

## Subject Index of Volume 142

- 2,4,6-Tris(2-pyridyl)-1,3,5-triazine  
Graphite electrode; Copper complex; Electrocatalysis; Oxygen reduction; Hydrogen peroxide reduction (Dias, V.L.N. (142) 10)
- AC impedance  
Solid-state lithium ion conductors (SSLICs);  $\text{Li}_6\text{BaLa}_2\text{Ta}_2\text{O}_{12}$ ; Pseudo-garnets; Chemical compatibility; Electrical properties (Thangadurai, V. (142) 339)
- Activated carbon nanofibre  
Electrospinning; Supercapacitor; Specific surface area; Specific capacitance (Kim, C. (142) 382)
- Active power sharing  
Fuel cell; Battery charger; Control strategy; Real-time; Power converter (Jiang, Z. (142) 253)
- Addition effect  
Lithium battery; Lithium chelatephosphate; Specific conductivity; Cycling efficiency; Orphology (Nanbu, N. (142) 333)
- Adhesion  
Porous nickel; Battery; Electrode; Coating (Chani, V.I. (142) 370)
- Air-breathing  
Passive DMFC, Methanol crossover, Open circuit voltage, Cell temperature; (Kho, B.K. (142) 50)
- Air-cooling  
Lithium-ion battery; Thermal management; Phase change materials; Electric scooter; Thermal modeling/simulation (Khateeb, S.A. (142) 345)
- Alkaline fuel cell  
Ammonia electrolysis; Hydrogen production; Electrodeposition; Bimetallic catalyst; Water reduction (Vitse, F. (142) 18)
- Alkaline  
Microwave irradiation; Ethanol oxidation;  $\text{CeO}_2$  (Xu, C. (142) 27)
- Ammonia electrolysis  
Alkaline fuel cell; Hydrogen production; Electrodeposition; Bimetallic catalyst; Water reduction (Vitse, F. (142) 18)
- Baffles  
Proton exchange membrane fuel cell; Reactant transport (Liu, H.-C. (142) 125)
- Barium zirconate  
Perovskite; Oxygen ion conduction; Electron-hole conduction; Proton conduction (Wang, W. (142) 1)
- Battery charger  
Fuel cell; Active power sharing; Control strategy; Real-time; Power converter (Jiang, Z. (142) 253)
- Battery  
Porous nickel; Electrode; Coating; Adhesion (Chani, V.I. (142) 370)
- Bimetallic catalyst  
Ammonia electrolysis; Alkaline fuel cell; Hydrogen production; Electrodeposition; Water reduction (Vitse, F. (142) 18)
- Bipolar plate  
PEMFC; Corrosion; Stainless steel; Long-term operation (Cho, E.A. (142) 177)
- Capacity fade  
Lithium ion; Power fade; Cycle life (Belt, J.R. (142) 354)
- Capacity  
Li-ion battery; Cycle deterioration; Storage deterioration; Impedance (Takeno, K. (142) 298)
- Carbon deposition  
Solid oxide fuel cell; Tars; Integrated SOFC-biomass gasification system (Singh, D. (142) 194)
- Carbon formation  
Solid oxide fuel cell; Thermodynamics analysis; Methane (Sangtongkitcharoen, W. (142) 75)
- Carbon monoxide  
Preferential oxidation; Platinum catalyst; Fuel cell (Suh, D.J. (142) 70)
- Carbon nanotubes  
DMFC; PEMFC; Electrocatalysis; CO oxidation (Carmo, M. (142) 169)
- Carbonate co-precipitation  
Lithium-ion battery; XPS; Rietveld;  $\text{Li}[\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}]\text{O}_2$  (Cho, T.H. (142) 306)
- Catalyst  
Methane steam reforming; Hydrogen; Hydrotalcite; Nickel (Fonseca, A. (142) 154)
- Catalytic partial oxidation  
