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Titolo	The sun as a guide to stellar physics // edited by Oddbjørn Engvold, professor emeritus, Rosseland Centre for Solar Physics, Institute of Theoretical Astrophysics, University of Oslo, Oslo, Norway, Jean-Claude Vial, emeritus senior scientist, Institut d'Astrophysique Spatiale, CNRS-Universite Paris-Sud, Orsay, France, Andrew Skumanich, emeritus senior scientist, High Altitude Observatory, National Center for Atmospheric Research, Boulder, Colorado, United States
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ISBN	0-12-814335-5
Descrizione fisica	1 online resource (524 pages) : illustrations (some color)
Disciplina	523.8
Soggetti	Physics Sun
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Discoveries and concepts: the sun's role in astrophysics -- Stellar and solar chromospheres and attendant phenomena -- The sun's atmosphere -- Helopseismic Inferences on the internal structure and dynamics of the sun -- Atmospheric structure, non-equilibrium thermodynamics and magnetism -- Spectropolarimetry and magnetic structures -- Coronal magnetism as a universal phenomenon -- Magnetohydrodynamics and solar dynamo action -- Solar and stellar variability -- High-energy solar physics -- Space weather at earth and in our solar system -- The solar-stellar connection -- Observations of the sun from space -- High-resolution ground-based observations of the sun -- Solar data and simulations -- Challenges and prospects for the future.
Sommario/riassunto	The Sun as a Guide to Stellar Physics illustrates the significance of the Sun in understanding stars through an examination of the discoveries and insights gained from solar physics research. Ranging from theories to modeling and from examination of the discoveries and insights gained from solar physics research. Ranging from theories to modeling

and from numerical simulations to instrumentation and data processing, the book provides an overview of what we currently understand and how the Sun can be a model for gaining further knowledge about stellar physics. Providing both updates on recent developments in solar physics and applications to stellar physics, this book strengthens the solar-stellar connection and summarizes what we know about the Sun for the stellar, space, and geophysics communities.

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