

## El-Sayed rules

The rate of intersystem crossing is relatively large if the radiationless transition involves a change of orbital type.

Note:

A typical case is the transition from the lowest *singlet state* to the *triplet manifold*, e.g.,  $^1\pi, \pi^* \rightarrow ^3n, \pi^*$  is faster than  $^1\pi, \pi^* \rightarrow ^3\pi, \pi^*$  and  $^1n, \pi^* \rightarrow ^3\pi, \pi^*$  is faster than  $^1n, \pi^* \rightarrow ^3n, \pi^*$ .

**Source:**

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 331