

Supporting information for manuscript:

XPS study of ruthenium tris-bipyridine electrografted from diazonium salt derivative on microcrystalline boron doped diamond

By Charles Agnès,^{ab} Jean-Charles Arnault,^c Franck Omnès,^a Bruno Jousselme,^b Martial Billon,^b Gérard Bidan^d and Pascal Mailley^b

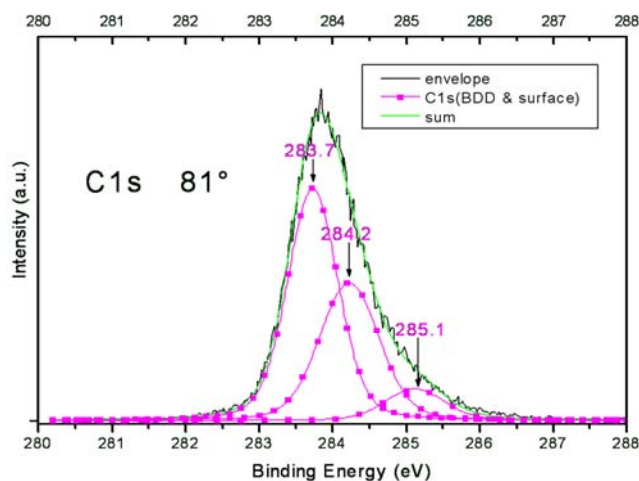


Figure S1: C1s core levels spectrum of as-grown BDD.

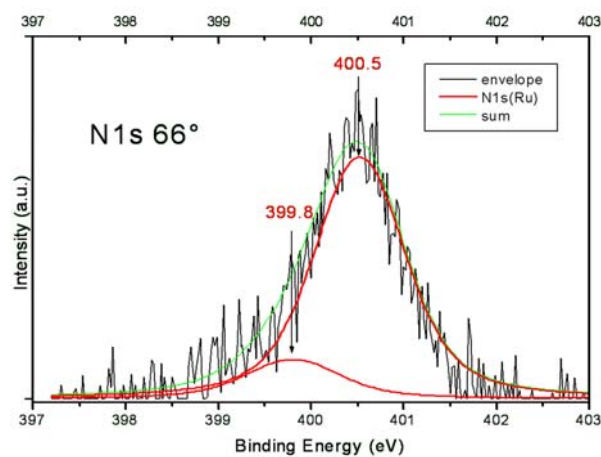


Figure S2: N1s core levels spectrum of Ru complex electrografted on BDD.

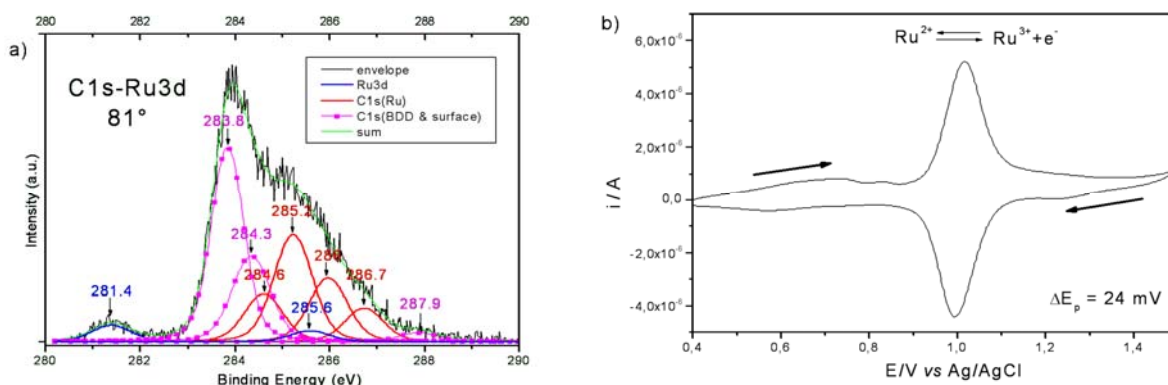


Figure S3: a) XPS C1s-Ru3d core levels spectrum of freshly synthesized Ru complex after electrografting at BDD surface by CV and b) response of the obtained Ru complex film (experimental conditions as in figure 2a)

Table S1: Area ratios of the different carbon types (extracted from figure S3a) for Ru complex film electrografted on BDD obtained from C1s-Ru3d XPS core levels.

C1s	All carbon atoms			Experimental
	E (eV)	Peak area (a.u.)	Area Ratio (%)	C _{Ru} Area Ratio (%)
C-C sp ³ , CH	283.8	239	31	19 42 25 13
CH _x (x=2, 3)	284.3	122	16	
C _a	284.6	68	9	
C _b	285.2	153	20	
C _c	286	91	12	
C _d	286.7	48	6	
C (COOH)	287.9	13	2	
C (CF)	-	-	-	