Methane reforming; Hydrogen production; Micro-reformer (Chanotis, A.K. (142) 184)
- Cathode  
Gas evolution; Lithium-ion batteries (Kong, W. (142) 285)
- Cathode  
Li-ion batteries; Redox potential; Olivine;  $\text{LiNiPO}_4$  (Wolfenstine, J. (142) 389)
- Cell temperature  
Air-breathing, Passive DMFC, Methanol crossover, Open circuit voltage; (Kho, B.K. (142) 50)
- $\text{CeO}_2$   
Microwave irradiation; Ethanol oxidation; Alkaline (Xu, C. (142) 27)
- Characterization  
Distributed generation; Hybrid power plant; Uncertainty; Quantification (Subramanian, K. (142) 103)
- Charge rate  
Lithium-ion polymer cell; Satellite application; Taper voltage; Impedance (Wang, X. (142) 313)
- Charge transfer  
Non-graphitizable carbon; Polymer electrolyte; Lithium-ion battery; Ion transfer (Doi, T. (142) 329)
- Chemical compatibility  
Solid-state lithium ion conductors (SSLICs);  $\text{Li}_6\text{BaLa}_2\text{Ta}_2\text{O}_{12}$ ; Pseudo-garnets; AC impedance; Electrical properties (Thangadurai, V. (142) 339)
- Chromium plating solutions  
Electrochemical characteristics; Fuel cell electrodes; Oxygen reduction (Huang, K.-L. (142) 243)
- Circuit model  
Fuel cell; Polarization characteristics; PSPICE (Yu, D. (142) 238)
- CO oxidation  
Carbon nanotubes; DMFC; PEMFC; Electrocatalysis (Carmo, M. (142) 169)

- Coating  
 Porous nickel; Battery; Electrode; Adhesion (Chani, V.I. (142) 370)
- Control strategy  
 Fuel cell; Battery charger; Active power sharing; Real-time; Power converter (Jiang, Z. (142) 253)
- Copper complex  
 Graphite electrode; 2,4,6-Tris(2-pyridyl)-1,3,5-triazine; Electrocatalysis; Oxygen reduction; Hydrogen peroxide reduction (Dias, V.L.N. (142) 10)
- Corrosion  
 PEMFC; Bipolar plate; Stainless steel; Long-term operation (Cho, E.A. (142) 177)
- Cycle deterioration  
 Li-ion battery; Capacity; Storage deterioration; Impedance (Takeno, K. (142) 298)
- Cycle life  
 Lithium ion; Capacity fade; Power fade (Belt, J.R. (142) 354)
- Cycle performance  
 Lithium secondary battery; Graphite-coke hybrid carbon; Lithium-nickel-cobalt composite oxide; Load-levelling system (Kida, Y. (142) 323)
- Cycling efficiency  
 Lithium battery; Lithium chelatephosphate; Specific conductivity; Addition effect; Morphology (Nanbu, N. (142) 333)
- Direct methanol fuel cell  
 Electrocatalyst; PtRu nanoparticles; Pt alloy; Single-source precursors; Thermolysis (Deivaraj, T.C. (142) 43)
- Direct methanol fuel cells  
 Serpentine channel; Two-phase flow; Pressure drop (Yang, H. (142) 117)
- Distributed generation  
 Hybrid power plant; Uncertainty; Characterization; Quantification (Subramanian, K. (142) 103)
- DMFC  
 Carbon nanotubes; PEMFC; Electrocatalysis; CO oxidation (Carmo, M. (142) 169)
- DMFC  
 Fuel cell (Ge, J. (142) 56)
- Dynamic modeling  
 SOFC; Tubular; Heat transfer; Mass transfer (Xue, X. (142) 211)
- Dynamic simulation  
 Energy systems; PEM fuel cell; Hybrid electric vehicle; Metal-hydride hydrogen storage system; Virtual test bed (Jiang, Z. (142) 92)
- Electric scooter  
 Lithium-ion battery; Thermal management; Phase change materials; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (142) 345)
