

Subject Index of Volume 150

- A. Electrode materials
A. Hydrogen storage materials; D. Electrochemical reactions (Kolbasov, G.Y. (150) 276)
- A. Hydrogen storage materials
A. Electrode materials; D. Electrochemical reactions (Kolbasov, G.Y. (150) 276)
- Air conditioning device
Fuel cell system modelling; Hydration management (Glises, R. (150) 78)
- Air pollution
Hydrogen fuel cell vehicle; Life cycle assessment; Coal gasification; Steam reforming; Wind electrolysis (Colella, W.G. (150) 150)
- Alkaline fuel cells
Direct alcohol fuel cells; Polyhydric alcohol; Anion exchange membrane; Silver catalyst (Matsuoka, K. (150) 27)
- Alkaline rechargeable batteries
Nickel hydroxide; Yttrium hydroxide; Composite tube (Cheng, F.-Y. (150) 255)
- Alkyl dicarbonates
Alkyl dicarbonates; Li-ion cells; Two-step nucleophilic reactions (Sasaki, T. (150) 208)
- Alloy structure
Hydrogen storage alloy; Ni/MH battery; Electrochemical properties (Zhang, F. (150) 247)
- Alpha nickel hydroxide
Alpha nickel hydroxide; Nanoparticles; Urea hydrolysis; Electrochemical ageing; Batteries (Jayalakshmi, M. (150) 272)
- Anion exchange membrane
Direct alcohol fuel cells; Polyhydric alcohol; Alkaline fuel cells; Silver catalyst (Matsuoka, K. (150) 27)
- Anthraquinones
Oxygen reduction; Riboflavin; Modified glassy carbon electrodes; Overpotential (Manisankar, P. (150) 240)
- Batteries
Alpha nickel hydroxide; Nanoparticles; Urea hydrolysis; Electrochemical ageing (Jayalakshmi, M. (150) 272)
- Bipolar plate
Fuel cell; Conductive materials; Wet-lay composite; Carbon composite (Huang, J. (150) 110)
- Capacity fade
Capacity fade; Online parameter estimation; Lithium ion batteries (Stamps, A.T. (150) 229)
- Capacity loss
Lithium-ion cell; Spinel cathode (LiMn_2O_4); Cathode material; Rotating ring disc electrode; Manganese dissolution (Wang, L.-F. (150) 1)
- Capacity
Fibre battery; Conducting polymers; Electrochemical deposition; Polypyrrole (Wang, J. (150) 223)
- Carbon composite
Fuel cell; Bipolar plate; Conductive materials; Wet-lay composite (Huang, J. (150) 110)
- Catalyst
Sputter deposition; Platinum thin film; Polymer electrolyte membrane (PEM) fuel cell (Gruber, D. (150) 67)
- Catalysts
Micro-channel reactor; Hydrogen production; Fuel cell; Coating; Steam reforming of methanol (Yu, X. (150) 57)
- Cathode material
Lithium-ion cell; Spinel cathode (LiMn_2O_4); Rotating ring disc electrode; Manganese dissolution; Capacity loss (Wang, L.-F. (150) 1)
- Cathode materials
Synthesis; Nanoparticles; Lithium batteries (Caballero, A. (150) 192)
- Cell impedance
Li-ion cells; Charge/discharge curves (Nagasubramanian, G. (150) 182)
- Charge/discharge curves
Li-ion cells; Cell impedance (Nagasubramanian, G. (150) 182)
- Chemical equilibrium
Steam reforming; Dynamic model; Fuel cell power plant (Jahn, H.-J. (150) 101)
- Chemical interaction
SOFC; Glass-ceramic sealants; Interconnect materials; High-chromium ferritic steels; Corrosion (Haanappel, V.A.C. (150) 86)
- Coal gasification
Hydrogen fuel cell vehicle; Life cycle assessment; Air pollution; Steam reforming; Wind electrolysis (Colella, W.G. (150) 150)
- Coating
Micro-channel reactor; Hydrogen production; Fuel cell; Steam reforming of methanol; Catalysts (Yu, X. (150) 57)
- Cobalt
Spherical spinel LiMn_2O_4 ; Co-doping; Yttrium; Elevated temperature (He, X. (150) 216)
- Co-doping
