Supporting information.
IR spectra

Table S1. IR-spectra (cm^{-1} in KBr) of starting macrocycles and salts **1** -**3**.

Components	PPN^+	$O=Ti^{IV}PcCl_8$	**1**	$Ti^{IV}Cl_2Nc$	**2**	$O=Ti^{IV}$(AceTPrzPz)	**3**
Macroheterocycle		431w	-	469m	-	449m	442w
		463w	462w	488w	-	464s	-
		659m	656m	514w	-	559w	-
		705m	691s	656w	-	630m	620w
		743m	745m*	690w	692s*	660m	658w
		775m	773w	716m	724s*	675m	-
		829m	799m	733w	-	716m	724s
		890m	878m	752s	-	772s	775m
		946m (Ti=O)	946m	798w	794m	802w	801w
		1017w	(Ti=O)	863m	843m	828m	827m
		1069s	-	886m	-	-	878m
		1188w	1080m	968m	-	927m(Ti=O)	917w(Ti=O)
		1260w	1183w	-	974w (Ti=O)	947m(Ti=O)	927m(Ti=O)
		1289w	1263s*	1077s	1074m	974w(Ti=O)	941w(Ti=O)
		1320m	-	1011m	-	1033s	1048s
		1375m	-	1062s	-	1099m	1088w
		1413s	1383m	1125m	1114s*	1134s	1117m
		1471m	1408m	1153w	1160w	1179m	1177m
		-	1481m*	-	1181m	1229s	1211m
		1603m	1501m	1264m	1267s*	1262m	1266w*
		2922m	1623m	-	1285s	-	1292m
		3087m	-	1318m	-	1333m	-
			-	1338m	-	1369w	1366m
				1358m	-	1431s	1435s*
				1468w	1456m*	1458m	1455w*
				1639m	1630m	1514m	-
				1747w	-	1547w	1553s
						1615s	1608w
						2851m	-
PPN^+						2921m	-
	500s				501s		500m
	531s		503m		534s		534m
	550s		534s		547s		-
	694m		546w		692s*		692s*
	724m		691s		724s*		724s
	746m		726s		748m*		-
	754m		745m*		995m		755m*
	-		773w		1023w*		998m
Solvent	1024w		998m		1267s*		-
	1250s		-		1435s		1266w*
	1439s		1263s*		1480m		1435s*
	1483m		1435s		-		1481w
	1575w		1481m*		1584w		-
	1587m		1563w				-
			1586w				
					$C_6H_4Cl_2$		$C_6H_4Cl_2$
					748m*		658w
			$C_6H_4Cl_2$		1023w*		755m*
			656m		1114s*		1117m
			745m*		1456m		1455w*
			1115s				
			1455m				C_6H_5CN
							692s*
							755m*

