

Title (en)

METHOD AND DEVICE FOR MULTICOLOUR 2-PHOTON FLUORESCENCE COINCIDENCE ANALYSIS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR MEHRFARBEN-2-PHOTONEN-FLUORESSENZ-KOINZIDENZANALYSE

Title (fr)

PROCEDE ET DISPOSITIF D'ANALYSE DE COINCIDENCE PAR FLUORESCENCE A DEUX PHOTONS POLYCHROME

Publication

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Application

EP 01969428 A 20010718

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Abstract (en)

[origin: WO0208732A1] The invention relates to a method for fluorescence measurement of sample analytes which are marked by different fluorescent markers having spectrally different fluorescence emissions. Said method consists of the following steps: the sample (11) is illuminated in a measuring volume by a laser (20) for exciting the fluorescence emission of the at least two fluorescent markers, the sample in the measuring volume being illuminated by one individual laser line at the most with such a high excitement intensity that the fluorescent markers are excited together by means of 2-photon absorption. The fluorescence emissions are detected by at least two detection devices (31, 32) which are designed to detect light in different spectral areas according to the spectral fluorescence properties of the fluorescent markers. A cross-correlation and/or a coincidence analysis of the detector signals from the detection devices is carried out. The invention also relates to a measuring device for carrying out the above-mentioned method.

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IPC 8 full level

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G01N 2021/6441 (2013.01 - EP US); **Y10T 436/13** (2015.01 - EP US)

Citation (search report)

See references of WO 0208732A1

Citation (examination)

- DE 19533092 A1 19970313 - BASF AG [DE]
- BERLAND K.M.; SO P.T.C.: "Dual-Color Fluorescence Correlation Spectroscopy Using Two-Photon Excitation", BIOPHYSICAL JOURNAL, vol. 78, no. 1, 12 February 2002 (2002-02-12), pages 441, XP001027202

Cited by

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