

## Supporting Information

# Polyphenol iongel patches with antimicrobial, antioxidant and anti-inflammatory properties

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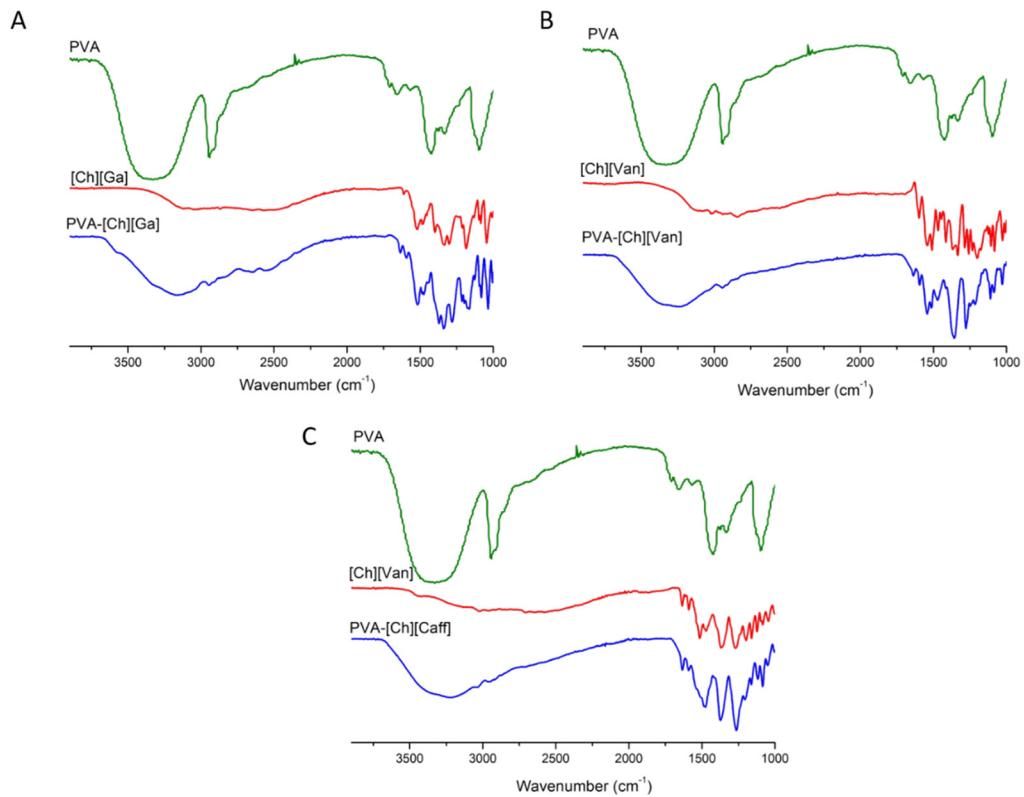
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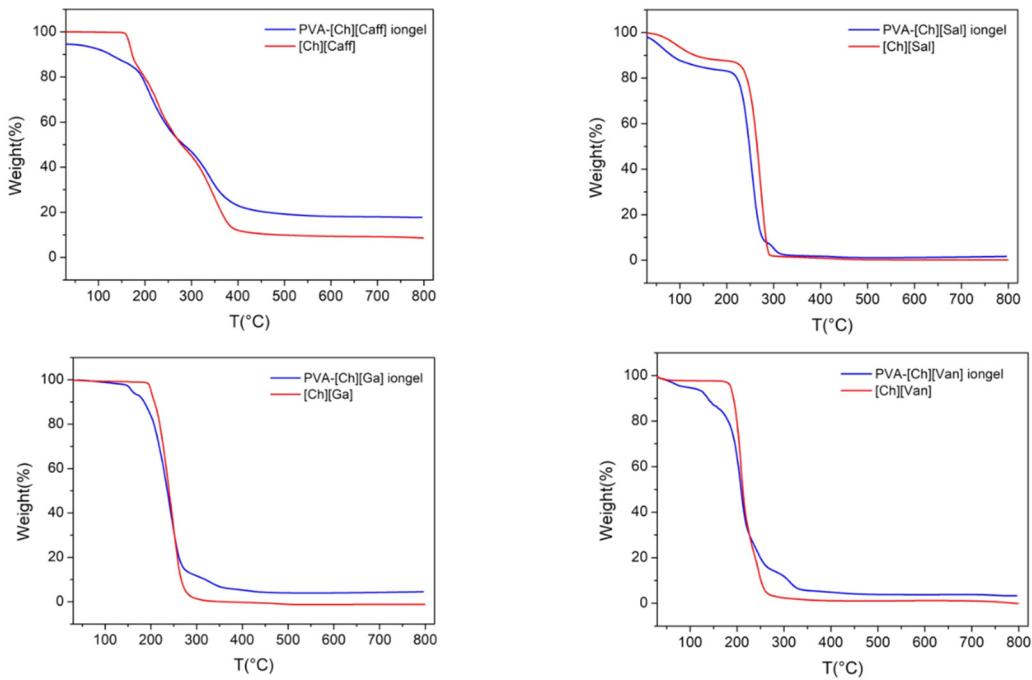
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**Table S1.** Pictures of polyphenol iongels



**Figure S1.** FTIR spectra of neat PVA, ILs, and polyphenol iongels.



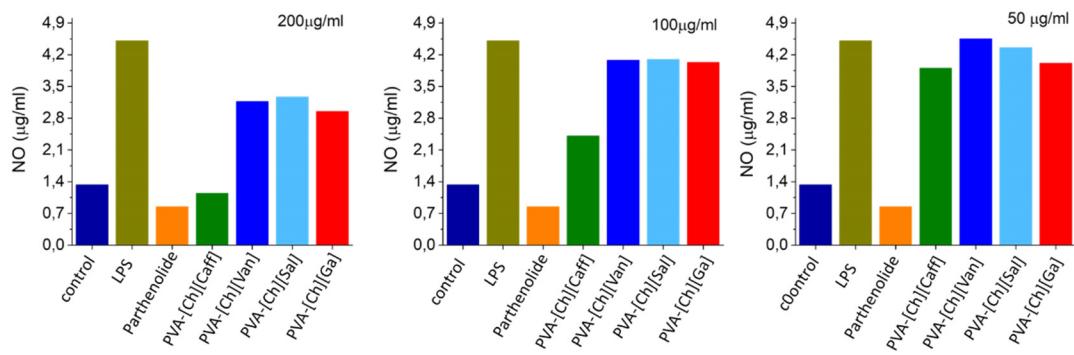
**Figure S2.** TGA analysis of polyphenol iongels with 10% of polymer concentration and the corresponding ILs.

**Table S2**  $T_{\max}$  and  $T_{50\%}$  of the polyphenol iongels

Iongel	$T_{\max}$ (°C)	$T_{50\%}$ (°C)
PVA-[Ch][Ga]	242	241
PVA-[Ch][Van]	206	208
PVA-[Ch][Sal]	251	248
PVA-[Ch][Caff]	226	275

**Table S3.** Gel to sol transition temperatures of the polyphenol iongels.

iongel	Transition temperatures (°C) $T_{gel-sol}$
PVA-[Ch][Ga]	123
PVA-[Ch][Van]	78
PVA-[Ch][Sal]	120
PVA-[Ch][Caff]	79



**Figure S3.** Evaluation of the capacity of iongels to prevent LPS-induced NO production in murine peritoneal macrophages different concentrations of each iongel reported NO (μg/ml)