A non common excitation wavelength for Imaging

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The use of UV light (emission peak at 365 nm) to study objects of Art is in place since several decades, from the time the Wood light became available(1,2), recently other light sources were suggested (3,4) to be used to generate Visible Induced Luminescence (VIL) , here we investigate the results using a source in the 440-460 nm range, not only capable to produce VIL images but also Visible Induced Fluorescence.
The chosen Wavelength is well known in the field of forensic investigations for its ability to detect organic and biological traces. (5)
The first results are encouraging further investigations, with a bigger interest on modern or contemporary Art, due to the organic and synthetic materials/pigments used by these.
The used source is based on filtered LED emitters, allowing a portable use (battery operated)
The novel light source could become an other useful tool in the Preventive Diagnostic, to better understand where, eventually, to perform a more specific or invasive test.

References

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