

Subject Index of Volume 128

- AB₂ Laves phase**
Electrode alloy; Rapid quenching; Electrochemical characteristics; Microstructures (Zhang, Y.-H. (128) 90)
- Agglomerate**
Computational model; PEMFC; Proton exchange membrane; Water transport (Siegel, N.P. (128) 173)
- Air cathode**
Fuel cell; DMFC; Direct methanol fuel cell; Methanol anode; Oxygen cathode (Reeve, R.W. (128) 1)
- Air-cooling**
Lithium-ion battery; Thermal management; Phase change materials; Electric scooter; Thermal modeling/simulation (Khateeb, S.A. (128) 292)
- Alkaline batteries**
Nickel hydroxide; Nanometer; Preparation; Cyclic voltammogram; Electrochemical performance (Liu, X. (128) 326)
- Along-the-channel model**
Fuel channels; Proton exchange membrane fuel cells; Gas-diffusion layer (Chen, F. (128) 125)
- Aluminum air battery**
Electric vehicle; Sub-batteries; Driving patterns; Control; Power required; Flow rates (Zhang, X. (128) 331)
- Anodic dissolution**
Zinc anode; Suppressed passivation; Improved capacity; Surfactant additive (Yang, H. (128) 97)
- ARC**
Li-ion battery; Thermal abuse; DSC; LiNi_{0.85}Co_{0.15}O₂; LiNi_{0.80}Co_{0.15}Al_{0.05}O₂ (Roth, E.P. (128) 308)
- Automotive applications**
Fuel cells; Fault diagnosis; Fuzzy logic; Genetic algorithms (Hissel, D. (128) 239)
- Batteries**
Conducting polymers; Zeolites and other complex solids; Electrochemical devices (Dalas, E. (128) 319)
- Batteries**
Power density; Passive fuel cells (Ha, S. (128) 119)
- Battery model**
Simulation; Fuel cell; Energy storage; HEV (Van Mierlo, J. (128) 76)
- Battery pack**
Capacity; Deterioration; Li-ion battery; Impedance (Takeno, K. (128) 67)
- Bipolar plate**
Stainless steel; Ferrite; PEMFC; Passive film (Wang, H. (128) 193)
- Capacity**
Deterioration; Li-ion battery; Battery pack; Impedance (Takeno, K. (128) 67)
- Carbon-coating**
Lithium-ion cell; Graphite electrode; Thermal stability; Electrolyte (Lee, H.-Y. (128) 61)
- Catalyst layer**
Fuel cell; Cathode; Modeling (Jeng, K.T. (128) 145)
- Cathode**
Fuel cell; Catalyst layer; Modeling (Jeng, K.T. (128) 145)
- Cathode**
Molten Carbonate Fuel Cell; Solubility; Nickel oxide; Zinc oxide; EIS (Huang, B. (128) 135)
- Cathodes**
Solid oxide fuel cells; Microstructure (Williford, R.E. (128) 45)
- Ceramic glaze**
Solid oxide fuel cell; Sealing material; Planar (Zheng, R. (128) 165)
- Clay nanocomposite**
Lithium-ion cell; Composite gel electrolyte; Hectorite; Polyethylene glycol; Small angle X-ray diffraction (Singhal, R.G. (128) 247)
- Cold start**
Fuel cell; Dynamic simulation; Gasoline (Springmann, S. (128) 13)
- Composite gel electrolyte**
Lithium-ion cell; Clay nanocomposite; Hectorite; Polyethylene glycol; Small angle X-ray diffraction (Singhal, R.G. (128) 247)
- Composite membranes**
Inorganic fillers; XPS; DMFCs (Aricò, A.S. (128) 113)
- Computational model**
PEMFC; Proton exchange membrane; Water transport; Agglomerate (Siegel, N.P. (128) 173)
- Concentration polarisation**
Fuel cells; Transport phenomena; Mass transfer; Over-potential; Diffusion (Beale, S.B. (128) 185)
- Conducting polymers**
Zeolites and other complex solids; Batteries; Electrochemical devices (Dalas, E. (128) 319)
- Control**
Electric vehicle; Aluminum air battery; Sub-batteries; Driving patterns; Power required; Flow rates (Zhang, X. (128) 331)
- Cr-doped spinel**
Mechanical activation; Rotary heating; Lithium manganese oxide; Lithium-ion battery (Song, G.-M. (128) 270)
- Cyclic voltammogram**
Nickel hydroxide; Nanometer; Preparation; Alkaline batteries; Electrochemical performance (Liu, X. (128) 326)
- Cycling performance**
Gelled polymer electrolyte; Lithium-ion polymer cell; Polymer-coated separator; Ionic conductivity (Jeong, Y.-B. (128) 256)
- Deterioration**
Capacity; Li-ion battery; Battery pack; Impedance (Takeno, K. (128) 67)
- Diffusion**
Fuel cells; Transport phenomena; Mass transfer; Concentration polarisation; Over-potential (Beale, S.B. (128) 185)
- Direct methanol fuel cell**
Fuel cell; DMFC; Methanol anode; Air cathode; Oxygen cathode (Reeve, R.W. (128) 1)
- Distributed generator**
Power system; Load frequency control; Optimal control; Disturbance accommodation control; Polymer electrolyte membrane fuel cell (Paradkar, A. (128) 218)

