

1. Record Nr.	UNINA9910477129703321
Autore	Varsavsky Andrea
Titolo	Epileptic Seizures and the EEG : Measurement, models, detection and prediction // Andrea Varsavsky, Iven Mareels and Mark Cook
Pubbl/distr/stampa	Boca Raton, Florida : , : Taylor & Francis, , 2010 ©2011
Descrizione fisica	1 online resource (xxi, 337) : illustrations
Disciplina	616.853075
Soggetti	Epilepsy - Diagnosis Biomedical engineering Electroencephalography
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	EEG generation and measurement -- Signal processing in EEG analysis -- Classifying the EEG -- Seizure detection -- Modeling for epilepsy -- On the predictability of seizures.
Sommario/riassunto	Analysis of medical data using engineering tools is a rapidly growing area, both in research and in industry, yet few texts exist that address the problem from an interdisciplinary perspective. <i>Epileptic Seizures and the EEG: Measurement, Models, Detection and Prediction</i> brings together biology and engineering practices and identifies the aspects of the field that are most important to the analysis of epilepsy. Analysis of EEG records The book begins by summarizing the physiology and the fundamental ideas behind the measurement, analysis and modeling of the epileptic brain. It introduces the EEG as a measured signal and explains its use in the study of epilepsy. Next, it provides an explanation of the type of brain activity likely to register in EEG measurements, offering quantitative analysis of the populations of neurons that contribute to both scalp and cortical EEG and discussing the limitations and effects that choices made in the recording process have on the data. The book provides an overview of how these EEG records are and have been analyzed in the past, concentrating on the mathematics relevant to the problem of classification of EEG. The

authors use these extracted features to differentiate between or classify inter-seizure, pre-seizure and seizure EEG. The challenge of seizure prediction The book focuses on the problem of seizure detection and surveys the physiologically based dynamic models of brain activity. Finally, the book addresses the fundamental question: can seizures be predicted? Through analysis of epileptic activity spanning from 3 hours to 25 years, it is proposed that seizures may be predictable, but the amount of data required is greater than previously thought. Based on the authors' extensive research, the book concludes by exploring a range of future possibilities in seizure prediction.

2. Record Nr.

Autore

Titolo

Pubbl/distr/stampa

UNINA9910704165803321

Keith William J. <1933->

Mineral resources of the Sierra Estrella Wilderness study area, Maricopa County, Arizona / / by William J. Keith [and four others]

[Reston, Va.] : , : Department of the Interior, U.S. Geological Survey, , 1989

Washington : , : United States Government Printing Office

Descrizione fisica

1 online resource (v, 14 pages) : illustrations, maps (some color)

Collana

Mineral resources of wilderness study areas--southwestern and south-central Arizona ; ; ch. I

Studies related to wilderness--Bureau of Land Management wilderness study area

U.S. Geological Survey Bulletin ; ; 1702-I

Soggetti

Mines and mineral resources - Arizona - Sierra Estrella Wilderness

Mines and mineral resources

Sierra Estrella Wilderness (Ariz.)

Arizona Sierra Estrella Wilderness

Lingua di pubblicazione

Inglese

Formato

Materiale a stampa

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Note generali

Title from title screen (viewed Aug. 20, 2014).

Nota di bibliografia

Includes bibliographical references.

