1. ZnSe substrate
   Refractive index – Sellmeier model

   $$n^2(\lambda) = A_0 + \frac{A_1\lambda^2}{\lambda^2 - A_2} + \frac{A_3\lambda^2}{\lambda^2 - A_4} + \frac{A_5\lambda^2}{\lambda^2 - A_6}$$ Eq. 1

   with $A_0 = 0.310182,\ A_1 = 4.855169,\ A_2 = 0.056359,\ A_3 = 0.673922,\ A_4 = 0.056336,\ A_5 = 2,481890,$ $A_6 = 2222.114$ numerical values are in ZnSe_nk.xlsx file.

   Extinction coefficient – table values (see ZnSe_nk.xlsx file), non-parametric approach was used

2. Ge substrate
   Refractive index, extinction coefficient – table data (Ge substrate_nk.xlsx), non-parametric approach

3. ZnS
   Refractive index – Sellmeier model (Eq. 1) with $A_0 = 1.010356,\ A_1 = 3.619092,\ A_2 = 0.02345364,$ $A_3 = 0.508130,\ A_4 = 0.099946,\ A_5 = 2.219955,\ A_6 = 1148.729$

   Extinction coefficient – exponential model

   $$k(\lambda) = B_0 \cdot \exp\left\{B_1\lambda^{-1} + B_2\lambda\right\}$$ Eq. 2

   With $B_0 = 0.03970,\ B_1 = -0.080715,\ B_2 = -7.074209.$

   Numerical values are in ZnS_nk.xlsx

4. YbF3

   Refractive index – Cauchy model $n(\lambda) = A_0 + \frac{A_1}{\lambda^2} + \frac{A_2}{\lambda^4}$, with $A_0 = 1.484489,\ 5.4996 \cdot 10^{-5},$ $2.6266 \cdot 10^{-3}.$

   Extinction coefficient – table data, non-parametric approach.
   Numerical values are in YbF3_nk.xlsx

5. LaF3
   Refractive index – Sellmeier model Eq. 1 with
   $A_0 = 0.187042,\ A_1 = 2.030974,\ A_2 = 0.01057737,\ A_3 = 0.024492,\ A_4 = -0.851254,\ A_5 = 4.544580,$ $A_6 = 1149.999773$

   Extinction coefficient – table data, non-parametric approach
   Numerical values are in LaF3_nk.xlsx

6. Ge film
   Refractive index and extinction coefficient – table data, non-parametric approach
   Numerical values are in Ge film_nk.xlsx

   All four films were produced using e-beam evaporation, substrate temperature was 120 degrees.