
List of Abbreviations

Å	Angstrom
AFM	Atomic force microscopy
Am	Amide
BSA	Bovine serum Albumin
CA	Cellulose Acetate
CC	Cyanuric chloride
CNTs	Carbon nanotubes
CVD	Chemical vapor deposition
DCDPS	Diphenoxide and bis(4-chlorophenyl) sulfone
FEG-SEM	Field Emission Gun-Scanning Electron Microscopes
FE-SEM	Field Emission Scanning Electron Microscope
f-MWCNTs	Functionalized MWCNTs
FO	Forward osmosis
FRR	Flux recovery ratio
FTIR	Fourier Transform Infrared Spectroscopy
HRTEM	High-Resolution Transmission Electron Microscopy
IEP	Isoelectric point
LMH	L/m ² /h
MMMs	Mixed matrix membranes
MOFs	Metal-organic frameworks
MWCNTs	Multi-walled Carbon nanotubes
Ox	Oxidized
PA	Polyamides
PAN	Polyacrylonitrile
PEI	Polyethylenimine

PES	Polyether sulphone
PI	Polyimides
PPO	Polyphenylene oxide
PSU	Polysulphone
PTFE	Polytetrafluoroethylene
PVD	physical vapor deposition
PVP	polyvinylpyrrolidone
Rir	Irreversible Fouling ratio
SANS	Small-angle neutron scattering
SWCNTs	Single Walled Carbon Nanotubes
TEM	Transmission electron microscopy
TFC	Thin-film composite
TIPS	Thermally Induced Phase Separation
TMC	Trimesoyl chloride
XPS	X-ray photoelectron spectroscopy