

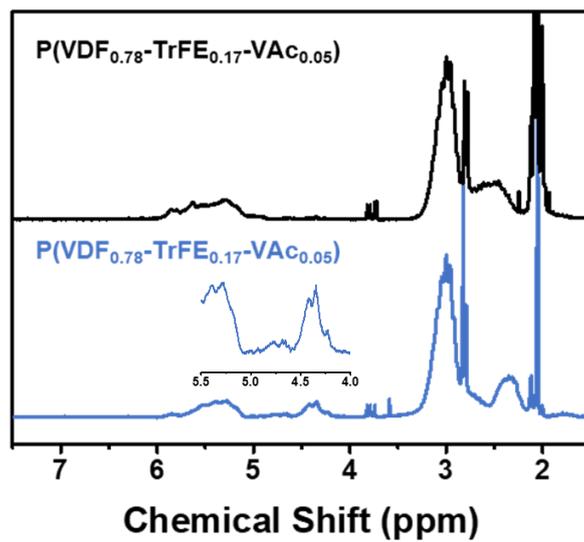
## Supporting Information:

### Physical pinning and chemical crosslinking induced relaxor ferroelectric behavior in P(VDF-*ter*-TrFE-*ter*-VA) terpolymers

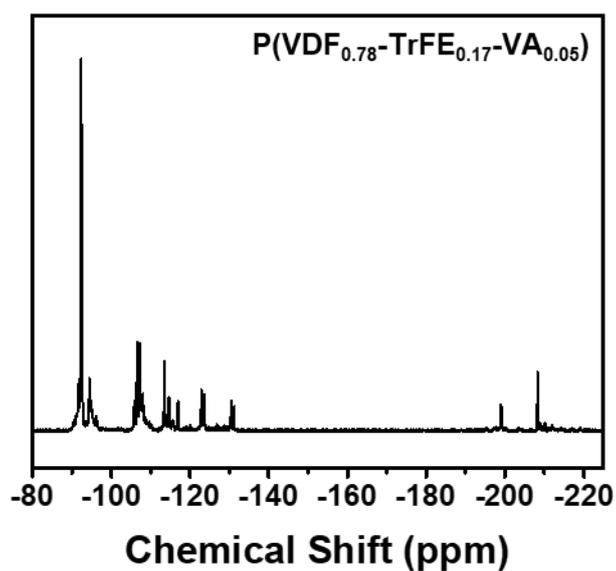
Niels L. Meereboer<sup>a</sup>, Ivan Terzić<sup>a</sup>, Piet van der Steeg<sup>a</sup>, Giuseppe Portale<sup>a</sup> and Katja Loos<sup>a\*</sup>

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<sup>a</sup>. *Macromolecular Chemistry and New Polymeric Materials, Zernike Institute for Advanced Materials, University of Groningen, Nijenborgh 4, 9747 AG Groningen, The Netherlands* \*Email - [k.u.loos@rug.nl](mailto:k.u.loos@rug.nl)



**Figure S1.**  $^1\text{H}$  NMR spectra of  $\text{P}(\text{VDF}_{0.78}\text{-}i\text{ter-TrFE}_{0.17}\text{-}i\text{ter-VAc}_{0.05})$  and  $\text{P}(\text{VDF}_{0.78}\text{-}i\text{ter-TrFE}_{0.17}\text{-}i\text{ter-VA}_{0.05})$ .



**Figure S2.**  $^1\text{F}$  NMR spectrum of  $\text{P}(\text{VDF}_{0.78}\text{-}i\text{ter-TrFE}_{0.17}\text{-}i\text{ter-VA}_{0.05})$ .

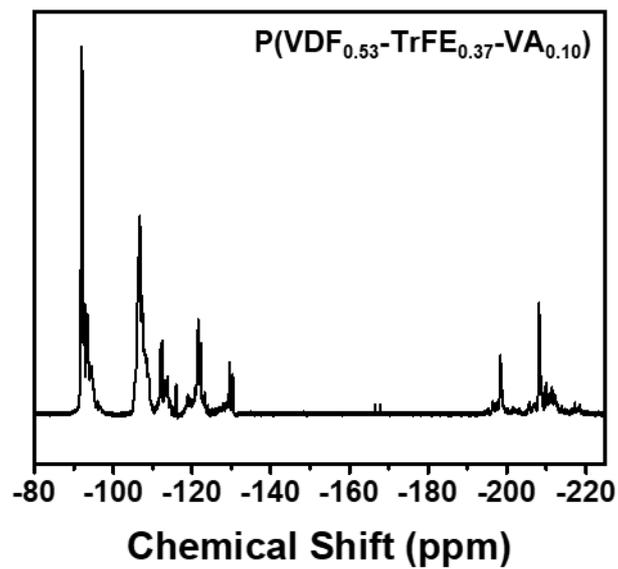


Figure S3. <sup>1</sup>F NMR spectrum of P(VDF<sub>0.53</sub>-*ter*-TrFE<sub>0.37</sub>-*ter*-VA<sub>0.10</sub>).

