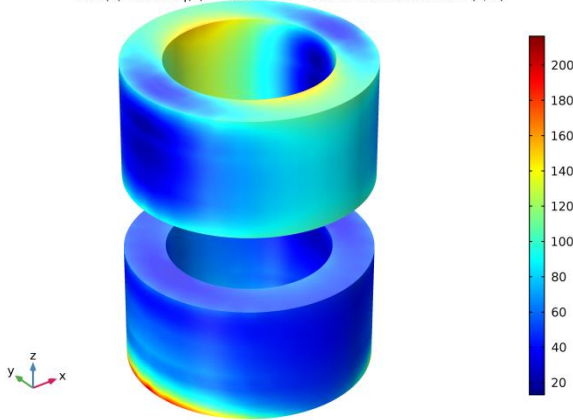
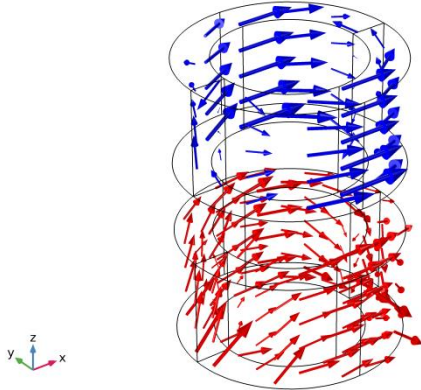


$\lambda=0,46\mu\text{m}$

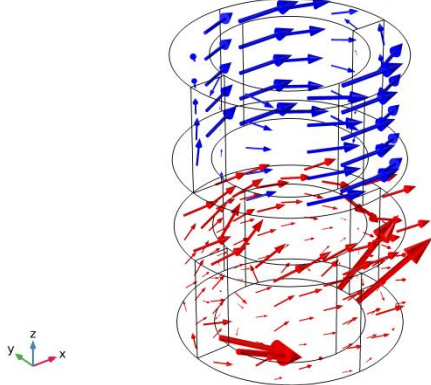
Ida0(4)=0.46 freq(1)=0.65172 GHz Volume: Electric field norm (V/m)



Ida0(4)=0.46 freq(1)=0.65172 GHz Arrow Volume: Electric field Arrow Volume: Electric field



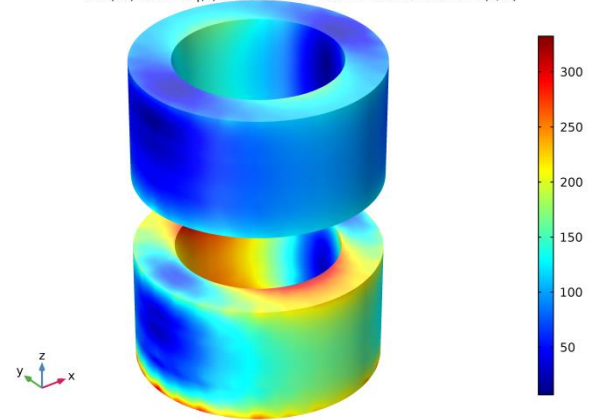
Ida0(4)=0.46 freq(1)=0.65172 GHz Arrow Volume: Current density Arrow Volume: Current density



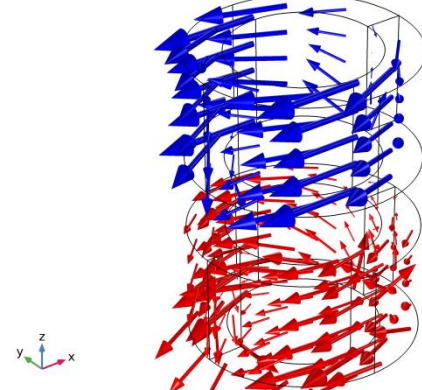
Electric field norm (V/m)

