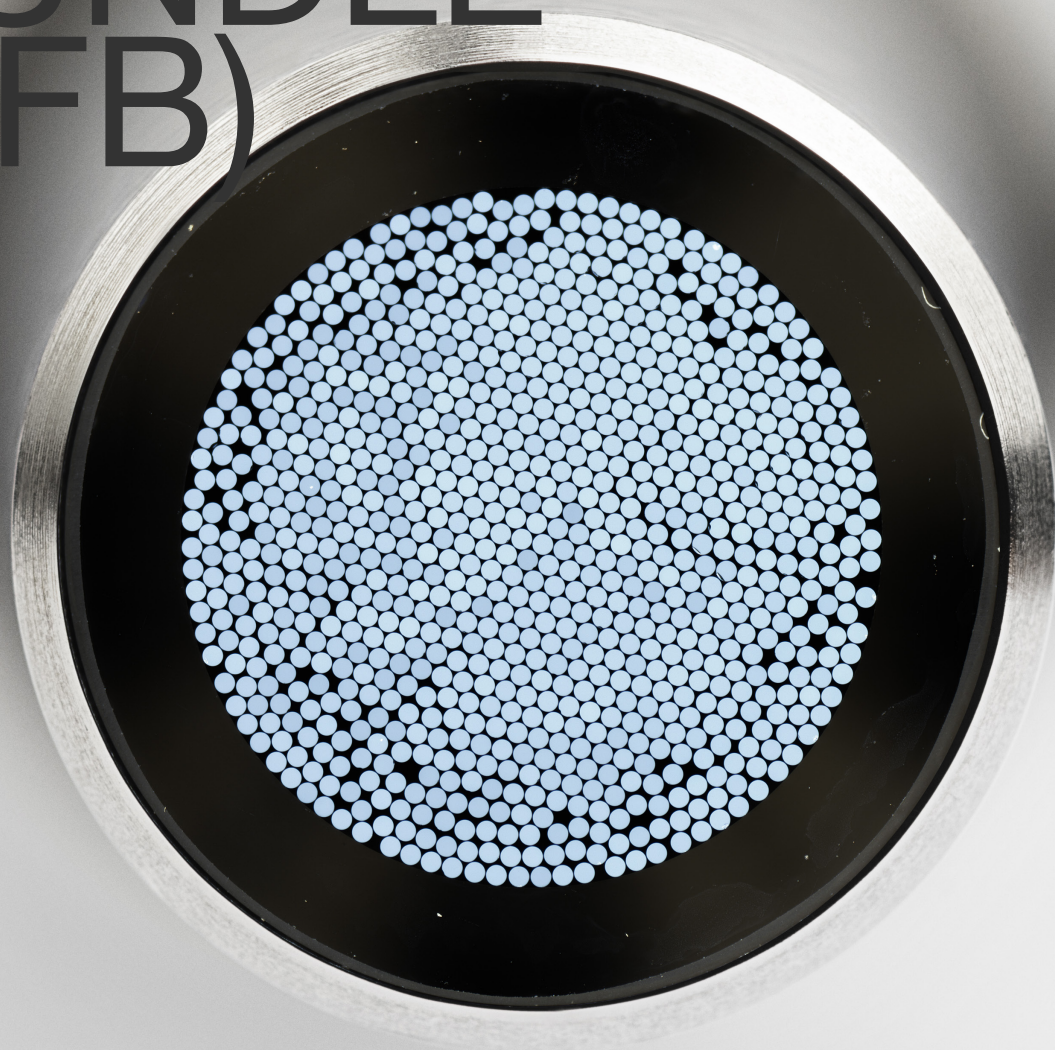


LATEST INNOVATION

# STACKED FIBER BUNDLE (SFB)



THE MOST POWERFUL TECHNOLOGY

A stacked fiber bundle (SFB) incorporates hydrogen-loaded, carbon-coated fibers that are highly resistant to solarization. These fibers are designed to maintain high transmission and durability when subjected to deep UV light, particularly from pulsed deep UV laser sources, over long durations. SFB technology is versatile and can be applied in various fields that require light transmission in deep UV spectral regions, such as medicine, quality control, UV curing, and process analysis.

## GENERAL PROPERTIES

- fill factor around 0.85
- circular active areas possible
- NA values 0.12 and 0.22
- low transmission, 75% as max
- max operating temperature of bundle for tip ~120°C
- high absorption of miscoupled light
- max operating power TBD

## BENEFITS

- optimized transmission efficiency at DUV, especially harmonics of Nd:YAG
- de-speckling
- solarization (photodarkening) resistance
- harsh environment compatible
- medium costs

## APPLICATIONS

- high power DUV light delivery systems
- semiconductors

