# Document details





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## Blade stress monitoring in a small wind turbine by using Arduino microcontroller (Conference Paper)

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### Abstract

This work presents the design and development of a remote monitoring system for the blades' strain in a small wind turbine (SWT). The monitoring system allows real-time transmission of the stress to a remote client which processes the information in order to suggest further control actions to guarantee a reliable wind turbine operation. Experimental results show an increased axial strain of the blade when the rotational speed of the wind turbine is increased. Additionally, an efficient transmission of the stress measurements is achieved by two communication approaches (wired and wireless) to a remote station, which logs and processes the information. © 2018 IEEE.

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