1. Record Nr. UNINA9910337631503321 Advances in Condition Monitoring of Machinery in Non-Stationary **Titolo** Operations: Proceedings of the 6th International Conference on Condition Monitoring of Machinery in Non-Stationary Operations, CMMNO'2018, 20-22 June 2018, Santander, Spain / / edited by Alfonso Fernandez Del Rincon, Fernando Viadero Rueda, Fakher Chaari, Radoslaw Zimroz, Mohamed Haddar Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-11220-9 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XI, 423 p. 274 illus., 218 illus. in color.) Applied Condition Monitoring, , 2363-698X;; 15 Collana Disciplina 670 620 Soggetti Manufactures Vibration Dynamical systems **Dynamics** Signal processing Image processing Speech processing systems **Physics** Manufacturing, Machines, Tools, Processes Vibration, Dynamical Systems, Control Signal, Image and Speech Processing Numerical and Computational Physics, Simulation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Condition Monitoring in Non-Stationary Operations -- Extraction of Weak Bearing Fault Signatures from Non-Stationary Signals Using Parallel Wavelet Denoising -- Neighbor Retrieval Visualizer for

Monitoring Lifting Cranes -- Monitoring and Diagnostic Systems -- Convolutional Neural Networks for Fault Diagnosis Using Rotating

Speed Normalized Vibration -- Monitoring of a High-Speed Train Bogie Using the EMD Technique -- Default Detection in a Back-To-Back Planetary Gear-Box through Current and Vibration Signals -- Noise and Vibration in Machines -- Identification of Torsional Vibration Modal Parameters: Application on a Ferrari Engine Crankshaft -- Experimental Characterization of Metal-Mesh Isolators Damping Capacity by Constitutive Mechanical Model -- Signal Processing -- Separation of Impulse from Oscillation for Detection of Bearing Defect in the Vibration Signal -- Vibro-Acoustic Diagnosis of Machinery -- Cyclo-Non-Stationary Based Bearing Diagnostics of Planetary Gearboxes -- Cyclostationary Approach for Long Term Vibration Data Analysis -- Monitoring of Soil Density During Compaction Processes.

Sommario/riassunto

This book is aimed at researchers, industry professionals and students interested in the broad ranges of disciplines related to condition monitoring of machinery working in non-stationary conditions. Each chapter, accepted after a rigorous peer-review process, reports on a selected, original piece of work presented and discussed at the International Conference on Condition Monitoring of Machinery in Non-stationary Operations, CMMNO'2018, held on June 20 – 22, 2018, in Santander, Spain. The book describes both theoretical developments and a number of industrial case studies, which cover different topics, such as: noise and vibrations in machinery, conditioning monitoring in non-stationary operations, vibro-acoustic diagnosis of machinery, signal processing, application of pattern recognition and data mining, monitoring and diagnostic systems, faults detection, dynamics of structures and machinery, and mechatronic machinery diagnostics.