

Subject Index of Volume 136

- Absorptive glass mats
Valve-regulated-lead-acid batteries; High power batteries; Polyethylene membranes; UPS applications (Luisa Soria, M. (136) 376)
- Acid leaching
Alkaline batteries; Recycling; Zinc; Manganese dioxide; Electrowinning (de Souza, C.C.B.M. (136) 191)
- Activated carbon
Li-ion battery; Supercapacitor; Power-ion battery; LiCoO_2 (Pasquier, A. Du (136) 160)
- Additives in solution
Li-ion cells; Cycling behavior; Elevated temperatures; Film formation; XPS analysis (Markovsky, B. (136) 296)
- Alcohol fuel cell
Expanded graphite anode; Electro-catalysts (Bhattacharya, A. (136) 208)
- Alkaline batteries
Recycling; Acid leaching; Zinc; Manganese dioxide; Electrowinning (de Souza, C.C.B.M. (136) 191)
- Amorphous film
Vanadium pentoxide; Silver co-sputtering; Microbatteries (Lee, J. M. (136) 122)
- Annealing temperature
 $\text{Co(OH)}_2/\text{USY}$ composite; Capacitive property characterization; Supercapacitors (Liang, Y.-Y. (136) 197)
- Anode
 Cu_3P ; Morphology; Lithium ion battery; Size; Crystallinity (Bichat, M.-P. (136) 80)
- Anode
HEMM; Nanocomposite; Li-ion; Battery (Kim, I.-S. (136) 145)
- Anode
Silicon; Lithium-ion; Batteries; Composite (Dimov, N. (136) 108)
- Applications
Hybrid vehicles; Space vehicles; Nickel; Metal hydride batteries (Klein, M. (136) 317)
- Applications/aircraft
Valve-regulated lead-acid batteries (Timmons, J. (136) 372)
- Applications/drilling/bore holes
Thermal batteries; Solid-state batteries (Guidotti, R.A. (136) 257)
- Applications/earth satellites
Nickel/cadmium batteries; Nickel/metal hydride; Batteries (Lewis, H. (136) 307)
- Applications/marine
Lithium-ion batteries (Gitzendanner, R. (136) 416)
- Applications/medical
Lithium/vanadium oxide batteries; Electrolytic capacitors (Skarstad, P.M. (136) 263)
- Applications/military (manpack and APU)
Fuel cells/PEM; Fuel cells/solid oxide; Hydrogen storage (Patil, A.S. (136) 220)
- Applications/underwater vehicles
 $\text{Mg-H}_2\text{O}_2$ semi-fuel cells (Medeiros, M.G. (136) 226)
- Asymmetric capacitor devices
Hybrid capacitor devices; Faradaic and non-faradaic processes (Pell, W.G. (136) 334)
- Batteries
Applications/earth satellites; Nickel/cadmium batteries; Nickel/metal hydride (Lewis, H. (136) 307)
- Batteries
Recycling (Espinosa, D.C.R. (136) 186)
- Batteries
Silicon; Lithium-ion; Anode; Composite (Dimov, N. (136) 108)
- Battery state of health
Impedance spectroscopy (Tinnemeyer, J.A. (136) 246)
- Battery
HEMM; Nanocomposite; Anode; Li-ion (Kim, I.-S. (136) 145)
- Biography
Thomas A. Edison (Salkind, A.J. (136) 356)
- Bipolar battery
Lithium battery; High-power application; Overcharge protection (Berger, T. (136) 383)
- Bipolar plates
PEM fuel cells; Carbon-filled polymers; Polymer blends (Wu, M. (136) 37)
- Bipolar
Lead-acid batteries; Inorganic separators (Ellis, K. (136) 366)
- Capacitive property characterization
 $\text{Co(OH)}_2/\text{USY}$ composite; Annealing temperature; Supercapacitors (Liang, Y.-Y. (136) 197)
- Carbon deposition
Solid oxide fuel cell; Surface modification; Hydrocarbon fuel; Partial oxidation of methane (Yoon, S.P. (136) 30)
- Carbon-filled polymers
PEM fuel cells; Bipolar plates; Polymer blends (Wu, M. (136) 37)
- Cathode
Li-ion batteries; Olivine; Phosphates; Solid solution (Wolfenstine, J. (136) 150)
- Cell voltage degradation
Direct methanol fuel cell; Portable power source; Microfluidic; Low temperature co-fire ceramic; Fuel cell system (Xie, C. (136) 55)
