**Dispersion formulas (for metal)**

All quantities (except dimensionless numbers) are expressed in unit of eV.

In this case, the angular frequency is expressed by the vacuum wavelength as

The refractive index and extinction coefficient is given by

Where is the dielectric function given by one of the following formulas.

***1:******Drude-Lorentz model***

In this case, coefficients are defined by

***2:******Brendel-Bormann model***

Where is the error integral of the complex argument

With is the complementary error function,

In this case, coefficients are defined by