- Electrical properties  
 Solid-state lithium ion conductors (SSLICs);  $\text{Li}_6\text{BaLa}_2\text{Ta}_2\text{O}_{12}$ ; Pseudogarnets; Chemical compatibility; AC impedance (Thangadurai, V. (142) 339)
- Electrocatalysis  
 Carbon nanotubes; DMFC; PEMFC; CO oxidation (Carmo, M. (142) 169)
- Electrocatalysis  
 Graphite electrode; 2,4,6-Tris(2-pyridyl)-1,3,5-triazine; Copper complex; Oxygen reduction; Hydrogen peroxide reduction (Dias, V.L.N. (142) 10)
- Electrocatalyst  
 Direct methanol fuel cell; PtRu nanoparticles; Pt alloy; Single-source precursors; Thermolysis (Deivaraj, T.C. (142) 43)
- Electrochemical characteristics  
 Fuel cell electrodes; Oxygen reduction; Chromium plating solutions (Huang, K.-L. (142) 243)
- Electrode  
 Porous nickel; Battery; Coating; Adhesion (Chani, V.I. (142) 370)
- Electrodeposition  
 Ammonia electrolysis; Alkaline fuel cell; Hydrogen production; Bimetallic catalyst; Water reduction (Vitse, F. (142) 18)
- Electron-hole conduction  
 Barium zirconate; Perovskite; Oxygen ion conduction; Proton conduction (Wang, W. (142) 1)
- Electrospinning  
 Activated carbon nanofibre; Supercapacitor; Specific surface area; Specific capacitance (Kim, C. (142) 382)
- Energy systems  
 Dynamic simulation; PEM fuel cell; Hybrid electric vehicle; Metal-hydride hydrogen storage system; Virtual test bed (Jiang, Z. (142) 92)
- Ethanol oxidation  
 Microwave irradiation; Alkaline;  $\text{CeO}_2$  (Xu, C. (142) 27)
- FTIR  
 Iron phosphate; Lithium batteries; Raman (Zaghib, K. (142) 279)
- Fuel cell electrodes  
 Electrochemical characteristics; Oxygen reduction; Chromium plating solutions (Huang, K.-L. (142) 243)
- Fuel cell power plant  
 Reliability; Markov model (Tanrioven, M. (142) 264)
- Fuel cell  
 Battery charger; Active power sharing; Control strategy; Real-time; Power converter (Jiang, Z. (142) 253)
- Fuel cell  
 DMFC (Ge, J. (142) 56)
- Fuel cell  
 Methanol decomposition; Methanol steam reforming; Water gas shift; Methanol reformer; Hydrogen; Optimization (Choi, Y. (142) 81)
- Fuel cell  
 Polarization characteristics; Circuit model; PSPICE (Yu, D. (142) 238)
- Fuel cell  
 Preferential oxidation; Carbon monoxide; Platinum catalyst (Suh, D.J. (142) 70)
- Fuel cell  
 Simulation; Natural gas reforming; Hydrogen (Matelli, J.A. (142) 160)
- Fuel cell  
 Solid acid membrane; Proton exchange membrane; Proton conduction; Zirconium phosphate (Hogarth, W.H.J. (142) 223)
- Gas evolution  
 Cathode; Lithium-ion batteries (Kong, W. (142) 285)
- Graphite electrode  
 2,4,6-Tris(2-pyridyl)-1,3,5-triazine; Copper complex; Electrocatalysis; Oxygen reduction; Hydrogen peroxide reduction (Dias, V.L.N. (142) 10)
- Graphite-coke hybrid carbon  
 Lithium secondary battery; Lithium-nickel-cobalt composite oxide; Load-levelling system; Cycle performance (Kida, Y. (142) 323)
- Heat and mass transfer  
 Solid oxide fuel cell; Micro gas turbine; Hybrid system; Performance analysis; Model (Song, T.W. (142) 30)
- Heat transfer  
 SOFC; Dynamic modeling; Tubular; Mass transfer (Xue, X. (142) 211)
