

Subject Index of Volume 112

- ac Impedance**
 Cyclic voltammetry; Lithium–cobalt–nickel oxide; Lithium intercalation; Solution combustion synthesis (Suresh, P. (112) 665)
- Al–Fe coating**
 Molten carbonate fuel cell; Separator plate; Wet-seal corrosion (Jun, J. (112) 153)
- Alkaline fuel cell**
 Particulate anode; Surface area; Aluminum; Hydrogen peroxide (Popovich, N.A. (112) 36)
- Alkaline storage batteries**
 Nickel hydroxide; Structural characteristics; Chemical precipitation reaction (Song, Q. (112) 428)
- Alpha lithium aluminate matrix**
 Molten carbonate fuel cell; Tape casting; Pore-size distribution (Batra, V.S. (112) 322)
- Aluminum electrolytic capacitors**
 Sparking voltage; Capacity; Dissipation factor; Leakage current; Dextrose (Tsai, M.-L. (112) 643)
- Aluminum**
 Alkaline fuel cell; Particulate anode; Surface area; Hydrogen peroxide (Popovich, N.A. (112) 36)
- Aluminum/air batteries**
 Life-cycle analysis; Electric vehicles; Cost analysis (Yang, S. (112) 162)
- Anode material**
 Lithium ion batteries; Sensitivity to humidity; Silver; Natural graphite (Wu, Y.P. (112) 255)
- Anode**
 Direct methanol fuel cell; Mathematical modeling; Methanol crossover (Jeng, K.T. (112) 367)
- Anode**
 Tin oxide; Graphite; Lithium-ion battery; Pechini process (Zhang, R. (112) 596)
- Artificial neural network (ANN)**
 Fuel cell; Solid oxide fuel cells (SOFC); Neural network; Feed-forward network; Backpropagation (Arriagada, J. (112) 54)
- Asymmetric alkylcarbonate**
 Organic electrolyte; Viscosity; Conductivity; Lithium battery (Geoffroy, I. (112) 191)
- Backpropagation**
 Fuel cell; Solid oxide fuel cells (SOFC); Artificial neural network (ANN); Neural network; Feed-forward network (Arriagada, J. (112) 54)
- Ball milling**
 Ni_3Sn_4 ; Nanocrystalline; Grain boundary; Lithium-ion battery; Capacity (Lee, H.-Y. (112) 8)
- Ball-milling**
 Rechargeable lithium batteries; Fe–Si alloy; Composite electrode; Negative electrode (Lee, H.-Y. (112) 649)
- Battery discharge unit**
 Silver-ion conductors; Solid-state batteries; Polarization; Discharge characteristics (Murugaraj, R. (112) 184)
- Battery electrodes**
 Soft X-ray; Hard X-ray; Surface; Manganese; Reduction (Braun, A. (112) 231)
- Battery**
 Conductive additive; Porosity; Carbon black; X-ray photoelectron spectroscopy (XPS) (Manickam, M. (112) 116)
- Battery**
 Dendritic-zinc powder; Manganese dioxide; Impedance; High-rate discharge (Yang, C.-C. (112) 174)
- Battery**
 DMFC; Mobile phone; Methanol (Han, J. (112) 477)
- Battery**
 Lithium-ion cells; Recycling (Castillo, S. (112) 247)
- Battery**
 Vanadium oxide; Rare-earth (Almeida, E.C. (112) 290)
- Benzoyl peroxide**
 Gel polymer electrolyte; Tri(ethylene glycol) dimethacrylate; Lithium-ion battery (Kim, H.-S. (112) 469)
- Blend**
 Polymer electrolyte; Ionic conductivity; Copolymer; VTF equation (Polo Fonseca, C. (112) 395)
- Calcium**
 Corrosion; Pb anodes; Lead acid batteries; Doping tin (Slavkov, D. (112) 199)
- CaO**
 Methane; Steam reforming; Ni–YSZ cermets; Carbon deposition (Takeguchi, T. (112) 588)
- Capacity fade**
 Sony 18650 cells; Cycle number (Ramadass, P. (112) 614)
- Capacity**
 Aluminum electrolytic capacitors; Sparking voltage; Dissipation factor; Leakage current; Dextrose (Tsai, M.-L. (112) 643)
- Capacity**
 Cobalt vanadate; Glycine; Cycle-life; Lithium battery (Kim, Y.T. (112) 504)
- Capacity**
 Ni_3Sn_4 ; Ball milling; Nanocrystalline; Grain boundary; Lithium-ion battery (Lee, H.-Y. (112) 8)
- Carbon anode**
 Lithium ion battery; Initial irreversible capacity; Lithium phosphorus oxynitride; Sputtering deposition (Chung, K.-i. (112) 626)
- Carbon black**
 Conductive additive; Porosity; X-ray photoelectron spectroscopy (XPS); Battery (Manickam, M. (112) 116)
- Carbon deposition**
 Methane; Steam reforming; Ni–YSZ cermets; CaO (Takeguchi, T. (112) 588)
- Carbon nanotube**
 Catalytic decomposition; Lithium battery (Shin, H.-C. (112) 216)
- Catalytic decomposition**
 Carbon nanotube; Lithium battery (Shin, H.-C. (112) 216)
- Cathode material**
 Phase transition; Lithium intercalation; Lithium ion battery; LiMn_2O_4 ; Potential–composition profile (Abiko, H. (112) 557)
- Cathode materials**
 Lithiated nickel cobalt oxides; $\text{LiNi}_{0.8}\text{Co}_{0.2}\text{O}_2$; Zn-doping; Lithium ion batteries (Fey, G.T.K. (112) 384)