- Chitosan
Thermal stability; Water absorption; Proton conductivity; Proton exchange membrane; Fuel cell (Mukoma, P. (136) 16)
- $\text{Co(OH)}_2/\text{USY}$ composite
Capacitive property characterization; Annealing temperature; Supercapacitors (Liang, Y.-Y. (136) 197)
- CO_2 tolerance
PEM fuel cell (PEMFC); Reverse water gas shift reaction; Reformate; Modelling study (Janssen, G.J.M. (136) 45)
- Cobalt sulfide
Thermal batteries; Molten salt electrolytes; Lithium-silicon (Butler, P. (136) 240)
- Composite
Silicon; Lithium-ion; Batteries; Anode (Dimov, N. (136) 108)
- Conductive additive carbons
Electrochemical capacitors; Double layer capacitors; Pseudo capacitors; Organic electrolytes; Ragone plot (Michael, M.S. (136) 250)

- Conventional flow field
Proton exchange membrane fuel cell; Interdigitated flow field; Numerical modeling (Hu, G. (136) 1)
- Coulombic efficiency
Solid-state batteries; Impedance; Discharge capacity (Nagasubramanian, G. (136) 395)
- Crystallinity
Cu₃P; Morphology; Anode; Lithium ion battery; Size (Bichat, M.-P. (136) 80)
- Cu₃P
Morphology; Anode; Lithium ion battery; Size; Crystallinity (Bichat, M.-P. (136) 80)
- Cycling behavior
Li-ion cells; Elevated temperatures; Additives in solution; Film formation; XPS analysis (Markovsky, B. (136) 296)
- Cycling characteristics
Sealed Ni/MH cell; Inner pressure; Pulse charging (Zhang, J. (136) 180)
- Design
Fabrication; Property; Solid oxide fuel cell (Du, Y. (136) 66)
- Direct methanol fuel cell
Portable power source; Cell voltage degradation; Microfluidic; Low temperature co-fire ceramic; Fuel cell system (Xie, C. (136) 55)
- Discharge capacity
Solid-state batteries; Impedance; Coulombic efficiency (Nagasubramanian, G. (136) 395)
- Doped barium cerate
Proton conductor; Fuel cell performance; LCFC and LSC cathodes (Maffei, N. (136) 24)
- Doping
Nano-crystalline lithium manganate; Li ion battery; Electrochemical properties (Nieto, S. (136) 88)
- Double layer capacitors
Electrochemical capacitors; Pseudo capacitors; Conductive additive carbons; Organic electrolytes; Ragone plot (Michael, M.S. (136) 250)
- Electric vehicles
Lithium-ion rechargeable batteries; Lithium iron sulphide (Ritchie, A.G. (136) 276)
- Electro-catalysts
Expanded graphite anode; Alcohol fuel cell (Bhattacharya, A. (136) 208)
- Electrochemical capacitors
Double layer capacitors; Pseudo capacitors; Conductive additive carbons; Organic electrolytes; Ragone plot (Michael, M.S. (136) 250)
- Electrochemical energy sources
Future energy economy; Fossil fuels; Renewable energy sources (Irvine, J.T.S. (136) 203)
- Electrochemical properties
Nano-crystalline lithium manganate; Li ion battery; Doping (Nieto, S. (136) 88)
- Electrolytic capacitors
Applications/medical; Lithium/vanadium oxide batteries (Skarstad, P.M. (136) 263)
- Electrowinning
Alkaline batteries; Recycling; Acid leaching; Zinc; Manganese dioxide (de Souza, C.C.B.M. (136) 191)
- Elevated temperatures
Li-ion cells; Cycling behavior; Additives in solution; Film formation; XPS analysis (Markovsky, B. (136) 296)
- Expanded graphite anode
Alcohol fuel cell; Electro-catalysts (Bhattacharya, A. (136) 208)
- Fabrication
Property; Design; Solid oxide fuel cell (Du, Y. (136) 66)
- Faradaic and non-faradaic processes
Hybrid capacitor devices; Asymmetric capacitor devices (Pell, W.G. (136) 334)
- Film formation
Li-ion cells; Cycling behavior; Elevated temperatures; Additives in solution; XPS analysis (Markovsky, B. (136) 296)