- Hybrid electric vehicle  
 Dynamic simulation; Energy systems; PEM fuel cell; Metal-hydride hydrogen storage system; Virtual test bed (Jiang, Z. (142) 92)
- Hybrid power plant  
 Distributed generation; Uncertainty; Characterization; Quantification (Subramanian, K. (142) 103)

- Hybrid system  
Solid oxide fuel cell; Micro gas turbine; Performance analysis; Heat and mass transfer; Model (Song, T.W. (142) 30)
- Hydrogen peroxide reduction  
Graphite electrode; 2,4,6-Tris(2-pyridyl)-1,3,5-triazine; Copper complex; Electrocatalysis; Oxygen reduction (Dias, V.L.N. (142) 10)
- Hydrogen production  
Ammonia electrolysis; Alkaline fuel cell; Electrodeposition; Bimetallic catalyst; Water reduction (Vitse, F. (142) 18)
- Hydrogen production  
Catalytic partial oxidation; Methane reforming; Micro-reformer (Chaniotis, A.K. (142) 184)
- Hydrogen  
Fuel cell; Simulation; Natural gas reforming (Matelli, J.A. (142) 160)
- Hydrogen  
Methane steam reforming; Hydrotalcite; Nickel; Catalyst (Fonseca, A. (142) 154)
- Hydrogen  
Methanol decomposition; Methanol steam reforming; Water gas shift; Methanol reformer; Fuel cell; Optimization (Choi, Y. (142) 81)
- Hydrotalcite  
Methane steam reforming; Hydrogen; Nickel; Catalyst (Fonseca, A. (142) 154)
- Impedance  
Li-ion battery; Capacity; Cycle deterioration; Storage deterioration (Takeno, K. (142) 298)
- Impedance  
Lithium-ion polymer cell; Satellite application; Charge rate; Taper voltage (Wang, X. (142) 313)
- Integrated SOFC-biomass gasification system  
Solid oxide fuel cell; Carbon deposition; Tars (Singh, D. (142) 194)
- Inverse method  
Non-destructive measurement; Temperature prediction; PEMFC (Chang, M.-H. (142) 200)
- Ion transfer  
Non-graphitizable carbon; Polymer electrolyte; Lithium-ion battery; Charge transfer (Doi, T. (142) 329)
- Iron phosphate  
Lithium batteries; Raman; FTIR (Zaghib, K. (142) 279)
- Li-ion batteries  
Cathode; Redox potential; Olivine; LiNiPO<sub>4</sub> (Wolfenstine, J. (142) 389)
- Li-ion battery  
Capacity; Cycle deterioration; Storage deterioration; Impedance (Takeno, K. (142) 298)
- Li<sub>6</sub>BaLa<sub>2</sub>Ta<sub>2</sub>O<sub>12</sub>  
Solid-state lithium ion conductors (SSLICs); Pseudo-garnets; Chemical compatibility; AC impedance; Electrical properties (Thangadurai, V. (142) 339)
- LiNiPO<sub>4</sub>  
Cathode; Li-ion batteries; Redox potential; Olivine (Wolfenstine, J. (142) 389)
- Lithium batteries  
Iron phosphate; Raman; FTIR (Zaghib, K. (142) 279)
- Lithium battery  
Lithium chelatophosphate; Specific conductivity; Cycling efficiency; Addition effect; Orphology (Nanbu, N. (142) 333)
- Lithium chelatophosphate  
Lithium battery; Specific conductivity; Cycling efficiency; Addition effect; Orphology (Nanbu, N. (142) 333)
- Lithium ion  
Capacity fade; Power fade; Cycle life (Belt, J.R. (142) 354)
- Lithium secondary battery  
Graphite-coke hybrid carbon; Lithium-nickel-cobalt composite oxide; Load-levelling system; Cycle performance (Kida, Y. (142) 323)
- Lithium-nickel-cobalt composite oxide  
