Systematic Molecular Design of *p*-phenylene Lasing Properties

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Supporting Information

Table S1: The following is a list of the compounds which were used for the Hammett valuecalculations. Compounds from the literature are numbered with the initial of the first author and thenumber assigned in the original journal article.

| Compound number | Chemical Structure |
|--------------------|---|
| Se4 ¹ | |
| | |
| Se5 | |
| | |
| Se6 | |
| | |
| Se7 | $\langle \rangle$ $\langle \rangle$ $\langle \rangle$ |
| | |
| Sc1 ⁴ | |
| Sc3 | |
| Sc4 | |
| Sc6 | |
| Sc7 | |
| Sc8 | |
| Sc11 | |

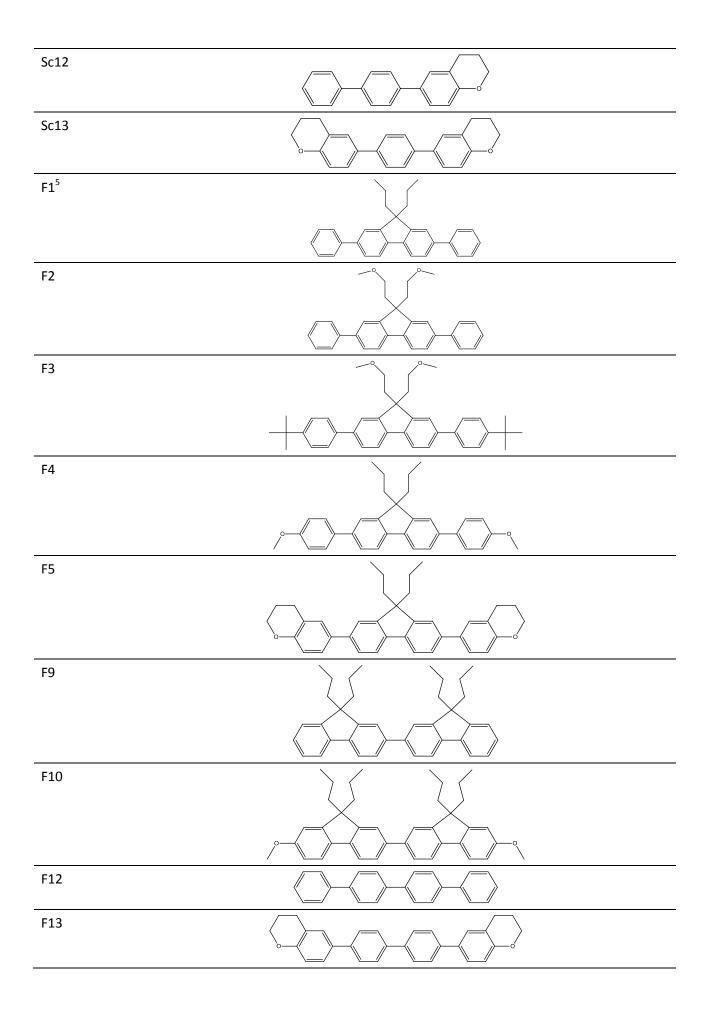
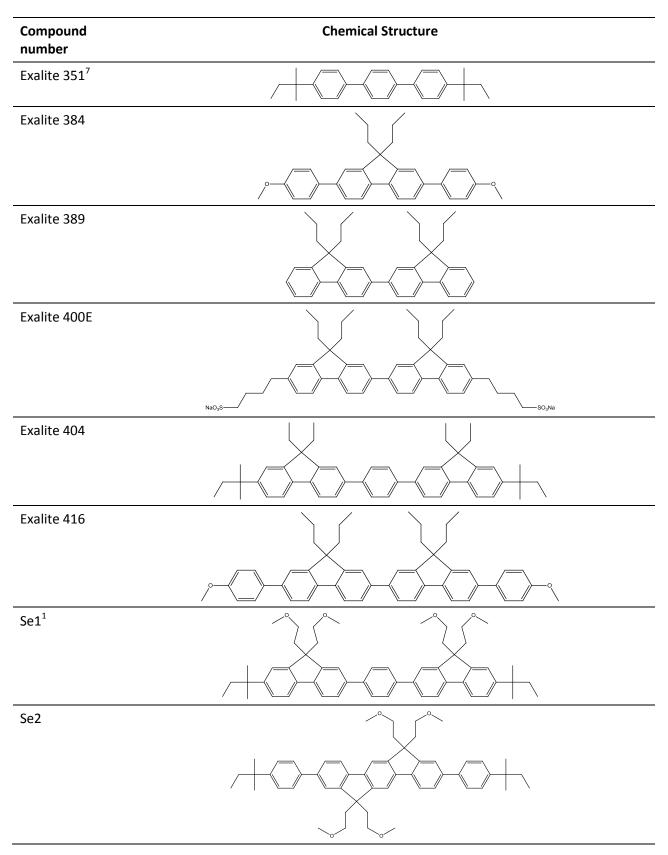
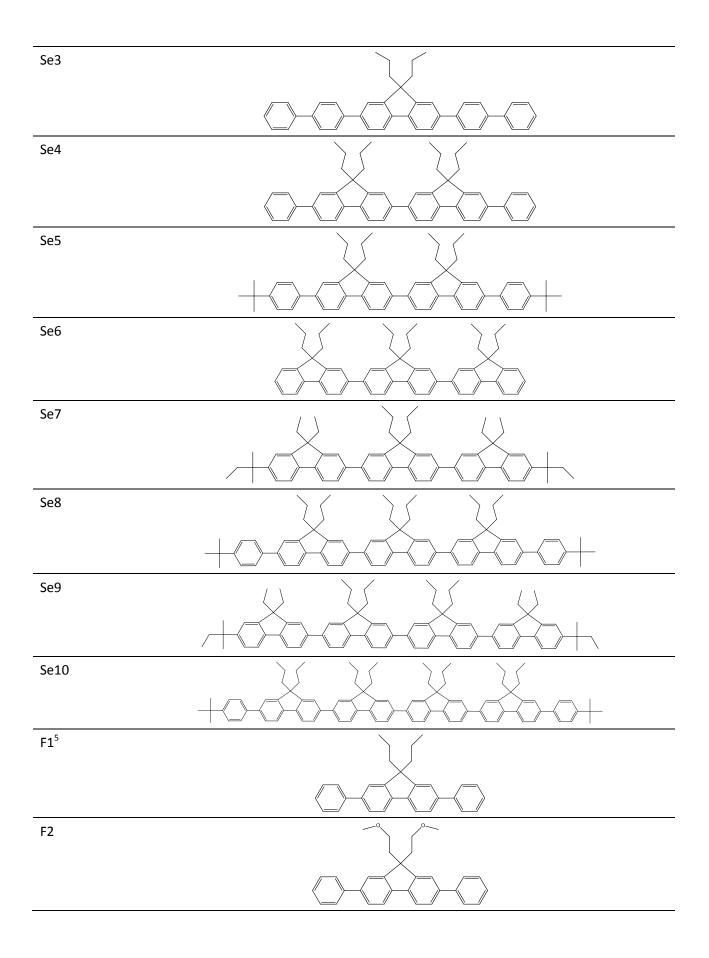
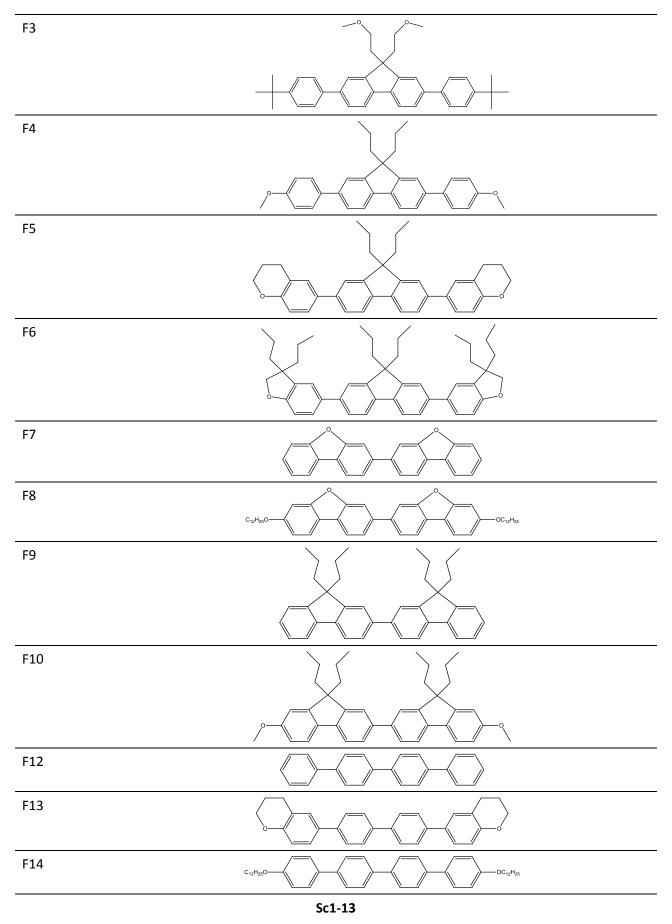


