

## List of Published Research - M. A. El-Sayed

### Publications from LDL (Georgia Tech) Research starts with # 333.

1. M.A.El-Sayed and R. K. Sheline, "The Infrared Spectrum and Structure of Hexacyanodinicke(I) Ion,  $[\text{Ni}_2(\text{CN})_6]^{4-}$ ," *J. Amer. Chem. Soc.*, **78** (1956).
2. M.A.El-Sayed and R. Wolfgang, "Chemical Reaction of Recoil Tritium with Gaseous Alkanes," *J. Amer. Chem. Soc.* **79**, 3286 (1957).
3. M.A.El-Sayed, Peter Estrup, and R. Wolfgang, "Mechanism of the Reaction of Recoil Hydrogen in the Gaseous Phase," *J. Phys. Chem.*, **62**, 1356 (1958).
4. M.A.El-Sayed, "A Nuclear Method for Determining Very Low Vapor Pressures," *Nucl. Instru.*, **3**, 359 (1958).
5. M.A.El-Sayed and R. K. Sheline, "The Infrared Spectrum and Structure of the  $[\text{Ni}(\text{CN})_4]^{4-}$  Ion," *J. Amer. Chem. Soc.*, **80**, 2047 (1958).
6. M.A.El-Sayed and R.K. Sheline, "The Position of the CN Stretching Frequency in Organic and Inorganic Molecules," *J. Inorg. Nucl. Chem.*, **6**, 187 (1958).
7. M.A.El-Sayed, "The Relation Between the CN Stretching Frequency and Hammett's  $\rho$ ," *J. Inorg. Nucl. Chem.*, **10**, 168 (1959).
8. M.A.El-Sayed and M. Kasha, "Orbital Type Interchange by Solvation and Effects on the Emission Properties of Naphthalene N-heterocyclics," *Spectrochimica Acta*, **15**, 758 (1960).
9. M.A.El-Sayed, M. Kasha, and Y. Tanaka, "Ionization Potentials of Benzene, Hexadeutero-benzene, and Pyridine from their Observed Rydberg Series in the 600-2000 Å," *J. Chem. Phys.*, **34**, 334 (1961).
10. M.A.El-Sayed and G. W. Robinson, "Excitation Transfer Splitting in the  $n, \pi^*$  Transitions of the Diazines," *J. Chem. Phys.*, **34**, 1840 (1961).
11. M.A.El-Sayed and G. W. Robinson, "Comments on a Communication by El-Sayed and Robinson," *J. Chem. Phys.*, **35**, 1896 (1961).
12. M.A.El-Sayed and G. W. Robinson, "Intramolecular Excitation Transfer. The Lowest  $n \rightarrow \pi^*$  Transitions in Pyrazine," *Mol. Phys.*, **4**, 273 (1961).
13. M.A.El-Sayed, "The Effect of Reducing the Symmetry on the Spectra of Benzene in the 1500-2000 Å Region: Spectra of Pyridine, Pyrimidine, and Pyrazine," *J. Chem. Phys.*, **36**, 552 (1962).
14. M.A.El-Sayed, "The Radiationless Processes Involving Change of Multiplicity in the Diazines," *J. Chem. Phys.*, **36**, 573 (1962).
15. M.A.El-Sayed, "Perturbational Enhancement of the Coupling Between the Lowest Two Electronic  $p, p^*$  States in Naphthalene," *J. Chem. Phys.*, **36**, 1943 (1962).

16. M.A.El-Sayed and H. D. Kaesz, "Assignment of the CO Stretching Absorptions in C<sub>4v</sub> Metal Pentacarbonyl Derivatives," *J. Mol. Spect.*, **9**, 310 (1962).
17. M.A.El-Sayed, M. T. Wauk, and G. W. Robinson, "Retardation of Singlet and Triplet Excitation Migration in Organic Crystals by Isotopic Dilution," *Mol. Phys.*, **5**, 205 (1962).
18. W.Rhodes and M. A. El-Sayed, "Observed Electronic Transitions in Hexahelicene," *J. Mol. Spect.*, **9**, 42 (1962).
19. M.A.El-Sayed, "Intramolecular Resonance Interaction Between Fundamental Vibrations of Polyatomic Molecules," *J. Chem. Phys.*, **37**, 680 (1962).
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21. M.A.El-Sayed, "The Method of Oscillating Interacting Dipoles and the Vibrational Spectra of Some Organic and Metal Poly-Carbonyl Derivatives," *Spectrochimica Acta*, **18**, 1387 (1962).
22. M.A.El-Sayed, "S-T Radiationless Process and the Emission Properties of Nitrogen Heterocyclics," *Bull. Amer. Phys. Soc.*, **7**, 499 (1962).
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