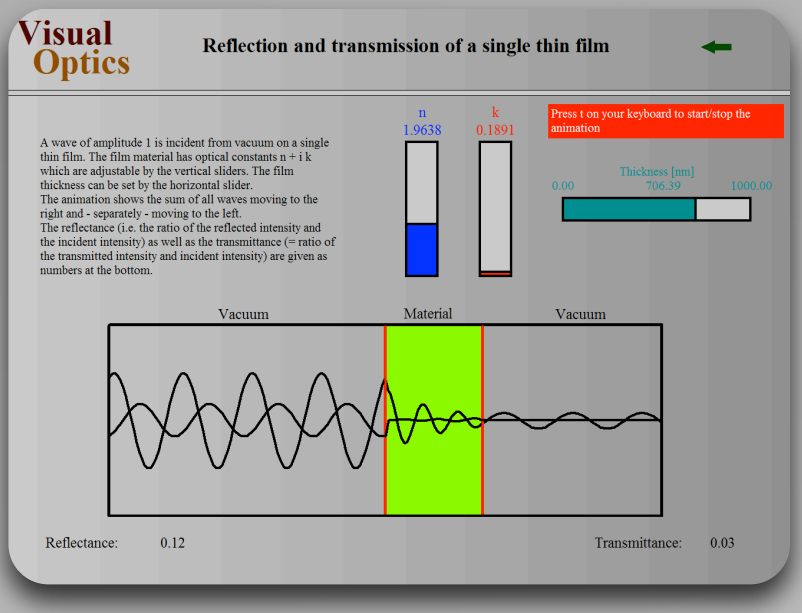
Visual Optics

An animated quick introduction to Optics

with focus on optical constants and thin films for technical applications

understanding optics the easy way | ideal for self-teaching | real-time interactive animations

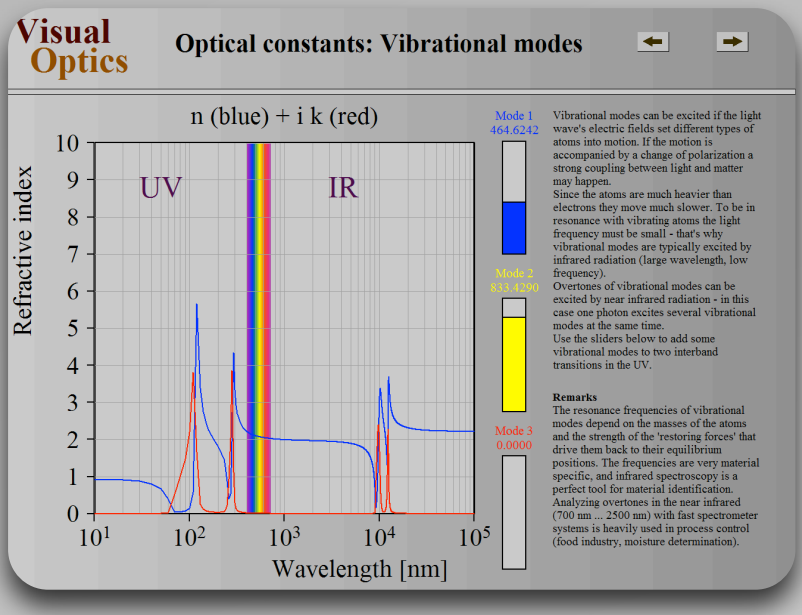


Visual Optics is an interactive course, designed for teaching optics to others and yourself.

The course is based on a discussion of

- optical constants
- wave propagation in materials
- reflection and transmission of light waves at interfaces
- ray optics
- thin film optics

Many interactive pages let you play and find out what happens if a property changes. This leads to an intuitive understanding of the interaction of light with matter.
The optical properties of typical metals, semiconductors and transparent oxides and nitrides are shown.



Having covered wave propagation fundamentals, the course then turns to technical applications of thin films. The function of

- anti-reflection coatings
- transparent conductive layers
- thin film solar cells
- thermal absorber coatings
- glass coatings for windows
- optical filters

are discussed using many live examples. The learner can interactively change parameters and instantly watch the consequences for the performance of the coating product.

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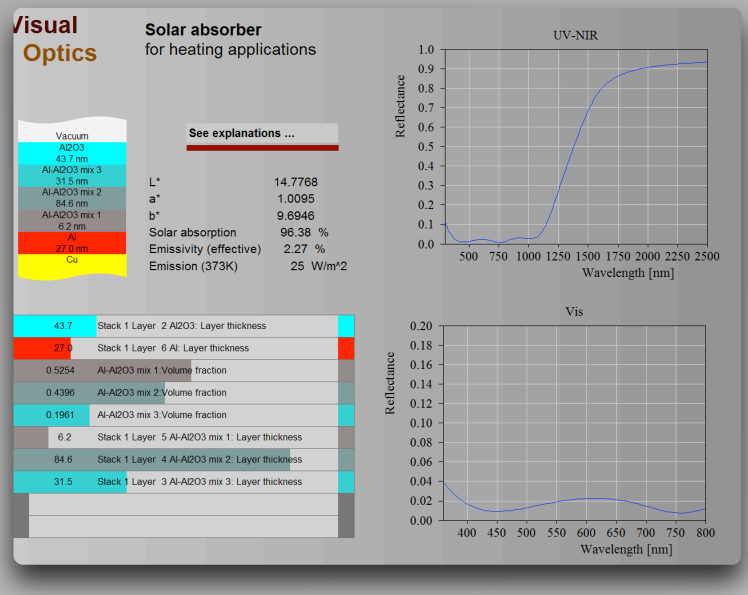

Visual Optics uses the commercial thin film analysis and design software CODE in the background. This way we can work with powerful, realistic examples in this course in real time.

The course is ideal training for beginners in optical engineering. After a few hours of self-teaching you will develop a feeling for thin film optics. The Visual Optics experience will influence your working style and speed up your success in thin film optics.

Physics teachers can use Visual Optics to enrich their classical electrodynamics lectures with live graphs and modern applications.

The course helps thin film companies to tell new employees, operaters and managers what thin film optics is all about, and how their own products really work. For this purpose the course contains ready-to-use presentations.

Visual Optics runs on any Windows platform.

Prices are
- 650 € for academic users
- 1850 € for industrial customers

A license includes free updates to new versions for one year.
For quotations and orders please contact

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