

Using Pulse Voltage Driving LED Irradiate PMT to Produce Different Number Photoelectron

Proposed the principle and method of using pulse voltage driving LED(Light Emitting Diode, LED) irradiate PMT(Photo Multiplier Tube, PMT) to produce different number photoelectron, analyzed the relation between photoelectron collecting probability, relative yield of single photoelectron, average photoelectron number and LED driving pulse voltage. The single photoelectron and multi photoelectron spectrum produced by pulse voltage driving LED irradiate PMT could be well resolved. The photoelectron collecting probability, relative yield of single photoelectron, average photoelectron number obviously changed with different LED driving voltage characters, can meet the basic parameters testing requirements of PMT.

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Track Classification: 核电子学与探测技术