Apparatus for making dipolar NaCs molecules

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Ni Group/Harvard

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- Cs single atom cooling
- Na MOT
- Looking for trapped single Na atom

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Laser system for Sodium

Sodium wavelengths

- D lines $\approx$ 589nm
- D2 line (Cooling, Imaging)
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Using diode laser

- Diode laser spectrum
- Power requirement for frequency doubling
- Diode laser from Innolume / TimeBase
- Waveguide doubler

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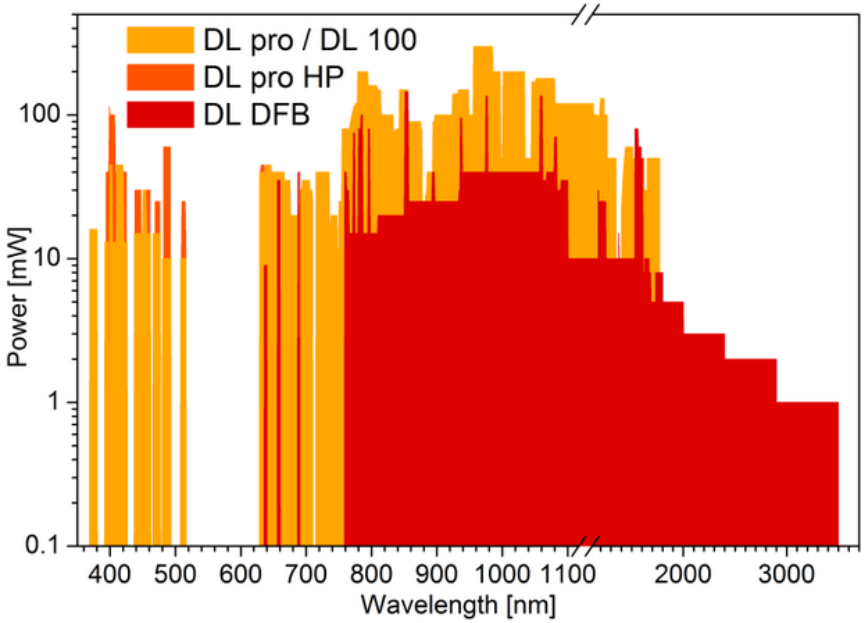

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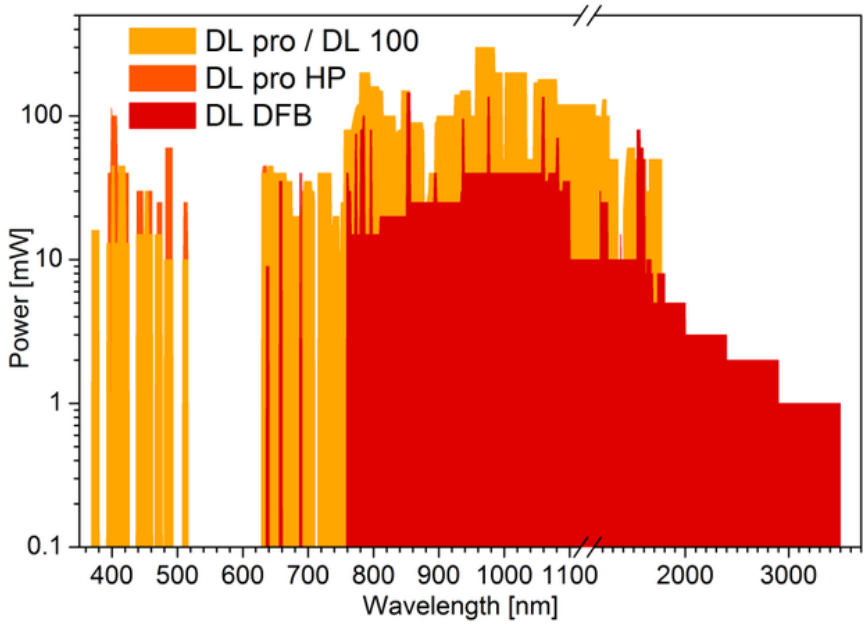

