

Subject Index of Volume 137

- AB₅-type hydrogen storage alloy**
 Rapid quenching; Fe content; Microstructure; Electrochemical performance (Zhang, Y.-h. (137) 309)
- Accelerating rate calorimetry**
 Thermal stability; Safety; Lithium-ion battery; Cathode and anode materials; State of charge (Maleki, H. (137) 117)
- Activated carbon fabric-polyaniline composite**
 Supercapacitor; Cyclic voltammetry; Pseudocapacitance (Hu, C.-C. (137) 152)
- Adipic acid**
 Spinel LiMn₂O₄; Chromium substitution; Sol-gel synthesis; Intercalation reaction; Electrochemical properties; Lithium ion battery (Thirunakaran, R. (137) 100)
- Aerospace**
 Polymer electrolyte fuel cell; Humidification; Dehydrator; Gas recycle; Closed environment (Sone, Y. (137) 269)
- Alcohol-reduction**
 PtRu/C electrocatalyst; Fuel cell; Electro-oxidation; Ethanol (Spinacé, E.V. (137) 17)
- Alkaline fuel cell**
 Carbon beads; Hydrogen electrode; Nickel-coated ceramic; Iron and cobalt catalyst; Electrocatalyst (Chatterjee, A.K. (137) 216)
- Alkaline media**
 Anion exchange membranes; Methanol crossover; Poisoning (Yu, E.H. (137) 248)
- Ambient temperature**
 DMFC; Passive fuel cells; Small-scale application; Portable; Nafion (Shimizu, T. (137) 277)
- Ammonia reforming**
 Microreactor; Hydrogen production (Ganley, J.C. (137) 53)
- Anion exchange membranes**
 Alkaline media; Methanol crossover; Poisoning (Yu, E.H. (137) 248)
- Anode catalyst**
 Direct methanol fuel cell; Polymer electrolyte; Proton-exchange; Model (Scott, K. (137) 228)
- Autothermal reforming**
 Ensemble size control; Coke reduction; Hydrogen production; Energetic efficiency (Dias, J.A.C. (137) 264)
- Battery collection**
 Battery recycling; Battery disposal (Crocce Romano Espinosa, D. (137) 134)
- Battery disposal**
 Battery recycling; Battery collection (Crocce Romano Espinosa, D. (137) 134)
- Battery recycling**
 Battery collection; Battery disposal (Crocce Romano Espinosa, D. (137) 134)
- Bipolar structure**
 Internal resistance; Contact resistance; Electrochemical capacitors; Composite electrodes (Zheng, J.P. (137) 158)
- Building simulation**
 Residential fuel cell system; Cogeneration (Ferguson, A. (137) 30)
- Capacity increase**
 Lithium batteries; Chromium accumulation; Impedance spectra (Wu, X. (137) 105)
- Carbon beads**
 Hydrogen electrode; Nickel-coated ceramic; Iron and cobalt catalyst; Alkaline fuel cell; Electrocatalyst (Chatterjee, A.K. (137) 216)
- Carbon support**
 Proton exchange membrane fuel cell (PEMFC); Oxygen gain; Oxygen concentration; Platinum content; MEA fabrication (Prasanna, M. (137) 1)
- Cathode and anode materials**
 Thermal stability; Safety; Lithium-ion battery; Accelerating rate calorimetry; State of charge (Maleki, H. (137) 117)
- Cathode gas cooling**
 Molten carbonate fuel cell (MCFC); Partial load thermal efficiency; Pressure swing operation (Yoshiba, F. (137) 196)
- Cathode material**
 LiFePO₄; Mechanical alloying; Rate capability; Rechargeable lithium battery (Kwon, S.J. (137) 93)
- Cathode**
 Molten carbonate fuel cell; Solubility; Nickel oxide; Coating; EIS (Huang, B. (137) 163)
- Cathode**
 NiO dissolution; Galvanostatic pulse plating; Co; MCFC (Ryu, B.H. (137) 62)
- Chromium accumulation**
 Lithium batteries; Capacity increase; Impedance spectra (Wu, X. (137) 105)
- Chromium substitution**
 Spinel LiMn₂O₄; Adipic acid; Sol-gel synthesis; Intercalation reaction; Electrochemical properties; Lithium ion battery (Thirunakaran, R. (137) 100)
- Closed environment**
 Polymer electrolyte fuel cell; Humidification; Dehydrator; Gas recycle; Aerospace (Sone, Y. (137) 269)
- Co**
 NiO dissolution; Galvanostatic pulse plating; MCFC; Cathode (Ryu, B.H. (137) 62)
- Coating**
 Molten carbonate fuel cell; Cathode; Solubility; Nickel oxide; EIS (Huang, B. (137) 163)
- Cogeneration**
 Residential fuel cell system; Building simulation (Ferguson, A. (137) 30)
- Coke reduction**
 Autothermal reforming; Ensemble size control; Hydrogen production; Energetic efficiency (Dias, J.A.C. (137) 264)
- Comb polymer**
 Polymer battery; Composite polymer electrolyte; Lithium electrode (Matoba, Y. (137) 284)
- Combined system**
 Solid oxide fuel cell; Polymer electrolyte fuel cell; Steam reforming reaction; Methane (Yokoo, M. (137) 206)

