

ADAS Subroutine oured

FUNCTION OURED(KTYPE, EIJ , EJ , OMUP , C)

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C
C ***** FORTRAN 77 FUNCTION: OURED *****
C
C PURPOSE: TO CALCULATE THE REDUCED COLLISION STRENGTH AS A FUNCTION
C OF E_j/E_{ij} FOR FOUR TYPES OF TRANSITION
C
C CALLING PROGRAM: VARIOUS ADAS101 ROUTINES
C
C FUNCTION:
C
C INPUT: (R*8) EIJ = TRANSITION ENERGY (E_{ij})
C (R*8) EJ = COLLIDING ELECTRON ENERGY AFTER
C EXCITATION (E_j)
C (R*8) C = ADJUSTABLE SCALING PARAMETER
C (R*8) ETR = E_j/E_{ij}
C (R*8) OMUP = COLLISION STRENGTH AS A FUNCTION
C OF ETR
C (I) KTYPE = TRANSITION TYPE
C 1 ELECTRIC DIPOLE
C 2 NON ELECTRIC DIPOLE
C 3 SPIN CHANGE
C 4 OTHER
C
C OUTPUT: (R*8) OURED = REDUCED COLLISION STRENGTH
C
C ROUTINES: NONE
C
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INTEGER KTYPE
REAL*8 C, EIJ, EJ, OMUP