Using doubled diode laser

$589 \times 2 = 1178$**nm**

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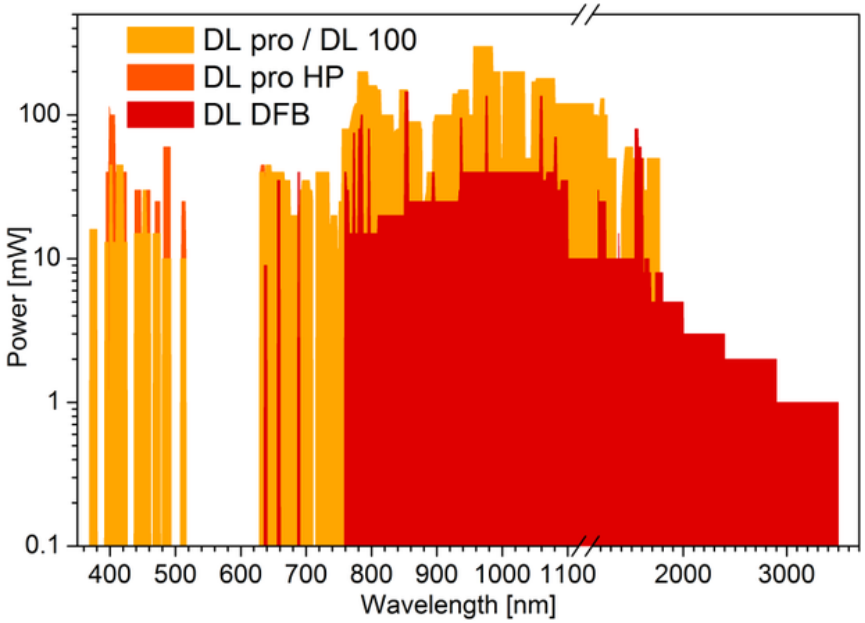

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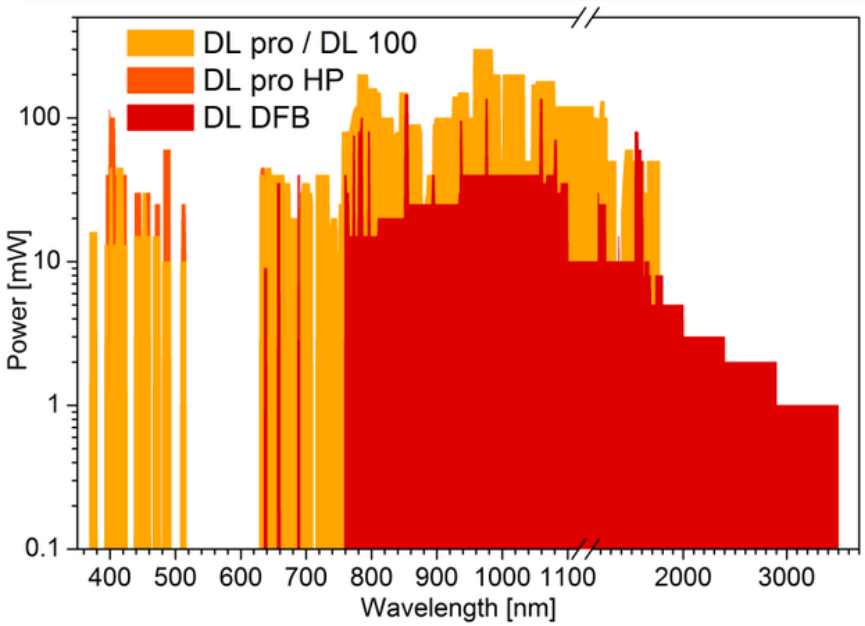

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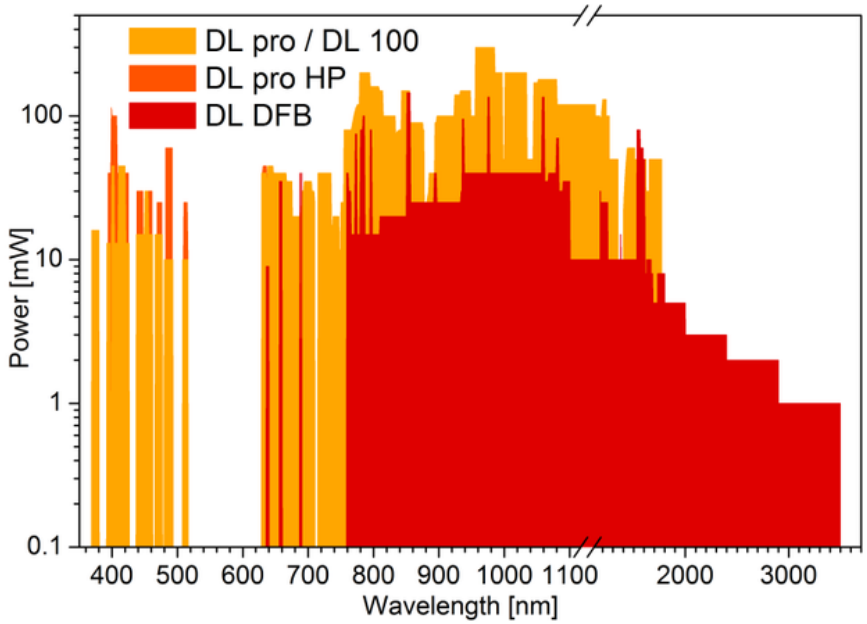