- Disturbance accommodation control
Power system; Distributed generator; Load frequency control; Optimal control; Polymer electrolyte membrane fuel cell (Paradkar, A. (128) 218)
- DMFC
Fuel cell; Direct methanol fuel cell; Methanol anode; Air cathode; Oxygen cathode (Reeve, R.W. (128) 1)
- DMFCs
Composite membranes; Inorganic fillers; XPS (Aricò, A.S. (128) 113)
- Driving patterns
Electric vehicle; Aluminum air battery; Sub-batteries; Control; Power required; Flow rates (Zhang, X. (128) 331)
- DSC
Li-ion battery; Thermal abuse; ARC; $\text{LiNi}_{0.85}\text{Co}_{0.15}\text{O}_2$; $\text{LiNi}_{0.80}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ (Roth, E.P. (128) 308)
- Dynamic simulation
Fuel cell; Cold start; Gasoline (Springmann, S. (128) 13)
- EIS
Molten Carbonate Fuel Cell; Cathode; Solubility; Nickel oxide; Zinc oxide (Huang, B. (128) 135)
- Electric scooter
Lithium-ion battery; Thermal management; Phase change materials; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (128) 292)
- Electric vehicle
Aluminum air battery; Sub-batteries; Driving patterns; Control; Power required; Flow rates (Zhang, X. (128) 331)
- Electrochemical characteristics
 AB_2 Laves phase; Electrode alloy; Rapid quenching; Microstructures (Zhang, Y.-H. (128) 90)
- Electrochemical devices
Conducting polymers; Zeolites and other complex solids; Batteries (Dalas, E. (128) 319)
- Electrochemical performance
Nickel hydroxide; Nanometer; Preparation; Alkaline batteries; Cyclic voltammogram (Liu, X. (128) 326)
- Electrochemical recycling
Spent battery; Zinc recovery; Zinc (Freitas, M.B.J.G. (128) 343)
- Electrode alloy
 AB_2 Laves phase; Rapid quenching; Electrochemical characteristics; Microstructures (Zhang, Y.-H. (128) 90)
- Electrolyte
Lithium-ion cell; Graphite electrode; Carbon-coating; Thermal stability (Lee, H.-Y. (128) 61)
- Energy storage
Simulation; Fuel cell; Battery model; HEV (Van Mierlo, J. (128) 76)
- Fault diagnosis
Fuel cells; Fuzzy logic; Genetic algorithms; Automotive applications (Hissel, D. (128) 239)
- Ferrite
Bipolar plate; Stainless steel; PEMFC; Passive film (Wang, H. (128) 193)
- Flow rates
Electric vehicle; Aluminum air battery; Sub-batteries; Driving patterns; Control; Power required (Zhang, X. (128) 331)
- Fuel cell
Cathode; Catalyst layer; Modeling (Jeng, K.T. (128) 145)
- Fuel cell
DMFC; Direct methanol fuel cell; Methanol anode; Air cathode; Oxygen cathode (Reeve, R.W. (128) 1)
- Fuel cell
Dynamic simulation; Cold start; Gasoline (Springmann, S. (128) 13)
- Fuel cell
Microfluidics; Laminar flow (Choban, E.R. (128) 54)
- Fuel cell
Simulation; Energy storage; Battery model; HEV (Van Mierlo, J. (128) 76)
- Fuel cells
Fault diagnosis; Fuzzy logic; Genetic algorithms; Automotive applications (Hissel, D. (128) 239)
- Fuel cells
Proton exchange membrane (PEM); Stacks; Pressure drop modeling; Voltage variations (Rodatz, P. (128) 208)
- Fuel cells
Transport phenomena; Mass transfer; Concentration polarisation; Overpotential; Diffusion (Beale, S.B. (128) 185)
- Fuel channels
Proton exchange membrane fuel cells; Gas-diffusion layer; Along-the-channel model (Chen, F. (128) 125)
- Fuzzy logic
Fuel cells; Fault diagnosis; Genetic algorithms; Automotive applications (Hissel, D. (128) 239)
- Gas-diffusion layer
Fuel channels; Proton exchange membrane fuel cells; Along-the-channel model (Chen, F. (128) 125)
- Gasoline
Fuel cell; Dynamic simulation; Cold start (Springmann, S. (128) 13)
- Gelled polymer electrolyte
Cycling performance; Lithium-ion polymer cell; Polymer-coated separator; Ionic conductivity (Jeong, Y.-B. (128) 256)
- Genetic algorithms
Fuel cells; Fault diagnosis; Fuzzy logic; Automotive applications (Hissel, D. (128) 239)
- Graphite electrode
Lithium-ion cell; Carbon-coating; Thermal stability; Electrolyte (Lee, H.-Y. (128) 61)
- Hectorite
Lithium-ion cell; Composite gel electrolyte; Clay nanocomposite; Polyethylene glycol; Small angle X-ray diffraction (Singhal, R.G. (128) 247)
- HEV
Simulation; Fuel cell; Energy storage; Battery model (Van Mierlo, J. (128) 76)
- High-power lithium-ion batteries
Lithium nickel cobalt oxide electrode; HPPC; Symmetric cells (Chen, C.H. (128) 278)
- HPPC
Lithium nickel cobalt oxide electrode; High-power lithium-ion batteries; Symmetric cells (Chen, C.H. (128) 278)
- Humidification
Proton exchange membrane; Membrane electrode assembly (Atkins, J.R. (128) 201)
- Impedance
Capacity; Deterioration; Li-ion battery; Battery pack (Takeno, K. (128) 67)
- Improved capacity
Zinc anode; Suppressed passivation; Surfactant additive; Anodic dissolution (Yang, H. (128) 97)
- Inorganic fillers
Composite membranes; XPS; DMFCs (Aricò, A.S. (128) 113)
- Ionic conductivity
Cycling performance; Gelled polymer electrolyte; Lithium-ion polymer cell; Polymer-coated separator; (Jeong, Y.-B. (128) 256)
- 10 kW-class stack
Molten carbonate fuel cell; Li/Na carbonate electrolyte; Life endurance test; Temperature analysis (Yoshida, F. (128) 152)