- Cathode materials
 Lithium secondary batteries; Sol-gel method; Layered manganese; Li_2MnO_3 (Shin, S.-S. (112) 634)
- Cathode materials
 Lithium-ion rechargeable battery; Lithium manganese nickel oxides; Layered structure (Kang, S.-H. (112) 41)
- Cathode substrate
 Solid oxide fuel cell; Co-firing; Tubular flat-plate type cell; Oxygen partial pressure; Cell performance (Orui, H. (112) 90)
- Cathode
 Lithium rechargeable polymer batteries; Polymer binder; Gel polymer electrolyte (Choi, N.-S. (112) 61)
- Cell performance model
 Molten carbonate fuel cell (MCFC); Li/Na carbonate electrolyte; Initial and long-term performance (Morita, H. (112) 509)
- Cell performance
 Solid oxide fuel cell; Co-firing; Tubular flat-plate type cell; Cathode substrate; Oxygen partial pressure (Orui, H. (112) 90)
- Charge transport
 DC conduction; Current-voltage characteristics; Schottky emission; Poole-Frenkel mechanism; Polymer (Nagaraj, N. (112) 326)
- Charge-discharge
 Lead-acid battery; Cycling; Microcycles; Wind turbine; Photovoltaic systems (Ruddell, A.J. (112) 531)
- Chemical precipitation reaction
 Nickel hydroxide; Alkaline storage batteries; Structural characteristics (Song, Q. (112) 428)
- Co-firing
 Solid oxide fuel cell; Tubular flat-plate type cell; Cathode substrate; Oxygen partial pressure; Cell performance (Orui, H. (112) 90)
- CO_2 separation
 SOFC; MCFC; Power plants (Campanari, S. (112) 273)
- Cobalt hydroxide
 Cobalt oxide; Dehydration; Waste LiCoO_2 ; Electrochemical-hydrothermal method (Myoung, J. (112) 639)
- Cobalt oxide
 Cobalt hydroxide; Dehydration; Waste LiCoO_2 ; Electrochemical-hydrothermal method (Myoung, J. (112) 639)
- Cobalt vanadate
 Glycine; Capacity; Cycle-life; Lithium battery (Kim, Y.T. (112) 504)
- Coefficient of thermal expansion
 Solid oxide fuel cells; Scanning electron microscopy (Chou, Y.-S. (112) 130)
- Composite electrode
 Rechargeable lithium batteries; Fe-Si alloy; Negative electrode; Ball-milling (Lee, H.-Y. (112) 649)
- Composite electrolyte
 Li^+ -conducting glasses; Conductivity; Stability; Interfacial properties (Zhang, X.-W. (112) 209)
- Composite polymer electrolyte
 PEO-PVA blend; Ionic conductivity; Zinc-air battery (Yang, C.-C. (112) 497)
- Composite polymer electrolyte
 Polyethylene oxide; Trioxyethylene; CuS cathode (Chung, J.-S. (112) 671)
- Compressive mica-based seals
 Thermal cycling; Solid oxide fuel cells (Chou, Y.-s. (112) 376)
- Conductive additive
 Porosity; Carbon black; X-ray photoelectron spectroscopy (XPS); Battery (Manickam, M. (112) 116)
- Conductivity
 Composite electrolyte; Li^+ -conducting glasses; Stability; Interfacial properties (Zhang, X.-W. (112) 209)
- Conductivity
 Organic electrolyte; Viscosity; Lithium battery; Asymmetric alkylcarbonate (Geoffroy, I. (112) 191)
- Constant phase element
 Lead-acid batteries; Electrochemical impedance spectroscopy; Equivalent circuits (Nelatury, S.R. (112) 621)
- Copolymer
 Polymer electrolyte; Ionic conductivity; Blend; VTF equation (Polo Fonseca, C. (112) 395)
- Corrosion
 Pb anodes; Lead acid batteries; Doping tin; Calcium (Slavkov, D. (112) 199)
- Cost analysis
 Aluminum/air batteries; Life-cycle analysis; Electric vehicles (Yang, S. (112) 162)
- Coupled characterization and modeling
 Ni-MH battery; Mathematical model; Oxygen evolution reaction (Pan, Y.H. (112) 298)
- Crossover current
 2-Propanol; Methanol; Fuel cell; Open circuit voltage (Qi, Z. (112) 121)
- Current collection
 PEMFC; Fuel cell; Segmented cell; Flow field (Rajalakshmi, N. (112) 331)
- Current density
 Nickel hydroxide; Electrochemical; Precipitation; Discharge capacity; Preparation (Subbaiah, T. (112) 562)
- Current interruption
 Ohmic loss; PEMFC; Stack (Mennola, T. (112) 261)
- Current-voltage characteristics
 DC conduction; Schottky emission; Poole-Frenkel mechanism; Polymer; Charge transport (Nagaraj, N. (112) 326)
- CuS cathode
 Polyethylene oxide; Trioxyethylene; Composite polymer electrolyte (Chung, J.-S. (112) 671)
- Cycle number
 Capacity fade; Sony 18650 cells (Ramadass, P. (112) 614)
- Cycle-life
 Cobalt vanadate; Glycine; Capacity; Lithium battery (Kim, Y.T. (112) 504)
- Cycle-life
 Li-ion battery; $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ (Shim, J. (112) 222)
- Cycleability
 Platinum co-sputtering; V_2O_5 ; Micro-power source; Short-range order; Thin-film battery (Kim, H.-K. (112) 67)
- Cyclic voltammetry
 ac Impedance; Lithium-cobalt-nickel oxide; Lithium intercalation; Solution combustion synthesis (Suresh, P. (112) 665)
- Cyclic voltammetry
 Structural transformation; Hydrous ruthenium-iridium oxides; Electrochemical supercapacitor; Pseudocapacitance (Hu, C.-C. (112) 401)
- Cycling performance
 Gel polymer electrolyte; Ionic conductivity; Lithium-ion polymer cell; Methyl methacrylate-styrene copolymer (Kang, D.-W. (112) 1)
- Cycling test
 $\text{LiNi}_{1-y}\text{Co}_y\text{O}_2$ cathodes; XRD parameters; VA-metry (Moshtev, R. (112) 30)
- Cycling
 Lead-acid battery; Microcycles; Charge-discharge; Wind turbine; Photovoltaic systems (Ruddell, A.J. (112) 531)
- DC conduction
 Current-voltage characteristics; Schottky emission; Poole-Frenkel mechanism; Polymer; Charge transport (Nagaraj, N. (112) 326)
- Dehydration
 Cobalt hydroxide; Cobalt oxide; Waste LiCoO_2 ; Electrochemical-hydrothermal method (Myoung, J. (112) 639)
- Dendritic-zinc powder
 Manganese dioxide; Impedance; Battery; High-rate discharge (Yang, C.-C. (112) 174)

