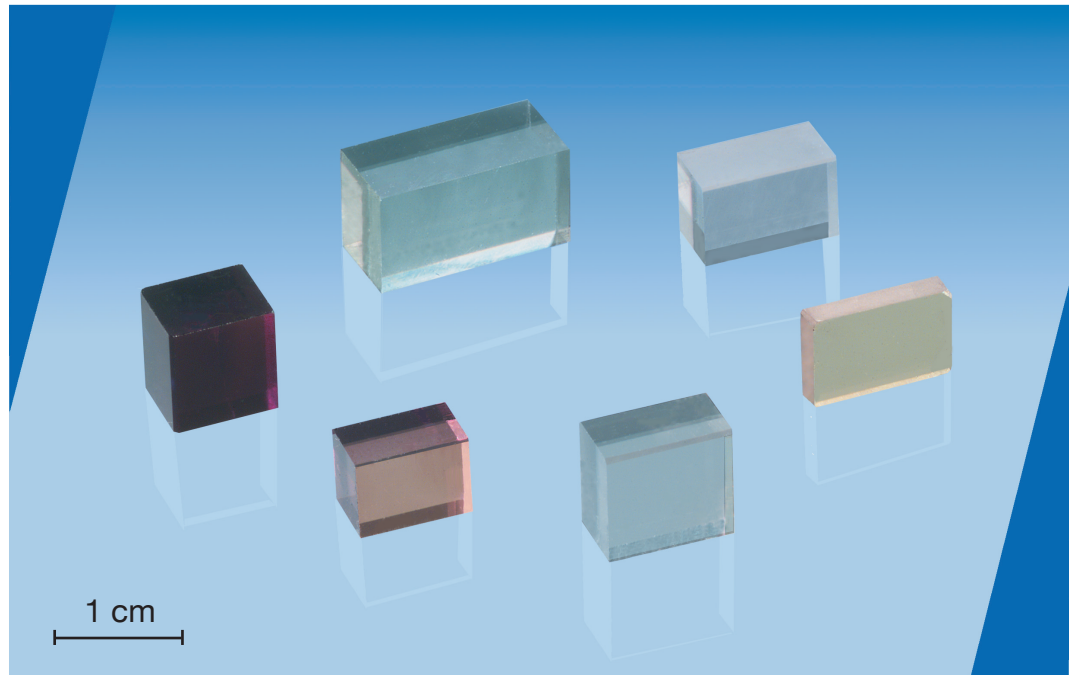


Photorefractive **KNbO₃**



Standard Features

- high quality crystals doped with Rh, Fe, Mn, and Ni for photorefractive applications in the infrared
- very low scattering losses

Optional Features

- high photosensitivity up to 1000 nm wavelength
- milliseconds response time

Applications

- photorefractive applications with laser diodes
 - dynamic holography and optical phase conjugation in the visible and near infrared
-

Photorefractive grating recording times

(selected KNbO₃ crystals at different wavelengths for $I = 1 \text{ W/cm}^2$)

Crystal	Wavelength [nm]	Recording time (typical) [s]
KNbO ₃ :Fe	488	1
KNbO ₃ :Mn	515 860	1 3
KNbO ₃ :Fe reduced	488 515	0.01 0.01
KNbO ₃ :Rh reduced	860 1064	0.5 50

Absorption Spectra