- Laminar flow
Microfluidics; Fuel cell (Choban, E.R. (128) 54)
- Li-ion battery
Capacity; Deterioration; Battery pack; Impedance (Takeno, K. (128) 67)
- Li-ion battery
Thermal abuse; ARC; DSC; $\text{LiNi}_{0.85}\text{Co}_{0.15}\text{O}_2$; $\text{LiNi}_{0.80}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ (Roth, E.P. (128) 308)
- Li/Na carbonate electrolyte
Molten carbonate fuel cell; 10 kW-class stack; Life endurance test; Temperature analysis (Yoshida, F. (128) 152)
- Life endurance test
Molten carbonate fuel cell; Li/Na carbonate electrolyte; 10 kW-class stack; Temperature analysis (Yoshida, F. (128) 152)
- $\text{LiNi}_{0.80}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$
Li-ion battery; Thermal abuse; ARC; DSC; $\text{LiNi}_{0.85}\text{Co}_{0.15}\text{O}_2$ (Roth, E.P. (128) 308)
- $\text{LiNi}_{0.85}\text{Co}_{0.15}\text{O}_2$
Li-ion battery; Thermal abuse; ARC; DSC; $\text{LiNi}_{0.80}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ (Roth, E.P. (128) 308)
- Lithium batteries
Lithium-cobalt-manganese oxides (Caballero, A. (128) 286)
- Lithium cobalt oxide
Thin-film cathode; rf sputtering; Oxygen partial pressure; Lithium-ion battery (Liao, C.-L. (128) 263)
- Lithium manganese oxide
Mechanical activation; Rotary heating; Cr-doped spinel; Lithium-ion battery (Song, G.-M. (128) 270)
- Lithium nickel cobalt oxide electrode
High-power lithium-ion batteries; HPPC; Symmetric cells (Chen, C.H. (128) 278)
- Lithium-cobalt-manganese oxides
Lithium batteries (Caballero, A. (128) 286)
- Lithium-ion battery
Lithium cobalt oxide; Thin-film cathode; rf sputtering; Oxygen partial pressure (Liao, C.-L. (128) 263)
- Lithium-ion battery
Mechanical activation; Rotary heating; Lithium manganese oxide; Cr-doped spinel (Song, G.-M. (128) 270)
- Lithium-ion battery
Thermal management; Phase change materials; Electric scooter; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (128) 292)
- Lithium-ion cell
Composite gel electrolyte; Clay nanocomposite; Hectorite; Polyethylene glycol; Small angle X-ray diffraction (Singhal, R.G. (128) 247)
- Lithium-ion cell
Graphite electrode; Carbon-coating; Thermal stability; Electrolyte (Lee, H.-Y. (128) 61)
- Lithium-ion polymer cell
Cycling performance; Gelled polymer electrolyte; Polymer-coated separator; Ionic conductivity (Jeong, Y.-B. (128) 256)
- Load frequency control
Power system; Distributed generator; Optimal control; Disturbance accommodation control; Polymer electrolyte membrane fuel cell (Paradkar, A. (128) 218)
- Mass transfer
Fuel cells; Transport phenomena; Concentration polarisation; Over-potential; Diffusion (Beale, S.B. (128) 185)
- Mechanical activation
Rotary heating; Lithium manganese oxide; Cr-doped spinel; Lithium-ion battery (Song, G.-M. (128) 270)
- Membrane electrode assembly
