

Subject Index of Volume 127

- Accumulation**
 Platinum; Fuel cells; Diffusion; Degradation; Scanning electron microscopy; X-ray photoelectron spectroscopy; PEFC (Schulze, M. (127) 213)
- AFC electrode**
 Gas diffusion electrodes; Polymer electrolyte membrane fuel cells; Carbon dioxide; Degradation (Gülgow, E. (127) 243)
- Aging mechanism of components**
 Solid-oxide fuel cell; Reduced temperature SOFC; Hydrocarbon fuels; Operation condition (Tu, H. (127) 284)
- Aging mechanism**
 Lithium–nickel–cobalt oxide; Lithium–manganese spinel; Calendar life; Capacity fading (Wohlfahrt-Mehrens, M. (127) 58)
- Aging mechanisms**
 Polymer electrolyte fuel cells; Direct methanol fuel cells; Lifetime; Failure; Mitigation strategies (Knights, S.D. (127) 127)
- Aging phenomenon**
 Lithium-ion batteries; Lithium-ion materials; Life assessment; Lithium-ion cell performances (Sarre, G. (127) 65)
- Alkaline batteries**
 Nickel hydroxides; Hydrogen storage alloys; Nickel–metal hydride (Köhler, U. (127) 45)
- Alkaline fuel cell**
 Gas-diffusion electrode; Oxygen reduction reaction; Silver cathode; Degradation; Scanning electron microscopy; X-ray photoelectron spectroscopy (Wagner, N. (127) 264)
- Alkaline fuel cell**
 Liquid electrolyte; Lifetime; Electrode stability; Carbon dioxide sensitivity; Ammonia as fuel (Cifrain, M. (127) 234)
- Alkaline fuel cells**
 X-ray photoelectron spectroscopy; Polytetrafluoroethylene; Degradation; Nickel electrodes (Schulze, M. (127) 252)
- Ambient conditions**
 DMFC; Diffusion layer; MEAs (Oedegaard, A. (127) 187)
- Ammonia as fuel**
 Alkaline fuel cell; Liquid electrolyte; Lifetime; Electrode stability; Carbon dioxide sensitivity (Cifrain, M. (127) 234)
- Anodic corrosion**
 Lead-acid batteries; Short-circuits (Ruetschi, P. (127) 33)
- Automotive electric systems**
 42 V (Keim, T.A. (127) 16)
- Autothermal gasoline reformer**
 Fuel cell system; Dynamic simulation; Modelling; Load change; Response time (Sommer, M. (127) 313)
- Batteries**
 Lithium intercalation; Molybdates (Leyzerovich, N.N. (127) 76)
- Battery management**
 Hybrid electric vehicles; Battery storage systems (Bitsche, O. (127) 8)
- Battery state-of-charge**
 Ni–MH; Ni–Cd; Impedance spectroscopy; Series resonance frequency (Hammouche, A. (127) 105)
- Battery storage systems**
 Hybrid electric vehicles; Battery management (Bitsche, O. (127) 8)
- Beta-alumina ceramic electrolyte**
 ZEBRA battery; Sodium–nickel-chloride system; High specific energy; Electric vehicle; Hybrid electric bus (Dustmann, C.-H. (127) 85)
- Biogas**
 Waste exploitation; Solid oxide fuel cells; Energy system balance; Reforming (Van herle, J. (127) 300)
- Calendar life**
 Lithium–nickel–cobalt oxide; Lithium–manganese spinel; Capacity fading; Aging mechanism (Wohlfahrt-Mehrens, M. (127) 58)
- Capacitance**
 Derivative impedance spectroscopy; Electrolyte concentration; Water electrolysis; Supercapacitors; Metal oxide electrodes (Kurzweil, P. (127) 331)
- Capacity fading**
 Lithium–nickel–cobalt oxide; Lithium–manganese spinel; Calendar life; Aging mechanism (Wohlfahrt-Mehrens, M. (127) 58)
- Carbon dioxide sensitivity**
 Alkaline fuel cell; Liquid electrolyte; Lifetime; Electrode stability; Ammonia as fuel (Cifrain, M. (127) 234)
- Carbon dioxide**
 Gas diffusion electrodes; AFC electrode; Polymer electrolyte membrane fuel cells; Degradation (Gülgow, E. (127) 243)
- Carbon monoxide poisoning**
 Polymer electrolyte fuel cells (PEFCs); Time resolved electrochemical impedance spectroscopy (TREIS); Surface relaxation; Porous electrode model (Wagner, N. (127) 341)
- Carbon**
 Thin film; Lithium-ion battery; Ion transfer; Charge transfer (Ogumi, Z. (127) 72)
- Catalyst**
 MEA; Slurry; Solvent; PEMFC (Yang, T.-H. (127) 230)
- Cathode material**
 SOFC; Electrolyte-supported cell; Electrode supported cell; Composite cathode; Electrolyte material; YSZ; GCO; LSGM (Weber, A. (127) 273)
- Charge transfer**
 Carbon; Thin film; Lithium-ion battery; Ion transfer (Ogumi, Z. (127) 72)
- CO-tolerance**
 Platinum loading; Polymerelectrolyte membrane (PEM) fuel cell; Platinum–ruthenium; Oxygen reduction reaction activity (Gasteiger, H.A. (127) 162)
- Composite cathode**
 SOFC; Electrolyte-supported cell; Electrode supported cell; Cathode material; Electrolyte material; YSZ; GCO; LSGM (Weber, A. (127) 273)
- Composite membranes**
 Polymer electrolyte fuel cell; Fluorinated polymer electrolytes; Non-fluorinated polymer electrolytes (Savadogo, O. (127) 135)
- Corrosion**
 Planar PEMFC; Printed circuit board (PCB); Self-breathing; Stability of performance; Long-term operation; Production process; Open cathode (Schmitz, A. (127) 197)