Spherical spinel LiMn_2O_4 ; Yttrium; Cobalt; Elevated temperature (He, X. (150) 216)
- Commercialization
Scenario analysis; Polymer electrolyte membrane fuel cells; Interactive Future Simulations; Stationary power generation (Millett, S. (150) 187)
- Composite membrane
Nafion; Poly(tetrafluoroethylene); Direct methanol fuel cell (Lin, H.-L. (150) 11)
- Composite tube
Nickel hydroxide; Yttrium hydroxide; Alkaline rechargeable batteries (Cheng, F.-Y. (150) 255)
- Conducting polymers
Fibre battery; Electrochemical deposition; Polypyrrole; Capacity (Wang, J. (150) 223)
- Conductive materials
Fuel cell; Bipolar plate; Wet-lay composite; Carbon composite (Huang, J. (150) 110)

- Corrosion
SOFC; Glass–ceramic sealants; Interconnect materials; High-chromium ferritic steels; Chemical interaction (Haanappel, V.A.C. (150) 86)
- Cu dispersion
Hydrogen production; Methanol reforming; Microreformer; Fuel cell (Kawamura, Y. (150) 20)
- Cu/ZnO catalyst
Hydrogen production; Methanol reforming; Cu dispersion; Microreformer; Fuel cell (Kawamura, Y. (150) 20)
- Cycling performance
Gel polymer electrolyte; Inorganic additive; Lithium-metal–polymer cell; Vanadium pentoxide (Song, I.-C. (150) 202)
- D. Electrochemical reactions
A. Electrode materials; A. Hydrogen storage materials (Kolbasov, G.Y. (150) 276)
- Diffusion
SOFC; Dynamic modeling; Simulation; Impedance (Qi, Y. (150) 32)
- Direct alcohol fuel cells
Polyhydric alcohol; Anion exchange membrane; Alkaline fuel cells; Silver catalyst (Matsuoka, K. (150) 27)
- Direct methanol fuel cell
Nafion; Poly(tetrafluoroethylene); Composite membrane (Lin, H.-L. (150) 11)
- Dynamic model
Steam reforming; Fuel cell power plant; Chemical equilibrium (Jahn, H.-J. (150) 101)
- Dynamic modeling
SOFC; Simulation; Diffusion; Impedance (Qi, Y. (150) 32)
- Economic evaluation
PEM fuel cell; Photovoltaic; Wind turbine; Renewable energy; Reliability (Tanrioven, M. (150) 136)
- Electrochemical ageing
Alpha nickel hydroxide; Nanoparticles; Urea hydrolysis; Batteries (Jayalakshmi, M. (150) 272)
- Electrochemical deposition
Fibre battery; Conducting polymers; Polypyrrole; Capacity (Wang, J. (150) 223)
- Electrochemical properties
Hydrogen storage alloy; Ni/MH battery; Alloy structure (Zhang, F. (150) 247)
- Elevated temperature
Spherical spinel LiMn_2O_4 ; Co-doping; Yttrium; Cobalt (He, X. (150) 216)
- Fe_2O_3 -loaded carbon materials
Nano-carbon; Iron–air battery anode (Hang, B.T. (150) 261)
- Fibre battery
Conducting polymers; Electrochemical deposition; Polypyrrole; Capacity (Wang, J. (150) 223)
- Fuel cell performance
Sulfonated poly(ether ether ketone) (SPEEK); Water vapor uptake; Proton conductivity; Temperature; Relative humidity (Jiang, R. (150) 120)
- Fuel cell power plant
Steam reforming; Dynamic model; Chemical equilibrium (Jahn, H.-J. (150) 101)
- Fuel cell stacks
Thermal management (Promislow, K. (150) 129)
- Fuel cell system modelling
Hydration management; Air conditioning device (Glises, R. (150) 78)
- Fuel cell
Cu/ZnO catalyst; Hydrogen production; Methanol reforming; Cu dispersion; Microreformer (Kawamura, Y. (150) 20)
- Fuel cell
Bipolar plate; Conductive materials; Wet-lay composite; Carbon composite (Huang, J. (150) 110)
- Fuel cell
Micro-channel reactor; Hydrogen production; Coating; Steam reforming of methanol; Catalysts (Yu, X. (150) 57)
- Gel polymer electrolyte
