## **Preface**

Nanophotonics or nano-optics is the study of the behavior of light on the nanometer scale, and of the interaction of nanometer-scale objects with light. It is a branch of optics, optical engineering, electrical engineering, and nanotechnology. It often involves dielectric structures such as nanoantennas, or metallic components, which can transport and focus light via surface plasmon polaritons.

The term "nano-optics", just like the term "optics", usually refers to situations involving ultraviolet, visible, and near-infrared light (free-space wavelengths from 300 to 1200 nanometers).

In the present book, twelve typical literatures about nanophotonics published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on nanophotonics. We hope this book can demonstrate advances in nanophotonics as well as give references to the researchers, students and other related people.

i https://en.wikipedia.org/wiki/Nanophotonics