$\lambda=0,78\mu\text{m}$

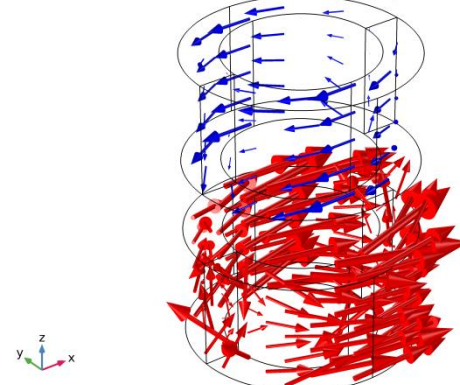
Ida0(20)=0.78 freq(1)=0.38435 GHz Volume: Electric field norm (V/m)



Ida0(20)=0.78 freq(1)=0.38435 GHz Arrow Volume: Electric field Arrow Volume: Electric field

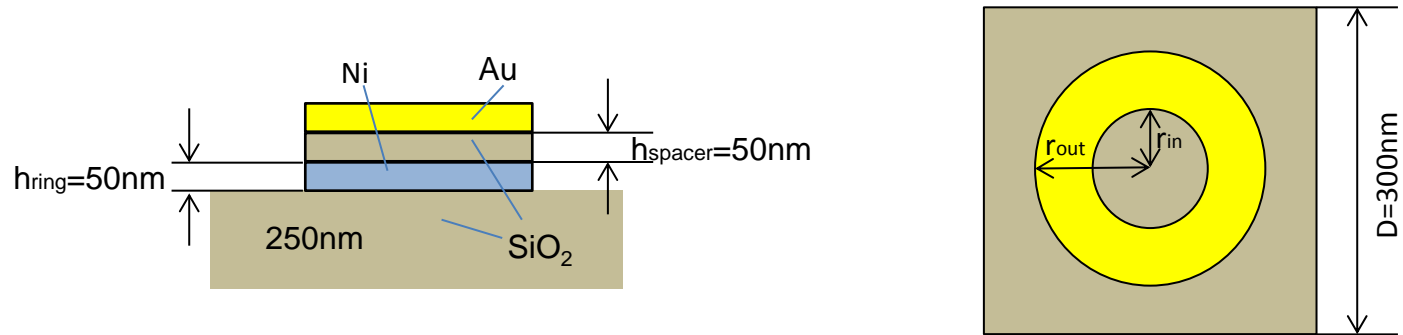


Ida0(20)=0.78 freq(1)=0.38435 GHz Arrow Volume: Current density Arrow Volume: Current density