Cycling performance; Inorganic additive; Lithium-metal–polymer cell; Vanadium pentoxide (Song, I.-C. (150) 202)
- Glass–ceramic sealants
SOFC; Interconnect materials; High-chromium ferritic steels; Chemical interaction; Corrosion (Haanappel, V.A.C. (150) 86)
- High-chromium ferritic steels
SOFC; Glass–ceramic sealants; Interconnect materials; Chemical interaction; Corrosion (Haanappel, V.A.C. (150) 86)
- Hydration management
Fuel cell system modelling; Air conditioning device (Glises, R. (150) 78)
- Hydrogen fuel cell vehicle
Life cycle assessment; Air pollution; Coal gasification; Steam reforming; Wind electrolysis (Colella, W.G. (150) 150)
- Hydrogen production
Cu/ZnO catalyst; Methanol reforming; Cu dispersion; Microreformer; Fuel cell (Kawamura, Y. (150) 20)
- Hydrogen production
Micro-channel reactor; Fuel cell; Coating; Steam reforming of methanol; Catalysts (Yu, X. (150) 57)
- Hydrogen storage alloy
Ni/MH battery; Alloy structure; Electrochemical properties (Zhang, F. (150) 247)
- Impedance
SOFC; Dynamic modeling; Simulation; Diffusion (Qi, Y. (150) 32)
- Inorganic additive
Cycling performance; Gel polymer electrolyte; Lithium-metal–polymer cell; Vanadium pentoxide (Song, I.-C. (150) 202)
- Interactive Future Simulations
Scenario analysis; Commercialization; Polymer electrolyte membrane fuel cells; Stationary power generation (Millett, S. (150) 187)
- Interconnect materials
SOFC; Glass–ceramic sealants; High-chromium ferritic steels; Chemical interaction; Corrosion (Haanappel, V.A.C. (150) 86)
- Interface
Sol–gel hybrid membranes; Membrane electrode assembly; Polarization curves (Thangamuthu, R. (150) 48)
- Iron–air battery anode
Nano-carbon; Fe_2O_3 -loaded carbon materials (Hang, B.T. (150) 261)
- Life cycle assessment
Hydrogen fuel cell vehicle; Air pollution; Coal gasification; Steam reforming; Wind electrolysis (Colella, W.G. (150) 150)
- Li-ion cells
Alkyl dicarbonates; Two-step nucleophilic reactions (Sasaki, T. (150) 208)
- Li-ion cells
Charge/discharge curves; Cell impedance (Nagasubramanian, G. (150) 182)
- Lithium batteries
Synthesis; Nanoparticles; Cathode materials (Caballero, A. (150) 192)
- Lithium ion batteries
Capacity fade; Online parameter estimation (Stamps, A.T. (150) 229)
- Lithium-ion cell
Spinel cathode (LiMn_2O_4); Cathode material; Rotating ring disc electrode; Manganese dissolution; Capacity loss (Wang, L.-F. (150) 1)

- Lithium-metal-polymer cell
Cycling performance; Gel polymer electrolyte; Inorganic additive; Vanadium pentoxide (Song, I.-C. (150) 202)
- Manganese dissolution
Lithium-ion cell; Spinel cathode (LiMn_2O_4); Cathode material; Rotating ring disc electrode; Capacity loss (Wang, L.-F. (150) 1)
- Membrane electrode assembly
Sol-gel hybrid membranes; Interface; Polarization curves (Thangamuthu, R. (150) 48)
- Methanol reforming
Cu/ZnO catalyst; Hydrogen production; Cu dispersion; Microreformer; Fuel cell (Kawamura, Y. (150) 20)
- Micro-channel reactor
Hydrogen production; Fuel cell; Coating; Steam reforming of methanol; Catalysts (Yu, X. (150) 57)
- Microreformer
Cu/ZnO catalyst; Hydrogen production; Methanol reforming; Cu dispersion; Fuel cell (Kawamura, Y. (150) 20)
- Modified glassy carbon electrodes
Oxygen reduction; Riboflavin; Anthraquinones; Overpotential (Manisankar, P. (150) 240)
- Nafion
Poly(tetrafluoroethylene); Composite membrane; Direct methanol fuel cell (Lin, H.-L. (150) 11)
