Supplemental Information

For

Increased binding of thiophene-based ligands to mercury(II) with water solubilizing functional groups

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<table>
<thead>
<tr>
<th></th>
<th>$K_{11}$ (M$^{-1}$)</th>
<th>$K_{21}$ (M$^{-1}$)</th>
<th>$K_a$ (M$^{-2}$)</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>$6.93 \times 10^1$ (± 4 %)</td>
<td>$7.70 \times 10^7$ (± 9 %)</td>
<td>$5.37 \times 10^9$ (± 4 %)</td>
</tr>
<tr>
<td>2</td>
<td>$1.15 \times 10^2$ (± 7 %)</td>
<td>$3.93 \times 10^8$ (± 17 %)</td>
<td>$4.52 \times 10^{10}$ (± 18 %)</td>
</tr>
<tr>
<td>3</td>
<td>$1.89 \times 10^5$ (± 8 %)</td>
<td>$7.57 \times 10^5$ (± 8 %)</td>
<td>$1.43 \times 10^{11}$ (± 12 %)</td>
</tr>
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