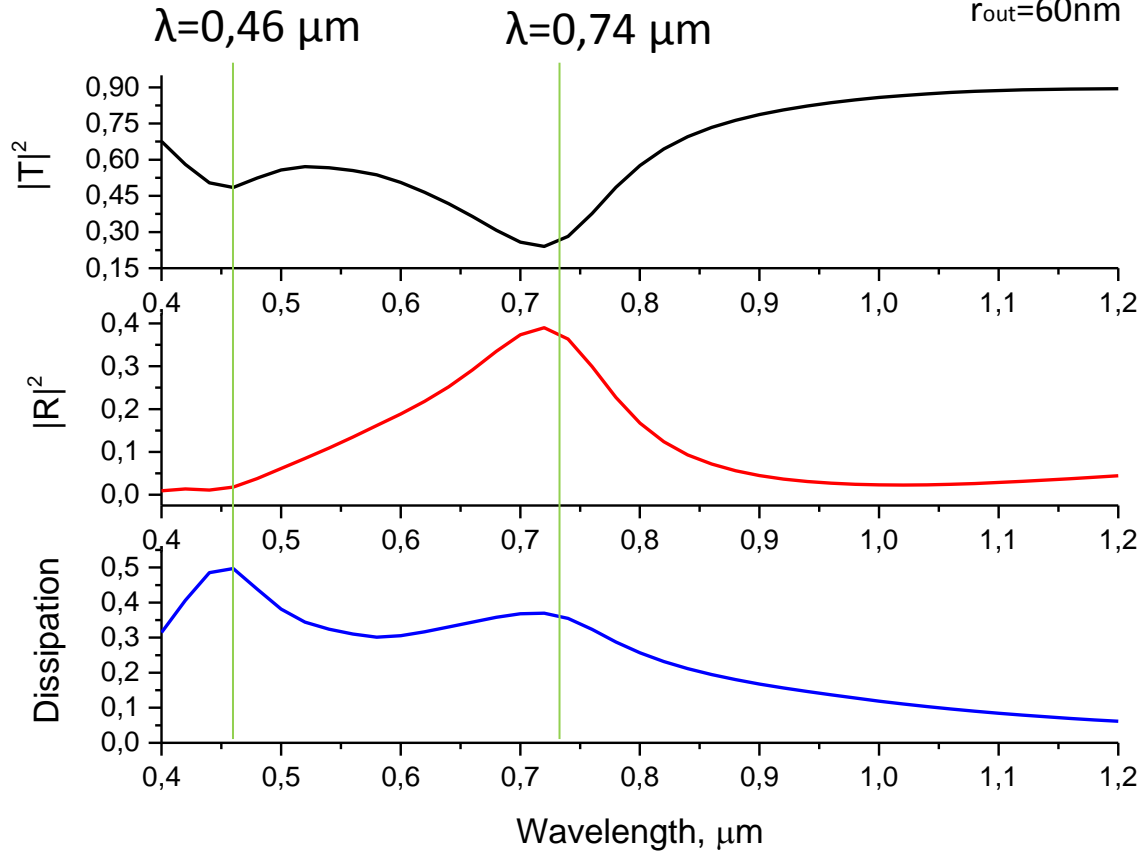


Current density (A/m^2)

Electric field (V/m)

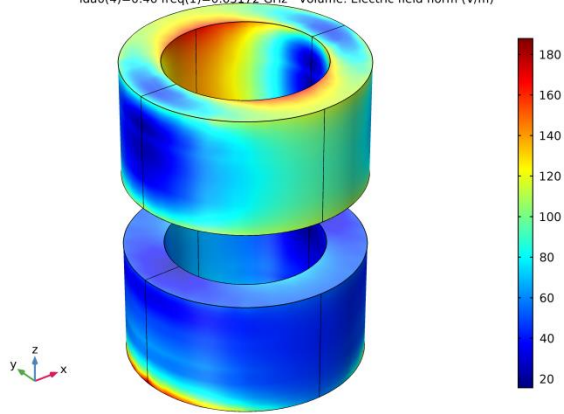


$r_{in}=40\text{nm}$   
 $r_{out}=60\text{nm}$

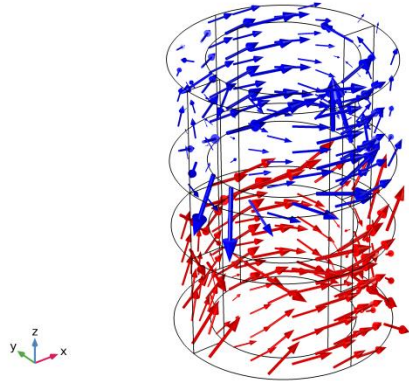


$\lambda=0,46\mu\text{m}$

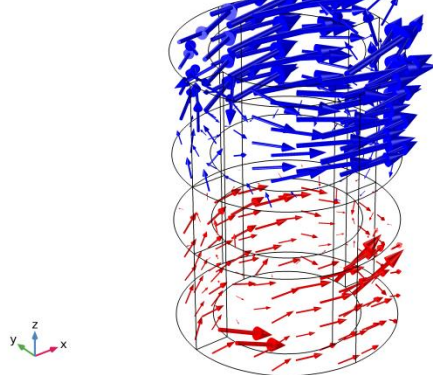
Ida0(4)=0.46 freq(1)=0.65172 GHz Volume: Electric field norm (V/m)



Ida0(4)=0.46 freq(1)=0.65172 GHz Arrow Volume: Electric field Arrow Volume: Electric field



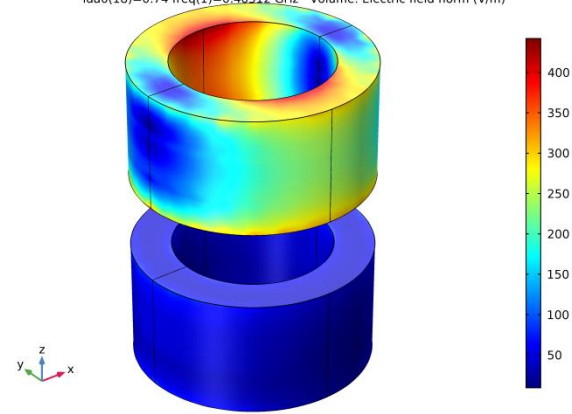
Ida0(4)=0.46 freq(1)=0.65172 GHz Arrow Volume: Current density  
Arrow Volume: Current density



