

# COMPUTING GLOBAL RELIABILITY FOR WIRELESS SENSOR NETWORKS SUBJECT TO SPANNING TREE ENUMERATION APPROACH

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## ABSTRACT

In recent advances of Wireless Sensor Networks (WSNs) have given rise to many application areas in daily life. Reliability plays a key role in the performance of any large-scale WSNs application. WSNs reliability must consider several design factors, viz. coverage, connectivity, lifetime, etc. However, connectivity remains the most fundamental factor especially in a large scale harsh environment. It is based on finding minimum paths or spanning trees, need a less memory and computational time. In this paper, we explore the problem of enumeration of these minimum paths that can be suitable method further evaluation of reliability for WSNs.

**KEYWORDS:** Wireless sensor networks, Spanning trees enumeration, Global Reliability Evaluation.