**Novel polysulfone ultrafiltration membranes incorporating polydopamine functionalized graphene oxide with enhanced flux and fouling resistance**

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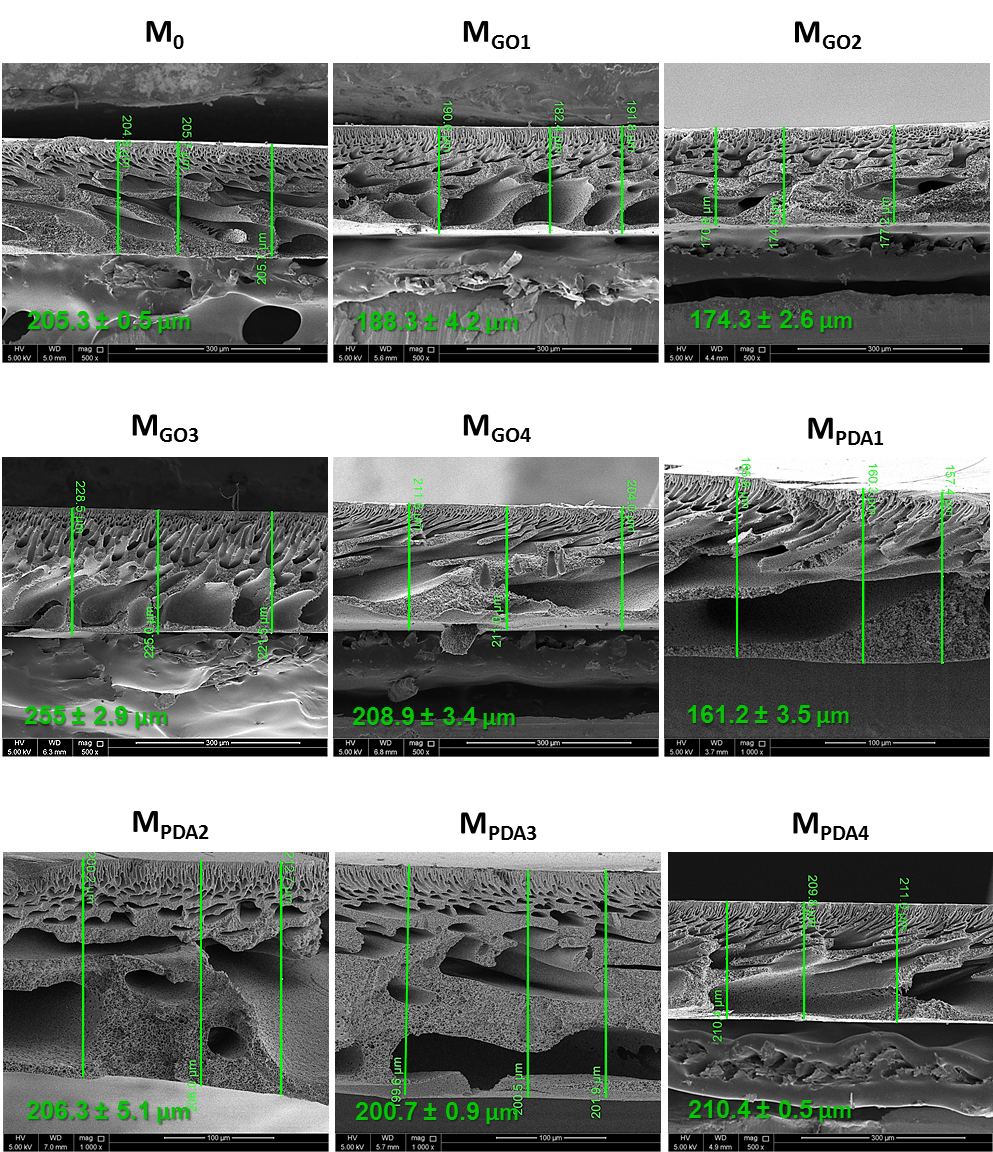


Figure S : determination of the average membranes thickness by the cross-section SEM images.