- Composite electrodes
Internal resistance; Contact resistance; Bipolar structure; Electrochemical capacitors (Zheng, J.P. (137) 158)
- Composite polymer electrolyte
Polymer battery; Comb polymer; Lithium electrode (Matoba, Y. (137) 284)
- Compression sealing
Solid oxide fuel cell; Pressure test; Interconnect design; Silver gasket (Duquette, J. (137) 71)
- Conducting polymer batteries
Poly(*N*-methylaniline); Polyisothianaphthene; Polymeric supercapacitors (Sivakkumar, S.R. (137) 322)
- Contact resistance
Internal resistance; Bipolar structure; Electrochemical capacitors; Composite electrodes (Zheng, J.P. (137) 158)
- Copper oxide
Copper; Insertion; Rechargeable lithium battery; Oxidation (Zhang, J. (137) 88)
- Copper
Copper oxide; Insertion; Rechargeable lithium battery; Oxidation (Zhang, J. (137) 88)
- Cyclic voltammetry
Redox supercapacitor; Supramolecular 1,5-diaminoanthraquinone (DAAQ) oligomer; Polymer electrolytes; Gel electrolytes; Impedance spectroscopy (Hashmi, S.A. (137) 145)
- Cyclic voltammetry
Supercapacitor; Activated carbon fabric–polyaniline composite; Pseudocapacitance (Hu, C.-C. (137) 152)
- Dehydrator
Polymer electrolyte fuel cell; Humidification; Gas recycle; Aerospace; Closed environment (Sone, Y. (137) 269)
- Dilution effect
PEM fuel cells; Electric vehicle; Transient behavior; Dynamic behavior; Reservoir effect (Kim, S. (137) 43)
- Direct methanol fuel cell
Fuel cell; Soldier power; Power; Energy (Bostic, E. (137) 76)
- Direct methanol fuel cell
Polymer electrolyte; Proton-exchange; Model; Anode catalyst (Scott, K. (137) 228)
- Direct methanol fuel cell
Sedimentation method; Membrane electrode assembly; Power density (Liu, J.H. (137) 222)
- DMFC
Passive fuel cells; Ambient temperature; Small-scale application; Portable; Nafion (Shimizu, T. (137) 277)
- Dynamic behavior
PEM fuel cells; Electric vehicle; Transient behavior; Reservoir effect; Dilution effect (Kim, S. (137) 43)
- EIS
Molten carbonate fuel cell; Cathode; Solubility; Nickel oxide; Coating (Huang, B. (137) 163)
- Electric vehicle
PEM fuel cells; Transient behavior; Dynamic behavior; Reservoir effect; Dilution effect (Kim, S. (137) 43)
- Electro-oxidation
PtRu/C electrocatalyst; Fuel cell; Alcohol-reduction; Ethanol (Spinacé, E.V. (137) 17)
- Electrocatalyst
Carbon beads; Hydrogen electrode; Nickel-coated ceramic; Iron and cobalt catalyst; Alkaline fuel cell (Chatterjee, A.K. (137) 216)
- Electrochemical capacitors
Internal resistance; Contact resistance; Bipolar structure; Composite electrodes (Zheng, J.P. (137) 158)
- Electrochemical performance
Rapid quenching; AB₅-type hydrogen storage alloy; Fe content; Microstructure (Zhang, Y.-h. (137) 309)
- Electrochemical properties
Spinel LiMn₂O₄; Chromium substitution; Adipic acid; Sol-gel synthesis; Intercalation reaction; Lithium ion battery (Thirunakaran, R. (137) 100)
- Energetic efficiency
Autothermal reforming; Ensemble size control; Coke reduction; Hydrogen production (Dias, J.A.C. (137) 264)
- Energy conversion systems
MCFC; LCA; Environmental impact; Fuel cell; Hydrogen (Lunghi, P. (137) 239)
- Energy
Fuel cell; Direct methanol fuel cell; Soldier power; Power (Bostic, E. (137) 76)
- Ensemble size control
Autothermal reforming; Coke reduction; Hydrogen production; Energetic efficiency (Dias, J.A.C. (137) 264)
- Environmental impact
MCFC; LCA; Energy conversion systems; Fuel cell; Hydrogen (Lunghi, P. (137) 239)
- Ethanol
PtRu/C electrocatalyst; Fuel cell; Alcohol-reduction; Electro-oxidation (Spinacé, E.V. (137) 17)
- Fe content
Rapid quenching; AB₅-type hydrogen storage alloy; Microstructure; Electrochemical performance (Zhang, Y.-h. (137) 309)
- Fluorinated graphite
Fluorination; Graphite intercalation compound; Primary lithium battery (Nakajima, T. (137) 80)
- Fluorination
Fluorinated graphite; Graphite intercalation compound; Primary lithium battery (Nakajima, T. (137) 80)
- Fuel cell
Direct methanol fuel cell; Soldier power; Power; Energy (Bostic, E. (137) 76)
- Fuel cell
MCFC; LCA; Energy conversion systems; Environmental impact; Hydrogen (Lunghi, P. (137) 239)
- Fuel cell
Methanol oxidation; Thermal decomposition; Pt electrocatalysts; Sn electrocatalysts; Ru electrocatalysts (Yang, L.X. (137) 257)
- Fuel cell
Polymer electrolyte; Performance equation; Polarization; Modeling (Hsuen, H.-K. (137) 183)
- Fuel cell
Proton conductor; Sol-gel; Glass (Park, Y.-I. (137) 175)
- Fuel cell
PtRu/C electrocatalyst; Alcohol-reduction; Electro-oxidation; Ethanol (Spinacé, E.V. (137) 17)
- Galvanostatic non-destructive technique
Valve-regulated lead-acid battery; State-of-charge; State-of-health; Online monitoring (Hariprakash, B. (137) 128)
- Galvanostatic pulse plating
NiO dissolution; Co; MCFC; Cathode (Ryu, B.H. (137) 62)
- Gas flow rate
Molten carbonate fuel cell; Unsteady-state; Initial behaviour; Hydrogen utilization (Lee, Y.-R. (137) 9)
- Gas recycle
Polymer electrolyte fuel cell; Humidification; Dehydrator; Aerospace; Closed environment (Sone, Y. (137) 269)
- Gel electrolytes
Redox supercapacitor; Supramolecular 1,5-diaminoanthraquinone (DAAQ) oligomer; Polymer electrolytes; Impedance spectroscopy; Cyclic voltammetry (Hashmi, S.A. (137) 145)