- Dextrose
 Aluminum electrolytic capacitors; Sparking voltage; Capacity; Dissipation factor; Leakage current (Tsai, M.-L. (112) 643)
- 1,3-Dioxolane
 Lithium–sulfur battery; Polysulfide; Electrolyte; Tetra(ethylene glycol) dimethyl ether (Chang, D.-R. (112) 452)
- Direct methanol fuel cell
 Anode; Mathematical modeling; Methanol crossover (Jeng, K.T. (112) 367)
- Direct methanol fuel cells
 Gas chromatography; Parameter variations (Gurau, B. (112) 339)
- Discharge capacity
 Nickel hydroxide; Electrochemical; Precipitation; Current density; Preparation (Subbaiah, T. (112) 562)
- Discharge characteristics
 Silver-ion conductors; Battery discharge unit; Solid-state batteries; Polarization (Murugaraj, R. (112) 184)
- Discharge curve
 Hydrogen storage alloy; Multi-phase composition; Ti–Ni-based alloy; XRD (Xu, Y.H. (112) 105)
- Dissipation factor
 Aluminum electrolytic capacitors; Sparking voltage; Capacity; Leakage current; Dextrose (Tsai, M.-L. (112) 643)
- DMFC
 Mobile phone; Battery; Methanol (Han, J. (112) 477)
- Doping tin
 Corrosion; Pb anodes; Lead acid batteries; Calcium (Slavkov, D. (112) 199)
- Efficiency
 Fuel cells; Fuel reforming; Water vapor exchanger; Models; Experiments (Williford, R.E. (112) 570)
- Electric vehicles
 Aluminum/air batteries; Life-cycle analysis; Cost analysis (Yang, S. (112) 162)
- Electrical properties
 LiCoO₂; Layered oxide; NMR; Lithium battery; Magnesium substitution (Levasseur, S. (112) 419)
- Electrocatalyst
 Regenerative fuel cell; Polymer electrolyte; Water electrolysis (Ioroi, T. (112) 583)
- Electrocatalytic effect
 Thionyl chloride; Schiff base; Primary battery (Kim, W.-S. (112) 76)
- Electrochemical impedance spectroscopy
 Hybrid electric vehicles; High-power lithium-ion batteries (Chu, A. (112) 236)
- Electrochemical impedance spectroscopy
 Impedance; Electrode resistance (Ramadass, P. (112) 606)
- Electrochemical impedance spectroscopy
 Lead–acid batteries; Equivalent circuits; Constant phase element (Nelatury, S.R. (112) 621)
- Electrochemical magnesium insertion
 Magnesium battery; Magnesium titanium phosphate (Makino, K. (112) 85)
- Electrochemical supercapacitor
 Structural transformation; Hydrous ruthenium–iridium oxides; Cyclic voltammetry; Pseudocapacitance (Hu, C.-C. (112) 401)
- Electrochemical
 Nickel hydroxide; Precipitation; Discharge capacity; Current density; Preparation (Subbaiah, T. (112) 562)
- Electrochemical–hydrothermal method
 Cobalt hydroxide; Cobalt oxide; Dehydration; Waste LiCoO₂ (Myoung, J. (112) 639)
- Electrode resistance
 Impedance; Electrochemical impedance spectroscopy (Ramadass, P. (112) 606)
- Electrolyte concentration
 Laplace transform; Short- and long-time solutions (Hashim Ali, S.A. (112) 435)
- Electrolyte
 Lithium–sulfur battery; Polysulfide; Tetra(ethylene glycol) dimethyl ether; 1,3-Dioxolane (Chang, D.-R. (112) 452)
- Energy use
 Well-to-wheels analysis; Fuel-cell vehicles; Fuels; Greenhouse gas emissions; Hydrogen (Wang, M. (112) 307)
- Equivalent circuits
 Lead–acid batteries; Electrochemical impedance spectroscopy; Constant phase element (Nelatury, S.R. (112) 621)
- Experiments
 Fuel cells; Fuel reforming; Water vapor exchanger; Efficiency; Models (Williford, R.E. (112) 570)
- FCV
 Fuel-cell; Reformer; Metal membrane; Fuel processor; Methanol (Han, J. (112) 484)
- Fe–Si alloy
 Rechargeable lithium batteries; Composite electrode; Negative electrode; Ball-milling (Lee, H.-Y. (112) 649)
- Feed-forward network
 Fuel cell; Solid oxide fuel cells (SOFC); Artificial neural network (ANN); Neural network; Backpropagation (Arriagada, J. (112) 54)
- Flow field
 PEMFC; Fuel cell; Segmented cell; Current collection (Rajalakshmi, N. (112) 331)
- Formic acid fuel cells
 Methanol conditioning; Membrane electrolyte assembly (Ha, S. (112) 655)
- Fuel cell system
 Water balance; Fuel processing (Ahmed, S. (112) 519)
- Fuel cell
 2-Propanol; Methanol; Crossover current; Open circuit voltage (Qi, Z. (112) 121)
- Fuel cell
 Methanol; In situ; Reforming; Reformation; Kinetics (Samms, S.R. (112) 13)
- Fuel cell
 PEMFC; Segmented cell; Current collection; Flow field (Rajalakshmi, N. (112) 331)
- Fuel cell
 Solid oxide fuel cells (SOFC); Artificial neural network (ANN); Neural network; Feed-forward network; Backpropagation (Arriagada, J. (112) 54)
- Fuel cells
 Fuel reforming; Water vapor exchanger; Efficiency; Models; Experiments (Williford, R.E. (112) 570)
- Fuel processing
 Water balance; Fuel cell system (Ahmed, S. (112) 519)
- Fuel processor
 Fuel-cell; Reformer; Metal membrane; FCV; Methanol (Han, J. (112) 484)
- Fuel reforming
 Fuel cells; Water vapor exchanger; Efficiency; Models; Experiments (Williford, R.E. (112) 570)
- Fuel-cell vehicles
 Well-to-wheels analysis; Fuels; Energy use; Greenhouse gas emissions; Hydrogen (Wang, M. (112) 307)
- Fuels
 Reformer; Metal membrane; FCV; Fuel processor; Methanol (Han, J. (112) 484)
- Fuels
 Well-to-wheels analysis; Fuel-cell vehicles; Energy use; Greenhouse gas emissions; Hydrogen (Wang, M. (112) 307)