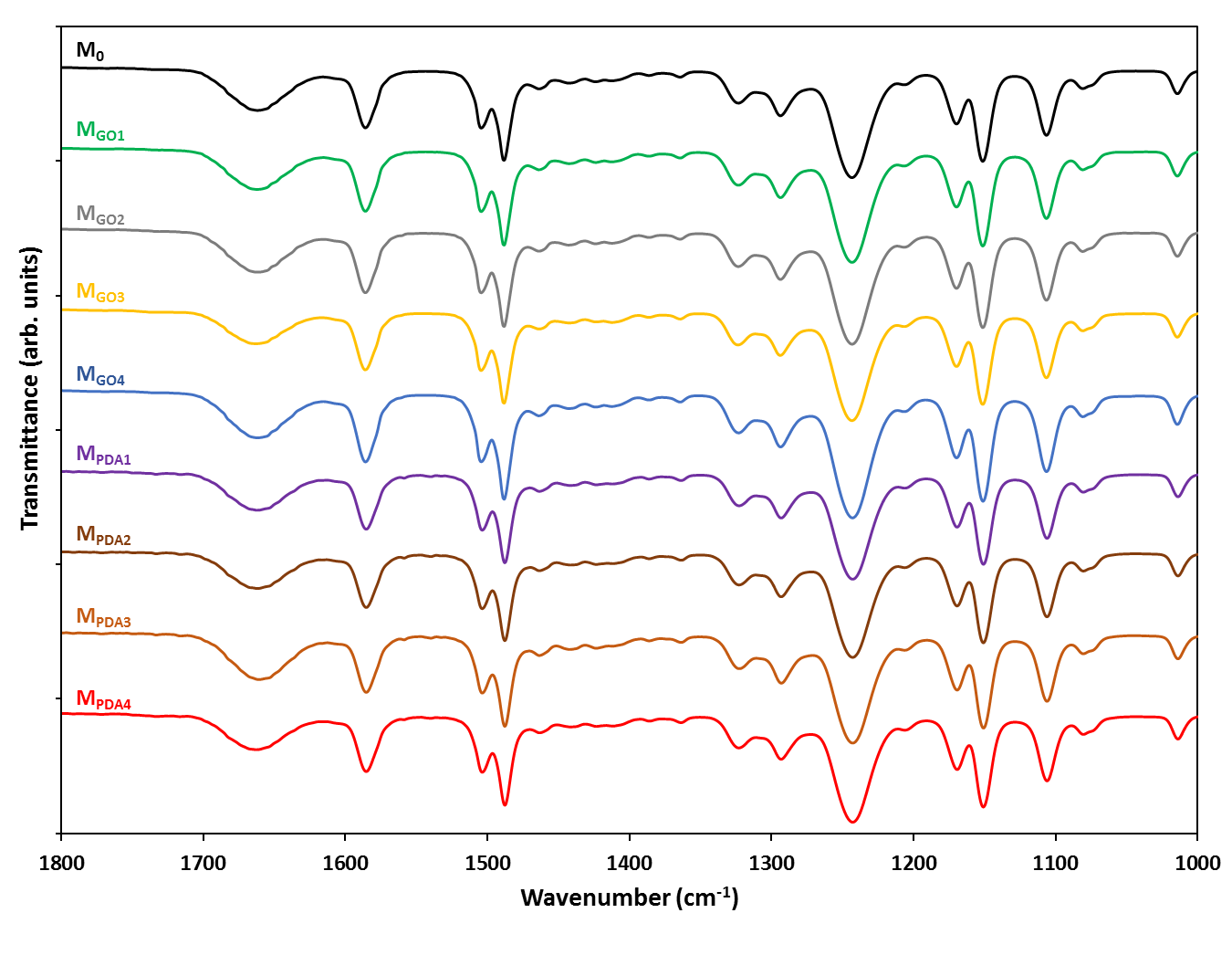


Figure S 2: FTIR-UATR spectra of the prepared membranes.

