1. Record Nr. UNINA990000000620503321

Titolo	Die Erde
Pubbl/distr/stampa	Berlin : Gesellschaft fur Erdkunde zu Berlin
ISSN	0013-9998
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Periodico

2. Record Nr. UNINA9910755073903321

Autore	Zhang Hua
Titolo	Signal Processing in X-ray Pulsar-Based Navigation / / by Hua Zhang, Luping Xu, Jingrong Sun, Bo Yan
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9945-26-7
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (251 pages)
Altri autori (Persone)	XuLuping SunJingrong YanBo
Disciplina	520
Soggetti	Astronomy Measurement Measuring instruments Signal processing Astronomy, Observations and Techniques Measurement Science and Instrumentation Digital and Analog Signal Processing Signal, Speech and Image Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Pulsar data acquisition and relativistic effect correction

	-- Characteristics and model of pulsar signal -- Validation of X-ray Pulsar Simulation Signals -- Pulse average profile accumulation method and phase measurement performance -- Pulsar signal denoising -- Pulsar Signal Detection -- Measurement of Arrival Time of Pulsar Signals.
Sommario/riassunto	This book highlights key technologies of signal processing in pulsar-based navigation. It discusses the modeling, simulation, acquisition, and correction of relativistic effects of signals from X-ray pulsars. It demonstrates the methods of contour reconstruction and denoising, and introduces the concept and methods of the average contour. The performance of the phase measurement methods using signal contour is analyzed. The role of wavelets and bispectral methods in the denoising of pulsar signals is discussed. The measurements of pulsar signals' arriving time are looked into from the perspective of time series. The book is intended for researchers and engineers interested in pulsar-based navigation. It is also a good reference source for senior undergraduates and postgraduate students majoring in navigation and signal processing.