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LIST OF ABBREVIATIONS

<i>ackA</i>	=	acetate kinase
<i>adhE</i>	=	Alcohol dehydrogenase
AFEX	=	Ammonia-based pretreatment
AM1	=	Alfredo Martinez Mineral Salt Medium 1
ATP	=	Adenosine triphosphate
BDO	=	Butanediol
°C	=	Degree Celsius
$C_2H_4O_3$	=	Peracetic acid
CCR	=	Carbon calabolite repression
CDW/L	=	Cell dry weight per liter
CFU/ml	=	Colony forming unit per mililiter
CS	=	Cellulose saccharification
FPU/g	=	Filtrated protein unit per gram
<i>frd</i>	=	Fumarate reductase
g	=	gram
g/g	=	gram/ gram
g/L	=	gram/ liter
g/L/h	=	gram/ liter/ hour
glu	=	Glucose
h	=	Hour
H_2O_2	=	hydrogen peroxide
H_2SO_4	=	Sulfuric acid
H_3O^+	=	Hydronium ions
H_3PO_4	=	Phosphoric acid
HCl	=	Hydrochloric acid
HCN	=	Hydrogen cyanide

LIST OF ABBREVIATIONS (Continued)

HMF	=	Hydroxymethylfurfural
HNO ₃	=	Nitric acid
HPLC	=	High-performance liquid chromatography
HS	=	Hemicellulose saccharification
KOH	=	Potassium hydroxide
L	=	Liter
LA	=	Lactic acid
LABs	=	Lactic acid bacteria
LB	=	Luria Bertani
LCC	=	Lignin-carbohydrate bonds
<i>ldhA</i>	=	Lactate dehydrogenase
LHW	=	Liquid hot water
M	=	Molar
mg/g	=	Milligram per gram
min	=	Minute
ml	=	Milliliter
mM	=	Millimolar
mmol/L	=	Millimoles per liter
N	=	Normality
Na ₂ CO ₃	=	Sodium carbonate
NADH	=	Nicotinamide adenine dinucleotide
NaOH	=	Sodium hydroxide
(NH ₄) ₂ SO ₄	=	Ammonium sulfate
OD	=	Optical density
PCU/g	=	Protein concentration units per gram
<i>pfkB</i>	=	Pyruvate formate-lyase
PIC	=	Pineapple crown

LIST OF ABBREVIATIONS (Continued)

PLA	=	polylactic acid
<i>pta</i>	=	Phosphate acetyltransferase
rpm	=	Round per minutes
SHF	=	Separate hydrolysis and fermentation
SSF	=	Simultaneous saccharification and fermentation
SSCF	=	simultaneous saccharification and co-fermentation
U	=	Unit
v/w	=	Volume by weight
w/v	=	weight by volume
w/w	=	weight by weight
xyl	=	Xylose
μm	=	Micrometer
$\mu\text{mol/L}$	=	Micromoles per liter