- Float conditions
VRLA batteries; Standby applications; Scattering (Rossinot, E. (136) 171)
- Fossil fuels
Future energy economy; Renewable energy sources; Electrochemical energy sources (Irvine, J.T.S. (136) 203)
- Fuel cell performance
Proton conductor; Doped barium cerate; LCFC and LSC cathodes (Maffei, N. (136) 24)
- Fuel cell system
Direct methanol fuel cell; Portable power source; Cell voltage degradation; Microfluidic; Low temperature co-fire ceramic (Xie, C. (136) 55)
- Fuel cell
Thermal stability; Water absorption; Proton conductivity; Chitosan; Proton exchange membrane (Mukoma, P. (136) 16)
- Fuel cells
Reforming/hydrocarbons (Pinkwart, K. (136) 211)
- Fuel cells/PEM
Applications/military (manpack and APU); Fuel cells/solid oxide; Hydrogen storage (Patil, A.S. (136) 220)
- Fuel cells/solid oxide
Applications/military (manpack and APU); Fuel cells/PEM; Hydrogen storage (Patil, A.S. (136) 220)
- Future energy economy
Fossil fuels; Renewable energy sources; Electrochemical energy sources (Irvine, J.T.S. (136) 203)
- Fuzzy logic
Nickel/metal hydride batteries; Impedance spectroscopy (Singh, P. (136) 322)
- HEMM
Nanocomposite; Anode; Li-ion; Battery (Kim, I.-S. (136) 145)
- High power batteries
Valve-regulated-lead-acid batteries; Polyethylene membranes; Absorptive glass mats; UPS applications (Luisa Soria, M. (136) 376)
- High rate capability
Silicon film; Vacuum deposition; Li insertion/extraction; Long cycle life (Ohara, S. (136) 303)
- High-power application
Lithium battery; Bipolar battery; Overcharge protection (Berger, T. (136) 383)
- History of rechargeable lithium batteries
Lithium ion; Hybrids; Methanol fuel cells (Broussely, M. (136) 386)
- Hybrid capacitor devices
Asymmetric capacitor devices; Faradaic and non-faradaic processes (Pell, W.G. (136) 334)
- Hybrid layer capacitor
Pulses Plus™ lithium primary battery; Low temperature performance; Long duration applications (Menachem, C. (136) 268)
- Hybrid vehicles
Applications; Space vehicles; Nickel; Metal hydride batteries (Klein, M. (136) 317)
- Hybrids
History of rechargeable lithium batteries; Lithium ion; Methanol fuel cells (Broussely, M. (136) 386)
- Hydrocarbon fuel
Solid oxide fuel cell; Surface modification; Carbon deposition; Partial oxidation of methane (Yoon, S.P. (136) 30)
- Hydrogen diffusion coefficient
Ni/MH battery; Metal hydride electrode (Feng, F. (136) 346)

- Hydrogen storage
Applications/military (manpack and APU); Fuel cells/PEM; Fuel cells/solid oxide (Patil, A.S. (136) 220)
- Impedance spectroscopy
Battery state of health (Tinnemeyer, J.A. (136) 246)
- Impedance spectroscopy
Nickel/metal hydride batteries; Fuzzy logic (Singh, P. (136) 322)
- Impedance
Solid-state batteries; Coulombic efficiency; Discharge capacity (Nagabramanian, G. (136) 395)
- Inner pressure
Sealed Ni/MH cell; Cycling characteristics; Pulse charging (Zhang, J. (136) 180)
- Inorganic separators
Lead-acid batteries; Bipolar (Ellis, K. (136) 366)
- Interdigitated flow field
Proton exchange membrane fuel cell; Conventional flow field; Numerical modeling (Hu, G. (136) 1)
- Lattice dynamics
Spinel; Raman spectroscopy; Lithium batteries (Julien, C.M. (136) 72)
- LCFC and LSC cathodes
Proton conductor; Doped barium cerate; Fuel cell performance (Maffei, N. (136) 24)
- LDMOSFET
Micropower; Microbattery; SOI (Sukumar, V. (136) 401)
- Lead-acid batteries
Bipolar; Inorganic separators (Ellis, K. (136) 366)