Proton exchange membrane; Humidification (Atkins, J.R. (128) 201)
- Methanol anode
Fuel cell; DMFC; Direct methanol fuel cell; Air cathode; Oxygen cathode (Reeve, R.W. (128) 1)
- Microfluidics
Laminar flow; Fuel cell (Choban, E.R. (128) 54)
- Microstructure
Solid oxide fuel cells; Cathodes (Williford, R.E. (128) 45)
- Microstructures
 AB_2 Laves phase; Electrode alloy; Rapid quenching; Electrochemical characteristics (Zhang, Y.-H. (128) 90)
- Modeling
Fuel cell; Cathode; Catalyst layer (Jeng, K.T. (128) 145)
- Molten Carbonate Fuel Cell
Cathode; Solubility; Nickel oxide; Zinc oxide; EIS (Huang, B. (128) 135)
- Molten carbonate fuel cell
Li/Na carbonate electrolyte; 10 kW-class stack; Life endurance test; Temperature analysis (Yoshida, F. (128) 152)
- Nanometer
Nickel hydroxide; Preparation; Alkaline batteries; Cyclic voltammogram; Electrochemical performance (Liu, X. (128) 326)
- Nickel hydroxide
Nanometer; Preparation; Alkaline batteries; Cyclic voltammogram; Electrochemical performance (Liu, X. (128) 326)
- Nickel oxide
Molten Carbonate Fuel Cell; Cathode; Solubility; Zinc oxide; EIS (Huang, B. (128) 135)
- Optimal control
Power system; Distributed generator; Load frequency control; Disturbance accommodation control; Polymer electrolyte membrane fuel cell (Paradkar, A. (128) 218)
- Over-potential
Fuel cells; Transport phenomena; Mass transfer; Concentration polarisation; Diffusion (Beale, S.B. (128) 185)
- Oxygen cathode
Fuel cell; DMFC; Direct methanol fuel cell; Methanol anode; Air cathode (Reeve, R.W. (128) 1)
- Oxygen partial pressure
Lithium cobalt oxide; Thin-film cathode; rf sputtering; Lithium-ion battery (Liao, C.-L. (128) 263)
- Padé approximant
Solid oxide fuel cell; Thermophysical properties; Rational approximation (Hernández-Pacheco, E. (128) 25)
- Passive film
Bipolar plate; Stainless steel; Ferrite; PEMFC (Wang, H. (128) 193)
- Passive fuel cells
Power density; Batteries (Ha, S. (128) 119)
- PEM fuel cells
System evaluation; Uniformity analysis (Zhu, W.H. (128) 231)
- PEMFC
Bipolar plate; Stainless steel; Ferrite; Passive film (Wang, H. (128) 193)
- PEMFC
Computational model; Proton exchange membrane; Water transport; Agglomerate (Siegel, N.P. (128) 173)
- Phase change materials
Lithium-ion battery; Thermal management; Electric scooter; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (128) 292)
- Planar
Solid oxide fuel cell; Sealing material; Ceramic glaze (Zheng, R. (128) 165)
- Polyethylene glycol
Lithium-ion cell; Composite gel electrolyte; Clay nanocomposite; Hectorite; Small angle X-ray diffraction (Singhal, R.G. (128) 247)
- Polymer electrolyte membrane fuel cell
Power system; Distributed generator; Load frequency control; Optimal control; Disturbance accommodation control (Paradkar, A. (128) 218)

