

# PIEZO-BASED TECHNIQUES FOR CORROSION DETECTION AND OVERALL HEALTH MONITORING OF AEROSPACE STRUCTURES

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*Corrosion poses a significant threat to aerospace structures, leading to safety hazards and operational failures. This review briefly discusses the state of art in corrosion monitoring techniques, focusing on the significance of piezoelectric transducer-based structural health monitoring (SHM) technologies and their applications in the aerospace industry. Based on the recent studies, we find that the piezoelectric material-based techniques are superior among the other methods in terms of their efficiency, cost-effectiveness, and structural simplicity. The importance of structural health monitoring and the role of advanced sensors in mitigating corrosion risks are highlighted.*

**Keywords:** *Piezoelectric Sensors, Corrosion detection, Ultrasonic Transducer, Acoustic Emission, Lamb wave, Structural Health Monitoring*

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