

### Tables

Table 1. Excitation wavelengths and fluorescence wavelengths that can pass through the fluorescent filters used in this study.

Filter color	Excitation wavelength (nm)	Fluorescence wavelength (nm)
WIG (red)	520–550	$\geq 580$
WU (blue)	330–385	$\geq 420$
NIBA (green)	470–490	515–550

Table 2. Average track and entry hole sizes, and the dimensions of the Lucentite particles after collision with the aerogel.

Shot particles		Track dimensions		Entrance hole dimensions			Particle dimensions		
Length ( $\mu\text{m}$ )	Width ( $\mu\text{m}$ )	Length (mm)	Maximum width (mm)	Length (mm)	Width (mm)	Area (mm <sup>2</sup> )	Length ( $\mu\text{m}$ )	Width ( $\mu\text{m}$ )	Area ( $\mu\text{m}^2$ )
$57.6 \pm 2.1$	$60.4 \pm 2.2$	$10.9 \pm 0.3$	$0.89 \pm 0.07$	$0.58 \pm 0.06$	$0.62 \pm 0.07$	$0.20 \pm 0.03$	$48.8 \pm 1.2$	$48.9 \pm 2.4$	$1,735.8 \pm 100.3$

Uncertainties are reported as the standard error of the mean.