

## Electronic Supporting Information for

# Sol-gel selection of hybrid G-quadruplex architectures from dynamic supramolecular guanosine libraries

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### BimineSi <sup>1</sup>H RMN MeOD

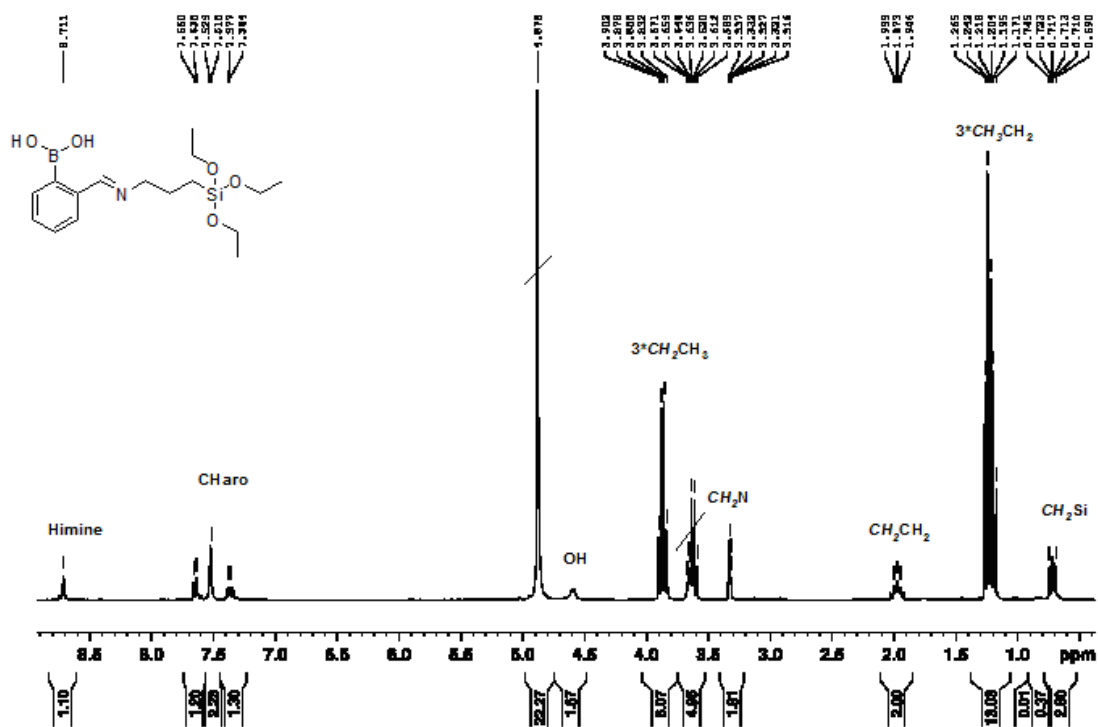


Figure 1S: <sup>1</sup>H NMR spectra of precursor **3** in *d*<sub>4</sub>-MeOD at 25°C

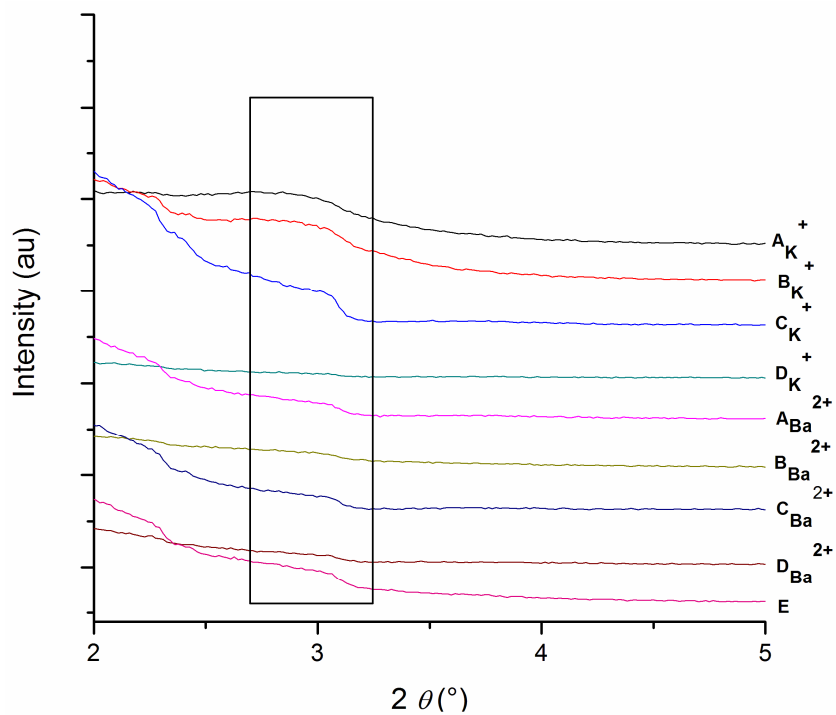
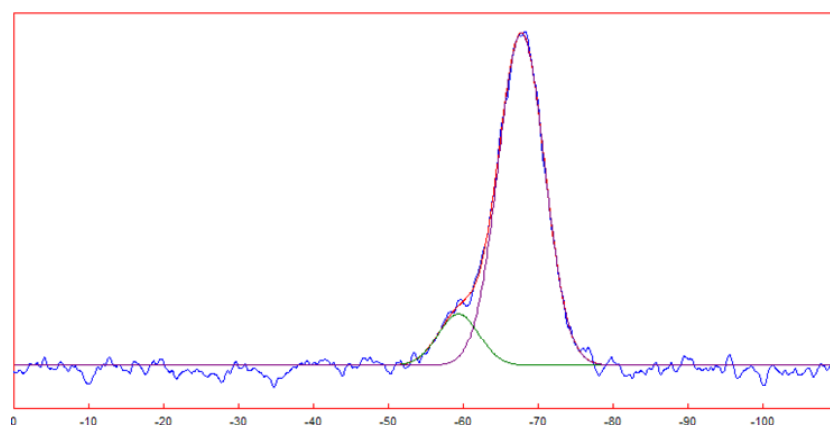


