Function to be plotted:

$$E = A_{-} \left[-2\sqrt{rt(2I - r)(2S - t)} + \frac{I - 1}{2S}t + \frac{S - 1}{2I}r + \frac{rt}{4IS} \right].$$
 (1)

Variables: r and t

angular momenta: I and S

what do we need:

The minima points (r,t) of the function E/A_{-} for several pairs (I,S):

$$(I,S) = (I,1)$$
 with $I=1,2,3,...,10$

$$(I,S) = (1,S)$$
 with $S=1,2,3,...,10$

Contour plots of E/A_{-} for 4 pairs (I,S): (1,1), (1,10), (10,1), (8,8)

Good luck!