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A calculation software for β (LSC)-γ coincidence counting

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Liquid scintillation counting(LSC) is widely used in the absolute radioactivity measurement for its advantages in no-self-absorption, simple sample preparation and relatively easy application to many radionuclides, for example, to 60Co and 134Cs. Base on the existing liquid scintillation testing platform and self-developed acquisition system, we could obtain the energy spectrum and time information of nuclides early in 2018. In this paper, a methods for β (LSC)-γ digital coincidence counting is developed and implemented in the form of software.Different from the pervious method, we applied the living time method in the process of counting rate correction to take place of the formula correction,which makes the coincidence counting method can applied to more general cases. The experiments on 60Co and 134Cs indicates that this software can work out absolute radioactivity with tolerable error and has wonderfully potential application in nuclear measurement filed.

Minioral

Yes

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Yes

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