

Polymer Blend Nanocomposites for Energy Storage Applications

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Edited by:

Sabu Thomas, A.R. Ajitha and Maciej Jaroszewski

POLYMER BLEND NANOCOMPOSITES FOR ENERGY STORAGE APPLICATIONS

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Polymer blend nanocomposites for polymer electrolyte membrane fuel cell (PEMFC) applications

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Abbreviations

AFC alkaline fuel cell bipolar plate

DEMFC direct methanol fuel cell
DOE Department of Environment

FC fuel cell

FCEV fuel cell electric vehicle
GDL gas diffusion layer
GE general electric
GHG greenhouse gas
GO graphene oxide
H₂ hydrogen gas

ICE internal combustion engine
MCFC molten carbonate fuel cell
MEA membrane electrode assembly

MGO marine gas oil mGT micro gas turbine

NASA National Aeronautics and Space Administration

PAFC phosphoric acid fuel cell
PBI polybenzenimidazole
PEEK polyaryletherketone

PEFC polymer electrolyte fuel cell PEM polymer electrolyte membrane

PEMFC polymer electrolyte membrane fuel cell

PES polyether sulfone

Pt platinum

PTFE polytetrafluoroethylene PVA poly(vinyl alcohol) PVB poly(vinyl butyral)