Glass

Proton conductor; Sol-gel; Fuel cell (Park, Y.-I. (137) 175)

Graphite intercalation compound

Fluorination; Fluorinated graphite; Primary lithium battery (Nakajima, T. (137) 80)

Humidification

Polymer electrolyte fuel cell; Dehydrator; Gas recycle; Aerospace; Closed environment (Sone, Y. (137) 269)

Hydrogen electrode

Carbon beads; Nickel-coated ceramic; Iron and cobalt catalyst; Alkaline fuel cell; Electrocatalyst (Chatterjee, A.K. (137) 216)

Hydrogen production

Autothermal reforming; Ensemble size control; Coke reduction; Energetic efficiency (Dias, J.A.C. (137) 264)

Hydrogen production

Microreactor; Ammonia reforming (Ganley, J.C. (137) 53)

Hydrogen utilization

Molten carbonate fuel cell; Unsteady-state; Initial behaviour; Gas flow rate (Lee, Y.-R. (137) 9)

Hydrogen

MCFC; LCA; Energy conversion systems; Environmental impact; Fuel cell (Lunghi, P. (137) 239)

Impedance spectra

Lithium batteries; Capacity increase; Chromium accumulation (Wu, X. (137) 105)

Impedance spectroscopy

Redox supercapacitor; Supramolecular 1,5-diaminoanthraquinone (DAAQ) oligomer; Polymer electrolytes; Gel electrolytes; Cyclic voltammetry (Hashmi, S.A. (137) 145)

Insertion

Copper oxide; Copper; Rechargeable lithium battery; Oxidation (Zhang, J. (137) 88)

Intercalation reaction

Spinel LiMn₂O₄; Chromium substitution; Adipic acid; Sol-gel synthesis; Electrochemical properties; Lithium ion battery (Thirunakaran, R. (137) 100)

Interconnect design

Solid oxide fuel cell; Compression sealing; Pressure test; Silver gasket (Duquette, J. (137) 71)

Internal resistance

Contact resistance; Bipolar structure; Electrochemical capacitors; Composite electrodes (Zheng, J.P. (137) 158)

Initial behaviour

Molten carbonate fuel cell; Unsteady-state; Gas flow rate; Hydrogen utilization (Lee, Y.-R. (137) 9)

Iron and cobalt catalyst

Carbon beads; Hydrogen electrode; Nickel-coated ceramic; Alkaline fuel cell; Electrocatalyst (Chatterjee, A.K. (137) 216)

LCA

MCFC; Energy conversion systems; Environmental impact; Fuel cell; Hydrogen (Lunghi, P. (137) 239)

Lead-acid batteries charge processes

PbO₂/PbSO₄ electrode; PbO₂ reduction; PbSO₄ oxidation; PbO₂ structure; Lead-acid batteries; Lead-acid batteries discharge processes (Pavlov, D. (137) 288)

Lead-acid batteries discharge processes

PbO₂/PbSO₄ electrode; PbO₂ reduction; PbSO₄ oxidation; PbO₂ structure; Lead-acid batteries; Lead-acid batteries charge processes (Pavlov, D. (137) 288)

Lead-acid batteries

PbO₂/PbSO₄ electrode; PbO₂ reduction; PbSO₄ oxidation; PbO₂ structure; Lead-acid batteries charge processes; Lead-acid batteries discharge processes (Pavlov, D. (137) 288)

 β -LiAlO₂ agglomerates

Pore-former; Rod-shaped γ -LiAlO₂ particles; Molten carbonate fuel cell; Matrices (Kim, S.-D. (137) 24)

Li-ion batteries

LiCoO₂ thin film electrode; Surface modification; Pulsed laser deposition; Lithium ion transfer (Iriyama, Y. (137) 111)

LiCoO₂ thin film electrode

Surface modification; Pulsed laser deposition; Lithium ion transfer; Li-ion batteries (Iriyama, Y. (137) 111)

LiFePO₄

Cathode material; Mechanical alloying; Rate capability; Rechargeable lithium battery (Kwon, S.J. (137) 93)

Lithium batteries

Capacity increase; Chromium accumulation; Impedance spectra (Wu, X. (137) 105)

Lithium electrode

Polymer battery; Comb polymer; Composite polymer electrolyte (Matoba, Y. (137) 284)

Lithium ion battery

Spinel LiMn₂O₄; Chromium substitution; Adipic acid; Sol-gel synthesis; Intercalation reaction; Electrochemical properties (Thirunakaran, R. (137) 100)

Lithium ion transfer

LiCoO₂ thin film electrode; Surface modification; Pulsed laser deposition; Li-ion batteries (Iriyama, Y. (137) 111)

