

Supporting Information

## Naproxen release behaviour from graphene oxide/cellulose acetate composite nanofiber

Wulan Purnamasari,<sup>a±</sup> Titah Aldila Budiastanti,<sup>b±</sup> Aminatun Aminatun,<sup>a</sup> Ulfa Rahmah,<sup>b</sup> Sri Sumarsih,<sup>b</sup> Jia-yaw Chang,<sup>c</sup> Mochamad Zakki Fahmi,<sup>bd\*</sup>

<sup>a</sup> Department of Physic, Faculty of Science and Technology, Universitas Airlangga, Surabaya 60115, Indonesia.

<sup>b</sup> Department of Chemistry, Faculty of Science and Technology, Universitas Airlangga, Surabaya 60115, Indonesia.

<sup>c</sup> Department of Chemical Engineering, National Taiwan University of Science and Technology, Taipei 106, Taiwan

<sup>d</sup> Supra Modification Nano-micro-Engineering Laboratory, Universitas Airlangga, Surabaya 60115, Indonesia.

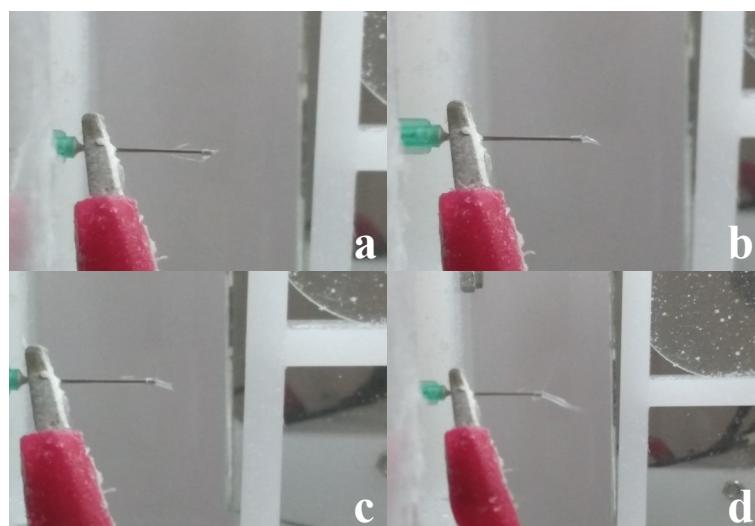


Figure S1. The images on spinneret area during the electrospinning process of CA-GO nanofiber using flow rate of 0.01(a), 0.01 (b), 0.05 (c), 0.1 (d) and 0.5  $\mu$ l/h (d)

