

BETA-DELAYED PROTON DECAY AS A SPECTROSCOPIC TOOL IN A=30-70 MASS REGION

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We have recently performed various experiments in proton-rich side of a nuclide chart by taking advantage of the sensitivity of the beta-delayed proton emission. High production rates of Al and Ti isotopes at JYFL [1,2], ^{57}Zn [3] at GSI, Ar and Kr isotopes [4,5,6,7,8] at ISOLDE and ^{35}Ca [9] at GANIL have resulted in new information, which will be reviewed. I will present some examples where beta-delayed proton emission has provided spectroscopic information, which otherwise would have been difficult to obtain. The physical motivation of these experiments covers various subjects, like beta decay strength far from the stability, isospin mixing, mirror beta decay and nuclear astrophysics. In some cases results will be compared to theoretical calculations and previous experiments, if they exist.

References

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