Supplementary file S2
The colour-coded interaction mappings within a radius of 6 Å of a central reference molecule for compounds (a) I, (b) II and (c) III, are given below.

Full details of the various contributions to the total energy ( $\mathrm{E}_{\mathrm{tot}}$ ) are also given.
(a) 1


| N | Symop | R | Electron Density | E_ele | E_pol | E_dis | E_rep | E_tot |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $-x_{1}-y_{1},-z$ | 11.24 | HF/3-21G | -1.1 | -0.2 | -4.2 | 0.5 | -4.6 |
| 2 | $x, y, z$ | 7.71 | HF/3-21G | -3.2 | -0.7 | -30.6 | 12.9 | -20.8 |
| 1 | $-x_{1},-y,-z$ | 15.76 | HF/3-21G | -6.6 | -1.2 | -16.3 | 7.4 | -16.2 |
| 1 | $-x_{1}-y_{1},-z$ | 7.74 | HF/3-21G | -2.7 | -3.1 | -53.2 | 20.4 | -36.1 |
| 1 | $-x_{1},-y,-z$ | 19.71 | HF/3-21G | 0.6 | -0.0 | -0.5 | 0.0 | 0.1 |
| 2 | $x, y, z$ | 14.50 | HF/3-21G | -7.4 | -2.2 | -19.4 | 9.4 | -18.9 |
| 1 | $-x_{1}-y_{1},-z$ | 6.88 | HF/3-21G | -5.4 | -1.8 | -45.5 | 18.6 | -32.7 |
| 1 | $-x_{1}-y_{r},-z$ | 11.23 | HF/3-21G | -0.2 | -0.0 | -1.5 | 0.0 | -1.6 |
| 1 | $-x_{1},-y,-z$ | 10.79 | HF/3-21G | -8.3 | -2.7 | -56.5 | 22.0 | -43.3 |
| 2 | $x, y, z$ | 11.28 | HF/3-21G | -4.9 | -1.8 | -38.1 | 15.5 | -27.9 |
| 2 | $x, y, z$ | 17.27 | HF/3-21G | 0.0 | -0.2 | -5.6 | 2.7 | -2.9 |
| 1 | $-x_{1},-y,-z$ | 20.98 | HF/3-21G | 0.1 | -0.0 | -0.6 | 0.0 | -0.5 |
| 2 | $x, y, z$ | 12.78 | HF/3-21G | 0.1 | -0.0 | -0.9 | 0.0 | -0.7 |
| 1 | $-x_{1}-y_{r},-z$ | 7.87 | HF/3-21G | -17.1 | -4.1 | -64.7 | 34.9 | -50.1 |
| 1 | $-x_{1}-y_{r},-z$ | 15.07 | HF/3-21G | 0.1 | -0.0 | -1.3 | 0.0 | -1.1 |
| 1 | $-x_{1}-y_{r},-z$ | 9.33 | HF/3-21G | 0.3 | -0.0 | -2.9 | 0.0 | -2.3 |
| 1 | $-x_{1}-y_{r},-z$ | 12.31 | HF/3-21G | -0.8 | -0.1 | -5.3 | 0.3 | -5.3 |
| 1 | $-x_{1}-y_{r},-z$ | 13.41 | HF/3-21G | -5.9 | -1.9 | -39.4 | 12.1 | -32.9 |
| 2 | $x, y, z$ | 12.95 | HF/3-21G | -0.2 | -0.0 | -0.8 | 0.0 | -0.9 |

(b) II


## (c) III



| N | Symop | R | Electron Density | E_ele | E_pol | E_dis | E_rep | E_tot |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $x, y, z$ | 5.69 | HF/3-21G | -8.0 | -4.0 | -68.9 | 26.3 | -51.5 |
| 2 | $x, y, z$ | 19.84 | HF/3-21G | 0.7 | -0.5 | -8.2 | 3.2 | -4.4 |
| 2 | $x, y, z$ | 22.16 | HF/3-21G | 0.2 | $-0.0$ | -0.3 | 0.0 | -0.0 |
| 2 | $-x+1 / 2, y+1 / 2,-z+1 / 2$ | 11.54 | HF/3-21G | -0.6 | -0.0 | -1.7 | 0.0 | -2.2 |
| 1 | $-x_{1}-y_{,}-z$ | 6.19 | HF/3-21G | -16.0 | -5.6 | -72.4 | 36.8 | -55.3 |
| 1 | $-x_{1}-y_{0},-z$ | 21.36 | HF/3-21G | 0.5 | -0.0 | -0.4 | 0.0 | 0.2 |
| 2 | $x+1 / 2,-y+1 / 2, z+1 / 2$ | 17.54 | HF/3-21G | -0.0 | -0.0 | -0.6 | 0.0 | -0.5 |
| 2 | $-x+1 / 2, y+1 / 2,-z+1 / 2$ | 8.27 | HF/3-21G | -4.6 | -2.1 | -44.4 | 20.4 | -29.5 |
| 1 | - $x_{1}-y_{1},-z$ | 19.49 | HF/3-21G | -0.3 | -0.1 | -1.8 | 0.0 | -1.9 |
| 2 | $x, y, z$ | 19.01 | HF/3-21G | -7.2 | -1.8 | -9.8 | 6.1 | -12.4 |
| 1 | $-x_{1}-y_{,}-z$ | 5.16 | HF/3-21G | -3.9 | -4.5 | -69.9 | 29.9 | -45.7 |
| 2 | $x, y, z$ | 19.84 | HF/3-21G | 0.1 | -0.0 | -0.4 | 0.0 | -0.3 |
| 2 | $x+1 / 2,-y+1 / 2, z+1 / 2$ | 11.87 | HF/3-21G | 0.2 | $-0.0$ | -1.0 | 0.0 | -0.7 |
| 1 | $-x_{1}-y_{\text {, }},-z$ | 8.93 | HF/3-21G | -1.5 | -0.1 | -3.1 | 0.0 | -4.3 |
| 1 | $-x_{1}-y_{\text {, }},-z$ | 10.71 | HF/3-21G | -0.5 | -0.0 | -2.0 | 0.0 | -2.4 |
| 2 | $-x+1 / 2, y+1 / 2,-z+1 / 2$ | 14.53 | HF/3-21G | -6.1 | -2.5 | -31.3 | 12.3 | -26.1 |
| 1 | $-x_{1}-y_{0},-z$ | 20.20 | HF/3-21G | -0.7 | -0.1 | -1.4 | 0.0 | -2.0 |
| 1 | $-x_{1}-y_{0},-z$ | 21.47 | HF/3-21G | 0.3 | -0.0 | -0.9 | 0.0 | -0.6 |