Lithium-ion battery

Thermal stability; Safety; Cathode and anode materials; Accelerating rate calorimetry; State of charge (Maleki, H. (137) 117)

Magnesia

Thermal battery; Water uptake; Molten salts; MgO (Masset, P. (137) 140)

Matrices

Pore-former; β -LiAlO₂ agglomerates; Rod-shaped γ -LiAlO₂ particles; Molten carbonate fuel cell (Kim, S.-D. (137) 24)

MCFC

LCA; Energy conversion systems; Environmental impact; Fuel cell; Hydrogen (Lunghi, P. (137) 239)

MCFC

NiO dissolution; Galvanostatic pulse plating; Co; Cathode (Ryu, B.H. (137) 62)

MEA fabrication

Proton exchange membrane fuel cell (PEMFC); Oxygen gain; Oxygen concentration; Carbon support; Platinum content (Prasanna, M. (137) 1)

Mechanical alloying

LiFePO₄; Cathode material; Rate capability; Rechargeable lithium battery (Kwon, S.J. (137) 93)

Membrane electrode assembly

Sedimentation method; Direct methanol fuel cell; Power density (Liu, J.H. (137) 222)

Methane

Solid oxide fuel cell; Polymer electrolyte fuel cell; Combined system; Steam reforming reaction (Yokoo, M. (137) 206)

Methanol crossover

Anion exchange membranes; Alkaline media; Poisoning (Yu, E.H. (137) 248)

Methanol oxidation

Thermal decomposition; Fuel cell; Pt electrocatalysts; Sn electrocatalysts; Ru electrocatalysts (Yang, L.X. (137) 257)

MgO

Thermal battery; Water uptake; Molten salts; Magnesia (Masset, P. (137) 140)

Microreactor

Hydrogen production; Ammonia reforming (Ganley, J.C. (137) 53)

Microstructure

Rapid quenching; AB₅-type hydrogen storage alloy; Fe content; Electrochemical performance (Zhang, Y.-h. (137) 309)