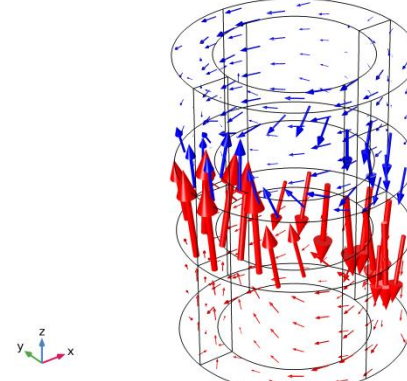
Electric field norm (V/m)

$\lambda=0,74\mu\text{m}$

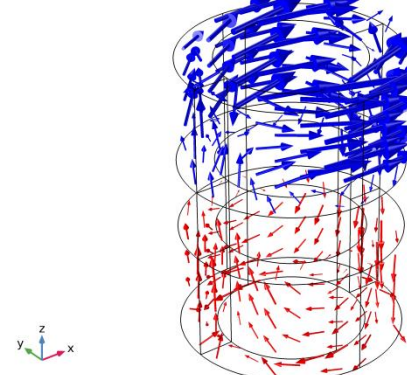
Ida0(18)=0.74 freq(1)=0.40512 GHz Volume: Electric field norm (V/m)



Ida0(17)=0.72 freq(1)=0.41638 GHz Arrow Volume: Electric field Arrow Volume: Electric field



Ida0(18)=0.74 freq(1)=0.40512 GHz Arrow Volume: Current density  
Arrow Volume: Current density



Current density (A/m^2)