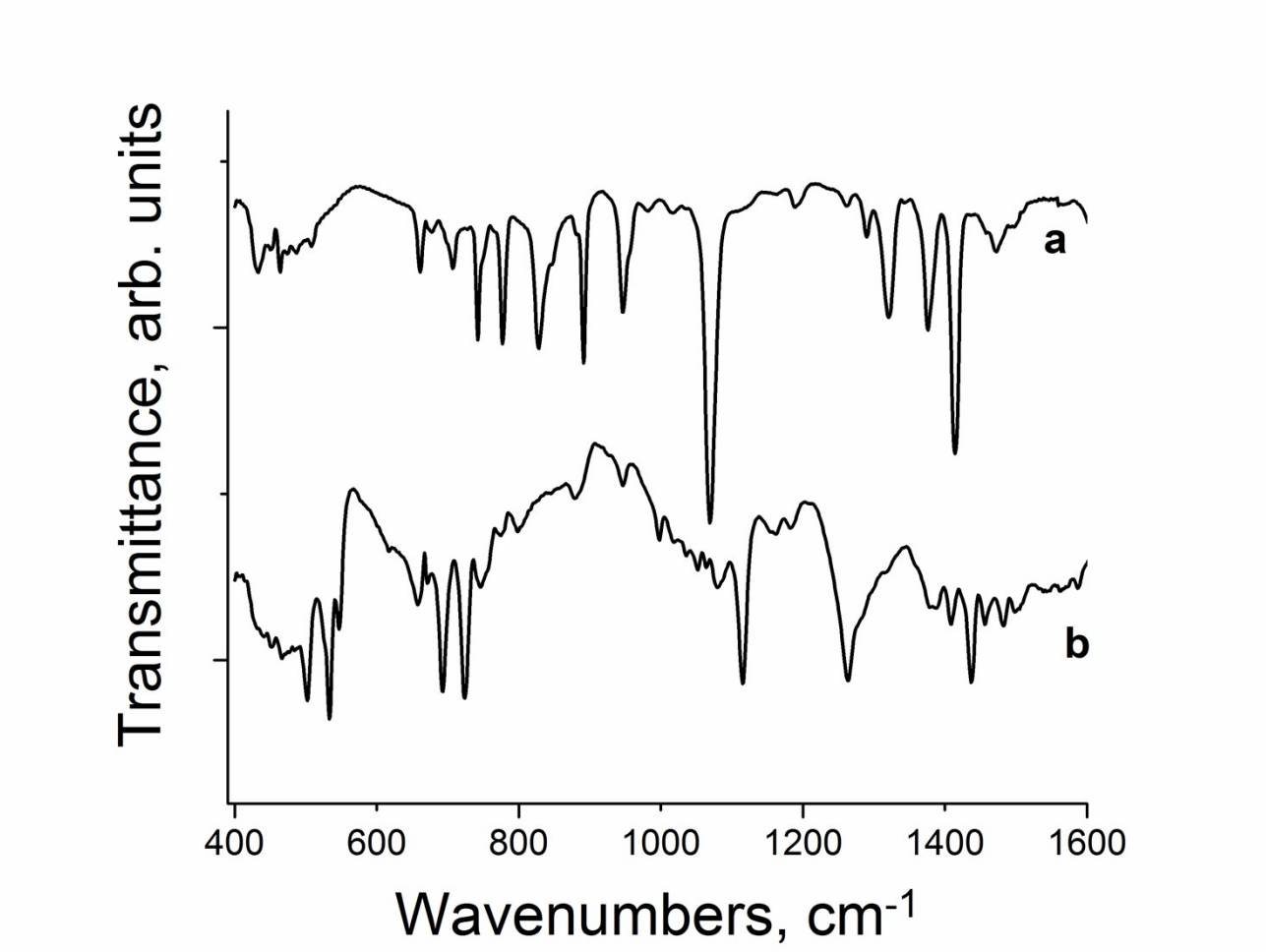

Figure S1. IR spectra of starting neutral $O{=}Ti^{IV}(PcCl_8^{2-})$ (a) and salt $(PPN^+)_2\{O{=}Ti^{IV}(PcCl_8^{4-})\}^{2-}$ (**1**) (b) in KBr pellet prepared in anaerobic condition.