- Model**
 Direct methanol fuel cell; Polymer electrolyte; Proton-exchange; Anode catalyst (Scott, K. (137) 228)
- Modeling**
 Polymer electrolyte; Fuel cell; Performance equation; Polarization (Hsuen, H.-K. (137) 183)
- Molten carbonate fuel cell (MCFC)**
 Partial load thermal efficiency; Pressure swing operation; Cathode gas cooling (Yoshiba, F. (137) 196)
- Molten carbonate fuel cell**
 Cathode; Solubility; Nickel oxide; Coating; EIS (Huang, B. (137) 163)
- Molten carbonate fuel cell**
 Pore-former; β -LiAlO₂ agglomerates; Rod-shaped γ -LiAlO₂ particles; Matrices (Kim, S.-D. (137) 24)
- Molten carbonate fuel cell**
 Unsteady-state; Initial behaviour; Gas flow rate; Hydrogen utilization (Lee, Y.-R. (137) 9)
- Molten salts**
 Thermal battery; Water uptake; MgO; Magnesia (Masset, P. (137) 140)
- Nafion**
 DMFC; Passive fuel cells; Ambient temperature; Small-scale application; Portable (Shimizu, T. (137) 277)
- Nickel oxide**
 Molten carbonate fuel cell; Cathode; Solubility; Coating; EIS (Huang, B. (137) 163)
- Nickel–cadmium batteries**
 Separator; Nickel–metal-hydride batteries; Self-discharge (Kritzer, P. (137) 317)
- Nickel–metal-hydride batteries**
 Separator; Nickel–cadmium batteries; Self-discharge (Kritzer, P. (137) 317)
- Nickel-coated ceramic**
 Carbon beads; Hydrogen electrode; Iron and cobalt catalyst; Alkaline fuel cell; Electrocatalyst (Chatterjee, A.K. (137) 216)
- NiO dissolution**
 Galvanostatic pulse plating; Co; MCFC; Cathode (Ryu, B.H. (137) 62)
- On-line monitoring**
 Galvanostatic non-destructive technique; Valve-regulated lead-acid battery; State-of-charge; State-of-health (Hariprakash, B. (137) 128)
- Oxidation**
 Copper oxide; Copper; Insertion; Rechargeable lithium battery (Zhang, J. (137) 88)
- Oxygen concentration**
 Proton exchange membrane fuel cell (PEMFC); Oxygen gain; Carbon support; Platinum content; MEA fabrication (Prasanna, M. (137) 1)
- Oxygen gain**
 Proton exchange membrane fuel cell (PEMFC); Oxygen concentration; Carbon support; Platinum content; MEA fabrication (Prasanna, M. (137) 1)
- Partial load thermal efficiency**
 Molten carbonate fuel cell (MCFC); Pressure swing operation; Cathode gas cooling (Yoshiba, F. (137) 196)
- Passive fuel cells**
 DMFC; Ambient temperature; Small-scale application; Portable; Nafion (Shimizu, T. (137) 277)
- PbO₂ reduction**
 PbO₂/PbSO₄ electrode; PbSO₄ oxidation; PbO₂ structure; Lead-acid batteries; Lead-acid batteries charge processes; Lead-acid batteries discharge processes (Pavlov, D. (137) 288)
- PbO₂/PbSO₄ structure**
 PbO₂/PbSO₄ electrode; PbO₂ reduction; PbSO₄ oxidation; Lead-acid batteries; Lead-acid batteries charge processes; Lead-acid batteries discharge processes (Pavlov, D. (137) 288)
- PbO₂/PbSO₄ electrode**
