SPECTROLIGHT Inc.

NEWSLETTER

May 2024

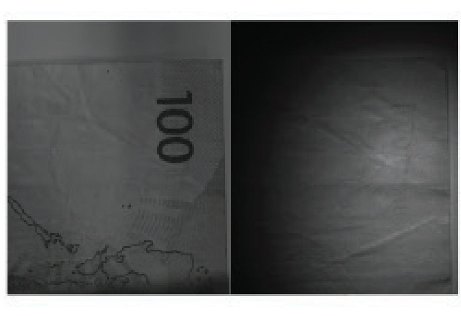
Tunable Laser System (TLS) for Spectral Imaging

Spectrolight's Tunable Laser System (TLS) revolutionizes spectral imaging by providing a single tunable light source solution covering a wide spectral range from 410 to 1700 nm. This significantly reduces operating costs and simplifies the imaging process by eliminating the need for hyperspectral cameras and individual optical filters.

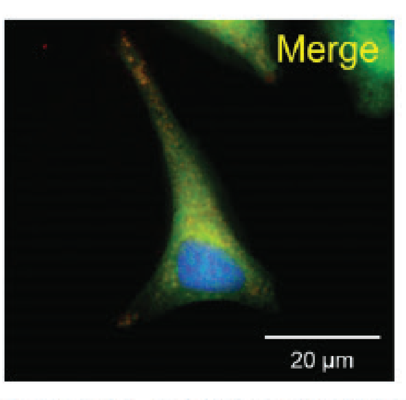
TLS-RED
FWHM tunable model

TLS-BLUE
FWHM fixed model

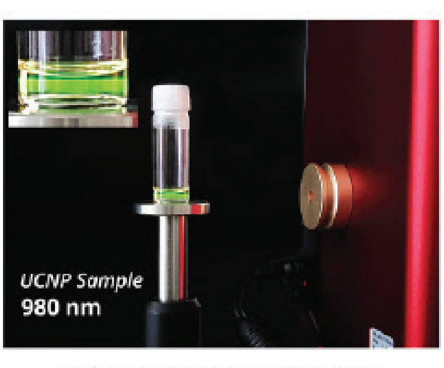
Highlighted Applications:



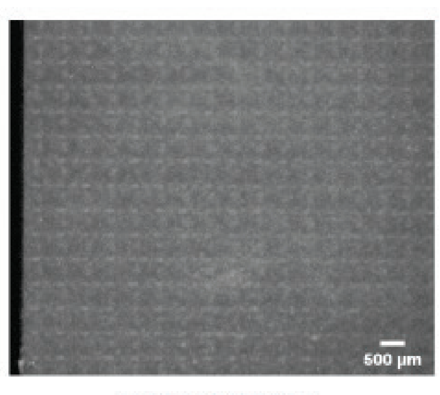
FORGERY DETECTION



MEDICAL & LIFE SCIENCE

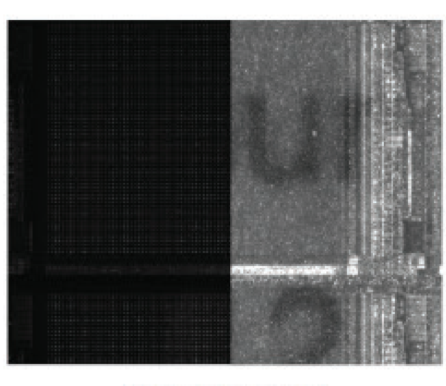


QUANTUM & NANO TECHNOLOGY



INDUSTRIAL

NON-DESTRUCTIVE TESTING



INSPECTION

Medical and Life Sciences: Fluorescence Imaging
The tunability of TLS revolutionizes fluorescence imaging by allowing a single light source to excite a variety of fluorophores, enabling complex multi-fluorophore studies easily and efficiently. This capability is critical to advancing cell and molecular biology research.

Forgery Detection
In authentication and forensics, TLS helps detect counterfeit products by analyzing the spectral signatures of various materials. The wide spectral range allows accurate identification of genuine and counterfeit products.

Quantum and Nano Technology: UCNP Imaging
TLS facilitates cutting-edge research in quantum dots and upconversion nanoparticles (UCNPs) by providing the precise and tunable excitation needed to explore the unique properties of these materials. These applications are pivotal for developing new materials for imaging, security, and solar energy.

Industrial Imaging and Non-destructive Testing
From detecting manufacturing defects to identifying contaminants in food production, TLS provides a non-invasive solution to ensure product quality and safety without the need for multiple imaging setups.

Inspection in the Semiconductor Field
The precision and wide spectral range of TLS make it an invaluable tool for semiconductor inspection to identify microscopic-level defects that can affect the functionality of semiconductor devices.

Tunable laser systems (TLS) are a breakthrough in spectral imaging, offering unparalleled flexibility, precision, and cost-effectiveness for a wide range of applications. Acting as a comprehensive and tunable light source, TLS significantly simplifies the imaging process, reducing reliance on multiple expensive instrument adjustments. Its transformative impact ranges from strengthening research capabilities in life sciences to improving production quality and safety in industrial settings. TLS, therefore, represents a pivotal advance in the spectral imaging domain, setting new standards for versatility and efficiency.

Meet the our Tunable Bandpass Filter at VisionChina Beijing!

TUNABLE BANDPASS FILTERS - FWS

Vision China
www.visionchinashow.net
BeiJing 2024

Viewsitec
友思特 · 虹科的一家公司

BOOTH NO. F03
May 21 - 22, Beijing, China

Spectrolight's tunable bandpass filter will be on show in the coming up exhibiton VisionChina Beijing!

VisionChina Beijing will be held between 2024. 05. 21 ~ 22 in Beijing, China.

Visit our China representative Viewsitec at booth F03!

NEW DISTRIBUTOR ANNOUNCEMENT

r×p×m×c

Visit
www.rpmclasers.com
for Spectrolight's supercontinuum lasers!

We are pleased to announce our new distributor - RPMC!
RPMC will be representing our supercontinuum lasers and the TLS in North America.
Visit their website at www.rpmclasers.com for our cutting edge tunable laser systems!

Tunable Light Sources

Fully tunable light sources and laser systems with wide tunable wavelength and bandwidth range

View details

Tunable Bandpass Filters

Applicable with any broadband light sources,
CWL tuning range : 255 - 1700 nm
FWHM tuning range : 2 - 15 nm

View details

Light Sources

A wide variety of powerful broadband light sources including tungsten-halogen/plasma lamps, LEDs and pico-second pulsed supercontinuum lasers

View details

Brochure Download

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