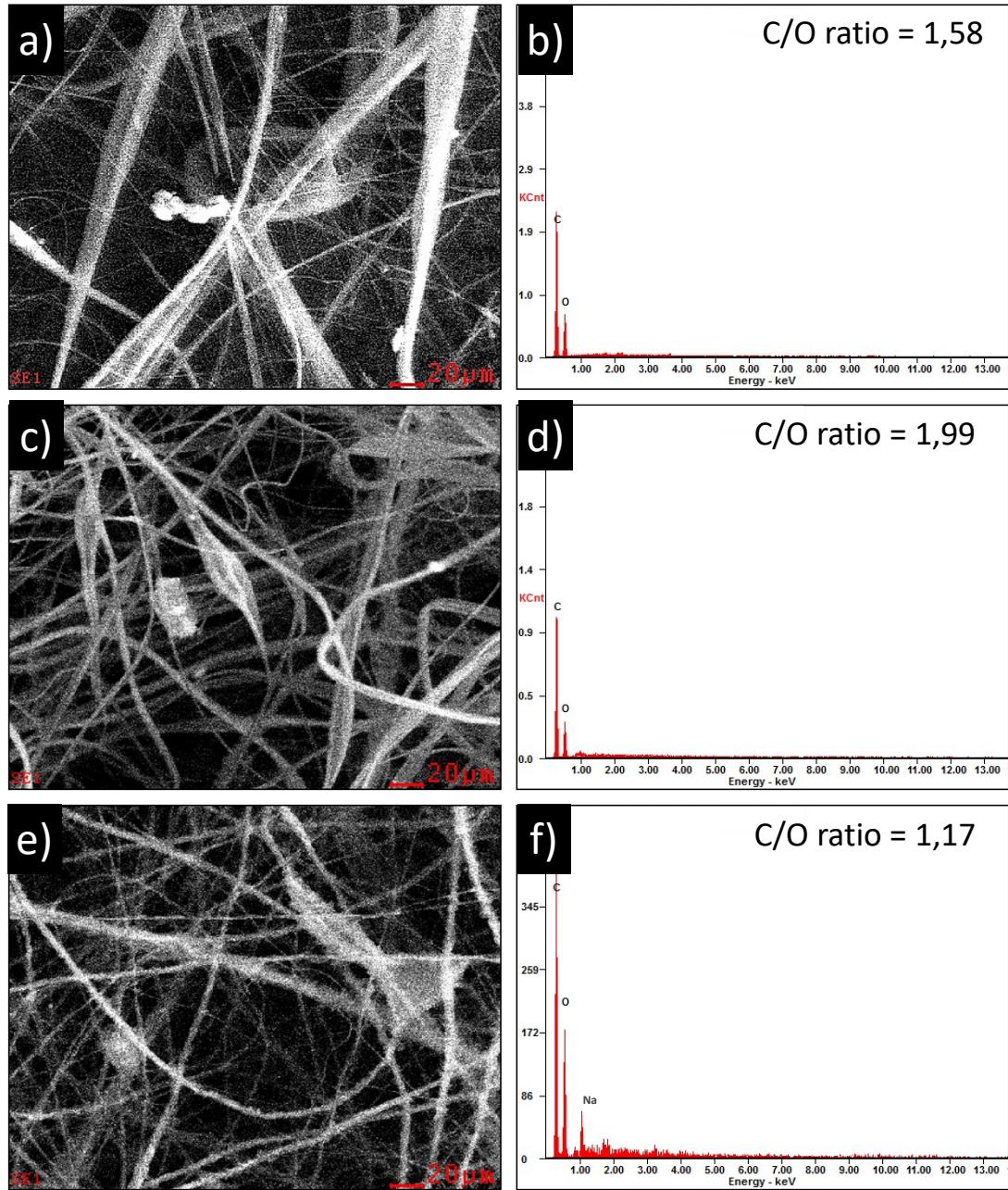
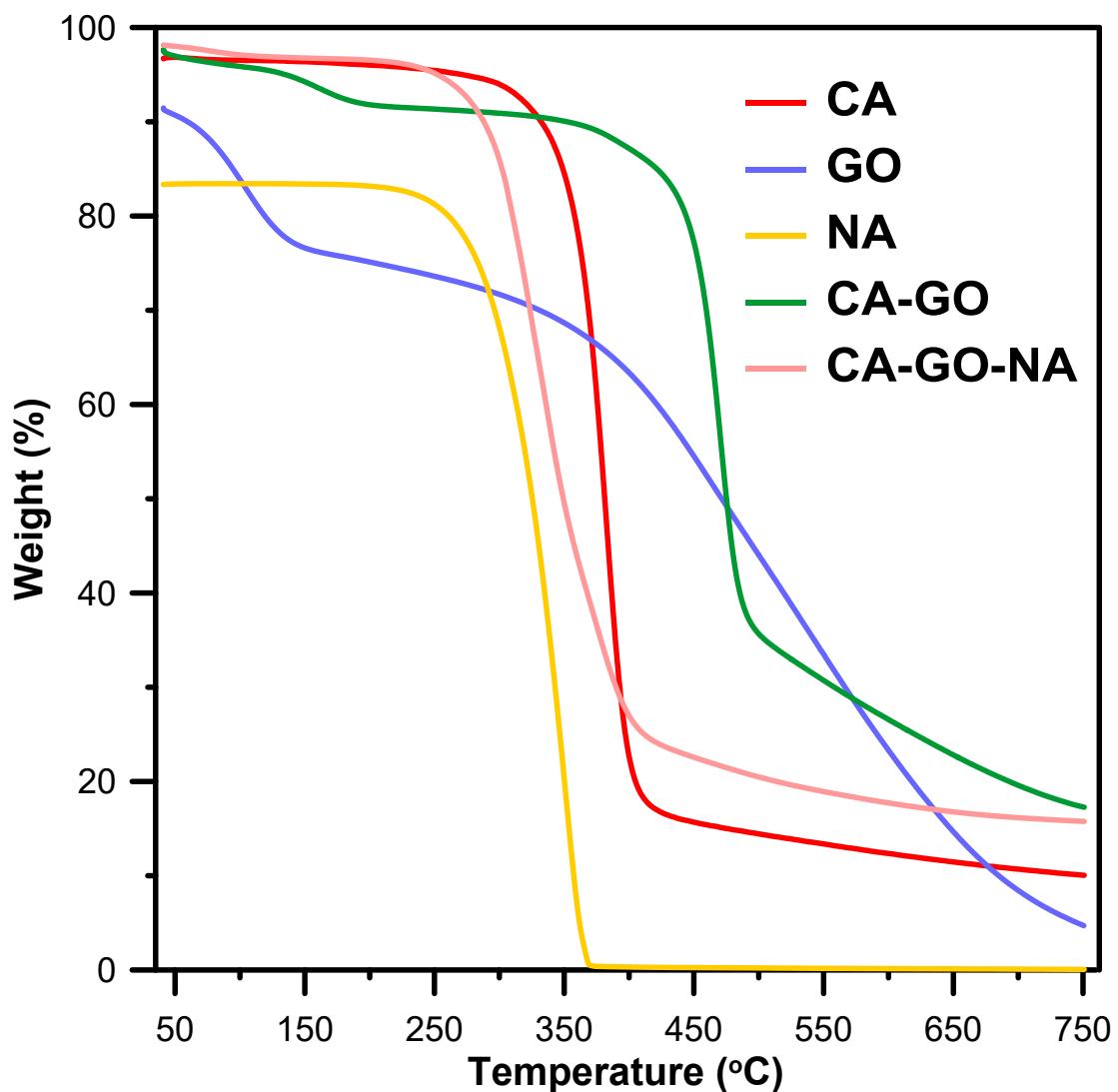