 PbO₂ reduction; PbSO₄ oxidation; PbO₂ structure; Lead-acid batteries; Lead-acid batteries charge processes; Lead-acid batteries discharge processes (Pavlov, D. (137) 288)
- PbSO₄ oxidation**
 PbO₂/PbSO₄ electrode; PbO₂ reduction; PbO₂ structure; Lead-acid batteries; Lead-acid batteries charge processes; Lead-acid batteries discharge processes (Pavlov, D. (137) 288)
- PEM fuel cells**
 Electric vehicle; Transient behavior; Dynamic behavior; Reservoir effect; Dilution effect (Kim, S. (137) 43)
- Performance equation**
 Polymer electrolyte; Fuel cell; Polarization; Modeling (Hsuen, H.-K. (137) 183)
- Platinum content**
 Proton exchange membrane fuel cell (PEMFC); Oxygen gain; Oxygen concentration; Carbon support; MEA fabrication (Prasanna, M. (137) 1)
- Poisoning**
 Anion exchange membranes; Alkaline media; Methanol crossover (Yu, E.H. (137) 248)
- Polarization**
 Polymer electrolyte; Fuel cell; Performance equation; Modeling (Hsuen, H.-K. (137) 183)
- Poly(*N*-methylaniline)**
 Polyisothianaphthene; Conducting polymer batteries; Polymeric supercapacitors (Sivakkumar, S.R. (137) 322)
- Polyisothianaphthene**
 Poly(*N*-methylaniline); Conducting polymer batteries; Polymeric supercapacitors (Sivakkumar, S.R. (137) 322)
- Polymer battery**
 Comb polymer; Composite polymer electrolyte; Lithium electrode (Matoba, Y. (137) 284)
- Polymer electrolyte fuel cell**
 Humidification; Dehydrator; Gas recycle; Aerospace; Closed environment (Sone, Y. (137) 269)
- Polymer electrolyte fuel cell**
 Solid oxide fuel cell; Combined system; Steam reforming reaction; Methane (Yokoo, M. (137) 206)
- Polymer electrolyte**
 Direct methanol fuel cell; Proton-exchange; Model; Anode catalyst (Scott, K. (137) 228)
- Polymer electrolyte**
 Fuel cell; Performance equation; Polarization; Modeling (Hsuen, H.-K. (137) 183)
- Polymer electrolytes**
 Redox supercapacitor; Supramolecular 1,5-diaminoanthraquinone (DAAQ) oligomer; Gel electrolytes; Impedance spectroscopy; Cyclic voltammetry (Hashmi, S.A. (137) 145)
- Polymeric supercapacitors**
 Poly(*N*-methylaniline); Polyisothianaphthene; Conducting polymer batteries (Sivakkumar, S.R. (137) 322)
- Pore-former**
 β -LiAlO₂ agglomerates; Rod-shaped γ -LiAlO₂ particles; Molten carbonate fuel cell; Matrices (Kim, S.-D. (137) 24)
- Portable**
 DMFC; Passive fuel cells; Ambient temperature; Small-scale application; Nafion (Shimizu, T. (137) 277)
- Power density**
 Sedimentation method; Direct methanol fuel cell; Membrane electrode assembly (Liu, J.H. (137) 222)
- Power**
 Fuel cell; Direct methanol fuel cell; Soldier power; Energy (Bostic, E. (137) 76)
- Pressure swing operation**
 Molten carbonate fuel cell (MCFC); Partial load thermal efficiency; Cathode gas cooling (Yoshiba, F. (137) 196)

