THE FISSION CROSS SECTIONS OF SOME THORIUM, URA N IUM, NEPTUNIUM AND PLUTONIUM ISOTOPES RELATIVE TO \textsuperscript{235}U

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ABSTRACT

Earlier results from the measurements, at this Laboratory, of the fission cross sections of \textsuperscript{230}Th, \textsuperscript{232}Th, \textsuperscript{233}U, \textsuperscript{234}U, \textsuperscript{236}U, \textsuperscript{238}U, \textsuperscript{237}Np, \textsuperscript{239}Pu, \textsuperscript{240}Pu, and \textsuperscript{242}Pu relative to \textsuperscript{235}U are reviewed with revisions to include changes in data processing procedures, alpha half lives and thermal fission cross sections. Some new data have also been included. The current experimental methods and procedures and the sample assay methods are described in detail and the sources of error are presented in a systematic manner.

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