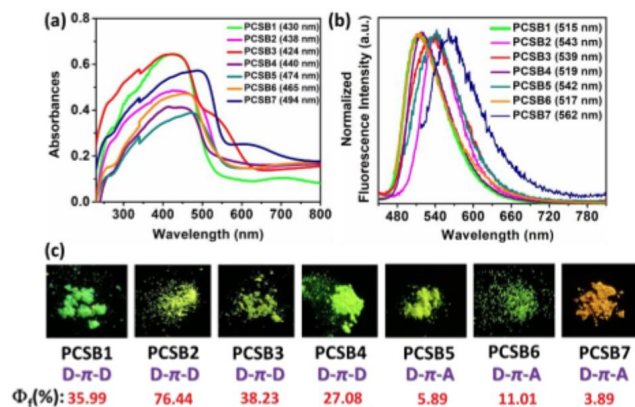


PENDING

(IN202311051895)

Uncharged, room temperature-stable,  $\pi$ -conjugated, organic dyes for nucleus-specific bioimaging and method of preparing the same



## NEED

Detecting cancerous tissue early is critical to improving patient outcomes. Current methods often rely on invasive procedures or require complex preparation, leading to delays. Efficient, non-invasive alternatives are needed.

## TECHNOLOGY OVERVIEW

This technology presents room-temperature-stable, uncharged,  $\pi$ -conjugated organic dyes for nucleus-specific bioimaging. The dyes enable easy staining of live or fixed cells for accurate cancer detection, offering a simpler, faster approach compared to conventional methods.

## TECHNOLOGY KEY FEATURES

The dyes are stable, uncharged, and specific for the nucleus, enabling efficient bioimaging of live or fixed cells. The technology supports wash-free imaging, ideal for detecting cancerous tissues quickly and precisely.

[Read more here](#)

## MARKET ANALYSIS

The global biotechnology market is projected to grow at a CAGR of 8.5%, reaching \$1 trillion by 2033. Key drivers include advancements in diagnostics, precision medicine, and non-invasive technologies.

## Target Industries

Healthcare, Diagnostics, Cancer Research. , Biotechnology firms developing diagnostic tools; Healthcare providers integrating non-invasive imaging solutions; Research institutions focusing on early-stage cancer detection.

## AT A GLANCE

- SDG 3 (Good Health and Well-Being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Technology is available for licensing/ co-development.

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