- Li insertion/extraction
Silicon film; Vacuum deposition; High rate capability; Long cycle life (Ohara, S. (136) 303)
- Li ion battery
Nano-crystalline lithium manganate; Electrochemical properties; Doping (Nieto, S. (136) 88)
- Li-ion batteries
Cathode; Olivine; Phosphates; Solid solution (Wolfenstine, J. (136) 150)
- Li-ion battery
Activated carbon; Supercapacitor; Power-ion battery; LiCoO₂ (Pasquier, A. Du (136) 160)
- Li-ion battery
Sol-gel; Solid-state reaction process; LiNi_{0.8}Co_{0.2}O₂ (Gong, Z.-L. (136) 139)
- Li-ion cells
Cycling behavior; Elevated temperatures; Additives in solution; Film formation; XPS analysis (Markovskiy, B. (136) 296)
- Li-ion
HEMM; Nanocomposite; Anode; Battery (Kim, I.-S. (136) 145)
- LiCoO₂
Activated carbon; Li-ion battery; Supercapacitor; Power-ion battery (Pasquier, A. Du (136) 160)
- LiNi_{0.8}Co_{0.2-x}Al_xO₂
Lithium secondary battery; Positive electrode; Sol-gel method; Phase transition (Han, C.J. (136) 132)
- LiNi_{0.8}Co_{0.2}O₂
Li-ion battery; Sol-gel; Solid-state reaction process (Gong, Z.-L. (136) 139)
- Lithium batteries
Polymer alloy; Poly(*N*-vinylcarbazole); PVdF-HFP copolymer; Polymer electrolyte; Transference number (Michael, M.S. (136) 408)
- Lithium batteries
Spinel; Lattice dynamics; Raman spectroscopy (Julien, C.M. (136) 72)
- Lithium battery
Bipolar battery; High-power application; Overcharge protection (Berger, T. (136) 383)
- Lithium battery
Simulation; Safety; Short circuit; Thermal runaway (Yamauchi, T. (136) 99)
- Lithium intercalation
Lithium removal; Vanadium oxide; Transition metal oxides; Vanadium oxide bronzes; Lithium ion diffusion (Andrukaitis, E. (136) 290)
- Lithium intercalation
Lithium-antimony alloys; Rechargeable lithium-ion battery (Dailly, A. (136) 281)
- Lithium ion battery
Cu₃P; Morphology; Anode; Size; Crystallinity (Bichat, M.-P. (136) 80)
- Lithium ion battery
Lithium manganese oxide; Surface area; Positive electrode property (Takahashi, K. (136) 115)
- Lithium ion diffusion
Lithium removal; Lithium intercalation; Vanadium oxide; Transition metal oxides; Vanadium oxide bronzes (Andrukaitis, E. (136) 290)
- Lithium ion
History of rechargeable lithium batteries; Hybrids; Methanol fuel cells (Broussely, M. (136) 386)
- Lithium iron phosphate
Lithium-ion rechargeable batteries; Sodium-ion batteries; Polymer gel electrolytes; Microbatteries (Ritchie, A.G. (136) 285)
- Lithium iron sulphide
Lithium-ion rechargeable batteries; Electric vehicles (Ritchie, A.G. (136) 276)
- Lithium manganese oxide
Surface area; Positive electrode property; Lithium ion battery (Takahashi, K. (136) 115)
- Lithium removal
Lithium intercalation; Vanadium oxide; Transition metal oxides; Vanadium oxide bronzes; Lithium ion diffusion (Andrukaitis, E. (136) 290)
- Lithium secondary battery
Nanometer-scale; Tin anode; Passivation layer (Choi, W. (136) 154)
- Lithium secondary battery
Positive electrode; Sol-gel method; LiNi_{0.8}Co_{0.2-x}Al_xO₂; Phase transition (Han, C.J. (136) 132)
- Lithium-antimony alloys
Lithium intercalation; Rechargeable lithium-ion battery (Dailly, A. (136) 281)
- Lithium-silicon
Thermal batteries; Molten salt electrolytes; Cobalt sulfide (Butler, P. (136) 240)
- Lithium-ion batteries
Applications/marine (Gitzendanner, R. (136) 416)
- Lithium-ion rechargeable batteries
Lithium iron sulphide; Electric vehicles (Ritchie, A.G. (136) 276)
- Lithium-ion rechargeable batteries
