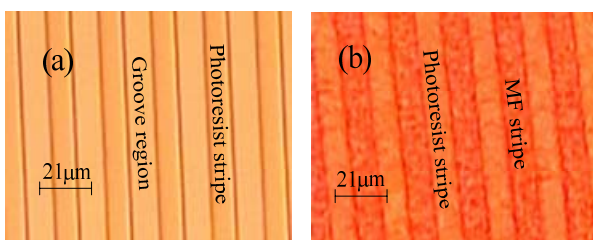
磁流体是一种具有磁性的纳米材料，它具有液体的流动性和光学性质可调谐的特点，是一种新型的光学功能材料。光学性质（如：各向异性、折射率的变化、光学透过率的变化等）可通过改变外加磁场的大小和方向而改变，进而可实现调谐的目的，对磁流体光学性能的研究为在光信息中的应用打下了基础。

Magnetic fluid is a kind of nanostructured material possessing magnetism. It is a novel functional material in optical field, which has both the fluidity of liquid and the tunable optical properties. Optical properties, such as anisotropy, index and transmission, can be tuned by external applied magnetic field. The information of optical performance of magnetic fluid is essential for its applications in photonics.



✓ 发展了一种“光纤端面后向反射法”来测量磁流体的折射率。
A method called “Retroreflection on the fiber-optic end face”, to measure the refractive index of magnetic fluid.

✓ 研究了团簇产生和分解的过程和各自的响应时间，为寻找和合成更短响应时间的材料打下基础。
The response time of agglomeration of magnetic particle is measured by response of the index or absorption of a magnetic fluid.



✓ 可调谐纳米磁流体光栅
Tunable magnetic fluid optical grating

✓ 光纤磁流体调制器
Fiber magnetic fluid modulator

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