

Title (en)

PLASTIC SCINTILLATORS ALLOWING INTRINSIC EMISSION AMPLIFIED BY PURCELL EFFECT

Title (de)

KUNSTSTOFFSZINTILLATOREN MIT DURCH PURCELL-EFFEKT VERSTÄRKTER INTRINSISCHER EMISSION

Title (fr)

SCINTILLATEURS PLASTIQUES PERMETTANT UNE EMISSION INTRINSEQUE AMPLIFIEE PAR EFFET PURCELL

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Application

EP 21839525 A 20211217

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Abstract (en)

[origin: WO2022136145A1] The invention relates to a plastic scintillator characterised in that it comprises a polymer, one or more fluorophore(s), and in that the plastic scintillator is either in the form of a nano-structured layer or comprises one or more metal nano-objects. It also relates to an ionising radiation detector comprising a plastic scintillator according to the invention and a photodetector. The invention also relates to the use of a plastic scintillator according to the invention, in nuclear instrumentation for measuring the intensity of gamma, electron or neutron radiation, in nuclear medicine, in radiation protection for protecting people in their workplaces or in the environment, for inspecting goods, and for monitoring and control of cosmic radiation.

IPC 8 full level

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