1. Record Nr. UNINA9910557629903321 Autore Ono Kanji Titolo Structural Health Monitoring of Large Structures Using Acoustic **Emission-Case Histories** Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 Descrizione fisica 1 electronic resource (298 p.) Soggetti History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Acoustic emission (AE) techniques have successfully been used for assuring the structural integrity of large rocket motorcases since 1963, and their uses have expanded to ever larger structures, especially as structural health monitoring (SHM) of large structures has become the most urgent task for engineering communities around the world. The needs for advanced AE monitoring methods are felt keenly by those dealing with aging infrastructures. Many publications have appeared covering various aspects of AE techniques, but documentation of actual applications of AE techniques has been mostly limited to reports of successful results without technical details that allow objective evaluation of the results. There are some exceptions in the literature. In this Special Issue of the Acoustics section of Applied Sciences, we seek contributions covering these exceptions cited here. Here, we seek contributions describing case histories of AE applications to large structures that have achieved the goals of SHM by providing adequate technical information supporting the success stories. Types of structures can include aerospace and geological structures, bridges,

buildings, factories, maritime facilities, off-shore structures, etc.

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Experiences with AE monitoring methods designed and proven for large