Lithium secondary battery; Graphite-coke hybrid carbon; Load-levelling system; Cycle performance (Kida, Y. (142) 323)
- Lithium-ion batteries  
Gas evolution; Cathode (Kong, W. (142) 285)
- Lithium-ion batteries  
Nanocrystalline thin film; Transition metal ferrite MF<sub>2</sub>O<sub>4</sub> (M=Cu, Ni, Co) (NuLi, Y.-N. (142) 292)
- Lithium-ion battery  
Carbonate co-precipitation; XPS; Rietveld; Li[Ni<sub>1/3</sub>Mn<sub>1/3</sub>Co<sub>1/3</sub>]O<sub>2</sub> (Cho, T.H. (142) 306)
- Lithium-ion battery  
Non-graphitizable carbon; Polymer electrolyte; Ion transfer; Charge transfer (Doi, T. (142) 329)
- Lithium-ion battery  
Thermal management; Phase change materials; Electric scooter; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (142) 345)
- Lithium-ion polymer cell  
Satellite application; Charge rate; Taper voltage; Impedance (Wang, X. (142) 313)
- Li[Ni<sub>1/3</sub>Mn<sub>1/3</sub>Co<sub>1/3</sub>]O<sub>2</sub>  
Lithium-ion battery; Carbonate co-precipitation; XPS; Rietveld (Cho, T.H. (142) 306)
- Load-levelling system  
Lithium secondary battery; Graphite-coke hybrid carbon; Lithium-nickel-cobalt composite oxide; Cycle performance (Kida, Y. (142) 323)
- Long-term operation  
PEMFC; Bipolar plate; Corrosion; Stainless steel (Cho, E.A. (142) 177)
- Markov model  
Reliability; Fuel cell power plant (Tanrioven, M. (142) 264)
- Mass transfer  
SOFC; Dynamic modeling; Tubular; Heat transfer (Xue, X. (142) 211)
- Mathematical modeling  
PEM fuel cell; Two-phase flow (Baschuk, J.J. (142) 134)
- Metal-hydride hydrogen storage system  
Dynamic simulation; Energy systems; PEM fuel cell; Hybrid electric vehicle; Virtual test bed (Jiang, Z. (142) 92)
- Methane reforming  
Catalytic partial oxidation; Hydrogen production; Micro-reformer (Chaniotis, A.K. (142) 184)
- Methane steam reforming  
Hydrogen; Hydrotalcite; Nickel; Catalyst (Fonseca, A. (142) 154)
- Methane  
Solid oxide fuel cell; Carbon formation; Thermodynamics analysis (Sangtongkitcharoen, W. (142) 75)
- Methanol crossover  
Air-breathing, Cell temperature, Passive DMFC, Open circuit voltage; (Kho, B.K. (142) 50)
- Methanol decomposition  
Methanol steam reforming; Water gas shift; Methanol reformer; Fuel cell; Hydrogen; Optimization (Choi, Y. (142) 81)
- Methanol reformer  
Methanol decomposition; Methanol steam reforming; Water gas shift; Fuel cell; Hydrogen; Optimization (Choi, Y. (142) 81)
- Methanol steam reforming  
Methanol decomposition; Water gas shift; Methanol reformer; Fuel cell; Hydrogen; Optimization (Choi, Y. (142) 81)
- Micro gas turbine  
Solid oxide fuel cell; Hybrid system; Performance analysis; Heat and mass transfer; Model (Song, T.W. (142) 30)
- Micro-reformer  
Catalytic partial oxidation; Methane reforming; Hydrogen production (Chaniotis, A.K. (142) 184)
- Microwave irradiation  
Ethanol oxidation; Alkaline; CeO<sub>2</sub> (Xu, C. (142) 27)

- Model**  
Solid oxide fuel cell; Micro gas turbine; Hybrid system; Performance analysis; Heat and mass transfer (Song, T.W. (142) 30)
- Modeling**  
Thermal batteries; Self-discharge (Schoeffert, S. (142) 361)
- Nanocrystalline thin film**  