Sodium-ion batteries; Lithium iron phosphate; Polymer gel electrolytes; Microbatteries (Ritchie, A.G. (136) 285)
- Lithium-ion
Silicon; Batteries; Anode; Composite (Dimov, N. (136) 108)
- Lithium/vanadium oxide batteries
Applications/medical; Electrolytic capacitors (Skarstad, P.M. (136) 263)
- Long cycle life
Silicon film; Vacuum deposition; Li insertion/extraction; High rate capability (Ohara, S. (136) 303)
- Long duration applications
Pulses PlusTM lithium primary battery; Hybrid layer capacitor; Low temperature performance (Menachem, C. (136) 268)
- Low temperature co-fire ceramic
Direct methanol fuel cell; Portable power source; Cell voltage degradation; Microfluidic; Fuel cell system (Xie, C. (136) 55)

- Low temperature performance
Pulses Plus™ lithium primary battery; Hybrid layer capacitor; Long duration applications (Menachem, C. (136) 268)
- Magnesium anode
Oxygen cathode; Seawater electrolyte semi-fuel cells; Magnesium seawater batteries (Hasvold, Ø. (136) 232)
- Magnesium seawater batteries
Magnesium anode; Oxygen cathode; Seawater electrolyte semi-fuel cells (Hasvold, Ø. (136) 232)
- Manganese dioxide
Alkaline batteries; Recycling; Acid leaching; Zinc; Electrowinning (de Souza, C.C.B.M. (136) 191)
- Metal hydride batteries
Applications; Hybrid vehicles; Space vehicles; Nickel (Klein, M. (136) 317)
- Metal hydride electrode
Ni/MH battery; Hydrogen diffusion coefficient (Feng, F. (136) 346)
- Methanol fuel cells
History of rechargeable lithium batteries; Lithium ion; Hybrids (Brouse, M. (136) 386)
- Methanol fuel cells
Methanol/air batteries (Koscher, G. (136) 215)
- Methanol oxidation
Platinum; Ruthenium; Tungsten; Substrate effect (Umeda, M. (136) 10)
- Methanol/air batteries
Methanol fuel cells (Koscher, G. (136) 215)
- Mg–H₂O₂ semi-fuel cells
Applications/underwater vehicles (Medeiros, M.G. (136) 226)
- Microbatteries
Lithium-ion rechargeable batteries; Sodium-ion batteries; Lithium iron phosphate; Polymer gel electrolytes (Ritchie, A.G. (136) 285)
- Microbatteries
Vanadium pentoxide; Silver co-sputtering; Amorphous film (Lee, J.M. (136) 122)
- Microbattery
LDMOSFET; Micropower; SOI (Sukumar, V. (136) 401)
- Microfluidic
Direct methanol fuel cell; Portable power source; Cell voltage degradation; Low temperature co-fire ceramic; Fuel cell system (Xie, C. (136) 55)
- Micropower
LDMOSFET; Microbattery; SOI (Sukumar, V. (136) 401)
- Modelling study
PEM fuel cell (PEMFC); CO₂ tolerance; Reverse water gas shift reaction; Reformate (Janssen, G.J.M. (136) 45)
- Molten salt electrolytes
Thermal batteries; Cobalt sulfide; Lithium–silicon (Butler, P. (136) 240)
- Morphology
Cu₃P; Anode; Lithium ion battery; Size; Crystallinity (Bichat, M.-P. (136) 80)
- Nano-crystalline lithium manganate
Li ion battery; Electrochemical properties; Doping (Nieto, S. (136) 88)
- Nanocomposite
HEMM; Anode; Li-ion; Battery (Kim, I.-S. (136) 145)
- Nanometer-scale
Tin anode; Passivation layer; Lithium secondary battery (Choi, W. (136) 154)
- Ni/MH battery
Metal hydride electrode; Hydrogen diffusion coefficient (Feng, F. (136) 346)
- Nickel
Applications; Hybrid vehicles; Space vehicles; Metal hydride batteries (Klein, M. (136) 317)
- Nickel/cadmium batteries
Applications/earth satellites; Nickel/metal hydride; Batteries (Lewis, H. (136) 307)
- Nickel/metal hydride batteries
Fuzzy logic; Impedance spectroscopy (Singh, P. (136) 322)
- Nickel/metal hydride
Applications/earth satellites; Nickel/cadmium batteries; Batteries (Lewis, H. (136) 307)