- Gas chromatography**
Direct methanol fuel cells; Parameter variations (Gurau, B. (112) 339)
- Gaskets**
Polymer electrolyte fuel cell; Membrane electrode assembly; Stack (Pozio, A. (112) 491)
- Gel electrolyte**
Li-ion polymer battery; Poly(acrylonitrile); Thermal stability; Lithium nickel dioxide; Mesocarbon microbeads (Akashi, H. (112) 577)
- Gel polymer electrolyte**
Cycling performance; Ionic conductivity; Lithium-ion polymer cell; Methyl methacrylate-styrene copolymer (Kang, D.-W. (112) 1)
- Gel polymer electrolyte**
Lithium rechargeable polymer batteries; Polymer binder; Cathode (Choi, N.-S. (112) 61)
- Gel polymer electrolyte**
Tri(ethylene glycol) dimethacrylate; Benzoyl peroxide; Lithium-ion battery (Kim, H.-S. (112) 469)
- Glycine**
Cobalt vanadate; Capacity; Cycle-life; Lithium battery (Kim, Y.T. (112) 504)
- Grain boundary**
 Ni_3Sn_4 ; Ball milling; Nanocrystalline; Lithium-ion battery; Capacity (Lee, H.-Y. (112) 8)
- Graphite anode**
Self-discharge; Li-ion batteries; Solid electrolyte interphase (Wang, C. (112) 98)
- Graphite**
Tin oxide; Anode; Lithium-ion battery; Pechini process (Zhang, R. (112) 596)
- Greenhouse gas emissions**
Well-to-wheels analysis; Fuel-cell vehicles; Fuels; Energy use; Hydrogen (Wang, M. (112) 307)
- Hard X-ray**
Soft X-ray; Battery electrodes; Surface; Manganese; Reduction (Braun, A. (112) 231)
- High-power lithium-ion batteries**
Hybrid electric vehicles; Electrochemical impedance spectroscopy (Chu, A. (112) 236)
- High-rate discharge**
Dendritic-zinc powder; Manganese dioxide; Impedance; Battery (Yang, C.-C. (112) 174)
- Hybrid electric vehicles**
Electrochemical impedance spectroscopy; High-power lithium-ion batteries (Chu, A. (112) 236)
- Hydrogen peroxide**
Alkaline fuel cell; Particulate anode; Surface area; Aluminum (Popovich, N.A. (112) 36)
- Hydrogen storage alloy**
Multi-phase composition; Ti-Ni-based alloy; Discharge curve; XRD (Xu, Y.H. (112) 105)
- Hydrogen storage alloys**
Magnesium-based compounds; Mechanical alloying; Nickel-metal hydride battery (Ruggeri, S. (112) 547)
- Hydrogen**
Well-to-wheels analysis; Fuel-cell vehicles; Fuels; Energy use; Greenhouse gas emissions (Wang, M. (112) 307)
- Hydrous ruthenium-iridium oxides**
Structural transformation; Cyclic voltammetry; Electrochemical supercapacitor; Pseudocapacitance (Hu, C.-C. (112) 401)
- Impedance**
Dendritic-zinc powder; Manganese dioxide; Battery; High-rate discharge (Yang, C.-C. (112) 174)
- Impedance**
Electrode resistance; Electrochemical impedance spectroscopy (Ramaswamy, P. (112) 606)
- In situ**
Methanol; Reforming; Reformation; Kinetics; Fuel cell (Samms, S.R. (112) 13)
- Initial and long-term performance**
Molten carbonate fuel cell (MCFC); Li/Na carbonate electrolyte; Cell performance model (Morita, H. (112) 509)
- Initial irreversible capacity**
Lithium ion battery; Lithium phosphorus oxynitride; Carbon anode; Sputtering deposition (Chung, K.-i. (112) 626)
- Interfacial properties**
Composite electrolyte; Li^+ -conducting glasses; Conductivity; Stability (Zhang, X.-W. (112) 209)
- Ionic conductivity**
Composite polymer electrolyte; PEO-PVA blend; Zinc-air battery (Yang, C.-C. (112) 497)
- Ionic conductivity**
Cycling performance; Gel polymer electrolyte; Lithium-ion polymer cell; Methyl methacrylate-styrene copolymer (Kang, D.-W. (112) 1)
- Ionic conductivity**
Polymer electrolyte; Blend; Copolymer; VTF equation (Polo Fonseca, C. (112) 395)
- Kinetics**
Methanol; In situ; Reforming; Reformation; Fuel cell (Samms, S.R. (112) 13)
- Laplace transform**
Electrolyte concentration; Short- and long-time solutions (Hashim Ali, S.A. (112) 435)
- Layered manganese**
Lithium secondary batteries; Sol-gel method; Cathode materials; Li_2MnO_3 (Shin, S.-S. (112) 634)
- Layered oxide**
 LiCoO_2 ; NMR; Lithium battery; Electrical properties; Magnesium substitution (Levasseur, S. (112) 419)
- Layered structure**
Lithium-ion rechargeable battery; Cathode materials; Lithium manganese nickel oxides (Kang, S.-H. (112) 41)
- Lead acid batteries**
Corrosion; Pb anodes; Doping tin; Calcium (Slavkov, D. (112) 199)
- Lead-acid batteries**
Electrochemical impedance spectroscopy; Equivalent circuits; Constant phase element (Nelatury, S.R. (112) 621)
- Lead-acid battery**
Cycling; Microcycles; Charge-discharge; Wind turbine; Photovoltaic systems (Ruddell, A.J. (112) 531)
- Leakage current**
Aluminum electrolytic capacitors; Sparking voltage; Capacity; Dissipation factor; Dextrose (Tsai, M.-L. (112) 643)
- Less battery storage system**
Shepherd model; Recursive least square algorithm (Cherif, A. (112) 49)
- Li-ion batteries**
Self-discharge; Graphite anode; Solid electrolyte interphase (Wang, C. (112) 98)
- Li-ion battery**
Cycle-life; $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ (Shim, J. (112) 222)
- Li-ion polymer battery**
Gel electrolyte; Poly(acrylonitrile); Thermal stability; Lithium nickel dioxide; Mesocarbon microbeads (Akashi, H. (112) 577)
- Li/Na carbonate electrolyte**
Molten carbonate fuel cell (MCFC); Cell performance model; Initial and long-term performance (Morita, H. (112) 509)

