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LIST OF SYMBOLS AND ABBREVIATIONS

AFC	Alkaline Fuel Cell
PEMFC	Proton Exchange Membrane Fuel Cell
DMFC	Direct Methanol Fuel Cell
PAFC	Phosphoric Acid Fuel Cell
MCFC	Molten Carbonate Fuel Cell
SOFC	Solid Oxide Fuel Cell
ORR	Oxygen Reduction Reaction
TEC	Thermal Expansion Coefficient
RT	Room temperature
ASR	Area Specific Resistance
MIEC	Mixed Ionic-Electronic Conductor
CV	Cyclic Voltammetry
EIS	Electrochemical Impedance Spectroscopy
IDEP	Isotope Exchange Depth Profile
OER	Oxygen Evolution Reaction
HER	Hydrogen Evolution Reaction
IT-SOFC	Intermediate Temperature Solid Oxide Fuel Cell
YSZ	Yttrium Stabilized Zirconia
CGO	Gadolinium Doped Ceria
PBCO	$PrBaCo_2O_{6-\delta}$
DSC	Differential Scanning Calorimetry
TGA	Thermogravimetry analysis
XRD	X-ray diffraction
JCPDS	Joint Committee on Powder Diffraction Standards
SEM	Scanning Electron Microscopy
TEM	Transmission Electron Microscopy

XPS	X-ray Photoelectron Spectroscopy
STM	Scanning Tunneling Microscopy
FWHM	Full width at Half Maximum
SSR	Solid State Route
ACR	Auto Combustion Route
P-SSR	Pallet Synthesized through SSR
P-ACR	Pallet Synthesized through ACR
K	Kelvin
N	Avogadro’s Number
JT	Jahn-Teller
ΔG	Gibbs Free Energy
ΔS	Entropy
ΔH	Enthalpy
G	Gram
SAED	Selected Area Electron Diffraction
V	Volt
OD	Orthorhombic Distortion
DFPT	Density Functional Perturbation Theory
DOS	Density of State
HS	High Spin
LS	Low Spin
IS	Intermediate Spin
RS	Randles–Ševčík
CR	Corrosion Rate