

Supplementary Materials

| n | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| S_{0-0}^{tol} | 2.439 | 2.037 | 1.800 | 1.660 | 1.575 | 1.521 | 1.498 | 1.475 | 1.466 |
| S_{0-1}^{tol} | 2.856 | 2.420 | 2.146 | 1.996 | 1.904 | 1.836 | 1.793 | 1.762 | 1.739 |
| S_{0-0}^{vac} | 2.673 | 2.239 | 1.985 | 1.825 | 1.720 | 1.649 | 1.602 | 1.569 | 1.547 |
| S_{0-1}^{vac} | 2.989 | 2.541 | 2.267 | 2.101 | 1.991 | 1.911 | 1.859 | 1.821 | 1.792 |

Table S1: Excitation energies as a function of the conjugation length n obtained from quantum-chemical calculations. S_{0-0} and S_{0-1} denote vibrationally relaxed and vertical excitation energies, respectively. Results in toluene and in vacuum are shown. All energies are given in eV.

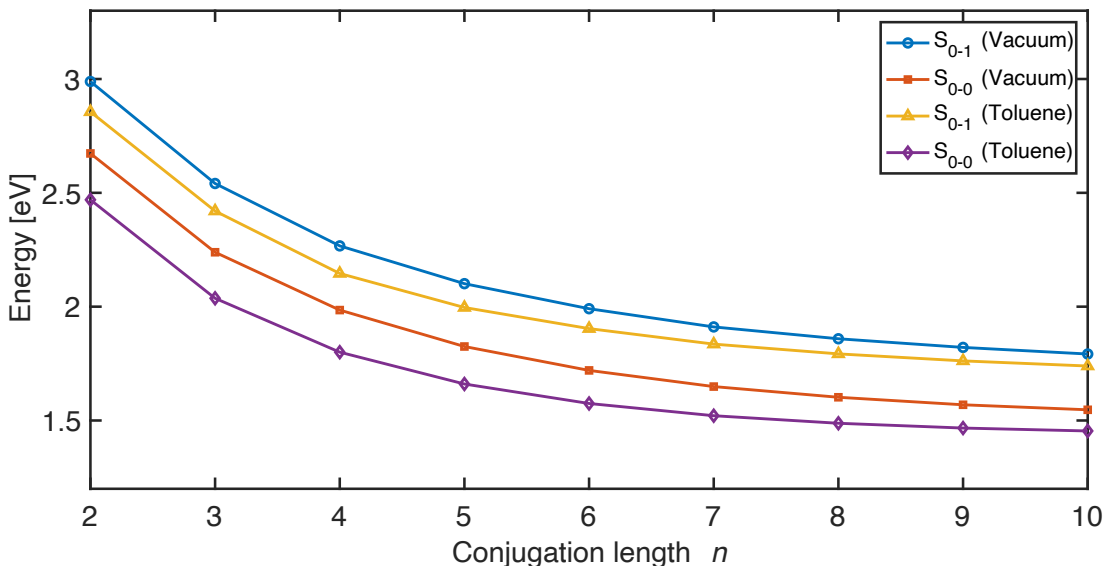


Figure S1: Conjugation-length dependence of the electronic excitation energies for MEH-PPV chromophores. The data points are taken from Table S1 and show both vertical (S_{0-1}) and vibrationally relaxed (S_{0-0}) excitation energies as functions of the conjugation length n . Results obtained in vacuum and in toluene are shown for comparison, illustrating the systematic stabilization of excitation energies with increasing conjugation length and the solvent-induced energy shifts.