

## The Calculation of the Log(ft) Values for Isospin Forbidden $0^+ \rightarrow 0^+$ Transitions in Some Nuclei by Pyatov Method\*

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In this study, the log(ft) values for the isospin forbidden  $0^+ \rightarrow 0^+$  transitions in some nuclei have been calculated by Pyatov .method[1]. The effective interaction constant used in the calculations has been obtained from the condition that the nuclear Hamiltonian is the isotopic invariant. The calculated and experimental log(ft) values for some nuclei have been presented in the following table. Calculations show that our calculated log(ft) values for the isospin forbidden  $0^+ \rightarrow 0^+$  transitions are generally in good agreement with the corresponding experimental results.

Transition	Pyatov Method[1]	Experimental[2]
$^{54}\text{Fe} \rightarrow ^{54}\text{Co}$	7.28	7.40
$^{60}\text{Fe} \rightarrow ^{60}\text{Mn}$	6.88	6.70
$^{64}\text{Zn} \rightarrow ^{64}\text{Ga}$	6.64	6.57
$^{66}\text{Zn} \rightarrow ^{66}\text{Ga}$	7.85	7.89
$^{70}\text{Se} \rightarrow ^{70}\text{As}$	7.76	6.4

**Table :** The comparison between calculated and experimental log(ft) values for the isospin forbidden  $0^+ \rightarrow 0^+$  transitions in some nuclei.

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[1] N.I.Pyatov and D.I.Salamov, Nucleonica, **22**, 127 (1977)

[2] B. Singh et al., Nucl .Data Sheets **84**, 487 (1998)