- Pressure test
Solid oxide fuel cell; Compression sealing; Interconnect design; Silver gasket (Duquette, J. (137) 71)
- Primary lithium battery
Fluorination; Fluorinated graphite; Graphite intercalation compound (Nakajima, T. (137) 80)
- Proton conductor
Sol-gel; Glass; Fuel cell (Park, Y.-I. (137) 175)
- Proton exchange membrane fuel cell (PEMFC)
Oxygen gain; Oxygen concentration; Carbon support; Platinum content; MEA fabrication (Prasanna, M. (137) 1)
- Proton-exchange
Direct methanol fuel cell; Polymer electrolyte; Model; Anode catalyst (Scott, K. (137) 228)
- Pseudocapacitance
Supercapacitor; Activated carbon fabric–polyaniline composite; Cyclic voltammetry (Hu, C.-C. (137) 152)
- Pt electrocatalysts
Methanol oxidation; Thermal decomposition; Fuel cell; Sn electrocatalysts; Ru electrocatalysts (Yang, L.X. (137) 257)
- PtRu/C electrocatalyst
Fuel cell; Alcohol-reduction; Electro-oxidation; Ethanol (Spinacé, E.V. (137) 17)
- Pulsed laser deposition
 LiCoO_2 thin film electrode; Surface modification; Lithium ion transfer; Li-ion batteries (Iriyama, Y. (137) 111)
- Rapid quenching
 AB_5 -type hydrogen storage alloy; Fe content; Microstructure; Electrochemical performance (Zhang, Y.-h. (137) 309)
- Rate capability
 LiFePO_4 ; Cathode material; Mechanical alloying; Rechargeable lithium battery (Kwon, S.J. (137) 93)
- Rechargeable lithium battery
Copper oxide; Copper; Insertion; Oxidation (Zhang, J. (137) 88)
- Rechargeable lithium battery
 LiFePO_4 ; Cathode material; Mechanical alloying; Rate capability (Kwon, S.J. (137) 93)
- Redox supercapacitor
Supramolecular 1,5-diaminoanthraquinone (DAAQ) oligomer; Polymer electrolytes; Gel electrolytes; Impedance spectroscopy; Cyclic voltammetry (Hashmi, S.A. (137) 145)
- Reservoir effect
PEM fuel cells; Electric vehicle; Transient behavior; Dynamic behavior; Dilution effect (Kim, S. (137) 43)
- Residential fuel cell system
Cogeneration; Building simulation (Ferguson, A. (137) 30)
- Rod-shaped $\gamma\text{-LiAlO}_2$ particles
Pore-former; $\beta\text{-LiAlO}_2$ agglomerates; Molten carbonate fuel cell; Matrices (Kim, S.-D. (137) 24)
- Ru electrocatalysts
Methanol oxidation; Thermal decomposition; Fuel cell; Pt electrocatalysts; Sn electrocatalysts (Yang, L.X. (137) 257)
- Safety
Thermal stability; Lithium-ion battery; Cathode and anode materials; Accelerating rate calorimetry; State of charge (Maleki, H. (137) 117)
- Sedimentation method
Direct methanol fuel cell; Membrane electrode assembly; Power density (Liu, J.H. (137) 222)
- Self-discharge
Separator; Nickel–metal-hydride batteries; Nickel–cadmium batteries (Kritzer, P. (137) 317)
- Separator
Nickel–metal-hydride batteries; Nickel–cadmium batteries; Self-discharge (Kritzer, P. (137) 317)
- Silver gasket
Solid oxide fuel cell; Compression sealing; Pressure test; Interconnect design (Duquette, J. (137) 71)
- Small-scale application
DMFC; Passive fuel cells; Ambient temperature; Portable; Nafion (Shimizu, T. (137) 277)