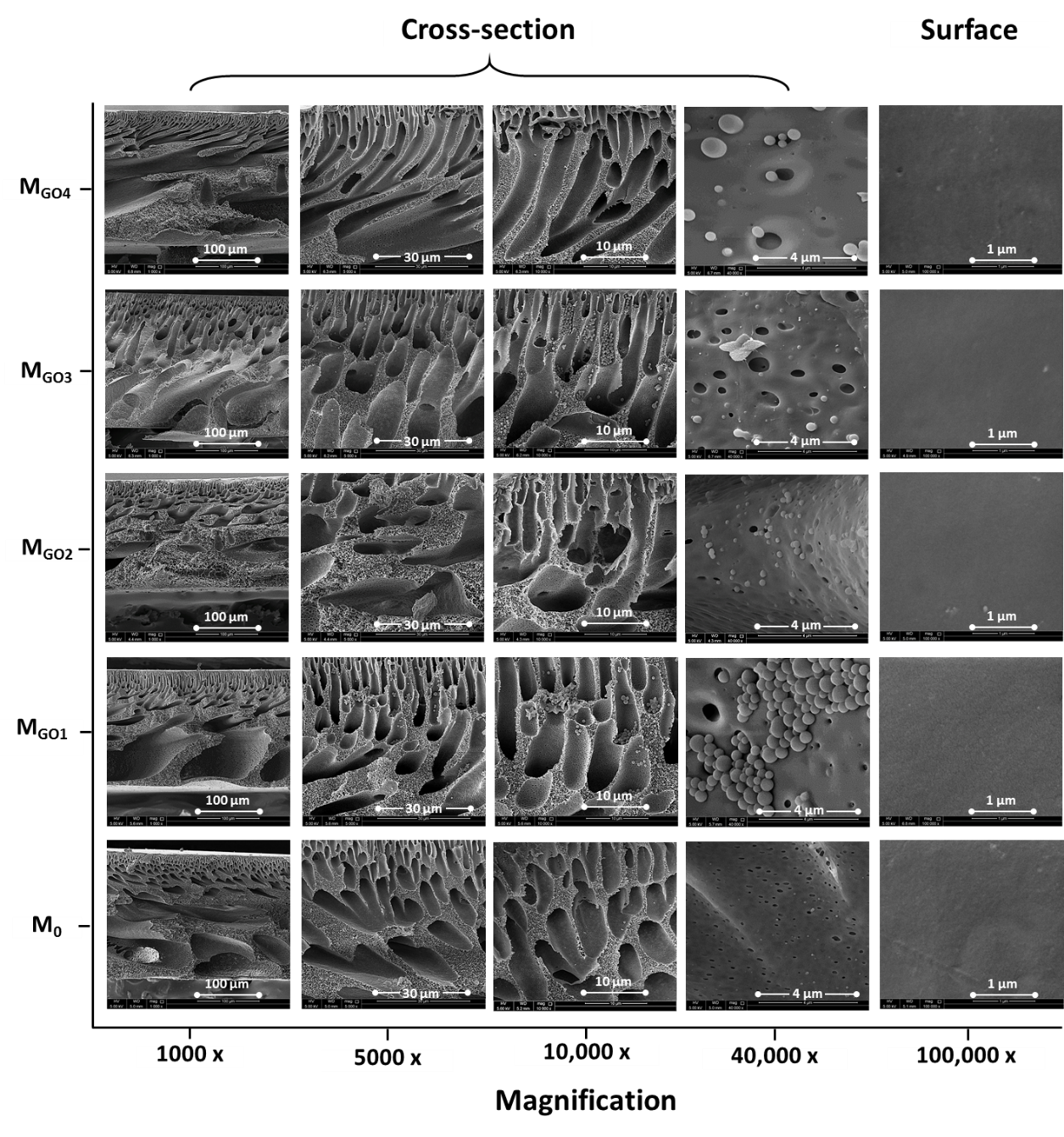


Figure S : SEM images of pristine PSF and PSF/GO MMMs.