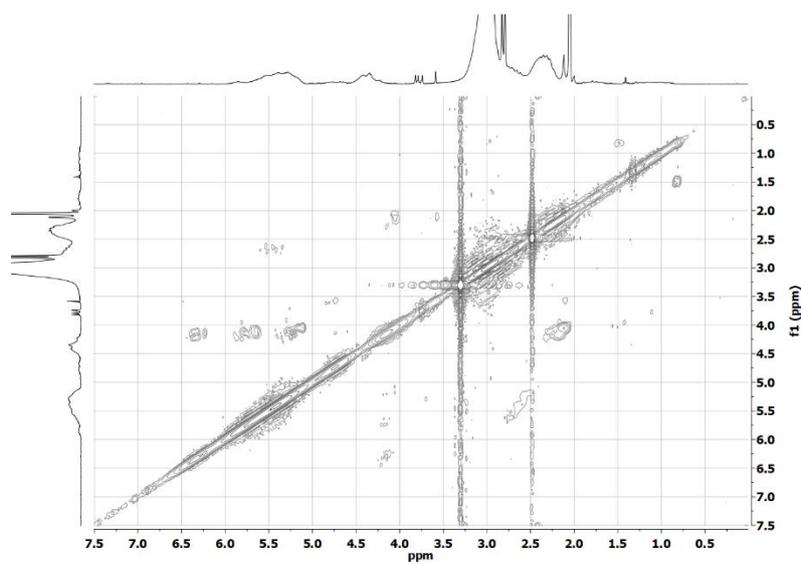


Figure S4. <sup>1</sup>H NMR COSY spectrum of P(VDF<sub>0.78</sub>-*ter*-TrFE<sub>0.17</sub>-*ter*-VA<sub>0.05</sub>).

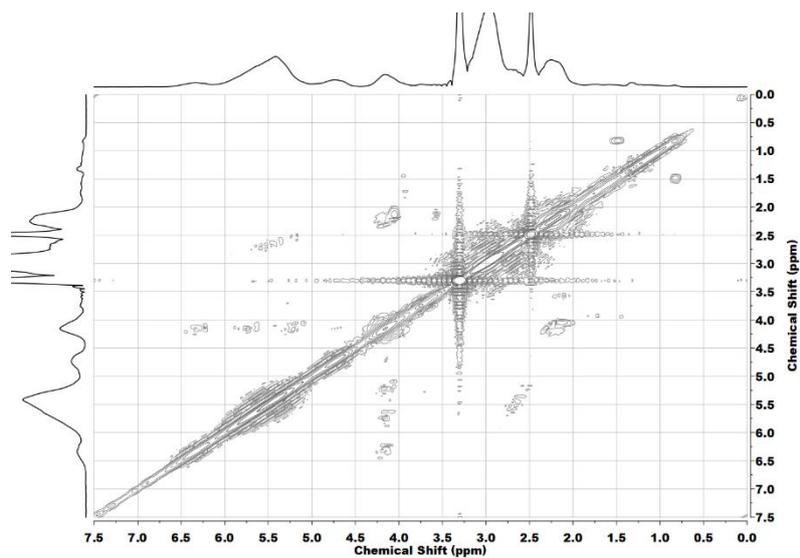


Figure S5.  $^1\text{H}$  NMR COSY spectrum of  $\text{P}(\text{VDF}_{0.53}\text{-ter-TrFE}_{0.37}\text{-ter-VA}_{0.10})$ .

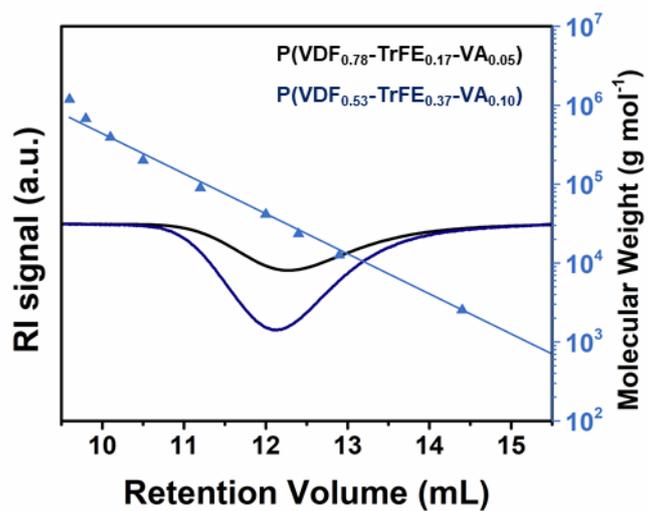


Figure S6. GPC traces of  $\text{P}(\text{VDF}_{0.78}\text{-ter-TrFE}_{0.17}\text{-ter-VA}_{0.05})$  and  $\text{P}(\text{VDF}_{0.53}\text{-ter-TrFE}_{0.37}\text{-ter-VA}_{0.10})$ .

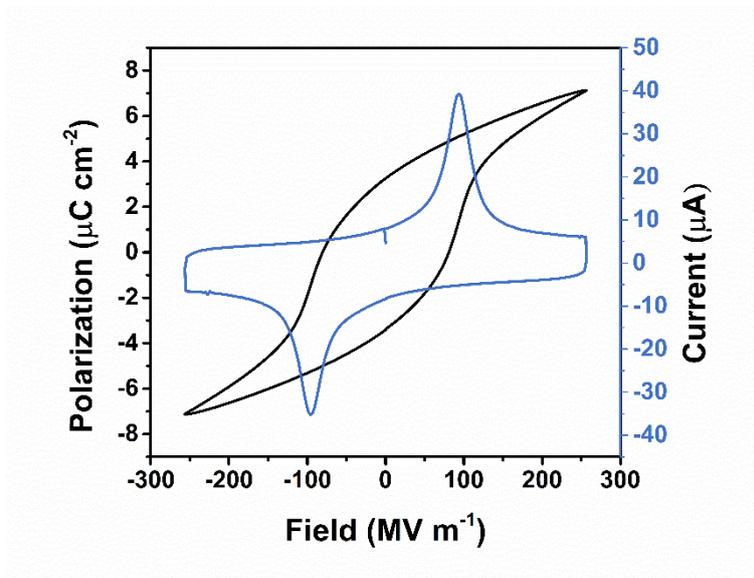


Figure S7. D-E loop of P(VDF<sub>0.78</sub>-*ter*-TrFE<sub>0.17</sub>-*ter*-VA<sub>0.05</sub>).