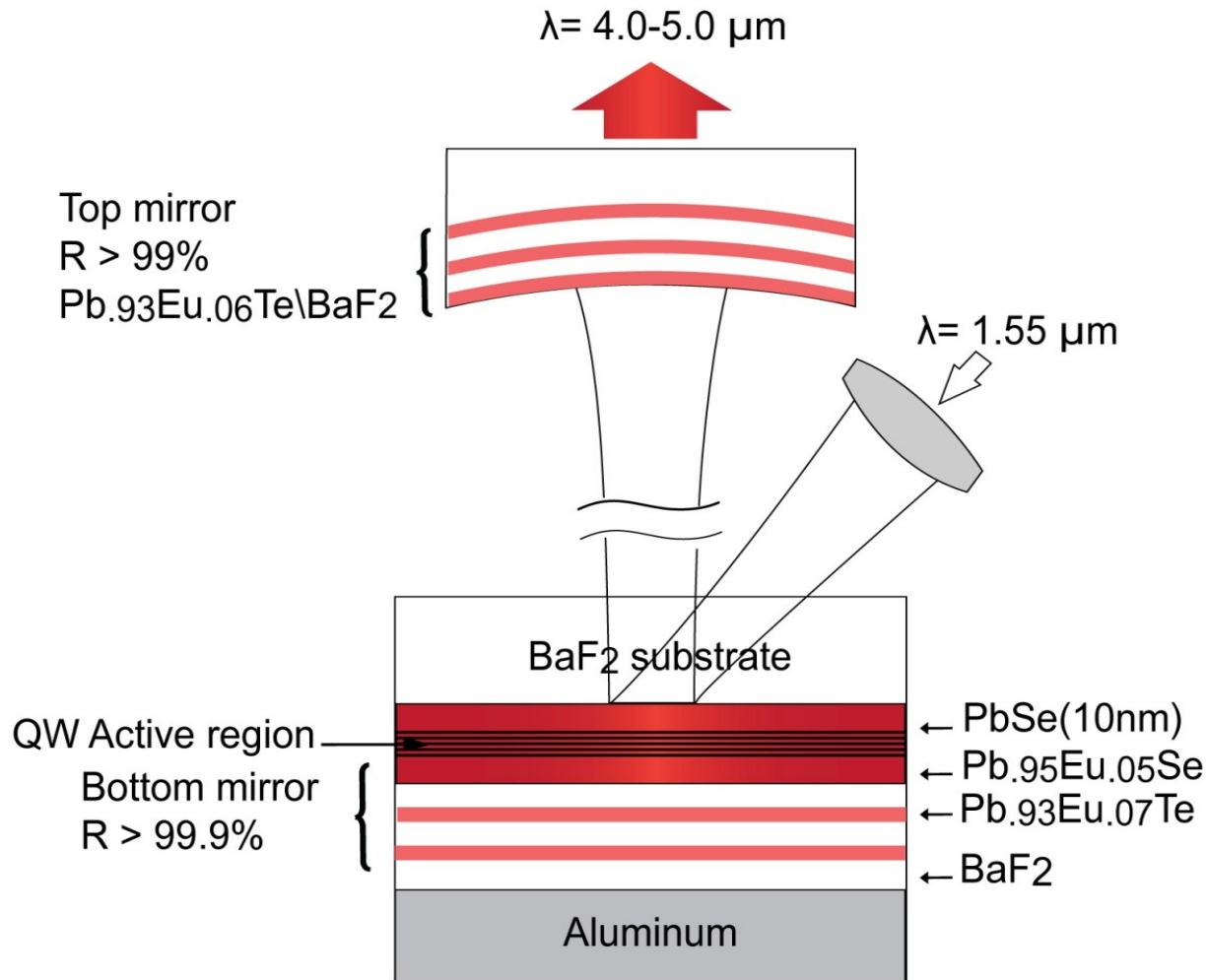


PbSe Quantum Well based VECSEL

IV-VI QW-VECSEL Design:

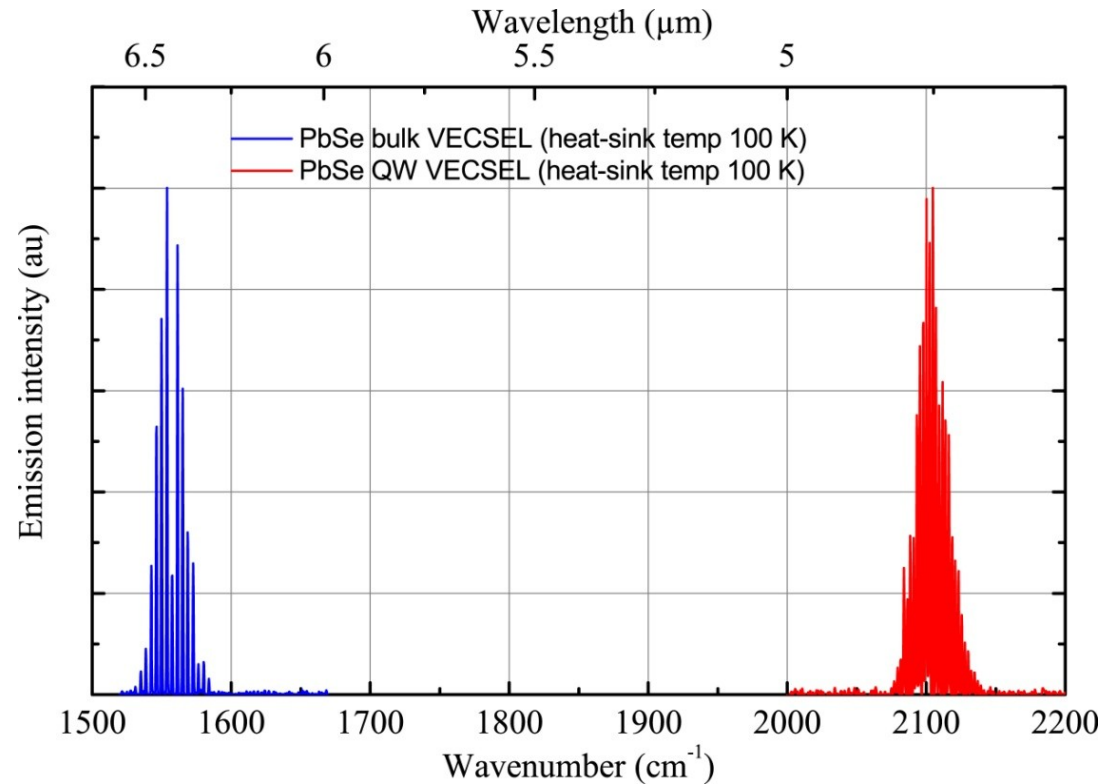
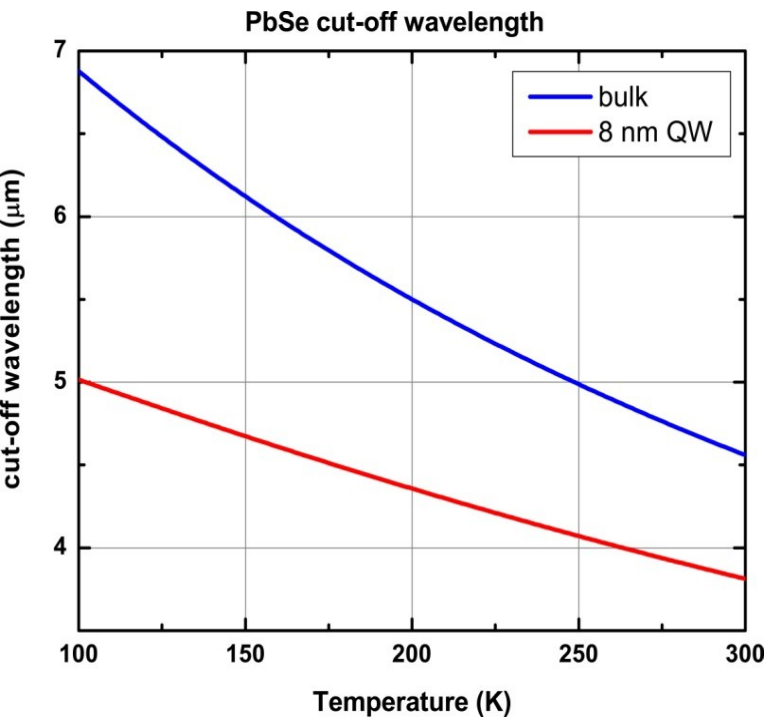
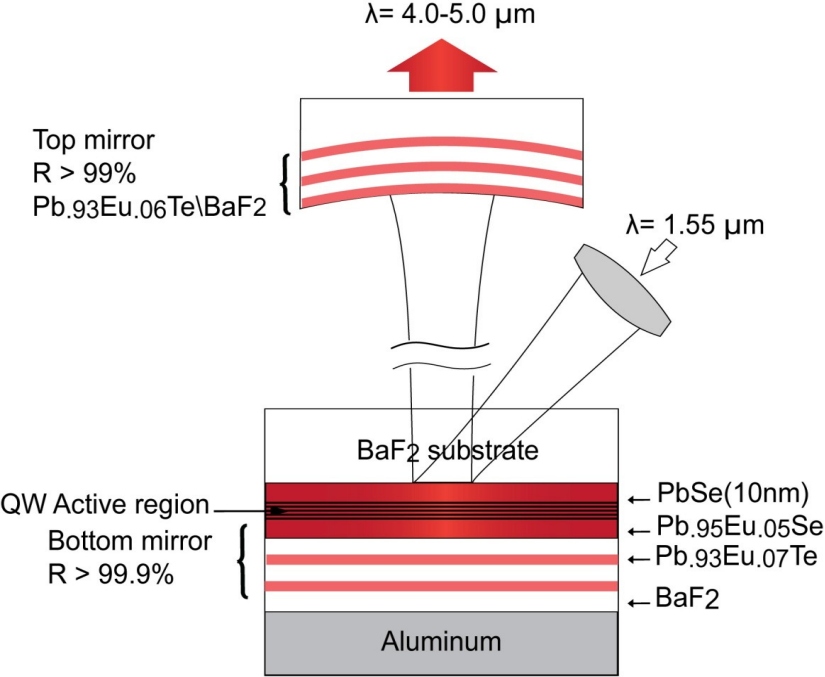
resonant, $1-\lambda$ active layer with 5 QW at near max. E-field