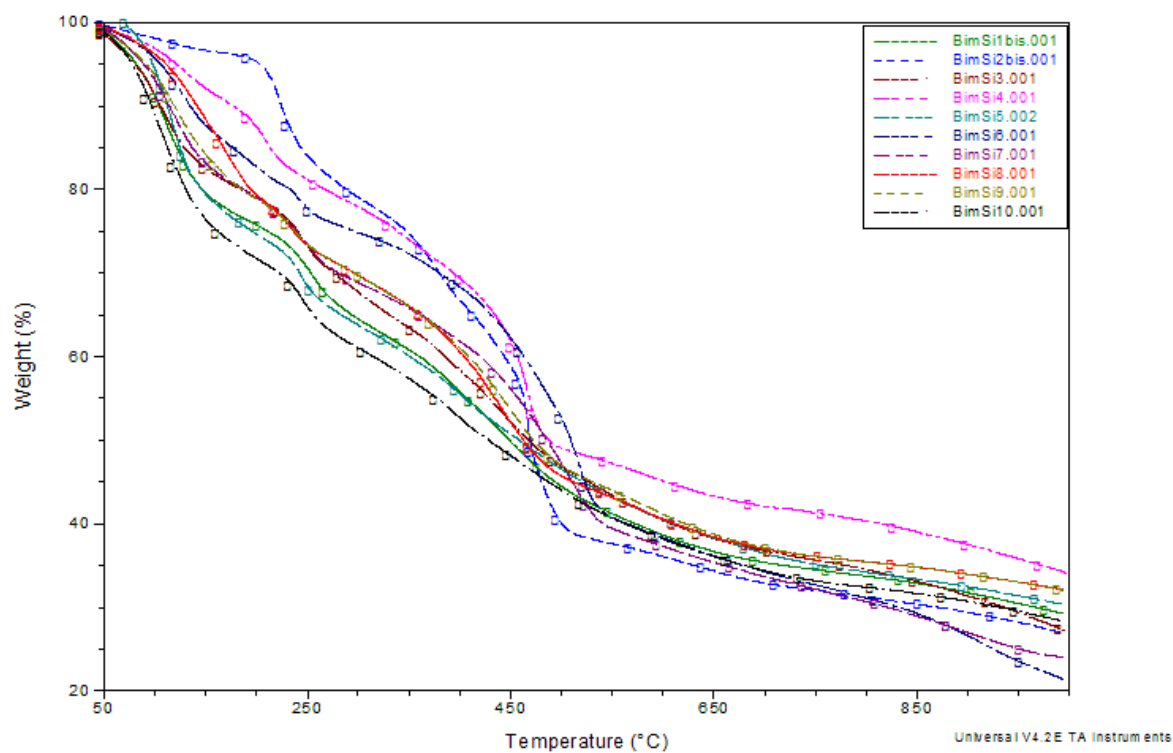
Figure 2S: Low angles XPRD patterns of  $A_K^+$ - $D_K^+$  or  $A_{Ba}^{2+}$ - $D_{Ba}^{2+}$  and reference **E** hybrid materials



**Figure 3S** :  $^{29}\text{Si}$  MAS NMR spectra of the solid hybrid material  $\text{A}_{\text{Ba}}^{2+}$ .

*Table 1S*:  $^{29}\text{Si}$  MAS NMR spectra results:  $T_c$ - the condensation number  $T_c = (T^1 + 2T^2 + 3T^3) / (T^1 + T^2 + T^3)$ , and the  $D_c$ - condensation degree  $\%D_c = T_c / 3 * 100$

	Eq. Sel	H <sub>2</sub> OmilliQ	$T_c$	$D_c$ (%)
$\text{A}_{\text{K}}^+$	-	+	2.80	93
$\text{C}_{\text{K}}^+$	0.25 KTf	-	2.81	97
$\text{A}_{\text{Ba}}^{2+}$	0.25 KTf	+	2.88	96
$\text{C}_{\text{Ba}}^{2+}$	1 BaTf	+	2.90	97



**Figure 4S. a)** TGA traces of  $A_K^+ - D_K^+$  or  $A_{Ba}^{2+} - D_{Ba}^{2+}$  and reference E hybrid materials as measured at 10°C/min under nitrogen.