Lithium-ion batteries; Transition metal ferrite  $MFe_2O_4$  ( $M=Cu, Ni, Co$ ) (NuLi, Y.-N. (142) 292)
- Natural gas reforming**  
Fuel cell; Simulation; Hydrogen (Matelli, J.A. (142) 160)
- Nickel**  
Methane steam reforming; Hydrogen; Hydrotalcite; Catalyst (Fonseca, A. (142) 154)
- Non-destructive measurement**  
Temperature prediction; PEMFC; Inverse method (Chang, M.-H. (142) 200)
- Non-graphitizable carbon**  
Polymer electrolyte; Lithium-ion battery; Ion transfer; Charge transfer (Doi, T. (142) 329)
- Olivine**  
Cathode; Li-ion batteries; Redox potential;  $LiNiPO_4$  (Wolfenstine, J. (142) 389)
- Open circuit voltage**  
Air-breathing, Cell temperature, Methanol crossover, Passive DMFC; (Kho, B.K. (142) 50)
- Optimization**  
Methanol decomposition; Methanol steam reforming; Water gas shift; Methanol reformer; Fuel cell; Hydrogen (Choi, Y. (142) 81)
- Orphology**  
Lithium battery; Lithium chelatophosphate; Specific conductivity; Cycling efficiency; Addition effect (Nanbu, N. (142) 333)
- Oxygen ion conduction**  
Barium zirconate; Perovskite; Electron-hole conduction; Proton conduction (Wang, W. (142) 1)
- Oxygen reduction**  
Electrochemical characteristics; Fuel cell electrodes; Chromium plating solutions (Huang, K.-L. (142) 243)
- Oxygen reduction**  
Graphite electrode; 2,4,6-Tris(2-pyridyl)-1,3,5-triazine; Copper complex; Electrocatalysis; Hydrogen peroxide reduction (Dias, V.L.N. (142) 10)
- Passive DMFC**  
Air-breathing, Methanol crossover, Open circuit voltage, Cell temperature (Kho, B.K. (142) 50)
- PEM fuel cell**  
Dynamic simulation; Energy systems; Hybrid electric vehicle; Metal-hydride hydrogen storage system; Virtual test bed (Jiang, Z. (142) 92)
- PEM fuel cell**  
Mathematical modeling; Two-phase flow (Baschuk, J.J. (142) 134)
- PEMFC**  
Bipolar plate; Corrosion; Stainless steel; Long-term operation (Cho, E.A. (142) 177)
- PEMFC**  
Carbon nanotubes; DMFC; Electrocatalysis; CO oxidation (Carmo, M. (142) 169)
- PEMFC**  
Non-destructive measurement; Temperature prediction; Inverse method (Chang, M.-H. (142) 200)
- Performance analysis**  
Solid oxide fuel cell; Micro gas turbine; Hybrid system; Heat and mass transfer; Model (Song, T.W. (142) 30)
- Perovskite**  
Barium zirconate; Oxygen ion conduction; Electron-hole conduction; Proton conduction (Wang, W. (142) 1)
- Phase change materials**  
Lithium-ion battery; Thermal management; Electric scooter; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (142) 345)
- Platinum catalyst**  
Preferential oxidation; Carbon monoxide; Fuel cell (Suh, D.J. (142) 70)
- Polarization characteristics**  
Fuel cell; Circuit model; PSPICE (Yu, D. (142) 238)
- Polymer electrolyte**  
Non-graphitizable carbon; Lithium-ion battery; Ion transfer; Charge transfer (Doi, T. (142) 329)
- Porous nickel**  
Battery; Electrode; Coating; Adhesion (Chani, V.I. (142) 370)
- Power converter**  
Fuel cell; Battery charger; Active power sharing; Control strategy; Real-time (Jiang, Z. (142) 253)
- Power fade**  
Lithium ion; Capacity fade; Cycle life (Belt, J.R. (142) 354)
- Preferential oxidation**  