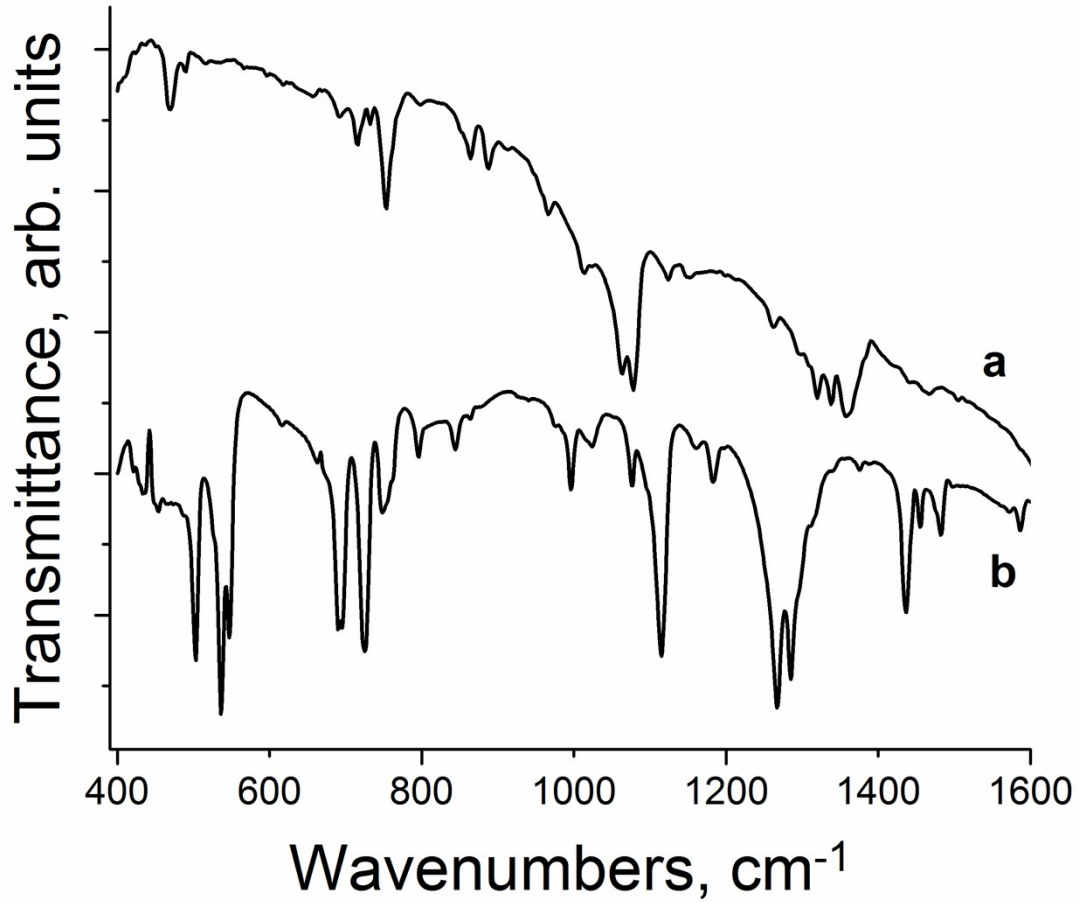

Figure S2. IR spectra of starting neutral $Ti^{IV}Cl_2Nc^{2-}$ (a) and salt $(PPN^+)\{O{=}Ti^{IV}(Nc^{\bullet 3-})\}^{\bullet -}{\cdot}2C_6H_4Cl_2$ (**2**) (b) in KBr pellet prepared in anaerobic condition.

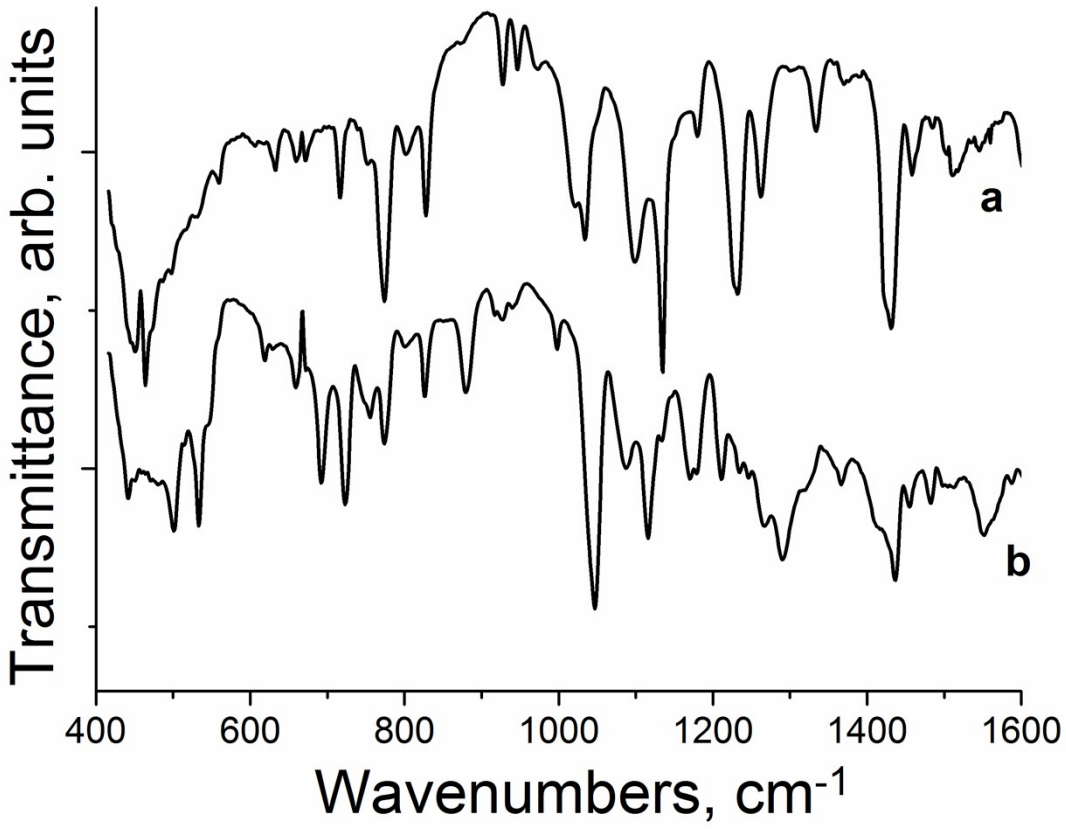

Figure S3. IR spectra of starting neutral $O{=}Ti^{IV}(AceTPrzPz^{2-})$ (a) and salt $(PPN^{+})_2\{O{=}Ti^{IV}(AceTPrzPz^{4-})\}^{2-}\cdot 1.3C_6H_4Cl_2\cdot 0.8C_6H_4Cl_2$ (**3**) (b) in KBr pellet prepared in anaerobic condition.