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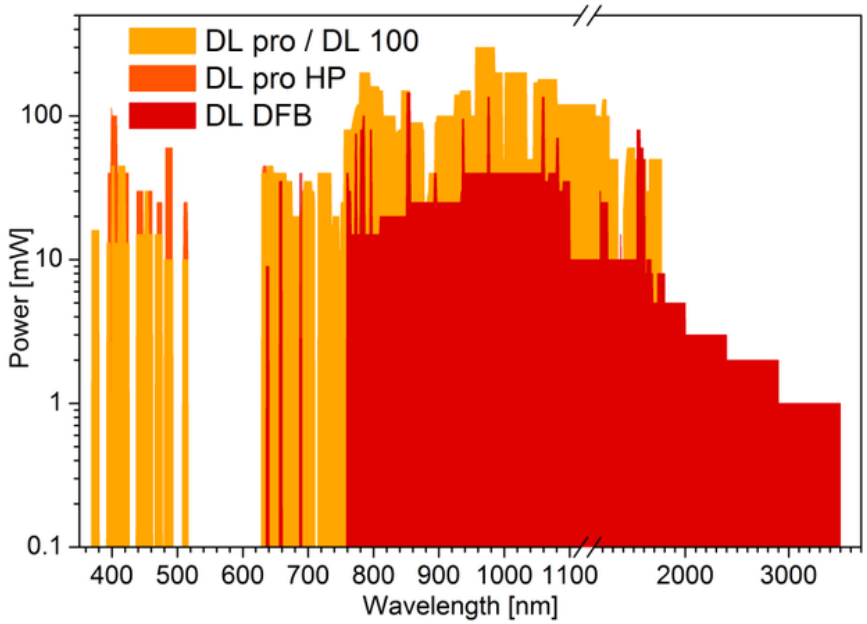

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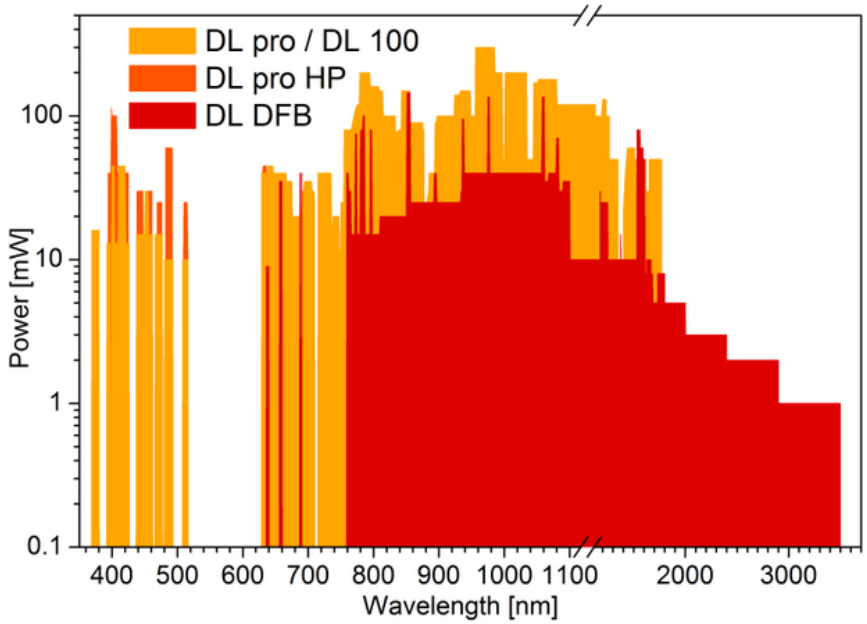

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Members