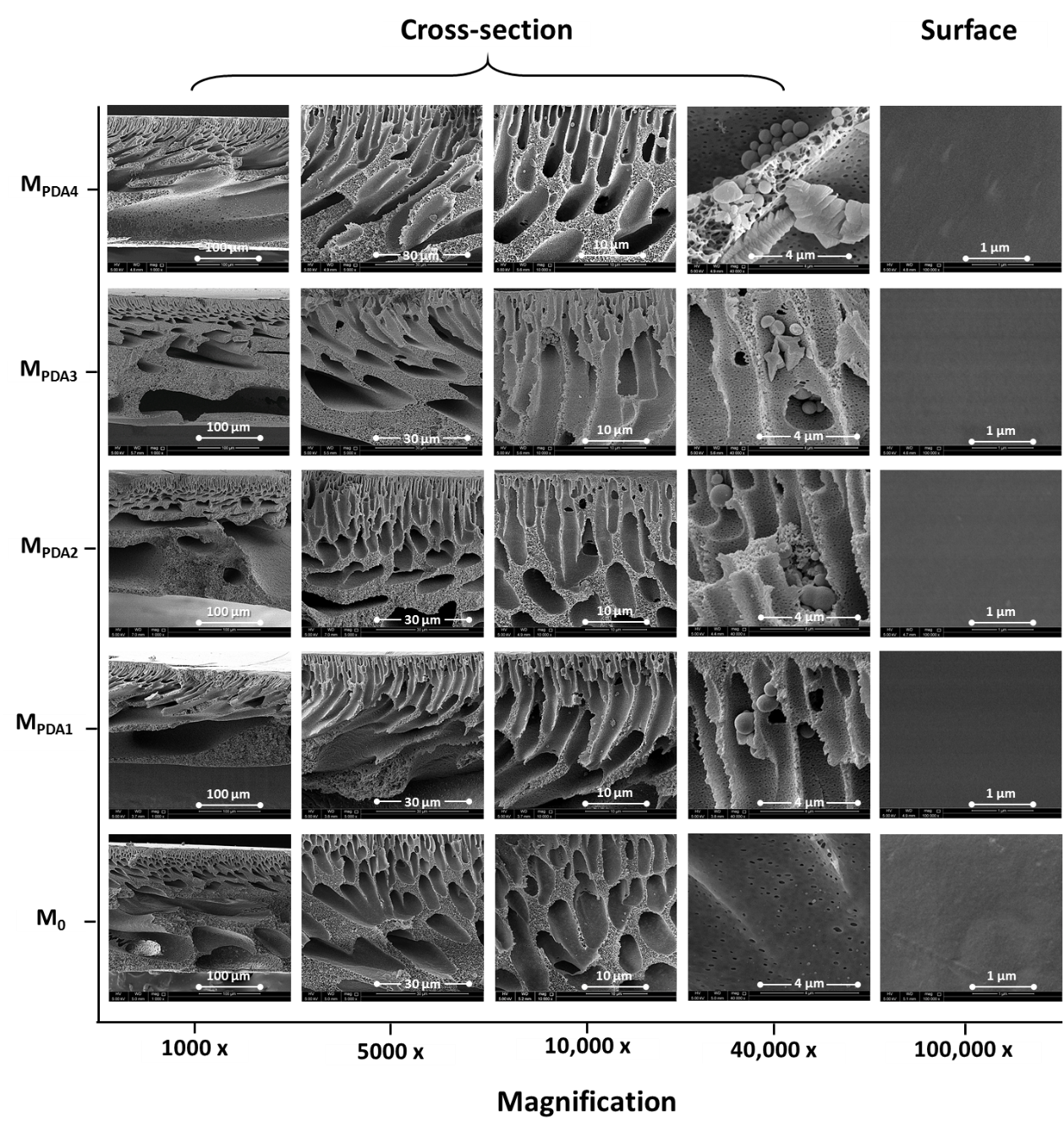


Figure S 4: SEM images of pristine PSF and PSF/rGO-PDA MMMs

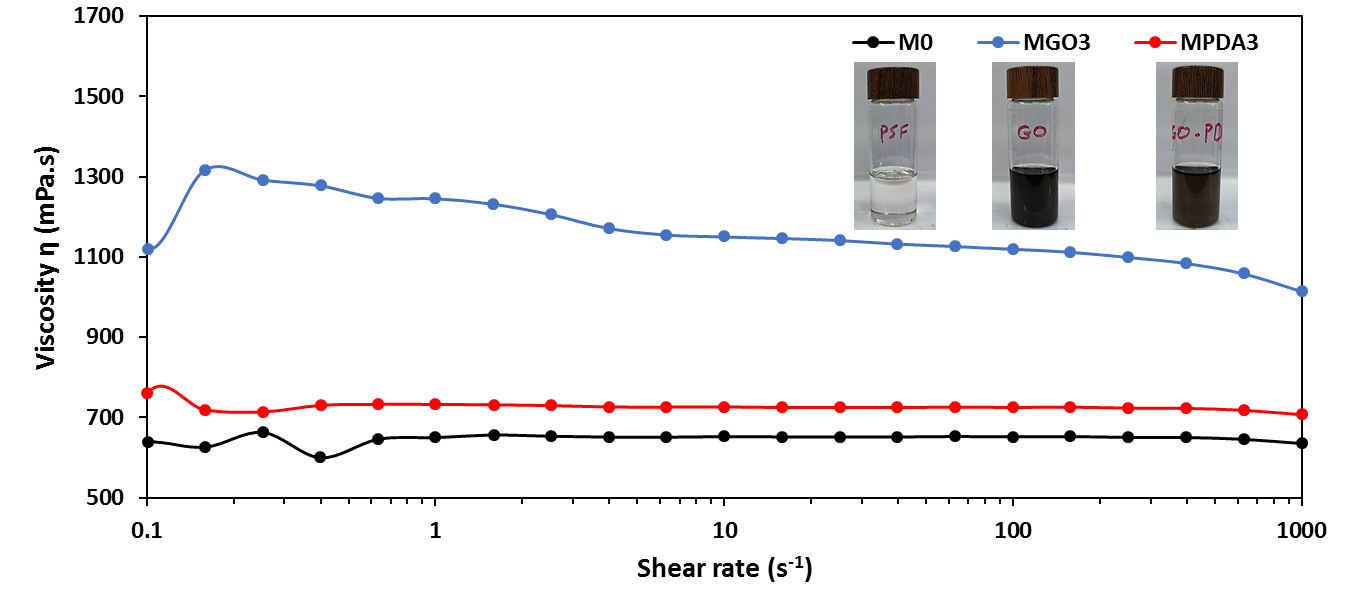


Figure S 5: Viscosity measurements of the casting solutions of M0, MGO3 and MPDA3.

Table S 1: The output of the correlation test of PWP, porosity, mean pore size (Rm), and average roughness (Ra).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | *PWP* | *ϵ (%)* | *Ra* | *CA* | *BSA-FRR3* | *HA-FRR3* |
| PWP | 1 |  |  |  |  |  |
| ϵ (%) | -0.2272 | 1 |  |  |  |  |
| Ra | 0.7614 | -0.4976 | 1 |  |  |  |
| CA | -0.5235 | 0.2134 | -0.8205 | 1 |  |  |
| BSA-FRR3 | 0.5664 | -0.2446 | 0.6830 | -0.6822 | 1 |  |
| HA-FRR3 | 0.4148 | 0.0010 | 0.6719 | -0.9107 | 0.5585 | 1 |