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
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LIST OF ABBREVIATIONS

HMF	5 -hydroxymethyl-2-furfural
MR	Merrifield resin
CSDVB	Cross-linked poly(styrene-divinylbenzene)
PA	Poly(sodium acrylate)
PAAc	Polyacrylic acid
PMMA	Poly(methylmethacrylate)
PTFE	Polytetrafluoroethylene
PAN	Polyacrylonitrile
PEG	Polyethyleneglycol
P4VP	Poly(4-vinyl pyridine)
PEI	Polyethyleneimine
PVAI	Poly(vinyl alcohol)
TPP	Tetraphenylporphyrin
pW	Peroxidotungstate
DIOP	4,5- bis(diphenylphosphinomethyl)-2,2-dimethyl- 1,3-dioxidolane
WSP	Water soluble polymer
DNA	Deoxyribonucleic acid
PEG	Poly(ethylene glycol)
BINOL	1,1'-Bi-2-naphthol
P	Peroxido
HMPT	hexamethylphosphorous triamide
Dipic	Dipicolinate
Cit	Citrate
Bipy	2,2'-bipyridine
pMo	Peroxidomolybdenum
pTi	Peroxidotitanium
DET	Diethyl tartrate
UHP	Urea hydroperoxide
MPS	Methyl phenyl sulfide
QO	8-quinolinolate

POM	Polyoxidometalate
TBA	Tetra-n-butylammonium
CHP	Cumene hydroperoxide
DMF	Dimethylformamide
TBHP	Tert-Butyl hydroperoxide
pybmz	(2-pyridyl)benzimidazole
Hphox	2-(2'-hydroxyphenyl)-5,6-dihydro-1,3-oxazine
DFP	2,5-diformylfuran
FDCA	2,5-furandicarboxylic acid
FFCA	5-formyl-2-furancarboxylic acid
LA	levulinic acid
HMFCA	5-hydroxymethyl-2-furancarboxylic acid
DMSO	Dimethyl sulfoxide
PS	poly(sodium vinyl sulfonate)
PSMo	[MoO(O ₂) ₂ (sulfonate)]-PS
PAMo	[Mo ₂ O ₂ (O ₂) ₄ (carboxylate)]-PA
EDX	Energy Dispersive X-Ray
AAS	Atomic absorption spectroscopy
ICP-OES	Inductively coupled plasma optical emission spectrophotometer
CHN	Carbon, hydrogen and nitrogen
SEM	Scanning Electron Microscope
PXRD	Powder X-ray diffraction
XPS	X-ray photoelectron spectroscopy
BET	Brunauer-Emmett-Teller
TGA	Thermogravimetric analysis
HPLC	High performance liquid chromatography
GC-MS	Gas chromatography-mass spectrometry
DFT	Density functional theory
PMA	poly(sodium methacrylate)
PSS	Poly(sodium 4-styrene sulfonate)
PATi	Ti ₂ (O ₂) ₂ O ₂ (OH) ₂ (carboxylate)]-PA
PMATi	[Ti ₂ (O ₂) ₂ O ₂ (OH) ₂ (carboxylate)]-PMA

PSSTi	$[\text{Ti}_2(\text{O}_2)_2\text{O}_2(\text{OH})_2(\text{sulfonate})]$ -PSS
TOF	Turn over frequency
TON	Turn over number
Ch	Chitosan
PMoCh	Chitosan supported dioxidomonoperoxido molybdenum(VI)
Asn	Asparagine
MRAsn	Asparagine functionalized Merrifield resin
MRNA	Nicotinic acid functionalized Merrifield resin
MRAsnMo	$[\text{MoO}_2(\text{O}_2)(\text{L})]^- \text{MR}$ [L = Asparagine]
MRNAMo	$[\text{MoO}_2(\text{O}_2)(\text{L})_2]^- \text{MR}$, [L = Nicotinic acid]
TLC	Thin layer chromatography
RT	Room temperature
NA	Nicotinic acid
DCE	Dichloroethane