Table S1. Contributions to the paramagnetic isotropic and the spin-orbit (Fermi contact) isotropic NMR shielding.

Compound	Paramagnetic Isotropic NMR Shielding contribution (ppm)			Fermi contact Isotropic NMR Shielding contribution (ppm)		
	Valence-Virtual	Valence-Valence	total	Valence-Virtual	Valence-Valence	total
$[PtCl_6]^{-2}$	0	0	0	0	0	0
$[PtCl_5Br]^{-2}$	-112.1	-54	-166.7	-76.7	-33.9	-110.7
trans-$[PtCl_4Br_2]^{-2}$	-216.8	-109.8	-326.4	-181.3	-76.8	-258
cis-$[PtCl_4Br_2]^{-2}$	-237.8	-106.5	344	-156.1	-66.7	-222.8
facial $[PtCl_3Br_3]^{-2}$ C_{3V}	-377.1	-154	-531	-263.8	-108.8	-372.6
meridian $[PtCl_3Br_3]^{-2}$	-358	-159.1	-516.7	-236.8	-108.8	-372.6
trans $[PtCl_2Br_4]^{-2}$	-490.4	-209.7	-699.5	-375.9	-150.3	-526.1
cis $[PtCl_2Br_4]^{-2}$	-511.2	-203.6	-714.3	-350.8	-138.5	-489.3
$[PtClBr_5]^{-2}$	-659	-250	-908.3	-467.5	-178.1	-645.6
$[PtBr_6]^{-2}$	-821.5	-292.8	-1113.5	-589.3	-216.1	-915.2