- Sn electrocatalysts
Methanol oxidation; Thermal decomposition; Fuel cell; Pt electrocatalysts; Ru electrocatalysts (Yang, L.X. (137) 257)
- Sol-gel synthesis
Spinel LiMn_2O_4 ; Chromium substitution; Adipic acid; Intercalation reaction; Electrochemical properties; Lithium ion battery (Thirunakaran, R. (137) 100)
- Sol-gel
Proton conductor; Glass; Fuel cell (Park, Y.-I. (137) 175)
- Soldier power
Fuel cell; Direct methanol fuel cell; Power; Energy (Bostic, E. (137) 76)
- Solid oxide fuel cell
Compression sealing; Pressure test; Interconnect design; Silver gasket (Duquette, J. (137) 71)
- Solid oxide fuel cell
Polymer electrolyte fuel cell; Combined system; Steam reforming reaction; Methane (Yokoo, M. (137) 206)
- Solubility
Molten carbonate fuel cell; Cathode; Nickel oxide; Coating; EIS (Huang, B. (137) 163)
- Spinel LiMn_2O_4
Chromium substitution; Adipic acid; Sol-gel synthesis; Intercalation reaction; Electrochemical properties; Lithium ion battery (Thirunakaran, R. (137) 100)
- State of charge
Thermal stability; Safety; Lithium-ion battery; Cathode and anode materials; Accelerating rate calorimetry (Maleki, H. (137) 117)
- State-of-charge
Galvanostatic non-destructive technique; Valve-regulated lead-acid battery; State-of-health; On-line monitoring (Hariprakash, B. (137) 128)
- State-of-health
Galvanostatic non-destructive technique; Valve-regulated lead-acid battery; State-of-charge; On-line monitoring (Hariprakash, B. (137) 128)
- Steam reforming reaction
Solid oxide fuel cell; Polymer electrolyte fuel cell; Combined system; Methane (Yokoo, M. (137) 206)
- Supercapacitor
Activated carbon fabric–polyaniline composite; Cyclic voltammetry; Pseudocapacitance (Hu, C.-C. (137) 152)
- Supramolecular 1,5-diaminoanthraquinone (DAAQ) oligomer
Redox supercapacitor; Polymer electrolytes; Gel electrolytes; Impedance spectroscopy; Cyclic voltammetry (Hashmi, S.A. (137) 145)
- Surface modification
 LiCoO_2 thin film electrode; Pulsed laser deposition; Lithium ion transfer; Li-ion batteries (Iriyama, Y. (137) 111)
- Thermal battery
Water uptake; Molten salts; MgO ; Magnesia (Masset, P. (137) 140)
- Thermal decomposition
Methanol oxidation; Fuel cell; Pt electrocatalysts; Sn electrocatalysts; Ru electrocatalysts (Yang, L.X. (137) 257)
- Thermal stability
Safety; Lithium-ion battery; Cathode and anode materials; Accelerating rate calorimetry; State of charge (Maleki, H. (137) 117)

Transient behavior

PEM fuel cells; Electric vehicle; Dynamic behavior; Reservoir effect;
Dilution effect (Kim, S. (137) 43)

Unsteady-state

Molten carbonate fuel cell; Initial behaviour; Gas flow rate; Hydrogen
utilization (Lee, Y.-R. (137) 9)

Valve-regulated lead-acid battery

Galvanostatic non-destructive technique; State-of-charge; State-of-
health; On-line monitoring (Hariprakash, B. (137) 128)

Water uptake

Thermal battery; Molten salts; MgO; Magnesia (Masset, P. (137)
140)