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ABSTRACT



PRESENTATION



PAPER



LOCK-IN THERMOGRAPHY WITH HYBRID EXCITATION SOURCE FOR DEFECT DETECTION IN COMPOSITE MATERIALS

This study presents a measurement system for active infrared thermography that utilizes a hybrid excitation source. The effectiveness of this system in detecting defects in composites will be evaluated. The excitation source has two modules: a forced cooling module and a heating module,

which can be implemented with any standard source such as halogen lights, infrared heaters, or hot air heating. The proposed technology, functioning under the lock-in regime, will be utilized for the identification of structural defects in glass and carbon composites.