
U(p,X) 2015Ba49

<u>Type</u>	<u>Author</u>	<u>History</u>	<u>Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Wang Jimin and Huang Xiaolong		NDS 144, 1 (2017)	1-Mar-2016

2015Ba49: ^{51}Mn beam produced in U(p,X) reaction at $E(p)=1.4$ GeV at CERN-ISOLDE facility using a RILIS source. Measured hyperfine structure using collinear laser spectroscopy (COLLAPS) technique. Deduced hyperfine constants for $^6\text{P}_{3/2}$ excited state, spin and magnetic dipole moment of ground state of ^{51}Mn . The magnetic dipole moment of ^{55}Mn , $\mu=+3.46871790$ μ_N was used as a standard reference for other Mn isotopes. Comparison with shell-model calculations using GXPFI1A interaction.

 ^{51}Mn Levels

<u>E(level)</u>	<u>J^π[†]</u>	<u>Comments</u>
0	$5/2^-$	$\mu=+3.577$ μ_N (COLLAPS, ^{55}Mn standard, 2015Ba49).

[†] Spin from analysis of hyperfine structure spectrum in the present work. Parity from Adopted Levels.