Carbon monoxide; Platinum catalyst; Fuel cell (Suh, D.J. (142) 70)
- Pressure drop**  
Direct methanol fuel cells; Serpentine channel; Two-phase flow (Yang, H. (142) 117)
- Proton conduction**  
Barium zirconate; Perovskite; Oxygen ion conduction; Electron-hole conduction (Wang, W. (142) 1)
- Proton conduction**  
Solid acid membrane; Proton exchange membrane; Fuel cell; Zirconium phosphate (Hogarth, W.H.J. (142) 223)
- Proton exchange membrane fuel cell**  
Reactant transport; Baffles (Liu, H.-C. (142) 125)
- Proton exchange membrane**  
Solid acid membrane; Fuel cell; Proton conduction; Zirconium phosphate (Hogarth, W.H.J. (142) 223)
- Pseudo-garnets**  
Solid-state lithium ion conductors (SSLICs);  $Li_6BaLa_2Ta_2O_{12}$ ; Chemical compatibility; AC impedance; Electrical properties (Thangadurai, V. (142) 339)
- PSPICE**  
Fuel cell; Polarization characteristics; Circuit model (Yu, D. (142) 238)
- Pt alloy**  
Direct methanol fuel cell; Electrocatalyst; PtRu nanoparticles; Single-source precursors; Thermolysis (Deivaraj, T.C. (142) 43)
- PtRu nanoparticles**  
Direct methanol fuel cell; Electrocatalyst; Pt alloy; Single-source precursors; Thermolysis (Deivaraj, T.C. (142) 43)
- Quantification**  
Distributed generation; Hybrid power plant; Uncertainty; Characterization (Subramanian, K. (142) 103)
- Raman**  
Iron phosphate; Lithium batteries; FTIR (Zaghib, K. (142) 279)
- Reactant transport**  
Proton exchange membrane fuel cell; Baffles (Liu, H.-C. (142) 125)
- Real-time**  
Fuel cell; Battery charger; Active power sharing; Control strategy; Power converter (Jiang, Z. (142) 253)
- Redox potential**  
Cathode; Li-ion batteries; Olivine;  $LiNiPO_4$  (Wolfenstine, J. (142) 389)
- Reliability**  
Markov model; Fuel cell power plant (Tanrioven, M. (142) 264)
- Rietveld**  
Lithium-ion battery; Carbonate co-precipitation; XPS;  $Li[Ni_{1/3}Mn_{1/3}Co_{1/3}]O_2$  (Cho, T.H. (142) 306)

- Satellite application  
Lithium-ion polymer cell; Charge rate; Taper voltage; Impedance (Wang, X. (142) 313)
- Self-discharge  
Thermal batteries; Modeling (Schoeffert, S. (142) 361)
- Serpentine channel  
Direct methanol fuel cells; Two-phase flow; Pressure drop (Yang, H. (142) 117)
- Simulation  
Fuel cell; Natural gas reforming; Hydrogen (Matelli, J.A. (142) 160)
- Single-source precursors  
Direct methanol fuel cell; Electrocatalyst; PtRu nanoparticles; Pt alloy; Thermolysis (Deivaraj, T.C. (142) 43)
- SOFC  
Dynamic modeling; Tubular; Heat transfer; Mass transfer (Xue, X. (142) 211)
- Solid acid membrane  
Proton exchange membrane; Fuel cell; Proton conduction; Zirconium phosphate (Hogarth, W.H.J. (142) 223)
- Solid oxide fuel cell  
Carbon deposition; Tars; Integrated SOFC-biomass gasification system (Singh, D. (142) 194)
- Solid oxide fuel cell  
Carbon formation; Thermodynamics analysis; Methane (Sangtongkitcharoen, W. (142) 75)
- Solid oxide fuel cell  
Micro gas turbine; Hybrid system; Performance analysis; Heat and mass transfer; Model (Song, T.W. (142) 30)
- Solid-state lithium ion conductors (SSLICs)  
