

1. Record Nr.	UNISALENTO991001016159707536
Autore	Cross, Rodney
Titolo	An introduction to Alfven waves / Rodney Cross
Pubbl/distr/stampa	Bristol ; Philadelphia : Adam Hilger Ltd, c1988
ISBN	0852742452
Descrizione fisica	x, 219 p. : ill. ; 24 cm.
Collana	The Adam Hilger series on plasma physics
Classificazione	53.2.24 53.6.5 53.6.54 538.6 QC718.5.M36
Soggetti	Magnetohydrodynamic waves Plasmas-Electromagnetic fields-Oscillations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliography: p. 203-215. Includes index.

2. Record Nr.	UNINA9910830045403321
Titolo	Distributed acoustic sensing in geophysics : methods and applications / Yingping Li, Martin Karrenbach, Jonathan Ajo-Franklin, editor
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley-American Geophysical Union, , [2021] ©2021
ISBN	1-119-52177-7 1-119-52180-7 1-119-52182-3
Descrizione fisica	1 online resource (320 pages)
Collana	Geophysical Monograph Series
Disciplina	550
Soggetti	Optical fiber detectors Geophysics - Methodology Tomography Imaging systems in geophysics Microseisms
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	High definition seismic an microseismic data acquisition using distributed and engineered fiber optic acoustic sensors / Shatalin et al -- Important aspects of acquiring DAS data for geoscientists / Willis et al -- Distributed microstructure optical fiber (DMOF) based Ultra-highly sensitive DAS for borehole seismic survey / Sun et al -- Distributed acoustic sensing system based on phase-generated carrier demodulation algorithm / Xu et al -- Field trial of distributed acoustic sensing in an active room-and-pillar mine / Zeng et al -- On the surmountable limitations of DAS VSP - depth calibration, directionality, noise : learnings from field trials / Mateev et al -- Denoising analysis and processing methods of DAS-VSP data / Chen et al -- High-resolution shallow structure at Brady Hot Springs using ambient noise tomography on a trenched DAS array / Zeng et al -- Introduction to interferometry of fiber optic strain measurements / Martin et al -- Using telecommunication fiber infrastructure for earthquake monitoring and near-surface characterization / Biondi et al --

Production distributed temperature sensing vs. stimulation distributed acoustic sensing for the Marcellus Shale / Kavousi Ghahfarokhi et al -- Coalescence microseismic mapping for DAS and geophone hybrid array : a model-based feasibility study / Mizuno et al -- Continuous downhole seismic monitoring using surface orbital vibrators and distributed acoustic sensing at the Otway Project - field trial for optimum configuration / Correa et al -- Introduction to DAS applications in environmental and shallow geophysics / Trainor-Guitton and Coleman -- Surface wave imaging using distributed acoustic sensing deployed on dark fiber : moving beyond high frequency noise / Rodriguez Tribaldos et al -- Using distributed acoustic sensing (DAS) for multichannel analysis of surface waves (MASW) to evaluate ground stiffness / Lancelle et al -- A literature review : distributed acoustic sensing (DAS) geophysical applications over last 20 years / Li et al.

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## Sommario/riassunto

"Distributed Acoustic Sensing (DAS) systems are optoelectronic instruments which measure acoustic interactions and distributed strain along the length of a fiber optic sensing cable, thus associated with various applications in geophysics, engineering, hazard mitigation, prevention, safety and security fields. The DAS observation system records the sound and vibration signals along several tens of kilometers of sensing optical fiber with fine spatial resolution of 1-10 meters over a wide frequency range (millihertz to tens kilohertz), thereby providing a flexible large sensing aperture for acquiring high resolution acoustic data in both time and space domains. Geophysical Applications of Distributed Acoustic Sensing (DAS): Principles and Practices focuses on the various geophysical applications in geophysics and principles of DAS measurements. Volume highlights include: An up-to-date state of the art of advanced DAS technologies that engages both academic and industrial communities to share their knowledge and experiences with deploying DAS in novel geophysical methods and applications Demonstrates full spectral DAS geophysical applications in generating large amounts of big DAS data within environmental and shallow surface geophysics fields, such as safe storage of carbon dioxide Describes several DAS applications in exploration geophysics for sustainable energy resources, including DAS applications in oil, gas, geothermal, and mining industries Develops and analyzes suitable 3D/4D DAS data processing methods to deal with the big data for efficient and effective extraction of useful geophysical information, such as, monitor reservoir activity in the deep-water wells, optimize velocity models and improve 3D subsurface images in oil and geothermal fields, and use of DAS tomography output in revealing mining excavation activity Describes a crucial tool, micro-seismic DAS for hydraulic monitoring integrated with temperature and strain measurements to improve subsurface reservoir description Discusses the DAS applications that helps monitor local, regional, and global seismicity, detects fault deformations and large earthquakes, builds earthquake early warning systems using new or existing fiber networks, such as the telecommunications conduits, fiber-networks, long pipelines, and existing "dark" fibers cross ocean and around the world Applications of ambient noise interferometry or tomography to DAS continuous records to image the shear wave velocity structures in the near surface for monitoring time-lapse and spatial variations of Earth's near-surface, such as soil properties, water tables, and the thickness of sediment layers Discusses development of suitable data processing methods to deal with the big data for efficient and effective extraction of useful geophysical information Geophysical Applications of Distributed Acoustic Sensing (DAS): Principles and Practices is a

valuable resource for geologists, geophysicists, earthquake seismologists, structural geologists, geoengineers, mining engineers, hydrocarbon geologists, engineers, environmental geologists, and industry experts in hazard risk mitigation, emergency preparedness and disaster management agencies"--

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