# Comparisons of experimental and theoretical data

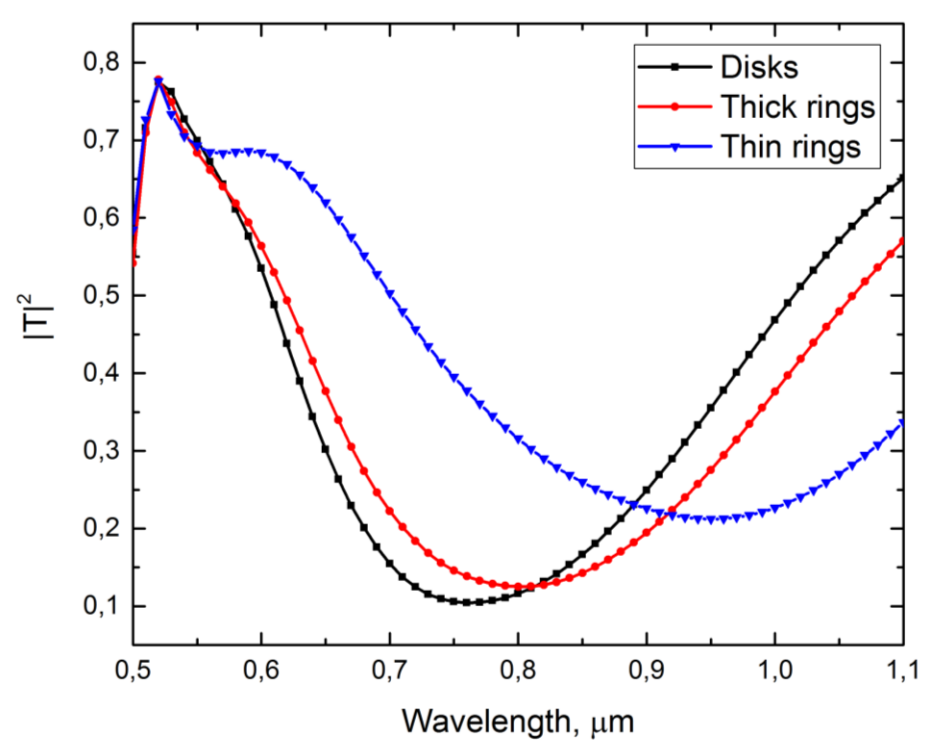
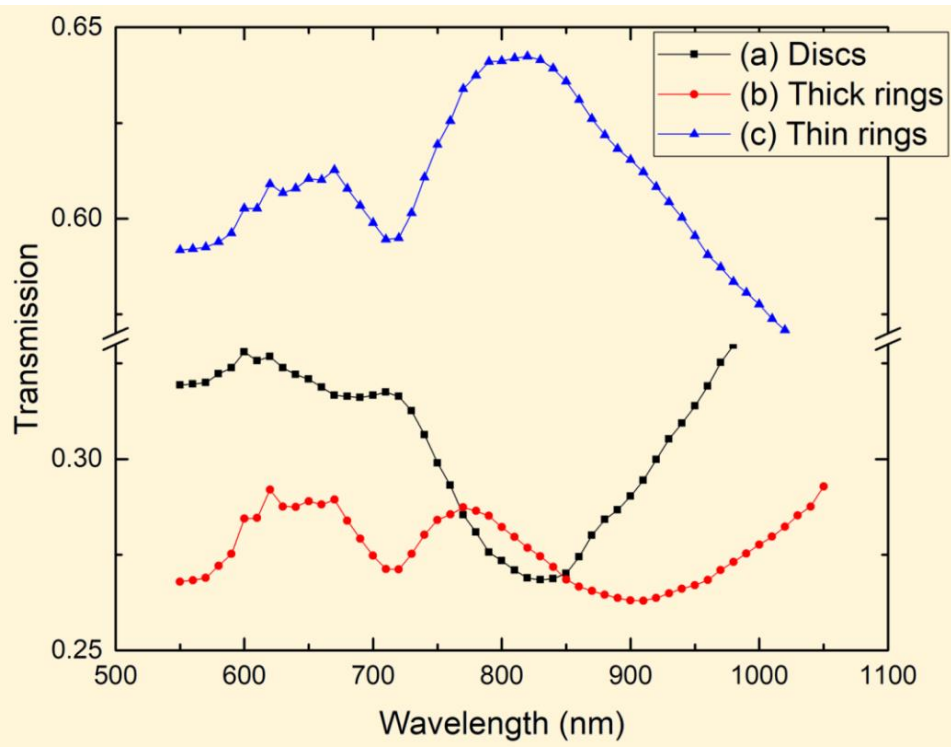
Experiment

