

Table S3 Selected bond lengths and AIM properties at each BCP.

Type 1a	R (Å) ^{a)}	ρ (a.u.) ^{b)}	$\nabla^2 \rho$ (a.u.)	Type 3a	R (Å) ^{a)}	ρ (a.u.) ^{b)}	$\nabla^2 \rho$ (a.u.)
Ag(1)-Ag(2)	2.834	0.0286	0.0995	Ag(1)-Ag(2)	3.297	0.0113	0.0322
Ag(1)-O(1)	2.172	0.0677	0.3619	Ag(1)-O(1)	2.262	0.0566	0.2862
Ag(1)-O(4)	2.173	0.0676	0.3609	Ag(1)-O(4)	2.316	0.0477	0.2404
Ag(2)-O(2)	2.173	0.0676	0.3609	Ag(1)-O(6)	2.641	0.0242	0.1002
Ag(2)-O(5)	2.172	0.0677	0.3619	Ag(2)-O(2)	2.316	0.0477	0.2404
C(1)-C(2)	1.529	0.2509	-0.6030	Ag(2)-O(3)	2.641	0.0242	0.1002
C(3)-C(4)	1.529	0.2509	-0.6030	Ag(2)-O(5)	2.262	0.0566	0.2862
<hr/>				C(1)-C(2)	1.528	0.2532	-0.6144
<hr/>				C(3)-C(4)	1.528	0.2532	-0.6144
Type 1b	R (Å) ^{a)}	ρ (a.u.) ^{b)}	$\nabla^2 \rho$ (a.u.)	Type 3b	R (Å) ^{a)}	ρ (a.u.) ^{b)}	$\nabla^2 \rho$ (a.u.)
Ag(1)-Ag(2)	2.831	0.0287	0.1003	Ag(1)-Ag(2)	3.669	-	-
Ag(1)-O(1)	2.171	0.0679	0.3634	Ag(1)-O(1)	2.285	0.0543	0.2675
Ag(1)-O(4)	2.171	0.0679	0.3634	Ag(1)-O(2)	2.741	0.0217	0.0843
Ag(2)-O(2)	2.171	0.0679	0.3634	Ag(1)-O(4)	2.430	0.0376	0.1786
Ag(2)-O(5)	2.171	0.0679	0.3634	Ag(1)-O(6)	2.410	0.0383	0.1897
C(1)-C(2)	1.525	0.2548	-0.6262	Ag(2)-O(2)	2.430	0.0376	0.1786
C(3)-C(4)	1.525	0.2548	-0.6262	Ag(2)-O(3)	2.410	0.0383	0.1897
<hr/>				Ag(2)-O(4)	2.741	0.0217	0.0843
<hr/>				Ag(2)-O(5)	2.285	0.0543	0.2675
Type 2	R (Å) ^{a)}	ρ (a.u.) ^{b)}	$\nabla^2 \rho$ (a.u.)	C(1)-C(2)	1.532	0.2509	-0.6038
Ag(1)-Ag(2)	2.988	0.0206	0.0669	C(3)-C(4)	1.532	0.2509	-0.6038
Ag(1)-O(1)	2.168	0.068	0.367	<hr/>			
Ag(1)-O(4)	2.204	0.0641	0.3307	<hr/>			
Ag(2)-O(2)	2.215	0.0611	0.3257	<hr/>			
Ag(2)-O(5)	2.33	0.0467	0.2308	<hr/>			
Ag(2)-O(6)	2.603	0.026	0.1103	<hr/>			
C(1)-C(2)	1.532	0.2496	-0.5963	<hr/>			
C(3)-C(4)	1.525	0.2548	-0.6218	<hr/>			

^{a)} Selected bond lengths.

^{b)} AIM electron density values at the BCP.