

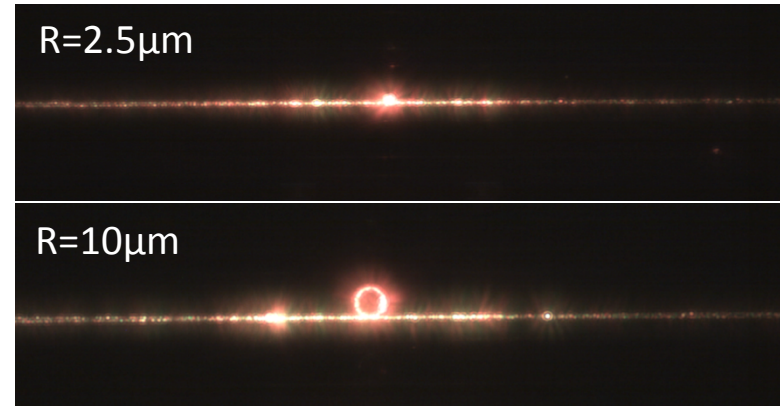
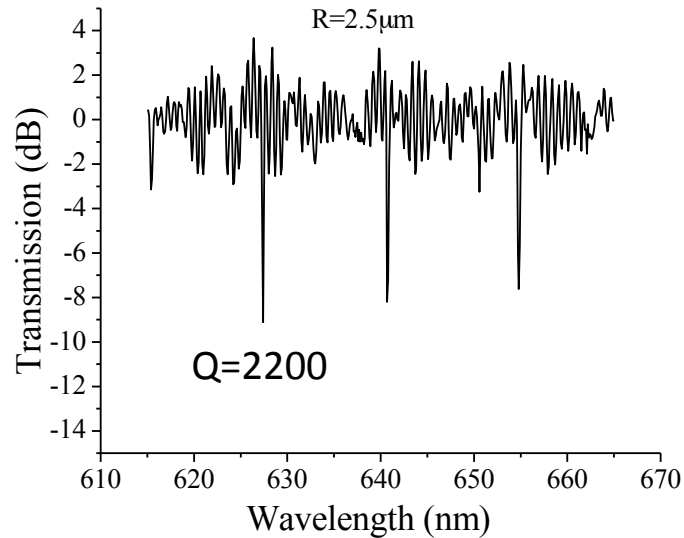
# Navolchi update

Telco 5 May 2014

## Amplifiers:

- Restarted work for plasmonic amplifier
  - TM-waveguides + Au-overlay measured (different lengths)
  - Losses in line with expectations
  - Next step: combine with QDOTs
- New experiments with SiN-waveguides and embedded qdots
  - Visible QDOTs in SiN-disks show clear resonances
  - High Q 1300nm resonators demonstrated
  - Next step: combine with HgTe QDOTs

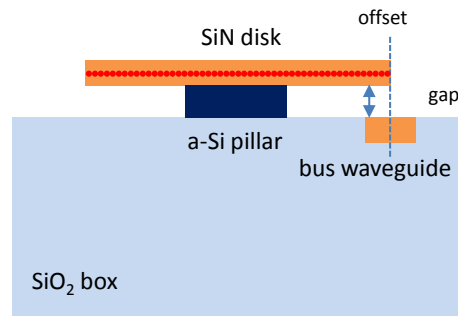
## ➤ SiN disk-waveguide vertical coupling device operating around 600nm



Visible light in waveguide coupled to the disk

Note: the characterization for the high-Q visible disk is limited by the resolution of sweeping.

## ➤ SiN-qDOT disk coupled with waveguide



SiN-qDOT disk coupled with waveguide for on-chip light source or laser application

## ➤ Transmission characterization