- Current collector
POLYMET; Lithium battery; Fuel cell; Gas diffusion layer; Microporous material (Voß, S. (127) 93)
- Degradation
Alkaline fuel cell; Gas-diffusion electrode; Oxygen reduction reaction; Silver cathode; Scanning electron microscopy; X-ray photoelectron spectroscopy (Wagner, N. (127) 264)
- Degradation
Alkaline fuel cells; X-ray photoelectron spectroscopy; Polytetrafluoroethylene; Nickel electrodes (Schulze, M. (127) 252)
- Degradation
Gas diffusion electrodes; AFC electrode; Polymer electrolyte membrane fuel cells; Carbon dioxide (Gülgow, E. (127) 243)
- Degradation
PEFC; Silicone; Sealing; Scanning electron microscopy; Energy dispersive X-ray analysis; X-ray photoelectron spectroscopy (Schulze, M. (127) 222)
- Degradation
Platinum; Fuel cells; Diffusion; Accumulation; Scanning electron microscopy; X-ray photoelectron spectroscopy; PEFC (Schulze, M. (127) 213)
- Derivative impedance spectroscopy
Capacitance; Electrolyte concentration; Water electrolysis; Supercapacitors; Metal oxide electrodes (Kurzweil, P. (127) 331)
- Diffusion layer
DMFC; MEAs; Ambient conditions (Oedegaard, A. (127) 187)
- Diffusion
Platinum; Fuel cells; Accumulation; Degradation; Scanning electron microscopy; X-ray photoelectron spectroscopy; PEFC (Schulze, M. (127) 213)
- Direct methanol fuel cells
Polymer electrolyte fuel cells; Lifetime; Aging mechanisms; Failure; Mitigation strategies (Knights, S.D. (127) 127)
- Direct methanol fuel cells
Polymer electrolyte membrane; Electrocatalysis; Electro-traction; Portable power sources (Dillon, R. (127) 112)
- DMFC
Diffusion layer; MEAs; Ambient conditions (Oedegaard, A. (127) 187)
- DMFC
Dynamic fuel cell; Transient; Gaseous direct methanol fuel cell (Kallo, J. (127) 181)
- DMFC
MEA; Methanol; Permeation; Stack; Electrocatalyst (Gogel, V. (127) 172)
- Dynamic fuel cell
Transient; Gaseous direct methanol fuel cell; DMFC (Kallo, J. (127) 181)
- Dynamic simulation
Fuel cell system; Autothermal gasoline reformer; Modelling; Load change; Response time (Sommer, M. (127) 313)
- Dynamics
Steam reforming; Hydrogen; Fuel cell; Simulation (Beckhaus, P. (127) 294)
- Electric vehicle
ZEBRA battery; Sodium-nickel-chloride system; High specific energy; Beta-alumina ceramic electrolyte; Hybrid electric bus (Dustmann, C.-H. (127) 85)
- Electro-traction
Direct methanol fuel cells; Polymer electrolyte membrane; Electrocatalysis; Portable power sources (Dillon, R. (127) 112)
- Electrocatalysis
Direct methanol fuel cells; Polymer electrolyte membrane; Electrocatalysis; Portable power sources (Dillon, R. (127) 112)
- Electrocatalyst
DMFC; MEA; Methanol; Permeation; Stack (Gogel, V. (127) 172)
- Electrode stability
Alkaline fuel cell; Liquid electrolyte; Lifetime; Carbon dioxide sensitivity; Ammonia as fuel (Cifrain, M. (127) 234)
- Electrode supported cell
SOFC; Electrolyte-supported cell; Cathode material; Composite cathode; Electrolyte material; YSZ; GCO; LSM (Weber, A. (127) 273)
- Electrolyte concentration
Derivative impedance spectroscopy; Capacitance; Water electrolysis; Supercapacitors; Metal oxide electrodes (Kurzweil, P. (127) 331)
- Electrolyte material
SOFC; Electrolyte-supported cell; Electrode supported cell; Cathode material; Composite cathode; YSZ; GCO; LSM (Weber, A. (127) 273)
- Electrolyte-supported cell
SOFC; Electrode supported cell; Cathode material; Composite cathode; Electrolyte material; YSZ; GCO; LSM (Weber, A. (127) 273)
- Energy dispersive X-ray analysis
PEFC; Silicone; Sealing; Degradation; Scanning electron microscopy; X-ray photoelectron spectroscopy (Schulze, M. (127) 222)
- Energy system balance
Biogas; Waste exploitation; Solid oxide fuel cells; Reforming (Vanherle, J. (127) 300)
- Failure
Polymer electrolyte fuel cells; Direct methanol fuel cells; Lifetime; Aging mechanisms; Mitigation strategies (Knights, S.D. (127) 127)
- Fluorinated polymer electrolytes
Polymer electrolyte fuel cell; Composite membranes; Non-fluorinated polymer electrolytes (Savadogo, O. (127) 135)
- Fuel cell system
Dynamic simulation; Autothermal gasoline reformer; Modelling; Load change; Response time (Sommer, M. (127) 313)
- Fuel cell system
Micro-computer control; Overall efficiency; Heating system; Network adjustment (Heideck, G. (127) 319)
- Fuel cell
In situ EPR; Membrane degradation (Panchenko, A. (127) 325)
- Fuel cell
PEMFC; Stack (Scholten, J. (127) 206)
- Fuel cell
POLYMET; Lithium battery; Current collector; Gas diffusion layer; Microporous material (Voß, S. (127) 93)
- Fuel cell
Steam reforming; Dynamics; Hydrogen; Simulation (Beckhaus, P. (127) 294)
- Fuel cells
Platinum; Diffusion; Accumulation; Degradation; Scanning electron microscopy; X-ray photoelectron spectroscopy; PEFC (Schulze, M. (127) 213)
- Fuel cells
Polymer electrolyte membranes; Gel-type; Lithium batteries (Ciuffa, F. (127) 53)
- Gas diffusion electrodes
AFC electrode; Polymer electrolyte membrane fuel cells; Carbon dioxide; Degradation (Gülgow, E. (127) 243)
- Gas diffusion layer
POLYMET; Lithium battery; Fuel cell; Current collector; Microporous material (Voß, S. (127) 93)
- Gas-diffusion electrode
Alkaline fuel cell; Oxygen reduction reaction; Silver cathode; Degradation; Scanning electron microscopy; X-ray photoelectron spectroscopy (Wagner, N. (127) 264)
- Gaseous direct methanol fuel cell
Dynamic fuel cell; Transient; DMFC (Kallo, J. (127) 181)