Computation

$\epsilon(\text{AlO}_x)=2,49$   
 $\epsilon(\text{fused silica})=2,1$

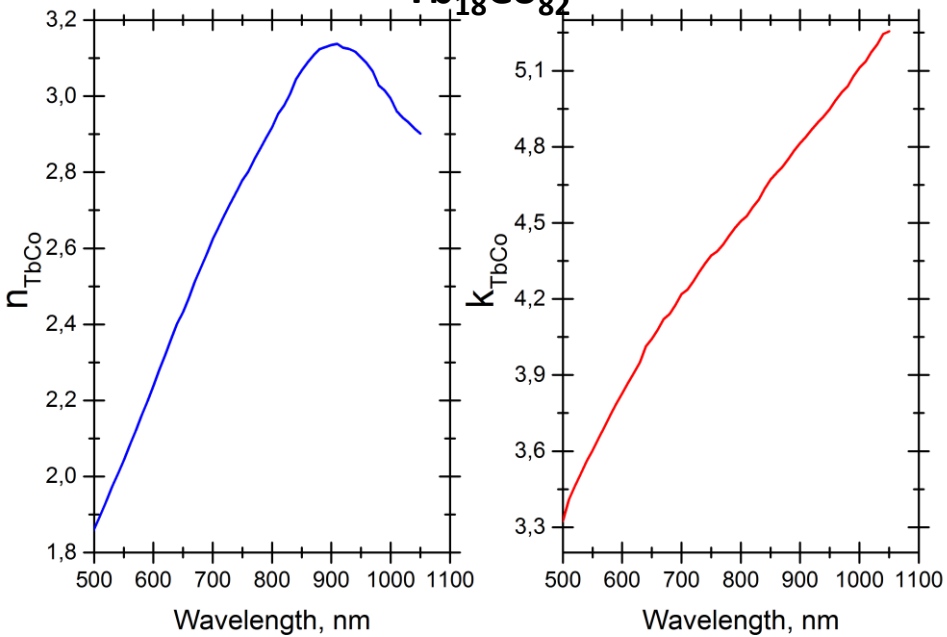
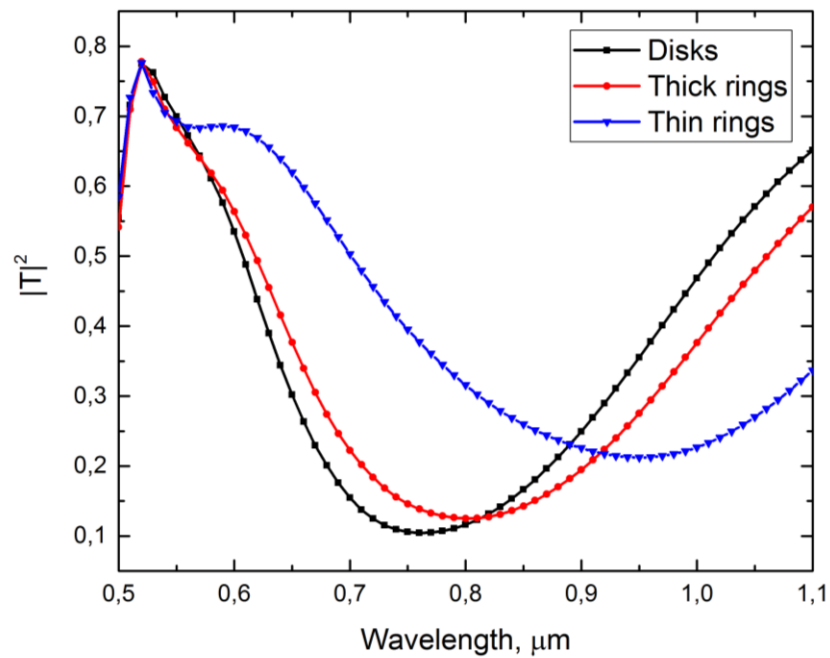
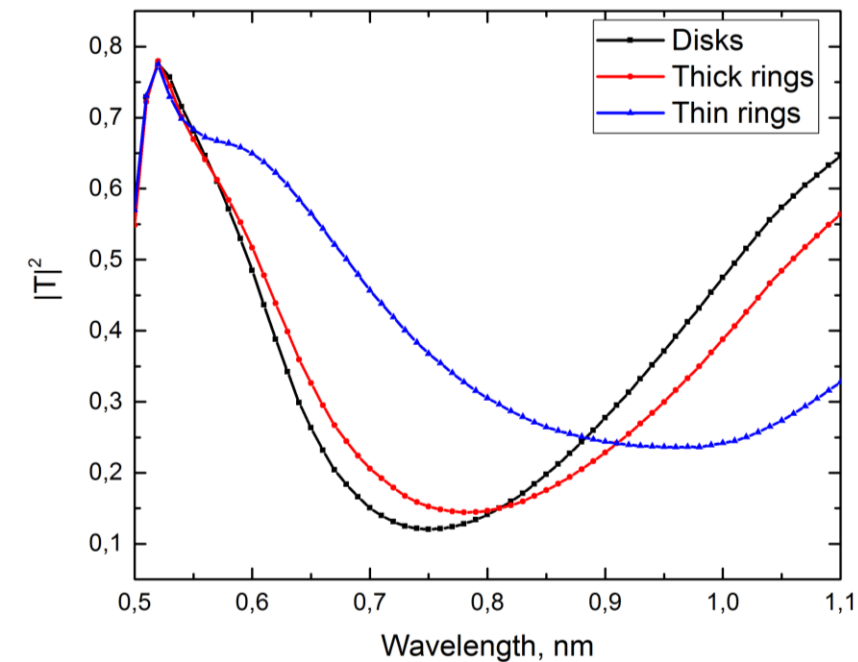
