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Title

ACTINIDES AND THEIR HEAVY ELECTRONS

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Journal

ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, 192

ISSN

0065-7727

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Publication Date

1986-09-07

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Peer reviewed

71. ACTINIDES AND THEIR HEAVY ELECTRONS. J. L. Smith, Z. Fisk, J. D. Thompson, and J. O. Willis, Los Alamos National Laboratory, Los Alamos, NM 87545.

It appears that some progress has been made on the question of localized vs. itinerant f-electrons in metallic actinide compounds. This can be derived from the properties of the so-called heavy fermion materials, where the electrons have effective masses hundreds of times larger than free electrons. Their properties will be reviewed. Their importance and implications for understanding actinides will be discussed.