- Polymer-coated separator
Cycling performance; Gelled polymer electrolyte; Lithium-ion polymer cell; Ionic conductivity (Jeong, Y.-B. (128) 256)
- Power density
Passive fuel cells; Batteries (Ha, S. (128) 119)
- Power required
Electric vehicle; Aluminum air battery; Sub-batteries; Driving patterns; Control; Flow rates (Zhang, X. (128) 331)
- Power system
Distributed generator; Load frequency control; Optimal control; Disturbance accommodation control; Polymer electrolyte membrane fuel cell (Paradkar, A. (128) 218)
- Preparation
Nickel hydroxide; Nanometer; Alkaline batteries; Cyclic voltammogram; Electrochemical performance (Liu, X. (128) 326)
- Pressure drop modeling
Fuel cells; Proton exchange membrane (PEM); Stacks; Voltage variations (Rodatz, P. (128) 208)
- Proton exchange membrane (PEM)
Fuel cells; Stacks; Pressure drop modeling; Voltage variations (Rodatz, P. (128) 208)
- Proton exchange membrane fuel cells
Fuel channels; Gas-diffusion layer; Along-the-channel model (Chen, F. (128) 125)
- Proton exchange membrane
Computational model; PEMFC; Water transport; Agglomerate (Siegel, N.P. (128) 173)
- Proton exchange membrane
Membrane electrode assembly; Humidification (Atkins, J.R. (128) 201)
- Rapid quenching
AB₂ Laves phase; Electrode alloy; Electrochemical characteristics; Microstructures (Zhang, Y.-H. (128) 90)
- Rational approximation
Solid oxide fuel cell; Thermophysical properties; Padé approximant (Hernández-Pacheco, E. (128) 25)
- Rational approximation
Thermophysical properties; SOFC modeling (Hernández-Pacheco, E. (128) 34)
- rf sputtering
Lithium cobalt oxide; Thin-film cathode; Oxygen partial pressure; Lithium-ion battery (Liao, C.-L. (128) 263)
- Rotary heating
Mechanical activation; Lithium manganese oxide; Cr-doped spinel; Lithium-ion battery (Song, G.-M. (128) 270)
- Sealing material
Solid oxide fuel cell; Ceramic glaze; Planar (Zheng, R. (128) 165)
- Simulation
Fuel cell; Energy storage; Battery model; HEV (Van Mierlo, J. (128) 76)
- Small angle X-ray diffraction
Lithium-ion cell; Composite gel electrolyte; Clay nanocomposite; Hectorite; Polyethylene glycol (Singhal, R.G. (128) 247)
- SOFC modeling
Rational approximation; Thermophysical properties (Hernández-Pacheco, E. (128) 34)
- Solid oxide fuel cell
Sealing material; Ceramic glaze; Planar (Zheng, R. (128) 165)
- Solid oxide fuel cell
Thermophysical properties; Rational approximation; Padé approximant (Hernández-Pacheco, E. (128) 25)
- Solid oxide fuel cells
Cathodes; Microstructure (Williford, R.E. (128) 45)
- Solubility
Molten Carbonate Fuel Cell; Cathode; Nickel oxide; Zinc oxide; EIS (Huang, B. (128) 135)
- Spent battery
Electrochemical recycling; Zinc recovery; Zinc (Freitas, M.B.J.G. (128) 343)
- Stacks
