

Title (en)
STED FLUORESCENCE MICROSCOPY HAVING TWO-PHOTON EXCITATION

Title (de)
STED-FLUORESZENZMIKROSKOPIE MIT ZWEIPHOTONEN-ANREGUNG

Title (fr)
MICROSCOPIE DE FLUORESCENCE STED À EXCITATION BIPHOTONIQUE

Publication
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Application
EP 08787227 A 20080814

Priority
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• DE 102007039111 A 20070818

Abstract (en)
[origin: WO2009024529A1] In order to depict at high spatial resolution a structure marked with a fluorescent colorant in a sample, pulsed excitation light (5) being focused in the sample in order to excite the fluorescent colorant present in the focus region to spontaneous emission of fluorescent light, damping light (10) having a different wavelength than the excitation light (5) being directed at the sample in order to damp the spontaneous emission of fluorescent light by the fluorescent colorant outside of a measurement region smaller than the focus region, and the fluorescent light spontaneously emitted by the fluorescent colorant being registered, the wavelength of the excitation light is selected such that the excitation light excites the fluorescent colorant by means of a multi-photon process, and the damping light (10), having a shorter wavelength than the excitation light (5), is directed at the sample continuously over a plurality of pulses (19) of the excitation light (5).

IPC 8 full level
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CPC (source: EP US)
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Citation (search report)
See references of WO 2009024529A1

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