- Li₂MnO₃**
 Lithium secondary batteries; Sol-gel method; Layered manganese; Cathode materials (Shin, S.-S. (112) 634)
- Li⁺-conducting glasses**
 Composite electrolyte; Conductivity; Stability; Interfacial properties (Zhang, X.-W. (112) 209)
- LiCoO₂**
 Layered oxide; NMR; Lithium battery; Electrical properties; Magnesium substitution (Levasseur, S. (112) 419)
- LiCoO₂-coated NiO cathode**
 MCFC; Ni dissolution; Sol-impregnation (Kim, S.-G. (112) 109)
- Life-cycle analysis**
 Aluminum/air batteries; Electric vehicles; Cost analysis (Yang, S. (112) 162)
- LiMn₂O₄**
 Cathode material; Phase transition; Lithium intercalation; Lithium ion battery; Potential-composition profile (Abiko, H. (112) 557)
- LiNi_{0.8}Co_{0.15}Al_{0.05}O₂**
 Li-ion battery; Cycle-life (Shim, J. (112) 222)
- LiNi_{0.8}Co_{0.2}O₂**
 Lithiated nickel cobalt oxides; Zn-doping; Cathode materials; Lithium ion batteries (Fey, G.T.K. (112) 384)
- LiNi_{1-y}Co_yO₂ cathodes**
 XRD parameters; Cycling test; VA-metry (Moshtev, R. (112) 30)
- Lithiated nickel cobalt oxides**
 LiNi_{0.8}Co_{0.2}O₂; Zn-doping; Cathode materials; Lithium ion batteries (Fey, G.T.K. (112) 384)
- Lithium battery**
 Carbon nanotube; Catalytic decomposition (Shin, H.-C. (112) 216)
- Lithium battery**
 Cobalt vanadate; Glycine; Capacity; Cycle-life (Kim, Y.T. (112) 504)
- Lithium battery**
 LiCoO₂; Layered oxide; NMR; Electrical properties; Magnesium substitution (Levasseur, S. (112) 419)
- Lithium battery**
 Manganese dioxide; Lithium salts (Kim, H.-S. (112) 660)
- Lithium battery**
 Organic electrolyte; Viscosity; Conductivity; Asymmetric alkylcarboxylate (Geoffroy, I. (112) 191)
- Lithium intercalation**
 ac Impedance; Cyclic voltammetry; Lithium–cobalt–nickel oxide; Solution combustion synthesis (Suresh, P. (112) 665)
- Lithium intercalation**
 Cathode material; Phase transition; Lithium ion battery; LiMn₂O₄; Potential-composition profile (Abiko, H. (112) 557)
- Lithium ion batteries**
 Anode material; Sensitivity to humidity; Silver; Natural graphite (Wu, Y.P. (112) 255)
- Lithium ion batteries**
 Lithiated nickel cobalt oxides; LiNi_{0.8}Co_{0.2}O₂; Zn-doping; Cathode materials (Fey, G.T.K. (112) 384)
- Lithium ion battery**
 Cathode material; Phase transition; Lithium intercalation; LiMn₂O₄; Potential-composition profile (Abiko, H. (112) 557)
- Lithium ion battery**
 Initial irreversible capacity; Lithium phosphorus oxynitride; Carbon anode; Sputtering deposition (Chung, K.-i. (112) 626)
- Lithium manganese nickel oxides**
 Lithium-ion rechargeable battery; Cathode materials; Layered structure (Kang, S.-H. (112) 41)
- Lithium nickel dioxide**
 Li-ion polymer battery; Gel electrolyte; Poly(acrylonitrile); Thermal stability; Mesocarbon microbeads (Akashi, H. (112) 577)
- Lithium phosphorus oxynitride**
 Lithium ion battery; Initial irreversible capacity; Carbon anode; Sputtering deposition (Chung, K.-i. (112) 626)
- Lithium rechargeable polymer batteries**
 Polymer binder; Cathode; Gel polymer electrolyte (Choi, N.-S. (112) 61)
- Lithium salts**
 Lithium battery; Manganese dioxide (Kim, H.-S. (112) 660)
- Lithium secondary batteries**
 Sol-gel method; Layered manganese; Cathode materials; Li₂MnO₃ (Shin, S.-S. (112) 634)
- Lithium–cobalt–nickel oxide**
 ac Impedance; Cyclic voltammetry; Lithium intercalation; Solution combustion synthesis (Suresh, P. (112) 665)
- Lithium–sulfur battery**
 Polysulfide; Electrolyte; Tetra(ethylene glycol) dimethyl ether; 1,3-Dioxolane (Chang, D.-R. (112) 452)
- Lithium-ion battery**
 Gel polymer electrolyte; Tri(ethylene glycol) dimethacrylate; Benzoyl peroxide (Kim, H.-S. (112) 469)
- Lithium-ion battery**
 Ni₃Sn₄; Ball milling; Nanocrystalline; Grain boundary; Capacity (Lee, H.-Y. (112) 8)
- Lithium-ion battery**
 Polymer electrolyte; PVC/PEMA; PVC/PMMA; Phase separation; Mechanical strength (Han, H.-S. (112) 461)
- Lithium-ion battery**
 Tin oxide; Graphite; Anode; Pechini process (Zhang, R. (112) 596)
- Lithium-ion cells**
 Battery; Recycling (Castillo, S. (112) 247)
- Lithium-ion polymer cell**
 Cycling performance; Gel polymer electrolyte; Ionic conductivity; Methyl methacrylate–styrene copolymer (Kang, D.-W. (112) 1)
- Lithium-ion rechargeable battery**
 Cathode materials; Lithium manganese nickel oxides; Layered structure (Kang, S.-H. (112) 41)
- Magnesium battery**
 Magnesium titanium phosphate; Electrochemical magnesium insertion (Makino, K. (112) 85)
- Magnesium substitution**
 LiCoO₂; Layered oxide; NMR; Lithium battery; Electrical properties (Levasseur, S. (112) 419)
- Magnesium titanium phosphate**
 Magnesium battery; Electrochemical magnesium insertion (Makino, K. (112) 85)
- Magnesium-based compounds**
 Hydrogen storage alloys; Mechanical alloying; Nickel-metal hydride battery (Ruggeri, S. (112) 547)
- Manganese dioxide**
 Dendritic-zinc powder; Impedance; Battery; High-rate discharge (Yang, C.-C. (112) 174)
- Manganese dioxide**
 Lithium battery; Lithium salts (Kim, H.-S. (112) 660)
- Manganese oxides**
 Rechargeable lithium battery (Doeff, M.M. (112) 294)
- Manganese**
 Soft X-ray; Hard X-ray; Battery electrodes; Surface; Reduction (Braun, A. (112) 231)
- Mathematical model**
 Ni-MH battery; Oxygen evolution reaction; Coupled characterization and modeling (Pan, Y.H. (112) 298)
- Mathematical modeling**
 Direct methanol fuel cell; Anode; Methanol crossover (Jeng, K.T. (112) 367)
- Mathematical modeling**
 Phosphoric acid fuel cells (PAFCs); Two-dimensional model (Choudhury, S.R. (112) 137)
- MCFC**
 LiCoO₂-coated NiO cathode; Ni dissolution; Sol-impregnation (Kim, S.-G. (112) 109)

MCFC

SOFC; CO₂ separation; Power plants (Campanari, S. (112) 273)

Mechanical alloying

Hydrogen storage alloys; Magnesium-based compounds; Nickel-metal hydride battery (Ruggeri, S. (112) 547)

Mechanical strength

Lithium-ion battery; Polymer electrolyte; PVC/PEMA; PVC/PMMA; Phase separation (Han, H.-S. (112) 461)

Membrane electrode assembly

Polymer electrolyte fuel cell; Gaskets; Stack (Pozio, A. (112) 491)

Membrane electrolyte assembly

Methanol conditioning; Formic acid fuel cells (Ha, S. (112) 655)

Mesocarbon microbeads

Li-ion polymer battery; Gel electrolyte; Poly(acrylonitrile); Thermal stability; Lithium nickel dioxide (Akashi, H. (112) 577)

Metal membrane

Fuel-cell; Reformer; FCV; Fuel processor; Methanol (Han, J. (112) 484)

Methane

Steam reforming; Ni-YSZ cermets; Carbon deposition; CaO (Takeguchi, T. (112) 588)

Methanol conditioning

Formic acid fuel cells; Membrane electrolyte assembly (Ha, S. (112) 655)

Methanol crossover

Direct methanol fuel cell; Anode; Mathematical modeling (Jeng, K.T. (112) 367)

Methanol

2-Propanol; Fuel cell; Crossover current; Open circuit voltage (Qi, Z. (112) 121)

Methanol

DMFC; Mobile phone; Battery (Han, J. (112) 477)

Methanol

Fuel-cell; Reformer; Metal membrane; FCV; Fuel processor (Han, J. (112) 484)

Methanol

In situ; Reforming; Reformation; Kinetics; Fuel cell (Samms, S.R. (112) 13)

Methyl methacrylate-styrene copolymer

Cycling performance; Gel polymer electrolyte; Ionic conductivity; Lithium-ion polymer cell (Kang, D.-W. (112) 1)