Fuel cells; Proton exchange membrane (PEM); Pressure drop modeling; Voltage variations (Rodatz, P. (128) 208)
- Stainless steel
Bipolar plate; Ferrite; PEMFC; Passive film (Wang, H. (128) 193)
- Sub-batteries
Electric vehicle; Aluminum air battery; Driving patterns; Control; Power required; Flow rates (Zhang, X. (128) 331)
- Suppressed passivation
Zinc anode; Improved capacity; Surfactant additive; Anodic dissolution (Yang, H. (128) 97)
- Surfactant additive
Zinc anode; Suppressed passivation; Improved capacity; Anodic dissolution (Yang, H. (128) 97)
- Symmetric cells
Lithium nickel cobalt oxide electrode; High-power lithium-ion batteries; HPPC (Chen, C.H. (128) 278)
- System evaluation
PEM fuel cells; Uniformity analysis (Zhu, W.H. (128) 231)
- Temperature analysis
Molten carbonate fuel cell; Li/Na carbonate electrolyte; 10 kW-class stack; Life endurance test (Yoshida, F. (128) 152)
- Thermal abuse
Li-ion battery; ARC; DSC; LiNi_{0.85}Co_{0.15}O₂; LiNi_{0.80}Co_{0.15}Al_{0.05}O₂ (Roth, E.P. (128) 308)
- Thermal management
Lithium-ion battery; Phase change materials; Electric scooter; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (128) 292)
- Thermal modeling/simulation
Lithium-ion battery; Thermal management; Phase change materials; Electric scooter; Air-cooling (Khateeb, S.A. (128) 292)
- Thermal stability
Lithium-ion cell; Graphite electrode; Carbon-coating; Electrolyte (Lee, H.-Y. (128) 61)
- Thermophysical properties
Rational approximation; SOFC modeling (Hernández-Pacheco, E. (128) 34)
- Thermophysical properties
Solid oxide fuel cell; Rational approximation; Padé approximant (Hernández-Pacheco, E. (128) 25)
- Thin-film cathode
Lithium cobalt oxide; rf sputtering; Oxygen partial pressure; Lithium-ion battery (Liao, C.-L. (128) 263)
- Transport phenomena
Fuel cells; Mass transfer; Concentration polarisation; Over-potential; Diffusion (Beale, S.B. (128) 185)
- Uniformity analysis
PEM fuel cells; System evaluation (Zhu, W.H. (128) 231)
- Voltage variations
Fuel cells; Proton exchange membrane (PEM); Stacks; Pressure drop modeling (Rodatz, P. (128) 208)
- Water transport
Computational model; PEMFC; Proton exchange membrane; Agglomerate (Siegel, N.P. (128) 173)
- XPS
Composite membranes; Inorganic fillers; DMFCs (Aricò, A.S. (128) 113)
- Zeolites and other complex solids
Conducting polymers; Batteries; Electrochemical devices (Dalas, E. (128) 319)

Zinc anode

Suppressed passivation; Improved capacity; Surfactant additive; Anodic dissolution (Yang, H. (128) 97)

Zinc oxide

Molten Carbonate Fuel Cell; Cathode; Solubility; Nickel oxide; EIS (Huang, B. (128) 135)

Zinc recovery

Electrochemical recycling; Spent battery; Zinc (Freitas, M.B.J.G. (128) 343)

Zinc

Electrochemical recycling; Spent battery; Zinc recovery (Freitas, M.B.J.G. (128) 343)