- GCO**
 SOFC; Electrolyte-supported cell; Electrode supported cell; Cathode material; Composite cathode; Electrolyte material; YSZ; LSGM (Weber, A. (127) 273)
- Gel-type**
 Polymer electrolyte membranes; Lithium batteries; Fuel cells (Ciuffa, F. (127) 53)
- Heating system**
 Micro-computer control; Fuel cell system; Overall efficiency; Network adjustment (Heideck, G. (127) 319)
- High rate**
 Lead-acid; Partial-state-of-charge; Service life; Valve-regulated (Moseley, P.T. (127) 27)
- High specific energy**
 ZEBRA battery; Sodium–nickel-chloride system; Beta-alumina ceramic electrolyte; Electric vehicle; Hybrid electric bus (Dustmann, C.-H. (127) 85)
- High-power batteries**
 42 V automotive systems; Hybrid electric vehicles; VRLA; NiMH; Li ion (Anderman, M. (127) 2)
- Hybrid electric bus**
 ZEBRA battery; Sodium–nickel-chloride system; High specific energy; Beta-alumina ceramic electrolyte; Electric vehicle (Dustmann, C.-H. (127) 85)
- Hybrid electric vehicles**
 42 V automotive systems; High-power batteries; VRLA; NiMH; Li ion (Anderman, M. (127) 2)
- Hybrid electric vehicles**
 Battery storage systems; Battery management (Bitsche, O. (127) 8)
- Hydrocarbon fuels**
 Solid-oxide fuel cell; Reduced temperature SOFC; Aging mechanism of components; Operation condition (Tu, H. (127) 284)
- Hydrogen storage alloys**
 Alkaline batteries; Nickel hydroxides; Nickel–metal hydride (Köhler, U. (127) 45)
- Hydrogen**
 Steam reforming; Dynamics; Fuel cell; Simulation (Beckhaus, P. (127) 294)
- Impedance spectroscopy**
 Ni–MH; Ni–Cd; Battery state-of-charge; Series resonance frequency (Hammouche, A. (127) 105)
- In situ EPR**
 Fuel cell; Membrane degradation (Panchenko, A. (127) 325)
- Ion transfer**
 Carbon; Thin film; Lithium-ion battery; Charge transfer (Ogumi, Z. (127) 72)
- Lead-acid batteries**
 Anodic corrosion; Short-circuits (Ruetschi, P. (127) 33)
- Lead-acid**
 High rate; Partial-state-of-charge; Service life; Valve-regulated (Moseley, P.T. (127) 27)
- Li ion**
 42 V automotive systems; Hybrid electric vehicles; High-power batteries; VRLA; NiMH (Anderman, M. (127) 2)
- Life assessment**
 Lithium-ion batteries; Lithium-ion materials; Aging phenomenon; Lithium-ion cell performances (Sarre, G. (127) 65)
- Lifetime**
 Alkaline fuel cell; Liquid electrolyte; Electrode stability; Carbon dioxide sensitivity; Ammonia as fuel (Cifrain, M. (127) 234)
- Lifetime**
 Polymer electrolyte fuel cells; Direct methanol fuel cells; Aging mechanisms; Failure; Mitigation strategies (Knights, S.D. (127) 127)
- Liquid electrolyte**
 Alkaline fuel cell; Lifetime; Electrode stability; Carbon dioxide sensitivity; Ammonia as fuel (Cifrain, M. (127) 234)
