1. Record Nr. UNINA9910254600303321

Titolo	Advances in Acoustic Emission Technology : Proceedings of the World Conference on Acoustic Emission–2015 / / edited by Gongtian Shen, Zhanwen Wu, Junjiao Zhang
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-29052-5
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIV, 428 p. 309 illus., 267 illus. in color.)
Collana	Springer Proceedings in Physics, , 0930-8989 ; ; 179
Disciplina	620.1127
Soggetti	Acoustics Quality control Reliability Industrial safety Acoustical engineering Materials science Quality Control, Reliability, Safety and Risk Engineering Acoustics Characterization and Evaluation of Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Part I: Keynote Lecture -- Progress of Acoustic Emission Technology on Pressure Equipment in China -- Part II: Instrumentation -- Advanced Usage of the Software Controlled Sensor Coupling Test -- A New Generation of AE System Based on PCI Express Bus -- Part III: Signal Processing and Analysis -- Localization of Acoustic Emissions in a Numerical Tshaped Concrete Beam using MultiSegment Path Analysis -- Pattern Recognition for Acoustic Emission Signals of Offshore Platform T--Tube Damage Based on K-means Clustering -- Fault Analysis for Low Speed Heavy Duty Crane Slewing Bearing Based on Wavelet Energy Spectrum Coefficient -- Analysis of Fractional S transform -- Research of Tank Bottom Corrosion Acoustic Emission Simulation -- Extracting the Fault Feature of Acoustic Emission Signal

Based on Kurtosis and Envelope Demodulation of the Wavelet Packet -- Research on the Diagnosis Method Based on the Waveform Streaming Signal of Rolling Bearing -- Part IV: Material Characteristics -- Acoustic Emission Behavior of 12MnNiVR under Corrosion -- B-value Characteristics of Rock Acoustic Emission under Impact Loading -- Evaluation of Acoustic Emission from damaged CFRP sheets for Air Industry Applications -- Acoustic Emission Study on Ti-Ni Shape Memory Alloy in Loading-unloading -- Glass Fiber Reinforce Plastic Composite Acoustic Emission Signal Detection and Source Localization -- Evaluating Freeze-Thaw Damage in Concrete with Acoustic Emissions and Ultrasonics -- Evaluation of Tensile Failure Progress in FRP using AE Tomography and Digital Image Correlation -- Assessment of Damage Evolution in Paper Material Based on Acoustic Emission: One Experimental and Statistical Method -- Innovative AE Measurement by Optical Fiber Sensing for FRP -- Fracturing Behaviors of Unfavorably Oriented Faults Investigated Using an Acoustic Emission Monitor -- Part V: Structure -- Investigation of Acoustic Emission Characteristics on Harbor Portal Crane -- Fatigue Failure Evaluation of RC Bridge Deck in Wheel Loading Test by AE Tomography -- The tests of node of railway steel bridge with use of Acoustic Emission method -- Evaluation of Deterioration of Concrete Due to Alkali-Aggregate Reaction Based on Through the Thickness Elastic Waves -- Assessing Deterioration of an In-field RC Bridge Deck by AE Tomography -- A Preliminary Study on Application of AE Methods to Detecting Aggregation Regions of RC Bridge Decks -- Acoustic emission testing of aluminum alloys pressure vessel -- Development of damage evaluation method for concrete in steel plate-bonded RC slabs -- Acoustic emission testing research of blowout preventer -- Part VI: Condition Monitoring and Diagnosis -- Acoustic emission testing of cryogenic pipelines in operating conditions -- Hit Based Acoustic Emission Monitoring of Rock Fractures: Challenges and Solutions -- Acoustic Emission Monitoring of Brittle Fatigue Crack Growth in Railway Steel -- Experimental Research on Acoustic Emission Monitoring for Dynamic Corrosion of the Simulated Tank Floor -- Part VII: Miscellaneous -- Study on the Influence Rule of Residual Stress on Ultrasonic Wave Propagation.

Sommario/riassunto

This volume collects the papers from the World Conference on Acoustic Emission 2015 (WCAE-2015) in Hawaii. The latest research and applications of Acoustic Emission (AE) are explored, with particular emphasis on detecting and processing of AE signals, development of AE instrument and testing standards, AE of materials, engineering structures and systems, including the processing of collected data and analytical techniques as well as experimental case studies.