Abbreviations and Acronyms

APT Atom probe tomography

CTGA Continuous thermogravimetric analysis

CVD Chemical vapour deposition

EBSD Electron back scattered diffraction
 EDAX Energy dispersive analysis of X-rays
 EELS Electron energy loss spectroscopy
 EPMA Electron probe microanalysis

FIB Focused ion beam

IGCC Integrated gasification combined cycle

ppm Parts per million (unit of relative concentration)

ppma Parts per million by atoms
 ppmm Parts per million by mass
 PVD Physical vapour deposition
 SAD Selected area diffraction

SCC Supercritical CO₂

SEM Secondary electron microscope SIMS Secondary ion mass spectrometry

TBC Thermal barrier coating

TEM Transmission electron microscope
TGA Thermogravimetric analysis

TGA Thermogravimetric analysis
TGO Thermally grown oxide

XPS X-ray photoelectron spectroscopy

XRD X-ray diffraction

YSZ Yttria-stabilized zirconia