- Lithium batteries**
 Polymer electrolyte membranes; Gel-type; Fuel cells (Ciuffa, F. (127) 53)
- Lithium battery**
 POLYMET; Fuel cell; Current collector; Gas diffusion layer; Microporous material (Voß, S. (127) 93)
- Lithium intercalation**
 Batteries; Molybdates (Leyzerovich, N.N. (127) 76)
- Lithium–manganese spinel**
 Lithium–nickel–cobalt oxide; Calendar life; Capacity fading; Aging mechanism (Wohlfahrt-Mehrens, M. (127) 58)
- Lithium–nickel–cobalt oxide**
 Lithium–manganese spinel; Calendar life; Capacity fading; Aging mechanism (Wohlfahrt-Mehrens, M. (127) 58)
- Lithium-ion batteries**
 Lithium-ion materials; Aging phenomenon; Life assessment; Lithium-ion cell performances (Sarre, G. (127) 65)
- Lithium-ion battery**
 Carbon; Thin film; Ion transfer; Charge transfer (Ogumi, Z. (127) 72)
- Lithium-ion cell performances**
 Lithium-ion batteries; Lithium-ion materials; Aging phenomenon; Life assessment (Sarre, G. (127) 65)
- Lithium-ion materials**
 Lithium-ion batteries; Aging phenomenon; Life assessment; Lithium-ion cell performances (Sarre, G. (127) 65)
- Load change**
 Fuel cell system; Dynamic simulation; Autothermal gasoline reformer; Modelling; Response time (Sommer, M. (127) 313)
- Load leveling**
 Vanadium redox-flow battery; Stand-alone photovoltaic system (Joerissen, L. (127) 98)
- Long-term operation**
 Planar PEMFC; Printed circuit board (PCB); Self-breathing; Stability of performance; Corrosion; Production process; Open cathode (Schmitz, A. (127) 197)
- LSGM**
 SOFC; Electrolyte-supported cell; Electrode supported cell; Cathode material; Composite cathode; Electrolyte material; YSZ; GCO (Weber, A. (127) 273)
- MEA**
 Catalyst; Slurry; Solvent; PEMFC (Yang, T.-H. (127) 230)
- MEA**
 DMFC; Methanol; Permeation; Stack; Electrocatalyst (Gogel, V. (127) 172)
- MEAs**
 DMFC; Diffusion layer; Ambient conditions (Oedegaard, A. (127) 187)
- Membrane degradation**
 In situ EPR; Fuel cell (Panchenko, A. (127) 325)
- Metal oxide electrodes**
 Derivative impedance spectroscopy; Capacitance; Electrolyte concentration; Water electrolysis; Supercapacitors (Kurzweil, P. (127) 331)
- Methanol**
 DMFC; MEA; Permeation; Stack; Electrocatalyst (Gogel, V. (127) 172)
- Micro-computer control**
 Fuel cell system; Overall efficiency; Heating system; Network adjustment (Heideck, G. (127) 319)
- Microporous material**
 POLYMET; Lithium battery; Fuel cell; Current collector; Gas diffusion layer (Voß, S. (127) 93)
- Mitigation strategies**
 Polymer electrolyte fuel cells; Direct methanol fuel cells; Lifetime; Aging mechanisms; Failure (Knights, S.D. (127) 127)