Micro fuel cell

Series interconnection; Micromachining (Lee, S.J. (112) 410)

Micro-power source

Platinum co-sputtering; V₂O₅; Cycleability; Short-range order; Thin-film battery (Kim, H.-K. (112) 67)

Microcycles

Lead-acid battery; Cycling; Charge-discharge; Wind turbine; Photovoltaic systems (Ruddell, A.J. (112) 531)

Microfibrous copper materials

Zinc electrodes; Thin nickel electrodes; Secondary nickel zinc batteries (Zhu, W.H. (112) 353)

Micromachining

Micro fuel cell; Series interconnection (Lee, S.J. (112) 410)

Mobile phone

DMFC; Battery; Methanol (Han, J. (112) 477)

Models

Fuel cells; Fuel reforming; Water vapor exchanger; Efficiency; Experiments (Williford, R.E. (112) 570)

Molten carbonate fuel cell (MCFC)

Li/Na carbonate electrolyte; Cell performance model; Initial and long-term performance (Morita, H. (112) 509)

Molten carbonate fuel cell

Al-Fe coating; Separator plate; Wet-seal corrosion (Jun, J. (112) 153)

Molten carbonate fuel cell

Alpha lithium aluminate matrix; Tape casting; Pore-size distribution (Batra, V.S. (112) 322)

Multi-phase composition

Hydrogen storage alloy; Ti-Ni-based alloy; Discharge curve; XRD (Xu, Y.H. (112) 105)

Nanocrystalline

Ni₃Sn₄; Ball milling; Grain boundary; Lithium-ion battery; Capacity (Lee, H.-Y. (112) 8)

Natural graphite

Lithium ion batteries; Anode material; Sensitivity to humidity; Silver (Wu, Y.P. (112) 255)

Negative electrode

Rechargeable lithium batteries; Fe-Si alloy; Composite electrode; Ball-milling (Lee, H.-Y. (112) 649)

Neural network

Fuel cell; Solid oxide fuel cells (SOFC); Artificial neural network (ANN); Feed-forward network; Backpropagation (Arriagada, J. (112) 54)

Ni dissolution

MCFC; LiCoO₂-coated NiO cathode; Sol-impregnation (Kim, S.-G. (112) 109)

Ni-MH battery

Mathematical model; Oxygen evolution reaction; Coupled characterization and modeling (Pan, Y.H. (112) 298)

Ni-YSZ cermets

Methane; Steam reforming; Carbon deposition; CaO (Takeguchi, T. (112) 588)

Ni₃Sn₄

Ball milling; Nanocrystalline; Grain boundary; Lithium-ion battery; Capacity (Lee, H.-Y. (112) 8)

Nickel hydroxide

Alkaline storage batteries; Structural characteristics; Chemical precipitation reaction (Song, Q. (112) 428)

Nickel hydroxide

Electrochemical; Precipitation; Discharge capacity; Current density; Preparation (Subbaiah, T. (112) 562)

Nickel-metal hydride battery

Hydrogen storage alloys; Magnesium-based compounds; Mechanical alloying (Ruggeri, S. (112) 547)

NMR

LiCoO₂; Layered oxide; Lithium battery; Electrical properties; Magnesium substitution (Levasseur, S. (112) 419)

Ohmic loss

Current interruption; PEMFC; Stack (Mennola, T. (112) 261)

Open circuit voltage

2-Propanol; Methanol; Fuel cell; Crossover current (Qi, Z. (112) 121)

Organic electrolyte

Viscosity; Conductivity; Lithium battery; Asymmetric alkylcarbonate (Geoffroy, I. (112) 191)

Oxygen evolution reaction

Ni-MH battery; Mathematical model; Coupled characterization and modeling (Pan, Y.H. (112) 298)

Oxygen partial pressure

Solid oxide fuel cell; Co-firing; Tubular flat-plate type cell; Cathode substrate; Cell performance (Orui, H. (112) 90)

Parameter variations

Direct methanol fuel cells; Gas chromatography (Gurau, B. (112) 339)

Particulate anode

Alkaline fuel cell; Surface area; Aluminum; Hydrogen peroxide (Popovich, N.A. (112) 36)

Pb anodes

Corrosion; Lead acid batteries; Doping tin; Calcium (Slavkov, D. (112) 199)

Pechini process

Tin oxide; Graphite; Anode; Lithium-ion battery (Zhang, R. (112) 596)

