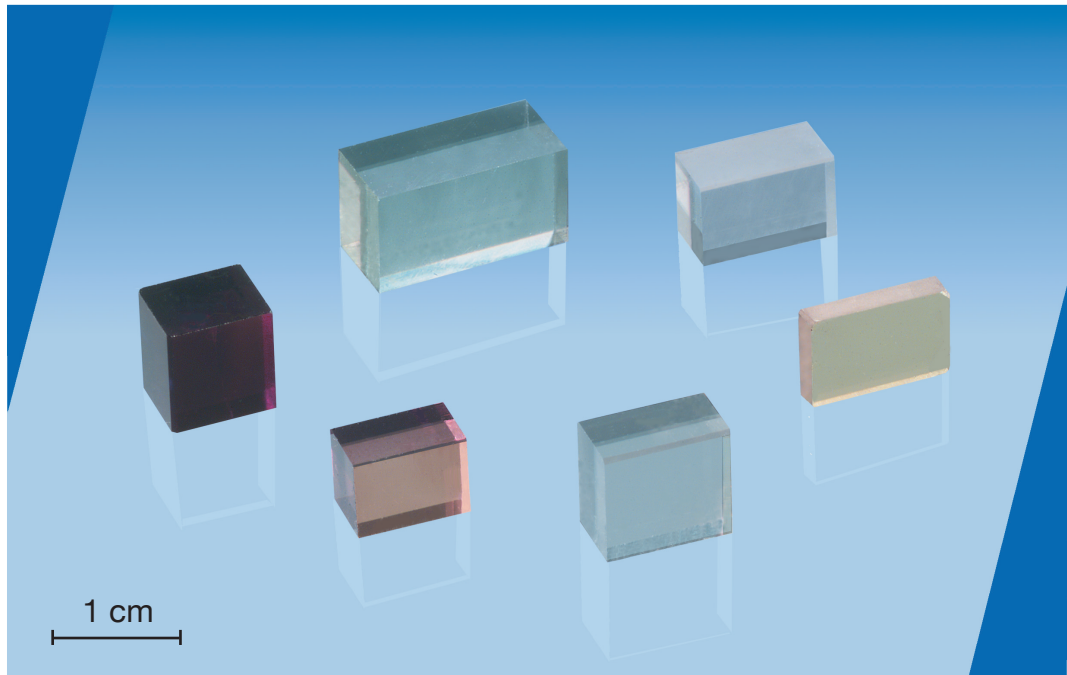


Photorefractive **KNbO₃**



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

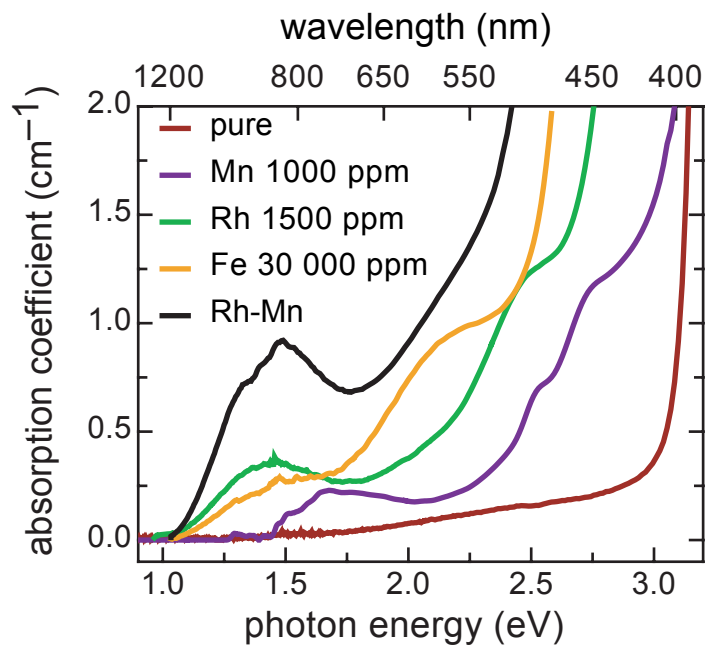
- photorefractive applications with laser diodes
 - dynamic holography and optical phase conjugation in the visible and near infrared
-

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 | 1 |
| | 860 | 3 |
| KNbO ₃ :Fe reduced | 488 | 0.01 |
| | 515 | 0.01 |
| KNbO ₃ :Rh reduced | 860 | 0.5 |
| | 1064 | 50 |

Absorption Spectra



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