

Abstract Submitted  
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**Electric dipole  $f$  values for Fe II  $J = 9/2 \rightarrow 11/2^o$  transitions<sup>1</sup>**

DONALD R. BECK, Physics Department, Michigan Technological University — Relativistic configuration-interaction  $f$  values have been obtained for all transitions between the lowest 17  $J = 9/2$  and the lowest 27  $J = 11/2^o$  levels. The 35  $f$  values  $>0.01$  have an average gauge agreement of 3.6% and generally agree well with the semi-empirical results of Raassen <sup>2</sup>. The near degeneracy of many of the odd levels requires the introduction of small semi-empirical energy shifts <sup>3</sup>. A systematic way of estimating radial convergence is discussed.

<sup>1</sup>D. R. Beck, J. Phys. B **40**, ? (2007). Work supported by the Division of Chemical Sciences, U.S. Department of Energy.

<sup>2</sup>A. J. J. Raassen, <ftp://ftp.wins.uva.nl/pub/orth/iron/Fell.E1> (1999).

<sup>3</sup>D. R. Beck, Phys. Scr. **71**, 447 (2005).

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