1. Record Nr. UNINA9911002556803321 Autore Kokhanovsky Alexander Titolo Snow Optics / / by Alexander Kokhanovsky Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 9783031859793 Edizione [2nd ed. 2025.] 1 online resource (XII, 160 p. 49 illus., 43 illus. in color.) Descrizione fisica 500 Disciplina Soggetti **Physics** Astronomy Lasers Geographic information systems **Ecology Environmental sciences** Physics and Astronomy Geographical Information System **Environmental Sciences Environmental Physics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Preface -- Chapter 1. Microphysics and geometry of snow surfaces --Nota di contenuto Chapter 2. Local optical properties of snow layers -- Chapter 3. Properties of solar light reflected from snow -- Chapter 4. Snow remote sensing. This book is the first book of its kind, focusing exclusively on the Sommario/riassunto optical properties of snow. As a complex and turbid medium, snow is approached as a strongly light-scattering (in the visible spectrum) medium with large, nonspherical ice grains. The book discusses both experimental and theoretical results, as well as the remote sensing of snow using ground-based, airborne and satellite optical instrumentation. The book will be of particular importance for researchers studying snow characteristics (the size of grains, snow

pollution and albedo) using various remote-sensing techniques.