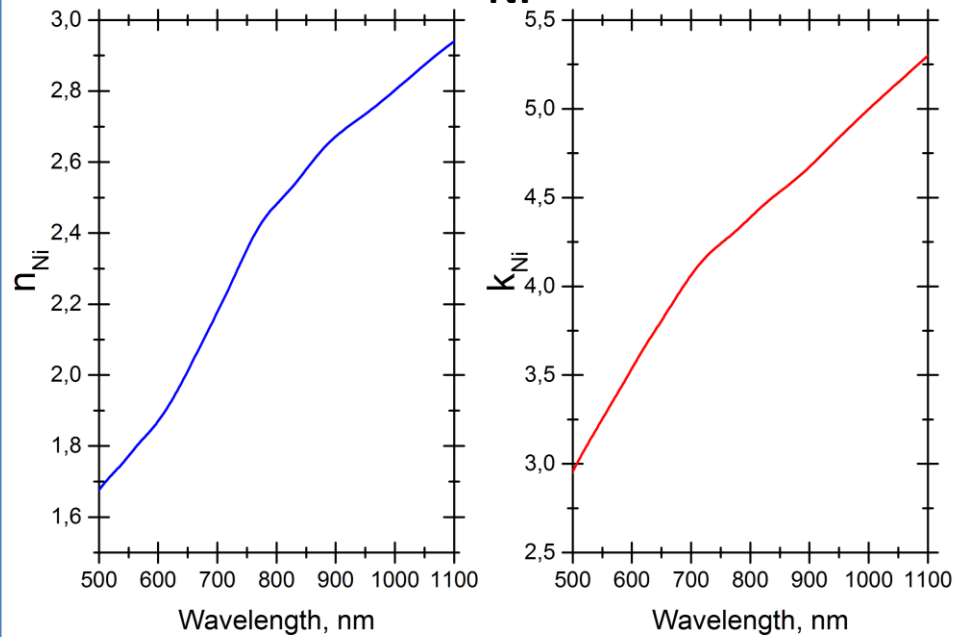
Layers:  
 $\text{AlO}_x(2 \text{ nm})/\text{Tb}_{18}\text{Co}_{82}(18 \text{ nm})/\text{AlO}_x(2 \text{ nm})/\text{Au}(20 \text{ nm})$   
 on fused silica

