

**Table S1.** Exponents  $\zeta_i$  and valence shell ionization potentials  $H_{ii}$  of Slater-type orbitals  $\chi_i$  used for extended Hückel tight-binding calculation <sup>a</sup>

atom	$\chi_i$	$H_{ii}$ (eV)	$\zeta_i$	$C_i$ <sup>b</sup>	$\zeta'_i$	$C'_i$ <sup>b</sup>
Cu	4s	-11.4	2.151	1.0		
Cu	4p	-6.06	1.370	1.0		
Cu	3d	-14.0	7.025	0.4473	3.004	0.6978
O	2s	-32.3	2.688	0.7076	1.675	0.3745
O	2p	-14.8	3.694	0.3322	1.659	0.7448
N	2s	-26.0	2.261	0.7297	1.425	0.3455
N	2p	-13.4	3.249	0.2881	1.499	0.7783
C	2s	-21.4	1.831	0.7931	1.153	0.2739
C	2p	-11.4	2.730	0.2595	1.257	0.8026
H	1s	-13.6	1.300	1.0		

<sup>a</sup>  $H_{ii}$ 's are the diagonal matrix elements  $\langle \chi_i | H^{\text{eff}} | \chi_i \rangle$ , where  $H^{\text{eff}}$  is the effective Hamiltonian. In our calculations of the off-diagonal matrix elements  $H_{ij} = \langle \chi_i | H^{\text{eff}} | \chi_j \rangle$ , the weighted formula was used. See: Ammeter, J.; Bürgi, H.-B.; Thibeault, J.; Hoffmann, R., *J. Am. Chem. Soc.* **1978**, *100*, 3686.

<sup>b</sup> Coefficients used in the double-zeta Slater-type orbital expansion.