- Nano-carbon
 Fe_2O_3 -loaded carbon materials; Iron-air battery anode (Hang, B.T. (150) 261)
- Nanoparticles
Alpha nickel hydroxide; Urea hydrolysis; Electrochemical ageing; Batteries (Jayalakshmi, M. (150) 272)
- Nanoparticles
Synthesis; Cathode materials; Lithium batteries (Caballero, A. (150) 192)
- Ni/MH battery
Hydrogen storage alloy; Alloy structure; Electrochemical properties (Zhang, F. (150) 247)
- Nickel hydroxide
Yttrium hydroxide; Composite tube; Alkaline rechargeable batteries (Cheng, F.-Y. (150) 255)
- Online parameter estimation
Capacity fade; Lithium ion batteries (Stamps, A.T. (150) 229)
- Overpotential
Oxygen reduction; Riboflavin; Modified glassy carbon electrodes; Anthraquinones (Manisankar, P. (150) 240)
- Oxygen reduction
Riboflavin; Modified glassy carbon electrodes; Anthraquinones; Overpotential (Manisankar, P. (150) 240)
- PEM fuel cell
Photovoltaic; Wind turbine; Renewable energy; Reliability; Economic evaluation (Tanrioven, M. (150) 136)
- Photovoltaic
PEM fuel cell; Wind turbine; Renewable energy; Reliability; Economic evaluation (Tanrioven, M. (150) 136)
- Platinum thin film
Sputter deposition; Catalyst; Polymer electrolyte membrane (PEM) fuel cell (Gruber, D. (150) 67)
- Polarization curves
Sol-gel hybrid membranes; Membrane electrode assembly; Interface (Thangamuthu, R. (150) 48)
- Poly(tetrafluoroethylene)
Nafion; Composite membrane; Direct methanol fuel cell (Lin, H.-L. (150) 11)
- Polyhydric alcohol
Direct alcohol fuel cells; Anion exchange membrane; Alkaline fuel cells; Silver catalyst (Matsuoka, K. (150) 27)
- Polymer electrolyte membrane (PEM) fuel cell
Sputter deposition; Platinum thin film; Catalyst (Gruber, D. (150) 67)
- Polymer electrolyte membrane fuel cells
Scenario analysis; Commercialization; Interactive Future Simulations; Stationary power generation (Millett, S. (150) 187)
- Polypyrrole
Fibre battery; Conducting polymers; Electrochemical deposition; Capacity (Wang, J. (150) 223)
- Proton conductivity
Sulfonated poly(ether ether ketone) (SPEEK); Water vapor uptake; Fuel cell performance; Temperature; Relative humidity (Jiang, R. (150) 120)
- Relative humidity
Sulfonated poly(ether ether ketone) (SPEEK); Water vapor uptake; Proton conductivity; Fuel cell performance; Temperature (Jiang, R. (150) 120)
- Reliability
PEM fuel cell; Photovoltaic; Wind turbine; Renewable energy; Economic evaluation (Tanrioven, M. (150) 136)
- Renewable energy
PEM fuel cell; Photovoltaic; Wind turbine; Reliability; Economic evaluation (Tanrioven, M. (150) 136)
- Residual stress
Solid oxide fuel cell; Yttria-stabilized zirconia; X-ray diffraction; Thermoelastic modeling (Fischer, W. (150) 73)
- Riboflavin
Oxygen reduction; Modified glassy carbon electrodes; Anthraquinones; Overpotential (Manisankar, P. (150) 240)
- Rotating ring disc electrode
Lithium-ion cell; Spinel cathode (LiMn_2O_4); Cathode material; Manganese dissolution; Capacity loss (Wang, L.-F. (150) 1)
- Scenario analysis
Commercialization; Polymer electrolyte membrane fuel cells; Interactive Future Simulations; Stationary power generation (Millett, S. (150) 187)
- Silver catalyst
Direct alcohol fuel cells; Polyhydric alcohol; Anion exchange membrane; Alkaline fuel cells (Matsuoka, K. (150) 27)
- Simulation
SOFC; Dynamic modeling; Diffusion; Impedance (Qi, Y. (150) 32)
- SOFC