Layers:  
 $\text{Ni}(18 \text{ nm})/\text{AlO}_x(2 \text{ nm})/\text{Au}(20 \text{ nm})$   
 on fused silica

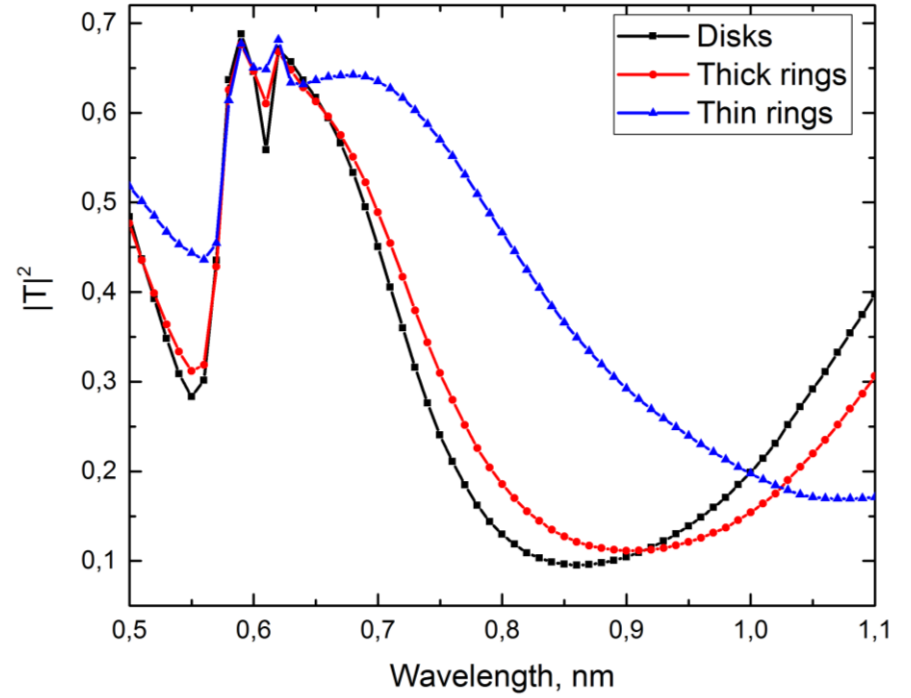
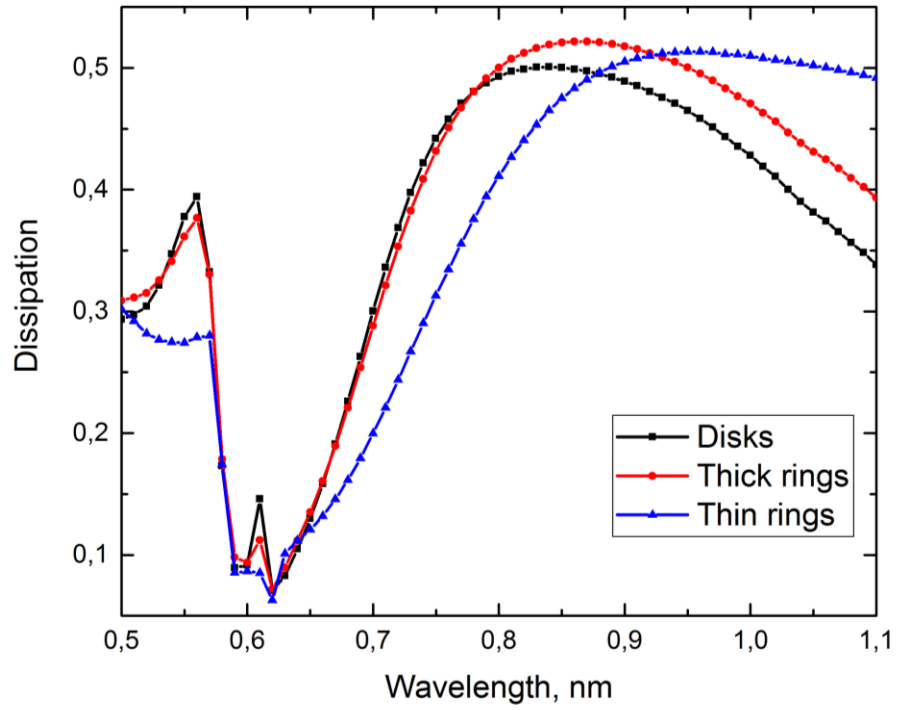


| Sample | Nominal radius* |               | Actual radius** |               |
|--------|-----------------|---------------|-----------------|---------------|
|        | $R_{out}$ , nm  | $R_{in}$ , nm | $R_{out}$ , nm  | $R_{in}$ , nm |
| a      | 120             | 40            | $125 \pm 5$     | 0             |
| b      |                 | 60            | $126 \pm 5$     | $30 \pm 5$    |
| c      |                 | 80            | $123 \pm 5$     | $60 \pm 5$    |

|             | $R_{out}$ , nm | $R_{in}$ , nm |
|-------------|----------------|---------------|
| Disks       | 125            | 0             |
| Thick rings | 126            | 30            |
| Thin rings  | 123            | 60            |

**Tb<sub>18</sub>Co<sub>82</sub>****Ni**

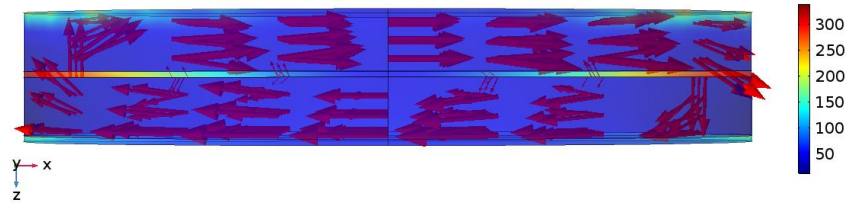
# Tb<sub>18</sub>Co<sub>82</sub>





# Disk

Wavelength=840nm | Volume: Electric field norm (V/m) | Arrow Volume: Current density



Wavelength=840nm | Volume: Magnetic field norm (A/m) | Arrow Volume: Magnetic field