Modelling

Fuel cell system; Dynamic simulation; Autothermal gasoline reformer;
Load change; Response time (Sommer, M. (127) 313)

Molybdates

Batteries; Lithium intercalation (Leyzerovich, N.N. (127) 76)

Network adjustment

Micro-computer control; Fuel cell system; Overall efficiency; Heating
system (Heideck, G. (127) 319)

Ni–Cd

Ni–MH; Battery state-of-charge; Impedance spectroscopy; Series reso-
nance frequency (Hammouche, A. (127) 105)

Ni–MH

Ni–Cd; Battery state-of-charge; Impedance spectroscopy; Series reso-
nance frequency (Hammouche, A. (127) 105)

Nickel electrodes

Alkaline fuel cells; X-ray photoelectron spectroscopy; Polytetrafluor-
ethylene; Degradation (Schulze, M. (127) 252)

Nickel hydroxides

Alkaline batteries; Hydrogen storage alloys; Nickel–metal hydride
(Köhler, U. (127) 45)

Nickel–metal hydride

Alkaline batteries; Nickel hydroxides; Hydrogen storage alloys (Köhler,
U. (127) 45)

NiMH

42 V automotive systems; Hybrid electric vehicles; High-power bat-
teries; VRLA; Li ion (Anderman, M. (127) 2)

Non-flourinated polymer electrolytes

Polymer electrolyte fuel cell; Composite membranes; Fluorinated poly-
mer electrolytes (Savadogo, O. (127) 135)

Open cathode

Planar PEMFC; Printed circuit board (PCB); Self-breathing; Stability of
performance; Corrosion; Long-term operation; Production process
(Schmitz, A. (127) 197)

Operation condition

Solid-oxide fuel cell; Reduced temperature SOFC; Hydrocarbon fuels;
Aging mechanism of components (Tu, H. (127) 284)

Overall efficiency

Micro-computer control; Fuel cell system; Heating system; Network
adjustment (Heideck, G. (127) 319)

Oxygen reduction reaction activity

Platinum loading; Polymerelectrolyte membrane (PEM) fuel cell; Pla-
tinum–ruthenium; CO-tolerance (Gasteiger, H.A. (127) 162)

Oxygen reduction reaction

Alkaline fuel cell; Gas-diffusion electrode; Silver cathode; Degradation;
Scanning electron microscopy; X-ray photoelectron spectroscopy
(Wagner, N. (127) 264)

Partial-state-of-charge

Lead-acid; High rate; Service life; Valve-regulated (Moseley, P.T. (127)
27)

PEFC

Platinum; Fuel cells; Diffusion; Accumulation; Degradation; Scanning
electron microscopy; X-ray photoelectron spectroscopy (Schulze,
M. (127) 213)

PEFC

Silicone; Sealing; Degradation; Scanning electron microscopy; Energy
dispersive X-ray analysis; X-ray photoelectron spectroscopy
(Schulze, M. (127) 222)

PEMFC

Fuel cell; Stack (Scholta, J. (127) 206)

PEMFC

MEA; Catalyst; Slurry; Solvent (Yang, T.-H. (127) 230)

Permeation

DMFC; MEA; Methanol; Stack; Electrocatalyst (Gogel, V. (127)
172)

Planar PEMFC

Printed circuit board (PCB); Self-breathing; Stability of performance;
Corrosion; Long-term operation; Production process; Open cathode
(Schmitz, A. (127) 197)

Platinum loading

Polymerelectrolyte membrane (PEM) fuel cell; Platinum–ruthenium;
Oxygen reduction reaction activity; CO-tolerance (Gasteiger, H.A.
(127) 162)

Platinum

Fuel cells; Diffusion; Accumulation; Degradation; Scanning electron
microscopy; X-ray photoelectron spectroscopy; PEFC (Schulze, M.
(127) 213)

Platinum–ruthenium

Platinum loading; Polymerelectrolyte membrane (PEM) fuel cell; Oxygen
reduction reaction activity; CO-tolerance (Gasteiger, H.A. (127) 162)

Polymer electrolyte fuel cell

Composite membranes; Fluorinated polymer electrolytes; Non-flouri-
nated polymer electrolytes (Savadogo, O. (127) 135)

Polymer electrolyte fuel cells (PEFCs)

Carbon monoxide poisoning; Time resolved electrochemical impedance
spectroscopy (TREIS); Surface relaxation; Porous electrode model
(Wagner, N. (127) 341)

Polymer electrolyte fuel cells

Direct methanol fuel cells; Lifetime; Aging mechanisms; Failure;
Mitigation strategies (Knights, S.D. (127) 127)

Polymer electrolyte membrane fuel cells

Gas diffusion electrodes; AFC electrode; Carbon dioxide; Degradation
(Gülow, E. (127) 243)

Polymer electrolyte membrane

Direct methanol fuel cells; Electrocatalysis; Electro-traction; Portable
power sources (Dillon, R. (127) 112)

Polymer electrolyte membranes

Gel-type; Lithium batteries; Fuel cells (Ciuffa, F. (127) 53)

Polymerelectrolyte membrane (PEM) fuel cell

Platinum loading; Platinum–ruthenium; Oxygen reduction reaction
activity; CO-tolerance (Gasteiger, H.A. (127) 162)

