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## Measurements on refractive index of wavelength shifters

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A common practice when detecting high-energy scintillation photons in noble gas experiments is the use of wavelength shifters. These compounds convert the high-energy photons to a less energetic spectrum, simplifying the detection process. The use of wavelength shifters in combination with other optical elements allows the construction of light traps, which can greatly increase the capacity of photon detection systems. Although their importance, some optical parameters of these compounds are still not known. This is the case for the refractive index, which is a key value when designing a multi-layer device.

In this work, we measured the Refractive Index for a wide wavelength range of commonly used wavelength shifters. This was performed using two different techniques, Total Transmittance, and Ellipsometry, to ensure the precision of the results.

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