Dynamic modeling; Simulation; Diffusion; Impedance (Qi, Y. (150) 32)
- SOFC
Glass-ceramic sealants; Interconnect materials; High-chromium ferritic steels; Chemical interaction; Corrosion (Haanappel, V.A.C. (150) 86)
- Solid oxide fuel cell
Yttria-stabilized zirconia; Residual stress; X-ray diffraction; Thermoelastic modeling (Fischer, W. (150) 73)
- Sol-gel hybrid membranes
Membrane electrode assembly; Interface; Polarization curves (Thangamuthu, R. (150) 48)
- Spherical spinel LiMn_2O_4
Co-doping; Yttrium; Cobalt; Elevated temperature (He, X. (150) 216)
- Spinel cathode (LiMn_2O_4)
Lithium-ion cell; Cathode material; Rotating ring disc electrode; Manganese dissolution; Capacity loss (Wang, L.-F. (150) 1)
- Sputter deposition
Platinum thin film; Catalyst; Polymer electrolyte membrane (PEM) fuel cell (Gruber, D. (150) 67)
- Stationary power generation
Scenario analysis; Commercialization; Polymer electrolyte membrane fuel cells; Interactive Future Simulations (Millett, S. (150) 187)

- Steam reforming of methanol
Micro-channel reactor; Hydrogen production; Fuel cell; Coating; Catalysts (Yu, X. (150) 57)
- Steam reforming
Hydrogen fuel cell vehicle; Life cycle assessment; Air pollution; Coal gasification; Wind electrolysis (Colella, W.G. (150) 150)
- Steam reforming
Dynamic model; Fuel cell power plant; Chemical equilibrium (Jahn, H.-J. (150) 101)
- Sulfonated poly(ether ether ketone) (SPEEK)
Water vapor uptake; Proton conductivity; Fuel cell performance; Temperature; Relative humidity (Jiang, R. (150) 120)
- Synthesis
Synthesis; Nanoparticles; Cathode materials; Lithium batteries (Caballero, A. (150) 192)
- Temperature
Sulfonated poly(ether ether ketone) (SPEEK); Water vapor uptake; Proton conductivity; Fuel cell performance; Relative humidity (Jiang, R. (150) 120)
- Thermal management
Fuel cell stacks (Promislow, K. (150) 129)
- Thermoelastic modeling
Solid oxide fuel cell; Yttria-stabilized zirconia; Residual stress; X-ray diffraction (Fischer, W. (150) 73)
- Two-step nucleophilic reactions
Alkyl dicarbonates; Li-ion cells (Sasaki, T. (150) 208)
- Urea hydrolysis
Alpha nickel hydroxide; Nanoparticles; Electrochemical ageing; Batteries (Jayalakshmi, M. (150) 272)
- Vanadium pentoxide
Cycling performance; Gel polymer electrolyte; Inorganic additive; Lithium-metal-polymer cell (Song, I.-C. (150) 202)
- Water vapor uptake
Sulfonated poly(ether ether ketone) (SPEEK); Proton conductivity; Fuel cell performance; Temperature; Relative humidity (Jiang, R. (150) 120)
- Wet-lay composite
Fuel cell; Bipolar plate; Conductive materials; Carbon composite (Huang, J. (150) 110)
- Wind electrolysis
Hydrogen fuel cell vehicle; Life cycle assessment; Air pollution; Coal gasification; Steam reforming (Colella, W.G. (150) 150)
- Wind turbine
PEM fuel cell; Photovoltaic; Renewable energy; Reliability; Economic evaluation (Tanrioven, M. (150) 136)
- X-ray diffraction
Solid oxide fuel cell; Yttria-stabilized zirconia; Residual stress; Thermoelastic modeling (Fischer, W. (150) 73)
- Yttria-stabilized zirconia
Solid oxide fuel cell; Residual stress; X-ray diffraction; Thermoelastic modeling (Fischer, W. (150) 73)
- Yttrium hydroxide
Nickel hydroxide; Composite tube; Alkaline rechargeable batteries (Cheng, F.-Y. (150) 255)
- Yttrium
Spherical spinel LiMn_2O_4 ; Co-doping; Cobalt; Elevated temperature (He, X. (150) 216)