POLYMET

Lithium battery; Fuel cell; Current collector; Gas diffusion layer;
Microporous material (Voß, S. (127) 93)

Polytetrafluoroethylene

Alkaline fuel cells; X-ray photoelectron spectroscopy; Degradation;
Nickel electrodes (Schulze, M. (127) 252)

Porous electrode model

Polymer electrolyte fuel cells (PEFCs); Carbon monoxide poisoning;
Time resolved electrochemical impedance spectroscopy (TREIS);
Surface relaxation (Wagner, N. (127) 341)

Portable power sources

Direct methanol fuel cells; Polymer electrolyte membrane; Electrocata-
lysis; Electro-traction (Dillon, R. (127) 112)

Printed circuit board (PCB)

Planar PEMFC; Self-breathing; Stability of performance; Corrosion;
Long-term operation; Production process; Open cathode (Schmitz,
A. (127) 197)

Production process

Planar PEMFC; Printed circuit board (PCB); Self-breathing; Stability of
performance; Corrosion; Long-term operation; Open cathode
(Schmitz, A. (127) 197)

Reduced temperature SOFC

Solid-oxide fuel cell; Hydrocarbon fuels; Aging mechanism of compo-
nents; Operation condition (Tu, H. (127) 284)

Reforming

Biogas; Waste exploitation; Solid oxide fuel cells; Energy system
balance (Van herle, J. (127) 300)

Response time

Fuel cell system; Dynamic simulation; Autothermal gasoline reformer;
Modelling; Load change (Sommer, M. (127) 313)