- Numerical modeling
Proton exchange membrane fuel cell; Conventional flow field; Interdigitated flow field (Hu, G. (136) 1)
- Olivine
Cathode; Li-ion batteries; Phosphates; Solid solution (Wolfenstine, J. (136) 150)
- Organic electrolytes
Electrochemical capacitors; Double layer capacitors; Pseudo capacitors; Conductive additive carbons; Ragone plot (Michael, M.S. (136) 250)
- Overcharge protection
Lithium battery; Bipolar battery; High-power application (Berger, T. (136) 383)
- Oxygen cathode
Magnesium anode; Seawater electrolyte semi-fuel cells; Magnesium seawater batteries (Hasvold, Ø. (136) 232)
- Partial oxidation of methane
Solid oxide fuel cell; Surface modification; Hydrocarbon fuel; Carbon deposition (Yoon, S.P. (136) 30)
- Passivation layer
Nanometer-scale; Tin anode; Lithium secondary battery (Choi, W. (136) 154)
- PEM fuel cell (PEMFC)
CO₂ tolerance; Reverse water gas shift reaction; Reformate; Modelling study (Janssen, G.J.M. (136) 45)
- PEM fuel cells
Bipolar plates; Carbon-filled polymers; Polymer blends (Wu, M. (136) 37)
- Phase transition
Lithium secondary battery; Positive electrode; Sol–gel method; LiNi_{0.8}Co_{0.2–x}Al_xO₂ (Han, C.J. (136) 132)
- Phosphates
Cathode; Li-ion batteries; Olivine; Solid solution (Wolfenstine, J. (136) 150)
- Platinum
Methanol oxidation; Ruthenium; Tungsten; Substrate effect (Umeda, M. (136) 10)
- Poly(*N*-vinylcarbazole)
Polymer alloy; PVdF–HFP copolymer; Polymer electrolyte; Transference number; Lithium batteries (Michael, M.S. (136) 408)
- Polyethylene membranes
Valve-regulated-lead-acid batteries; High power batteries; Absorptive glass mats; UPS applications (Luisa Soria, M. (136) 376)
- Polymer alloy
Poly(*N*-vinylcarbazole); PVdF–HFP copolymer; Polymer electrolyte; Transference number; Lithium batteries (Michael, M.S. (136) 408)
- Polymer blends
PEM fuel cells; Bipolar plates; Carbon-filled polymers (Wu, M. (136) 37)
- Polymer electrolyte
Polymer alloy; Poly(*N*-vinylcarbazole); PVdF–HFP copolymer; Transference number; Lithium batteries (Michael, M.S. (136) 408)
- Polymer gel electrolytes
Lithium-ion rechargeable batteries; Sodium-ion batteries; Lithium iron phosphate; Microbatteries (Ritchie, A.G. (136) 285)

- Portable power source
Direct methanol fuel cell; Cell voltage degradation; Microfluidic; Low temperature co-fire ceramic; Fuel cell system (Xie, C. (136) 55)
- Positive electrode property
Lithium manganese oxide; Surface area; Lithium ion battery (Takahashi, K. (136) 115)
- Positive electrode
Lithium secondary battery; Sol-gel method; $\text{LiNi}_{0.8}\text{Co}_{0.2-x}\text{Al}_x\text{O}_2$; Phase transition (Han, C.J. (136) 132)
- Power-ion battery
Activated carbon; Li-ion battery; Supercapacitor; LiCoO_2 (Pasquier, A. Du (136) 160)
- Property
Fabrication; Design; Solid oxide fuel cell (Du, Y. (136) 66)
- Proton conductivity
Thermal stability; Water absorption; Chitosan; Proton exchange membrane; Fuel cell (Mukoma, P. (136) 16)
- Proton conductor
Doped barium cerate; Fuel cell performance; LCFC and LSC cathodes (Maffei, N. (136) 24)
- Proton exchange membrane fuel cell
Conventional flow field; Interdigitated flow field; Numerical modeling (Hu, G. (136) 1)
- Proton exchange membrane
Thermal stability; Water absorption; Proton conductivity; Chitosan; Fuel cell (Mukoma, P. (136) 16)
- Pseudo capacitors
Electrochemical capacitors; Double layer capacitors; Conductive additive carbons; Organic electrolytes; Ragone plot (Michael, M.S. (136) 250)
