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Vijendra Anant Chaudhari has completed his Doctor of Philosophy in Physics at Dr. B.A.M. University Aurangabad. He is working as an Assistant Professor at Department of Physics, Dayanand Science College Latur. He has published 35 research articles in international journals as well as conferences. He is a reviewer for many journals. He has expertise in synthesizing and investigating nanomaterials using variety of chemical methods. Recently, the authors have pursued research on perovskite-structured ferroelectric material which is widely used in many technological applications. They synthesized and characterized ferroelectric materials using various chemical routes to obtain nanostructural materials and also worked on electrical and dielectric properties in the MPB region.

**Materials for
OPTOELECTRONIC APPLICATIONS**

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ORIGINAL RESEARCH

IoT based Object Sorting and portable skin tone meter System

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ABSTRACT

Background: There is an extensive convention of numerous products in our daily life and built-up of this products are completed in various big scale and petite scale industries. Arranging causes class uniformity problem. Currently the major intricacy explicitly faced subsequent to the manufacture is of categorization. Arranging of objects in an industry is a tedious contemporary procedure, which is done actually. Consistent physical necessitate of this variety of machine in the industries will assist in arrangement the machine according to their load, bulk, color, shape, etc. This paper gives succinct information regarding the categorization of objects according to their color using TCS3200 sensor, Arduino UNO and servo motors. The recognition of color is made by frequency scaling of color detection.

Keywords: Internet of Things (IoT), Color Sensor, Arduino Uno, TFT LCD, Blynk Platform.

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INTRODUCTION

The Internet of Things (IoT) will be a current association sculpt that envisions a not so distant prospect, clinched beside which those questions from claiming customary usual attendance will be furnished for microcontrollers for electronic correspondence. IoT contains two well-known words Internet and Things. While, Internet helps the data to be sent, receive or still commune with the devices[1]. The efficient and vigorous scenery of cloud computing allows users to create their applications on it. Cloud acts as a best option for IoT that stores all the data from sensor and also accessed from remote locations [2]. For earlier outlook, the IoT is leading to have dwelling and commerce utilizes, to adjoin to the private contentment. For example, smart homes will sanction their resident to naturally unlock their carport when reached at home, set up their TVs and various gadgets. The conclusion is to comprehend this impending growth, mounting advances and opinion, applications required to extend comparatively to synchronize market requirements and buyer's need. Today there are various fields where the sorting of two different objects on the basis of their color nature is mandatory. To do the task very effectively the various color sensor are developed. This is a simple project consisting of color sensor using Arduino Uno R3 and TCS3200 color sensor module. It can be helpful for color recognition and revealing for food-processing units, color printer applications, skin-tone meter applications and other industrial applications including robotics. This paper depicts primary colors (red, green and blue, or RGB)—colors that are actually accessible in LEDs in one package; e.g., common cathode or common-anode RGB