- PEMFC**
 Current interruption; Ohmic loss; Stack (Mennola, T. (112) 261)
- PEMFC**
 Fuel cell; Segmented cell; Current collection; Flow field (Rajalakshmi, N. (112) 331)
- PEO–PVA blend**
 Composite polymer electrolyte; Ionic conductivity; Zinc–air battery (Yang, C.-C. (112) 497)
- Phase separation**
 Lithium-ion battery; Polymer electrolyte; PVC/PEMA; PVC/PMMA; Mechanical strength (Han, H.-S. (112) 461)
- Phase transition**
 Cathode material; Lithium intercalation; Lithium ion battery; LiMn₂O₄; Potential–composition profile (Abiko, H. (112) 557)
- Phosphoric acid fuel cells (PAFCs)**
 Two-dimensional model; Mathematical modeling (Choudhury, S.R. (112) 137)
- Photovoltaic systems**
 Lead-acid battery; Cycling; Microcycles; Charge–discharge; Wind turbine (Ruddell, A.J. (112) 531)
- Platinum co-sputtering**
 V₂O₅; Cycleability; Micro-power source; Short-range order; Thin-film battery (Kim, H.-K. (112) 67)
- Polarization**
 Silver-ion conductors; Battery discharge unit; Solid-state batteries; Discharge characteristics (Murugaraj, R. (112) 184)
- Poly(acrylonitrile)**
 Li-ion polymer battery; Gel electrolyte; Thermal stability; Lithium nickel dioxide; Mesocarbon microbeads (Akashi, H. (112) 577)
- Polyaniline**
 Potentiodynamic deposition; Pulse power; Redox supercapacitor; Stainless-steel (Rajendra Prasad, K. (112) 443)
- Polyethylene oxide**
 Trioxyethylene; Composite polymer electrolyte; CuS cathode (Chung, J.-S. (112) 671)
- Polymer binder**
 Lithium rechargeable polymer batteries; Cathode; Gel polymer electrolyte (Choi, N.-S. (112) 61)
- Polymer electrolyte fuel cell**
 Membrane electrode assembly; Gaskets; Stack (Pozio, A. (112) 491)
- Polymer electrolyte**
 Ionic conductivity; Blend; Copolymer; VTF equation (Polo Fonseca, C. (112) 395)
- Polymer electrolyte**
 Lithium-ion battery; PVC/PEMA; PVC/PMMA; Phase separation; Mechanical strength (Han, H.-S. (112) 461)
- Polymer electrolyte**
 Regenerative fuel cell; Electrocatalyst; Water electrolysis (Ioroi, T. (112) 583)
- Polymer**
 DC conduction; Current–voltage characteristics; Schottky emission; Poole–Frenkel mechanism; Charge transport (Nagaraj, N. (112) 326)
- Polysulfide**
 Lithium–sulfur battery; Electrolyte; Tetra(ethylene glycol) dimethyl ether; 1,3-Dioxolane (Chang, D.-R. (112) 452)
- Poole–Frenkel mechanism**
 DC conduction; Current–voltage characteristics; Schottky emission; Polymer; Charge transport (Nagaraj, N. (112) 326)
- Pore-size distribution**
 Molten carbonate fuel cell; Alpha lithium aluminate matrix; Tape casting (Batra, V.S. (112) 322)
- Porosity**
 Conductive additive; Carbon black; X-ray photoelectron spectroscopy (XPS); Battery (Manickam, M. (112) 116)
- Potential–composition profile**
 Cathode material; Phase transition; Lithium intercalation; Lithium ion battery; LiMn₂O₄ (Abiko, H. (112) 557)
- Potentiodynamic deposition**
 Polyaniline; Pulse power; Redox supercapacitor; Stainless-steel (Rajendra Prasad, K. (112) 443)
- Power plants**
 SOFC; MCFC; CO₂ separation (Campanari, S. (112) 273)
- Precipitation**
 Nickel hydroxide; Electrochemical; Discharge capacity; Current density; Preparation (Subbaiah, T. (112) 562)
- Preparation**
 Nickel hydroxide; Electrochemical; Precipitation; Discharge capacity; Current density (Subbaiah, T. (112) 562)
- Primary battery**
 Thionyl chloride; Electrocatalytic effect; Schiff base (Kim, W.-S. (112) 76)
- 2-Propanol**
 Methanol; Fuel cell; Crossover current; Open circuit voltage (Qi, Z. (112) 121)
- Pseudocapacitance**
 Structural transformation; Hydrous ruthenium–iridium oxides; Cyclic voltammetry; Electrochemical supercapacitor (Hu, C.-C. (112) 401)
- Pulse power**
 Polyaniline; Potentiodynamic deposition; Redox supercapacitor; Stainless-steel (Rajendra Prasad, K. (112) 443)
- PVC/PEMA**
 Lithium-ion battery; Polymer electrolyte; PVC/PMMA; Phase separation; Mechanical strength (Han, H.-S. (112) 461)
- PVC/PMMA**
 Lithium-ion battery; Polymer electrolyte; PVC/PEMA; Phase separation; Mechanical strength (Han, H.-S. (112) 461)
- Rare-earth**
 Vanadium oxide; Battery (Almeida, E.C. (112) 290)
- Rechargeable lithium batteries**
 Fe–Si alloy; Composite electrode; Negative electrode; Ball-milling (Lee, H.-Y. (112) 649)
- Rechargeable lithium battery**
 Manganese oxides (Doeff, M.M. (112) 294)
- Recursive least square algorithm**
 Shepherd model; Less battery storage system (Cherif, A. (112) 49)
- Recycling**
 Lithium-ion cells; Battery (Castillo, S. (112) 247)
- Redox supercapacitor**
 Polyaniline; Potentiodynamic deposition; Pulse power; Stainless-steel (Rajendra Prasad, K. (112) 443)
- Reduction**
 Soft X-ray; Hard X-ray; Battery electrodes; Surface; Manganese (Braun, A. (112) 231)
- Reformation**
 Methanol; In situ; Reforming; Kinetics; Fuel cell (Samms, S.R. (112) 13)
- Reformer**
 Fuel-cell; Metal membrane; FCV; Fuel processor; Methanol (Han, J. (112) 484)
- Reforming**
 Methanol; In situ; Reformation; Kinetics; Fuel cell (Samms, S.R. (112) 13)
- Regenerative fuel cell**
 Polymer electrolyte; Electrocatalyst; Water electrolysis (Ioroi, T. (112) 583)
- Scanning electron microscopy**
 Solid oxide fuel cells; Coefficient of thermal expansion (Chou, Y.-S. (112) 130)
- Schiff base**
 Thionyl chloride; Electrocatalytic effect; Primary battery (Kim, W.-S. (112) 76)