- Pulse charging
Sealed Ni/MH cell; Inner pressure; Cycling characteristics (Zhang, J. (136) 180)
- Pulses PlusTM lithium primary battery
Hybrid layer capacitor; Low temperature performance; Long duration applications (Menachem, C. (136) 268)
- PVdF-HFP copolymer
Polymer alloy; Poly(*N*-vinylcarbazole); Polymer electrolyte; Transference number; Lithium batteries (Michael, M.S. (136) 408)
- Ragone plot
Electrochemical capacitors; Double layer capacitors; Pseudo capacitors; Conductive additive carbons; Organic electrolytes (Michael, M.S. (136) 250)
- Raman spectroscopy
Spinel; Lattice dynamics; Lithium batteries (Julien, C.M. (136) 72)
- Rechargeable lithium-ion battery
Lithium intercalation; Lithium-antimony alloys (Dailly, A. (136) 281)
- Recycling
Alkaline batteries; Acid leaching; Zinc; Manganese dioxide; Electro-winning (de Souza, C.C.B.M. (136) 191)
- Recycling
Batteries (Espinosa, D.C.R. (136) 186)
- Reformate
PEM fuel cell (PEMFC); CO_2 tolerance; Reverse water gas shift reaction; Modelling study (Janssen, G.J.M. (136) 45)
- Reforming/hydrocarbons
Fuel cells (Pinkwart, K. (136) 211)
- Renewable energy sources
Future energy economy; Fossil fuels; Electrochemical energy sources (Irvine, J.T.S. (136) 203)
- Reverse water gas shift reaction
PEM fuel cell (PEMFC); CO_2 tolerance; Reformate; Modelling study (Janssen, G.J.M. (136) 45)
- Ruthenium
Methanol oxidation; Platinum; Tungsten; Substrate effect (Umeda, M. (136) 10)
- Safety
Lithium battery; Simulation; Short circuit; Thermal runaway (Yamauchi, T. (136) 99)
- Scattering
VRLA batteries; Standby applications; Float conditions (Rossinot, E. (136) 171)
- Sealed Ni/MH cell
Inner pressure; Cycling characteristics; Pulse charging (Zhang, J. (136) 180)
- Seawater electrolyte semi-fuel cells
Magnesium anode; Oxygen cathode; Magnesium seawater batteries (Hasvold, Ø. (136) 232)
- Short circuit
Lithium battery; Simulation; Safety; Thermal runaway (Yamauchi, T. (136) 99)
- Silicon film
Vacuum deposition; Li insertion/extraction; High rate capability; Long cycle life (Ohara, S. (136) 303)
- Silicon
Lithium-ion; Batteries; Anode; Composite (Dimov, N. (136) 108)
- Silver co-sputtering
Vanadium pentoxide; Amorphous film; Microbatteries (Lee, J.M. (136) 122)
- Simulation
Lithium battery; Safety; Short circuit; Thermal runaway (Yamauchi, T. (136) 99)
- Size
 Cu_3P ; Morphology; Anode; Lithium ion battery; Crystallinity (Bichat, M.-P. (136) 80)
- Sodium-ion batteries
Lithium-ion rechargeable batteries; Lithium iron phosphate; Polymer gel electrolytes; Microbatteries (Ritchie, A.G. (136) 285)
- SOI
LDMOSFET; Micropower; Microbattery (Sukumar, V. (136) 401)
- Sol-gel method
Lithium secondary battery; Positive electrode; $\text{LiNi}_{0.8}\text{Co}_{0.2-x}\text{Al}_x\text{O}_2$; Phase transition (Han, C.J. (136) 132)
- Sol-gel
Li-ion battery; Solid-state reaction process; $\text{LiNi}_{0.8}\text{Co}_{0.2}\text{O}_2$ (Gong, Z.-L. (136) 139)
- Solid oxide fuel cell
Fabrication; Property; Design (Du, Y. (136) 66)
- Solid oxide fuel cell
Surface modification; Hydrocarbon fuel; Carbon deposition; Partial oxidation of methane (Yoon, S.P. (136) 30)
- Solid solution
Cathode; Li-ion batteries; Olivine; Phosphates (Wolfenstine, J. (136) 150)
- Solid-state batteries
Applications/drilling/bore holes; Thermal batteries (Guidotti, R.A. (136) 257)
- Solid-state batteries
Impedance; Coulombic efficiency; Discharge capacity (Nagasubramanian, G. (136) 395)
