

**Table S1.** Comparison of permeate flux variation between membrane materials used in microalgae filtration.

Membrane Material (Pore Size)	Permeate Flux L h <sup>-1</sup> m <sup>-2</sup>	Filtration Conditions	Microalgae Species	Concentration of Microalgae g L <sup>-1</sup>	References
Alumina (0.2 µm)	500	CFMF concentration mode at 3 ms <sup>-1</sup> and 75 kPa	<i>C. vulgaris</i>	1.04	Bamba et al. 2021
Kaolinite clay and alumina (1 µm)	200-250	MF flashback (5 min) recirculation mode at 600 L h <sup>-1</sup> and 201 kPa	<i>Arthrospira</i> sp.	0.99	Jana et al. 2018
Ti <sub>4</sub> O <sub>7</sub>	198	MF at 68.94 kPa	<i>Scenedesmus diphormis</i>	1.4	Hua et al. 2020
Fluoro polymer (0.2 µm)	80	CFMF recirculation mode at 3.86 m s <sup>-1</sup> and 130 kPa	<i>Chlorella pyrenoidosa</i>	0.68	Sun et al. 2013
PVDF (0.05 µm)	22	CF uniform shearing vibration in recirculation mode at 9 kPa	<i>C. pyrenoidosa</i>	0.6	Jiang et al. 2018
PES (0.1 µm)	97	CFMF, 2.15 m s <sup>-1</sup> ; 100 kPa	mixed microalgal biomass	0.5	Soydemir et al. 2020
PVC (50 kDa)	53.6	CFUF at 0.9 m s <sup>-1</sup> and 51 kPa	<i>Scenedesmus acuminatus</i>	1.0	Wang et al. 2019

CFMF—Crossflow microfiltration; MF—microfiltration; CF—Crossflow filtration; PVDF—Polyvinile fluoride; PES—Polyethersulphone; PVC—Polyvinile chloride.

## References

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