- Scanning electron microscopy
 Alkaline fuel cell; Gas-diffusion electrode; Oxygen reduction reaction;
 Silver cathode; Degradation; X-ray photoelectron spectroscopy
 (Wagner, N. (127) 264)
- Scanning electron microscopy
 PEFC; Silicone; Sealing; Degradation; Energy dispersive X-ray analysis;
 X-ray photoelectron spectroscopy (Schulze, M. (127) 222)
- Scanning electron microscopy
 Platinum; Fuel cells; Diffusion; Accumulation; Degradation; X-ray photoelectron spectroscopy; PEFC (Schulze, M. (127) 213)
- Sealing
 PEFC; Silicone; Degradation; Scanning electron microscopy; Energy dispersive X-ray analysis; X-ray photoelectron spectroscopy (Schulze, M. (127) 222)
- Self-breathing
 Planar PEMFC; Printed circuit board (PCB); Stability of performance;
 Corrosion; Long-term operation; Production process; Open cathode (Schmitz, A. (127) 197)
- Series resonance frequency
 Ni-MH; Ni-Cd; Battery state-of-charge; Impedance spectroscopy (Hammouche, A. (127) 105)
- Service life
 Lead-acid; High rate; Partial-state-of-charge; Valve-regulated (Moseley, P.T. (127) 27)
- Short-circuits
 Lead-acid batteries; Anodic corrosion (Ruetschi, P. (127) 33)
- Silicone
 PEFC; Sealing; Degradation; Scanning electron microscopy; Energy dispersive X-ray analysis; X-ray photoelectron spectroscopy (Schulze, M. (127) 222)
- Silver cathode
 Alkaline fuel cell; Gas-diffusion electrode; Oxygen reduction reaction;
 Degradation; Scanning electron microscopy; X-ray photoelectron spectroscopy (Wagner, N. (127) 264)
- Simulation
 Steam reforming; Dynamics; Hydrogen; Fuel cell (Beckhaus, P. (127) 294)
- Slurry
 MEA; Catalyst; Solvent; PEMFC (Yang, T.-H. (127) 230)
- Sodium-nickel-chloride system
 ZEBRA battery; High specific energy; Beta-alumina ceramic electrolyte; Electric vehicle; Hybrid electric bus (Dustmann, C.-H. (127) 85)
- SOFC
 Electrolyte-supported cell; Electrode supported cell; Cathode material;
 Composite cathode; Electrolyte material; YSZ; GCO; LSGM (Weber, A. (127) 273)
- Solid oxide fuel cells
 Biogas; Waste exploitation; Energy system balance; Reforming (Vanherle, J. (127) 300)
- Solid-oxide fuel cell
 Reduced temperature SOFC; Hydrocarbon fuels; Aging mechanism of components; Operation condition (Tu, H. (127) 284)
- Solvent
 MEA; Catalyst; Slurry; PEMFC (Yang, T.-H. (127) 230)
- Stability of performance
 Planar PEMFC; Printed circuit board (PCB); Self-breathing; Corrosion;
 Long-term operation; Production process; Open cathode (Schmitz, A. (127) 197)
- Stack
 DMFC; MEA; Methanol; Permeation; Electrocatalyst (Gogel, V. (127) 172)
- Stack
 Fuel cell; PEMFC (Scholten, J. (127) 206)
- Stand-alone photovoltaic system
