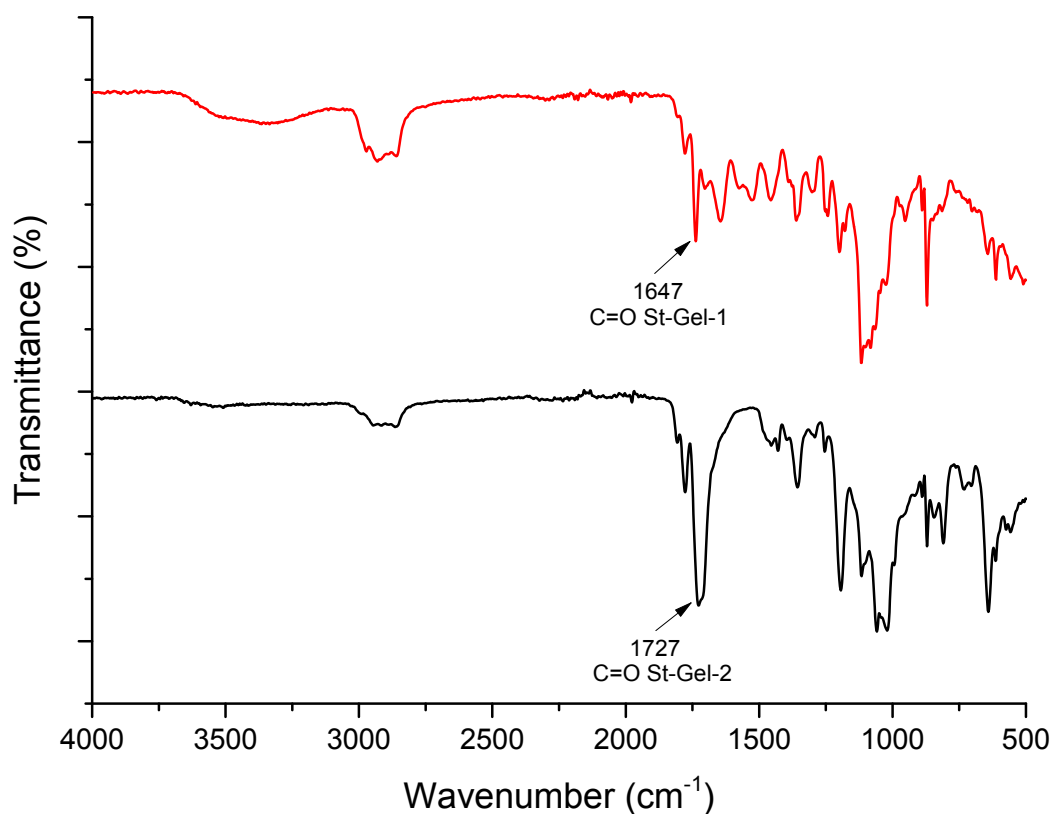


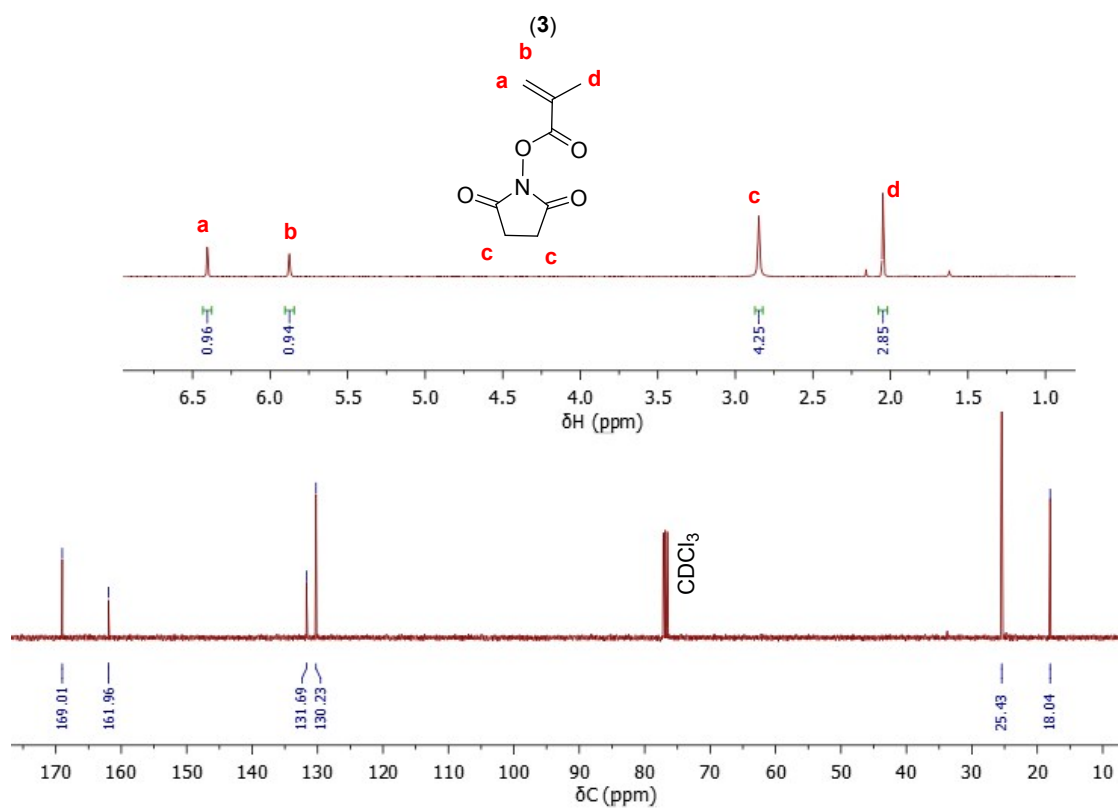
*Electronic Supplementary Information*

**Gel Actuators based on Polymeric Radicals**

FTIR-spectrum after nucleophilic substitution with a nitroxide-containing amine



**Figure. S1** FTIR spectra of prepared gels, gel **G1** (top), gel **G2** (bottom) showing substitution by amino-radical.



**Figure. S2** NMR spectra of monomer **1**,  $^1\text{H}$  NMR spectrum (top) and  $^{13}\text{C}$  NMR spectrum (bottom) in  $\text{CDCl}_3$ .

Table S1, Resulting compositions of gels with (**G2-C**), and without carbon fillers (**G2**)

Gel	Monomer 1 /mg	DMF/ mg	MWCNT /mg	FLG/ mg	Cross-linker /mg	ABCN/mg
<b>G2</b>	400	1400	-	-	30	20
<b>G2-C</b>	400	1381	14.6	4.4	30	20

