Supporting information

Critical issues and guidelines to improve the performance of photocatalytic polymeric membranes

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Table S1. Acronym list

Acronym	Name
2-DCP	2,4 dichlorophenol
4-CP	4-chlorophenol
AA	acetic acid
AC	activated carbon
Aeff	effective area
AO7	acid orange 7
B. subtilis	*Bacilus subtilis*
BA	boric acid
BAT	best available technologies
BPA	bisphenol A
BSA	bovine serum albumin
CA	cellulose acetate
CIP	ciprofloxacin
CMT	cimentine
CNTs	carbon nanotubes
$CoFe_2O_4$	cobalt ferrite
com	commercial
CQDs	carbon quantum dots
CR	congo red
Cr VI	chromium VI
CV	crystal violet
DB	direct blue
DMAc	dymethylacetamide
DMF	dimethylformamide
DP	diphenhydramine
DR	direct red
DY	direct yellow
E. Coli	*Escherichia coli*
EIPS	evaporation induced phase separation
EtOH	ethanol

EY	eosin yellow
FA	formic acid
Fe_2O_3	Iron oxide
FESEM	field emission scanning electron microscopy
GA	glutaraldehyde
g-C_3N_4	graphitic carbon nitride
GO	graphene oxide
GV	gentian violet
HA	humic acid
IBP	ibuprofen
IC	indigo carmine
ICP	inductively coupled plasma
IPMR	immobilized photocatalytic membrane reactor
LiCl	lithium chloride
MB	methylene blue
MCE	mixed cellulose esters
MEK	methyl ethyl ketone
MG	malachite green
MIP	molecular imprinting polymer
MMM	mixed matrix membranes
MO	methylene orange
mpg-C_3N_4	mesoporous graphitic carbon nitride
MWCNTs	multi-walled carbon nanotubes
n-Ag	nano silver
NaY	sodium Y zeolite
NH_2	amine group
NIP	non-imprinting polymer
NIPS	non-solvent induced phase separation
NMP	n-methylpyrrolidone
NOM	natural organic matter
NOR	norfloxacin
NP	nonylphenol
nw	nanowire
O-g-C_3N_4	oxygen doped graphitic carbon nitride
OMWCNTs	oxygenated MWCNTs
PA6, PA	polyamide
PAA	polyacrylic acid
PAAM	polyallylamine
PAM	polyacrylamide
PAN	polyacrylonitrile
PC	polycarbonate
PDA	polydopamine
PEG	polyethylene glycol
PEI	polyetherimide
PEO	polyethylene oxide

PES	polyethersulfone
PES-F-COOH	Poly (aryl ether sulfone) with trifluoromethyl and carboxyl groups
PMR	photocatalytic membrane reactors
POM	polyoxometalate
POME	palm oil mill effluent
POPs	persistent Organic Pollutants
PS	polystyrene
PSF	polysulfone
PTFE	poly(tetrafluoroethylene)
PTrFE	polytrifluoroethylene
PU	polyurethane
PVA	polyvinyl alcohol
PVDF	polyvinylidene fluoride
PVDF-HFP	PVDF-co-hexafluoropropylene
PVP	polyvinyl pyrrolidone
R6G	rhodamine 6G
RB21	reactive blue 21
RB5	reactive black 5
RBB	remazol black b
RG	reactive green
rGO	reduced graphene oxide
RhB	rhodamine B
RO	reactive orange
RR	reactive red
RTB	remazol turquoise blue
RY	reactive yellow
SA	ammonium alginate
SEM	scanning electron microscopy
SiO_2	silicon oxide
SMM	surface molecule modifier
SMX	sulfamethoxazole
SPMR	suspended photocatalytic membrane reactor
TEP	triethyl phosphate
TFCM	thin-film composite membranes
TiO_2	titanium dioxide
YEF	yeast extract fermentation
ZnO	zinc oxide
α-Fe_2O_3	hematite