

Abstract Submitted
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Fluorescence Measurement of Burned Skin Tissues HECTOR MICHAEL DE PEDRO, CHUAN-I. CHANG, HUE NGUYEN, ANTON MALKO, FARANAK ZARNANI, ROBERT GLOSSER, Physics Department, University of Texas at Dallas, D. MAAS, A. IDRIS, Department of Surgery, University of Texas Southwestern Medical Center — Early removal of affected tissues from burn patients can significantly increase the success of their recovery, since burns continue to spread and damage surrounding tissues after hours of injury. The rationale behind this procedure is that burns trigger the body's immune system to overreact, causing additional damage. Therefore it is important to locate and identify the burn (area and thickness) so that it can be removed as quickly as possible. Our project explores the use of autofluorescence as a tool to identify the burned tissues from healthy ones. Here we present that our fluorescence results show differences between burned and normal skin in both its spectra and lifetime.

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