PbSe Quantum Well VECSEL

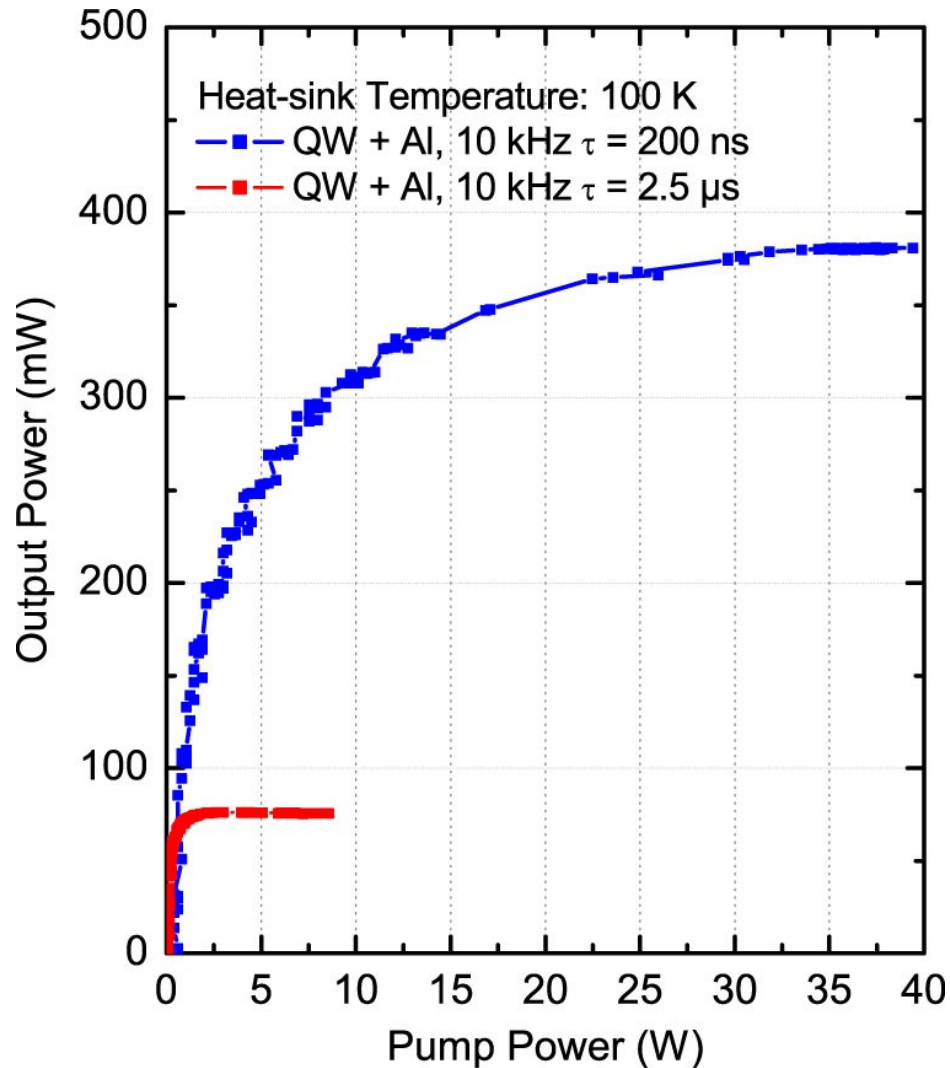
Newest Results !

- Design for $\sim 100\text{K}$
- Pulsed excitation $2.5\ \mu\text{s}$, $10\ \text{kHz}$
- *Lasing up to $170\ \text{K}$*



PbSe Quantum Well VECSEL

Output power



Newest Results !

- $P_{\max} = 380$ mW (~600 mW corrected for window/lens losses)
- Cavity length $\sim < 25$ mm
- 1.55 μ m laser, pulsed excitation
- very low threshold ~ 200 mW