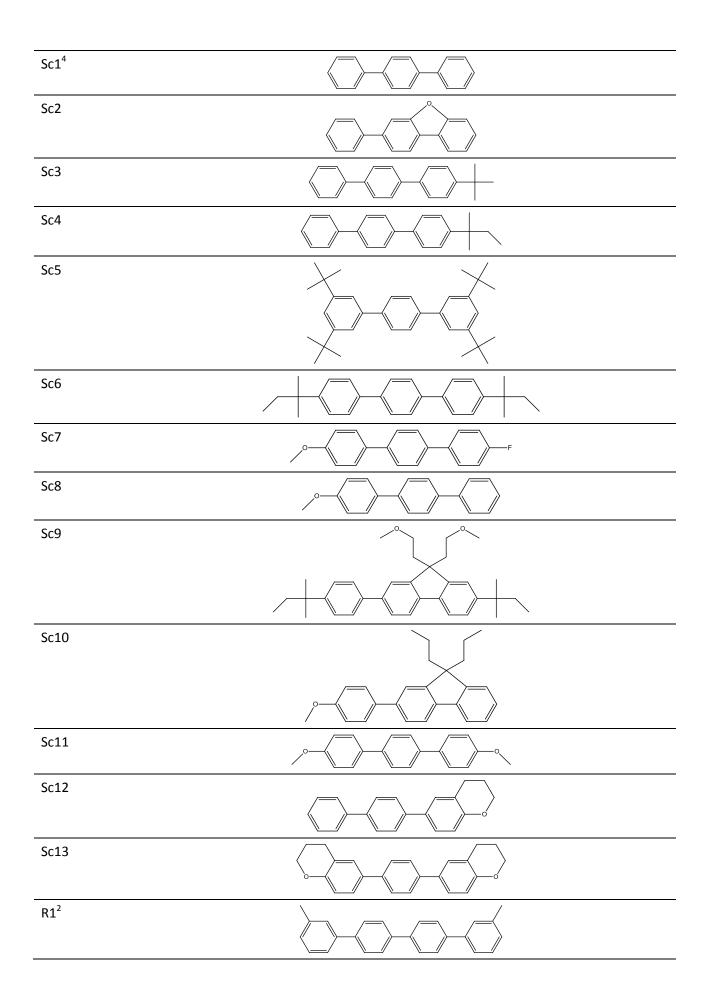
Table S2: The following is a list of the compounds which were used for comparison of maximal lasing values. Compounds from the literature are numbered with the initial of the first author and the number assigned in the original journal article.







Schneider, D. J.; Landis, D. A.; Fleitz, P. A.; Seliskar, C. J.; Kauffman, J. M.; Steppel, R. N. Laser Chem. 1991, 11, 49–62.



| R2 | \times \times |
|------------------|--|
| | |
| R3 | |
| R10 ³ | |
| R11 | |
| R12 | |
| R14 | |
| R16 | |
| R17 | |
| B2 ⁶ | C _g H ₁₁ C _g H ₁₇ |
| B3 | CgH ₁₁ CgH ₁₇ |
| B4 | C ₉ H ₁₁ C ₉ H ₁₇ |
| B5 | |
| B6 | $\overset{C_{0}H_{11}}{\longrightarrow} \overset{C_{0}H_{17}}{\longrightarrow} \overset{C_{0}H_{$ |
| B7 | |