Figure S2. Adjusted area and its EDX data for CA (a-b), CA-GO (c-d), CA-GO-NA (e-f).



a)

Figure S3. TGA data of CA, GO, NA, CA-GO and CA-GO-NA nanofibers on % weight form

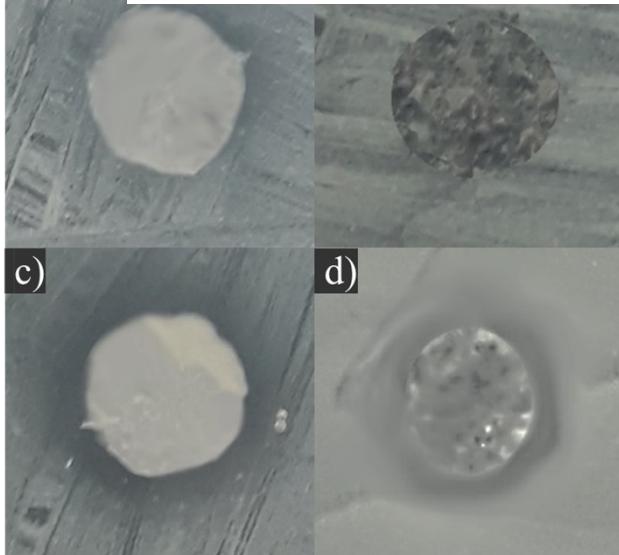


Figure S4. Inhibition area of *Staphy. Aureus* on (a) CA; (b) CA-GO; (c) CA—NA; (d) CA-GO-NA

**Table S1.** Conductivity data of GO varied composite nanofiber

Nanofiber Sample	Conductivity ( $\mu\text{S.cm}^{-1}$ )
CA-GO <sub>0.1</sub>	1.0
CA-GO <sub>0.5</sub>	1.0
CA-GO <sub>1</sub>	1.2
CA-GO <sub>0.1</sub> -NA	1.1
CA-GO <sub>0.5</sub> -NA	1.5
CA-GO <sub>1</sub> -NA	1.6