



## Discover our range of rare earth doped double cladding fibers:

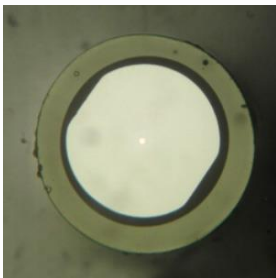
Thanks to their high RE solubility (up to 100 000 ppm) and low phonon energy, our fluoride fibers offer dozens of active transitions, enabling a broad range of application possibilities **from visible to the midinfrared**.

We have a large stock of ZFG or IFG RE doped double cladding fibers. Most of them exhibit a double D-shape on the first cladding in order to improve the pump absorption.

Dopant: Er, Ho, Dy, Tm...

Co-doping: Pr/Yb, Tm/Yb....

### Examples of some applications



Rare earth	Molar content (ppm)	Øcore/clad (µm)	λ <sub>c</sub> (*) (µm)	Applications (realizations obtained by research labs)
Erbium	70 000 ppm	15/240*260/290 µm (also available as PM)	2.5 µm	41 W CW laser at 2.94 µm
Erbium	10 000 ppm	16.5/240*260/290 µm	2.7 µm	5.6 W CW at 3.55 µm
Thulium	30 000 ppm	13/115*125/190 µm	2.2 µm	Laser at 2.3 µm
Praseodymium Ytterbium	3000 ppm 20000 ppm	5/125/200 µm	1.3 µm	Visible emission at 491, 520, 535 and 620 nm
Praseodymium	8 000 ppm	7.5/115*125/180 µm	0.78 µm	Red laser around 635 nm

(\*) cut-off wavelength

### Standard rare earth doped fiber prices

Fiber type	Specifications	Price/m
ZFG double cladding double D-shape Er-doped fiber	Øcore/1st clad/2ndclad = 15/240*260/290 µm (λ <sub>c</sub> = 2.2 µm)	600 €

### CUSTOMIZE your own RE doped double cladding fiber



- Doping/co-doping (rare earth, molar content)
- Cut-off wavelength (single mode)
- NA (single mode)
- Core size (≥ 1 µm (single mode), up to 1000 µm (multimode))

LVF proposes also a large variety of **protective tubings and connectors** as add-ons to your fiber. Do not hesitate to contact us for advice.

