

1. Record Nr.	UNINA9910827231903321
Autore	Thomas John H. <1941->
Titolo	Sunspots and starspots // John H. Thomas, Nigel O. Weiss [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2008
ISBN	1-107-19644-2 1-281-94491-2 9786611944919 0-511-45628-X 0-511-45759-6 0-511-45459-7 0-511-45357-4 0-511-53634-8 0-511-45562-3
Descrizione fisica	1 online resource (xvi, 275 pages) : digital, PDF file(s)
Collana	Cambridge astrophysics ; ; 46
Disciplina	523.7/4
Soggetti	Sunspots Starspots
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. 246-270) and index.
Nota di contenuto	The sun among the stars -- Sunspots and starspots : a historical introduction -- Overall structure of a sunspot -- Final structure of the umbra -- Fine structure of the penumbra -- Oscillations in sunspots -- Sunspots and active regions -- Magnetic activity in stars -- Starspots -- Solar and stellar activity cycles -- Solar and stellar dynamos -- Solar activity, space weather, and climate change -- The way ahead -- Appendix 1 : Observing techniques for sunspots -- Appendix 2 : Essentials of magnetohydrodynamic theory.
Sommario/riassunto	The past two decades have seen remarkable advances in observations of sunspots and their magnetic fields, in imaging of spots and fields in distant stars and in associated theoretical models and numerical simulations. This book provides a comprehensive combined account of the properties of sunspots and starspots. It covers both observations

and theory, and describes the intricate fine structure of a sunspot's magnetic field and the prevalence of polar spots on stars. The book includes a substantial historical introduction and treats solar and stellar magnetic activity, dynamo models of magnetic cycles, and the influence of solar variability on the Earth's magnetosphere and climate. This volume is a valuable reference for graduate students and specialists in solar and stellar physics, astronomers, geophysicists, space physicists and experts in fluid dynamics and plasma physics.

---