 Vanadium redox-flow battery; Load leveling (Joerissen, L. (127) 98)
- Steam reforming
 Dynamics; Hydrogen; Fuel cell; Simulation (Beckhaus, P. (127) 294)
- Supercapacitors
 Derivative impedance spectroscopy; Capacitance; Electrolyte concentration; Water electrolysis; Metal oxide electrodes (Kurzweil, P. (127) 331)
- Surface relaxation
 Polymer electrolyte fuel cells (PEFCs); Carbon monoxide poisoning;
 Time resolved electrochemical impedance spectroscopy (TREIS);
 Porous electrode model (Wagner, N. (127) 341)
- Thin film
 Carbon; Lithium-ion battery; Ion transfer; Charge transfer (Ogumi, Z. (127) 72)
- Time resolved electrochemical impedance spectroscopy (TREIS)
 Polymer electrolyte fuel cells (PEFCs); Carbon monoxide poisoning;
 Surface relaxation; Porous electrode model (Wagner, N. (127) 341)
- Transient
 Dynamic fuel cell; Gaseous direct methanol fuel cell; DMFC (Kallo, J. (127) 181)
- 42 V
 Automotive electric systems (Keim, T.A. (127) 16)
- 42 V automotive systems
 Hybrid electric vehicles; High-power batteries; VRLA; NiMH; Li ion (Anderman, M. (127) 2)
- Valve-regulated
 Lead-acid; High rate; Partial-state-of-charge; Service life (Moseley, P.T. (127) 27)
- Vanadium redox-flow battery
 Load leveling; Stand-alone photovoltaic system (Joerissen, L. (127) 98)
- VRLA
 42 V automotive systems; Hybrid electric vehicles; High-power batteries; NiMH; Li ion (Anderman, M. (127) 2)
- Waste exploitation
 Biogas; Solid oxide fuel cells; Energy system balance; Reforming (Vanherle, J. (127) 300)
- Water electrolysis
 Derivative impedance spectroscopy; Capacitance; Electrolyte concentration; Supercapacitors; Metal oxide electrodes (Kurzweil, P. (127) 331)
- X-ray photoelectron spectroscopy
 Alkaline fuel cell; Gas-diffusion electrode; Oxygen reduction reaction;
 Silver cathode; Degradation; Scanning electron microscopy (Wagner, N. (127) 264)
- X-ray photoelectron spectroscopy
 Alkaline fuel cells; Polytetrafluoroethylene; Degradation; Nickel electrodes (Schulze, M. (127) 252)
- X-ray photoelectron spectroscopy
 PEFC; Silicone; Sealing; Degradation; Scanning electron microscopy; Energy dispersive X-ray analysis (Schulze, M. (127) 222)
- X-ray photoelectron spectroscopy
 Platinum; Fuel cells; Diffusion; Accumulation; Degradation; Scanning electron microscopy; PEFC (Schulze, M. (127) 213)
- YSZ
 SOFC; Electrolyte-supported cell; Electrode supported cell; Cathode material; Composite cathode; Electrolyte material; GCO; LSGM (Weber, A. (127) 273)
- ZEBRA battery
 Sodium-nickel-chloride system; High specific energy; Beta-alumina ceramic electrolyte; Electric vehicle; Hybrid electric bus (Dustmann, C.-H. (127) 85)