- Schottky emission
DC conduction; Current-voltage characteristics; Poole-Frenkel mechanism; Polymer; Charge transport (Nagaraj, N. (112) 326)
- Secondary nickel zinc batteries
Microfibrous copper materials; Zinc electrodes; Thin nickel electrodes (Zhu, W.H. (112) 353)
- Segmented cell
PEMFC; Fuel cell; Current collection; Flow field (Rajalakshmi, N. (112) 331)
- Self-discharge
Graphite anode; Li-ion batteries; Solid electrolyte interphase (Wang, C. (112) 98)
- Sensitivity to humidity
Lithium ion batteries; Anode material; Silver; Natural graphite (Wu, Y.P. (112) 255)
- Separator plate
Molten carbonate fuel cell; Al-Fe coating; Wet-seal corrosion (Jun, J. (112) 153)
- Series interconnection
Micro fuel cell; Micromachining (Lee, S.J. (112) 410)
- Shepherd model
Recursive least square algorithm; Less battery storage system (Cherif, A. (112) 49)
- Short- and long-time solutions
Laplace transform; Electrolyte concentration (Hashim Ali, S.A. (112) 435)
- Short-range order
Platinum co-sputtering; V₂O₅; Cycleability; Micro-power source; Thin-film battery (Kim, H.-K. (112) 67)
- Silver
Lithium ion batteries; Anode material; Sensitivity to humidity; Natural graphite (Wu, Y.P. (112) 255)
- Silver-ion conductors
Battery discharge unit; Solid-state batteries; Polarization; Discharge characteristics (Murugara, R. (112) 184)
- SOFC
MCFC; CO₂ separation; Power plants (Campanari, S. (112) 273)
- Soft X-ray
Hard X-ray; Battery electrodes; Surface; Manganese; Reduction (Braun, A. (112) 231)
- Sol-gel method
Lithium secondary batteries; Layered manganese; Cathode materials; Li₂MnO₃ (Shin, S.-S. (112) 634)
- Sol-impregnation
MCFC; LiCoO₂-coated NiO cathode; Ni dissolution (Kim, S.-G. (112) 109)
- Solid electrolyte interphase
Self-discharge; Graphite anode; Li-ion batteries (Wang, C. (112) 98)
- Solid oxide fuel cell
Co-firing; Tubular flat-plate type cell; Cathode substrate; Oxygen partial pressure; Cell performance (Orui, H. (112) 90)
- Solid oxide fuel cells (SOFC)
Fuel cell; Artificial neural network (ANN); Neural network; Feed-forward network; Backpropagation (Arriagada, J. (112) 54)
- Solid oxide fuel cells
Scanning electron microscopy; Coefficient of thermal expansion (Chou, Y.-S. (112) 130)
- Solid oxide fuel cells
Thermal cycling; Compressive mica-based seals (Chou, Y.-S. (112) 376)
- Solid-state batteries
Silver-ion conductors; Battery discharge unit; Polarization; Discharge characteristics (Murugara, R. (112) 184)
- Solution combustion synthesis
ac Impedance; Cyclic voltammetry; Lithium-cobalt-nickel oxide; Lithium intercalation (Suresh, P. (112) 665)
- Sony 18650 cells
Capacity fade; Cycle number (Ramadass, P. (112) 614)
- Sparkling voltage
Aluminum electrolytic capacitors; Capacity; Dissipation factor; Leakage current; Dextrose (Tsai, M.-L. (112) 643)
- Sputtering deposition
Lithium ion battery; Initial irreversible capacity; Lithium phosphorus oxynitride; Carbon anode (Chung, K.-i. (112) 626)
- Stability
Composite electrolyte; Li⁺-conducting glasses; Conductivity; Interfacial properties (Zhang, X.-W. (112) 209)
- Stack
Current interruption; Ohmic loss; PEMFC (Mennola, T. (112) 261)
- Stack
Polymer electrolyte fuel cell; Membrane electrode assembly; Gaskets (Pozio, A. (112) 491)
- Stainless-steel
Polyaniline; Potentiodynamic deposition; Pulse power; Redox supercapacitor (Rajendra Prasad, K. (112) 443)
- Steam reforming
Methane; Ni-YSZ cermets; Carbon deposition; CaO (Takeguchi, T. (112) 588)
- Structural characteristics
Nickel hydroxide; Alkaline storage batteries; Chemical precipitation reaction (Song, Q. (112) 428)
- Structural transformation
Hydrous ruthenium-iridium oxides; Cyclic voltammetry; Electrochemical supercapacitor; Pseudocapacitance (Hu, C.-C. (112) 401)
- Surface area
Alkaline fuel cell; Particulate anode; Aluminum; Hydrogen peroxide (Popovich, N.A. (112) 36)
- Surface
Soft X-ray; Hard X-ray; Battery electrodes; Manganese; Reduction (Braun, A. (112) 231)
- Tape casting
Molten carbonate fuel cell; Alpha lithium aluminate matrix; Pore-size distribution (Batra, V.S. (112) 322)
- Tetra(ethylene glycol) dimethyl ether
Lithium-sulfur battery; Polysulfide; Electrolyte; 1,3-Dioxolane (Chang, D.-R. (112) 452)
- Thermal cycling
Compressive mica-based seals; Solid oxide fuel cells (Chou, Y.-S. (112) 376)
- Thermal stability
Li-ion polymer battery; Gel electrolyte; Poly(acrylonitrile); Lithium nickel dioxide; Mesocarbon microbeads (Akashi, H. (112) 577)
- Thin nickel electrodes
Microfibrous copper materials; Zinc electrodes; Secondary nickel zinc batteries (Zhu, W.H. (112) 353)
- Thin-film battery
Platinum co-sputtering; V₂O₅; Cycleability; Micro-power source; Short-range order (Kim, H.-K. (112) 67)
- Thionyl chloride
Electrocatalytic effect; Schiff base; Primary battery (Kim, W.-S. (112) 76)
- Ti-Ni-based alloy
Hydrogen storage alloy; Multi-phase composition; Discharge curve; XRD (Xu, Y.H. (112) 105)
- Tin oxide
Graphite; Anode; Lithium-ion battery; Pechini process (Zhang, R. (112) 596)
- Tri(ethylene glycol) dimethacrylate
Gel polymer electrolyte; Benzoyl peroxide; Lithium-ion battery (Kim, H.-S. (112) 469)
- Trioxylethylene
Polyethylen oxide; Composite polymer electrolyte; CuS cathode (Chung, J.-S. (112) 671)

- Tubular flat-plate type cell
 Solid oxide fuel cell; Co-firing; Cathode substrate; Oxygen partial pressure; Cell performance (Orui, H. (112) 90)
- Two-dimensional model
 Phosphoric acid fuel cells (PAFCs); Mathematical modeling (Choudhury, S.R. (112) 137)
- V_2O_5
 Platinum co-sputtering; Cycleability; Micro-power source; Short-range order; Thin-film battery (Kim, H.-K. (112) 67)
- VA-metry
 $LiNi_{1-y}Co_yO_2$ cathodes; XRD parameters; Cycling test (Moshtev, R. (112) 30)
- Vanadium oxide
 Rare-earth; Battery (Almeida, E.C. (112) 290)
- Viscosity
 Organic electrolyte; Conductivity; Lithium battery; Asymmetric alkyl-carbonate (Geoffroy, I. (112) 191)
- VTF equation
 Polymer electrolyte; Ionic conductivity; Blend; Copolymer (Polo Fonseca, C. (112) 395)
- Waste $LiCoO_2$
 Cobalt hydroxide; Cobalt oxide; Dehydration; Electrochemical-hydrothermal method (Myoung, J. (112) 639)
- Water balance
 Fuel cell system; Fuel processing (Ahmed, S. (112) 519)
- Water electrolysis
 Regenerative fuel cell; Polymer electrolyte; Electrocatalyst (Ioroi, T. (112) 583)
- Water vapor exchanger
 Fuel cells; Fuel reforming; Efficiency; Models; Experiments (Williford, R.E. (112) 570)
- Well-to-wheels analysis
 Fuel-cell vehicles; Fuels; Energy use; Greenhouse gas emissions; Hydrogen (Wang, M. (112) 307)
- Wet-seal corrosion
 Molten carbonate fuel cell; Al–Fe coating; Separator plate (Jun, J. (112) 153)
- Wind turbine
 Lead–acid battery; Cycling; Microcycles; Charge–discharge; Photovoltaic systems (Ruddell, A.J. (112) 531)
- X-ray photoelectron spectroscopy (XPS)
 Conductive additive; Porosity; Carbon black; Battery (Manickam, M. (112) 116)
- XRD parameters
 $LiNi_{1-y}Co_yO_2$ cathodes; Cycling test; VA-metry (Moshtev, R. (112) 30)
- XRD
 Hydrogen storage alloy; Multi-phase composition; Ti–Ni-based alloy; Discharge curve (Xu, Y.H. (112) 105)
- Zinc electrodes
 Microfibrous copper materials; Thin nickel electrodes; Secondary nickel zinc batteries (Zhu, W.H. (112) 353)
- Zinc–air battery
 Composite polymer electrolyte; PEO–PVA blend; Ionic conductivity (Yang, C.-C. (112) 497)
- Zn-doping
 Lithiated nickel cobalt oxides; $LiNi_{0.8}Co_{0.2}O_2$; Cathode materials; Lithium ion batteries (Fey, G.T.K. (112) 384)