- Solid-state reaction process
Li-ion battery; Sol-gel; $\text{LiNi}_{0.8}\text{Co}_{0.2}\text{O}_2$ (Gong, Z.-L. (136) 139)
- Space vehicles
Applications; Hybrid vehicles; Nickel; Metal hydride batteries (Klein, M. (136) 317)
- Spinel
Lattice dynamics; Raman spectroscopy; Lithium batteries (Julien, C.M. (136) 72)
- Standby applications
VRLA batteries; Float conditions; Scattering (Rossinot, E. (136) 171)
- Standby batteries
Uninterruptible power supplies (Bitterlin, I.F. (136) 351)

- Substrate effect
Methanol oxidation; Platinum; Ruthenium; Tungsten (Umeda, M. (136) 10)
- Supercapacitor
Activated carbon; Li-ion battery; Power-ion battery; LiCoO₂ (Pasquier, A. Du (136) 160)
- Supercapacitors
Co(OH)₂/USY composite; Capacitive property characterization; Annealing temperature (Liang, Y.-Y. (136) 197)
- Surface area
Lithium manganese oxide; Positive electrode property; Lithium ion battery (Takahashi, K. (136) 115)
- Surface modification
Solid oxide fuel cell; Hydrocarbon fuel; Carbon deposition; Partial oxidation of methane (Yoon, S.P. (136) 30)
- Thermal batteries
Applications/drilling/bore holes; Solid-state batteries (Guidotti, R.A. (136) 257)
- Thermal batteries
Molten salt electrolytes; Cobalt sulfide; Lithium-silicon (Butler, P. (136) 240)
- Thermal runaway
Lithium battery; Simulation; Safety; Short circuit (Yamauchi, T. (136) 99)
- Thermal stability
Water absorption; Proton conductivity; Chitosan; Proton exchange membrane; Fuel cell (Mukoma, P. (136) 16)
- Tin anode
Nanometer-scale; Passivation layer; Lithium secondary battery (Choi, W. (136) 154)
- Transference number
Polymer alloy; Poly(*N*-vinylcarbazole); PVdF-HFP copolymer; Polymer electrolyte; Lithium batteries (Michael, M.S. (136) 408)
- Transition metal oxides
Lithium removal; Lithium intercalation; Vanadium oxide; Vanadium oxide bronzes; Lithium ion diffusion (Andrukaitis, E. (136) 290)
- Tungsten
Methanol oxidation; Platinum; Ruthenium; Substrate effect (Umeda, M. (136) 10)
- Uninterruptible power supplies
Standby batteries (Bitterlin, I.F. (136) 351)
- UPS applications
Valve-regulated-lead-acid batteries; High power batteries; Polyethylene membranes; Absorptive glass mats (Luisa Soria, M. (136) 376)
- Vacuum deposition
Silicon film; Li insertion/extraction; High rate capability; Long cycle life (Ohara, S. (136) 303)
- Valve-regulated lead-acid batteries
Applications/aircraft (Timmons, J. (136) 372)
- Valve-regulated-lead-acid batteries
High power batteries; Polyethylene membranes; Absorptive glass mats; UPS applications (Luisa Soria, M. (136) 376)
- Vanadium oxide bronzes
Lithium removal; Lithium intercalation; Vanadium oxide; Transition metal oxides; Lithium ion diffusion (Andrukaitis, E. (136) 290)
- Vanadium oxide
Lithium removal; Lithium intercalation; Transition metal oxides; Vanadium oxide bronzes; Lithium ion diffusion (Andrukaitis, E. (136) 290)
- Vanadium pentoxide
Silver co-sputtering; Amorphous film; Microbatteries (Lee, J.M. (136) 122)
- VRLA batteries
Standby applications; Float conditions; Scattering (Rossinot, E. (136) 171)
- Water absorption
Thermal stability; Proton conductivity; Chitosan; Proton exchange membrane; Fuel cell (Mukoma, P. (136) 16)
- XPS analysis
Li-ion cells; Cycling behavior; Elevated temperatures; Additives in solution; Film formation (Markovsky, B. (136) 296)
- Zinc
Alkaline batteries; Recycling; Acid leaching; Manganese dioxide; Electrowinning (de Souza, C.C.B.M. (136) 191)