

Researchers develop color-changing fabric

May 16 2018, by Marco Santana Marco, The Orlando Sentinel



Credit: chromorphous

A team of researchers at University of Central Florida has developed a fabric that changes color.

The material uses thin metal micro-wires embedded with an [electric current](#), which can change the wires' temperature.

Pigments within the thread respond to changes in temperature by changing color. The [temperature](#) shifts can be controlled through a user's smartphone.

"Although clothing has been a staple of the human experience for millennia, the basic structure and functionality of textile fibers and yarns have remained unchanged throughout history," said Ayman Abouraddy, a professor of optics and photonics at UCF, in a release. "The capabilities of electronics constantly increase and we always expect more from our iPhones so why haven't textiles been updated?"

The [mobile app](#) that users can access with the fabric allows subtle changes in color or larger shifts.

In an example provided by the researchers, a person could gradually add blue stripes to a tote bag by pressing a "stripe" button on the app.

The team hopes to mass produce the technology, as they develop it to work with thinner threads.

More information: www.chromorphous.com/

©2018 The Orlando Sentinel (Orlando, Fla.)
Distributed by Tribune Content Agency, LLC.

Citation: Researchers develop color-changing fabric (2018, May 16) retrieved 23 April 2024

from <https://techxplore.com/news/2018-05-color-changing-fabric.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.