 $\text{Li}_6\text{BaLa}_2\text{Ta}_2\text{O}_{12}$ ; Pseudo-garnets; Chemical compatibility; AC impedance; Electrical properties (Thangadurai, V. (142) 339)
- Specific capacitance  
Electrospinning; Activated carbon nanofibre; Supercapacitor; Specific surface area (Kim, C. (142) 382)
- Specific conductivity  
Lithium battery; Lithium chelatophosphate; Cycling efficiency; Addition effect; Orphology (Nanbu, N. (142) 333)
- Specific surface area  
Electrospinning; Activated carbon nanofibre; Supercapacitor; Specific capacitance (Kim, C. (142) 382)
- Stainless steel  
PEMFC; Bipolar plate; Corrosion; Long-term operation (Cho, E.A. (142) 177)
- Storage deterioration  
Li-ion battery; Capacity; Cycle deterioration; Impedance (Takeno, K. (142) 298)
- Supercapacitor  
Electrospinning; Activated carbon nanofibre; Specific surface area; Specific capacitance (Kim, C. (142) 382)
- Taper voltage  
Lithium-ion polymer cell; Satellite application; Charge rate; Impedance (Wang, X. (142) 313)
- Tars  
Solid oxide fuel cell; Carbon deposition; Integrated SOFC-biomass gasification system (Singh, D. (142) 194)
- Temperature prediction  
Non-destructive measurement; PEMFC; Inverse method (Chang, M.-H. (142) 200)
- Thermal batteries  
Modeling; Self-discharge (Schoeffert, S. (142) 361)
- Thermal management  
Lithium-ion battery; Phase change materials; Electric scooter; Thermal modeling/simulation; Air-cooling (Khateeb, S.A. (142) 345)
- Thermal modeling/simulation  
Lithium-ion battery; Thermal management; Phase change materials; Electric scooter; Air-cooling (Khateeb, S.A. (142) 345)
- Thermodynamics analysis  
Solid oxide fuel cell; Carbon formation; Methane (Sangtongkitcharoen, W. (142) 75)
- Thermolysis  
Direct methanol fuel cell; Electrocatalyst; PtRu nanoparticles; Pt alloy; Single-source precursors (Deivaraj, T.C. (142) 43)
- Transition metal ferrite  $\text{MFe}_2\text{O}_4$  (M=Cu, Ni, Co)  
Lithium-ion batteries; Nanocrystalline thin film (NuLi, Y.-N. (142) 292)
- Tubular  
SOFC; Dynamic modeling; Heat transfer; Mass transfer (Xue, X. (142) 211)
- Two-phase flow  
Direct methanol fuel cells; Serpentine channel; Pressure drop (Yang, H. (142) 117)
- Two-phase flow  
PEM fuel cell; Mathematical modeling (Baschuk, J.J. (142) 134)
- Uncertainty  
Distributed generation; Hybrid power plant; Characterization; Quantification (Subramanian, K. (142) 103)
- Virtual test bed  
Dynamic simulation; Energy systems; PEM fuel cell; Hybrid electric vehicle; Metal-hydride hydrogen storage system (Jiang, Z. (142) 92)
- Water gas shift  
Methanol decomposition; Methanol steam reforming; Methanol reformer; Fuel cell; Hydrogen; Optimization (Choi, Y. (142) 81)
- Water reduction  
Ammonia electrolysis; Alkaline fuel cell; Hydrogen production; Electrodeposition; Bimetallic catalyst (Vitse, F. (142) 18)
- XPS  
Lithium-ion battery; Carbonate co-precipitation; Rietveld;  $\text{Li}[\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}]\text{O}_2$  (Cho, T.H. (142) 306)
- Zirconium phosphate  
Solid acid membrane; Proton exchange membrane; Fuel cell; Proton conduction (Hogarth, W.H.J. (142) 223)