

Subject Index of Volume 124

- AB₅ compound
Hydrides; Cavity microelectrode; Battery (Vivier, V. (124) 564)
- AC impedance
Capacity degradation; LiV₂O₅; Surface morphology (Moss, P.L. (124) 261)
- Accelerated power degradation
Pulse power characterization test; Statistical experimental design (Thomas, E.V. (124) 254)
- Activated carbon
Carbon nanotubes; Specific capacitance; ECDL capacitor; Supercapacitors (Emmenegger, Ch. (124) 321)
- Adsorbate
Direct alcohol fuel cell; Base metal anode catalyst; 2-Propanol fuel; Mobile applications (Kobayashi, T. (124) 34)
- Air-electrode
Perovskite catalyst (Wang, X. (124) 278)
- Al₂O₃ coating
Lithium battery; Cathode material; LiFe_{0.5}Mn_{1.5}O₄; LiBF₄; Cyclability; Capacity fade (Eftekhari, A. (124) 182)
- All-solid-state cells
Oxysulfide glass; Solid electrolyte; LiNi_{0.5}Mn_{0.5}O₂; Layer-structured cathode; Lithium secondary batteries (Mizuno, F. (124) 170)
- Alumina
Pt; CO oxidation; PROX; Infrared thermography; Deactivation; Water-pretreatment; Fuel cells (Son, I. H. (124) 415)
- Aluminum–air cell
Modeling; Analysis; Cell performance (Yang, S.H. (124) 572)
- Ambigel
MnO₂; Xerogel; Pseudocapacitors (Reddy, R.N. (124) 330)
- Analysis
Aluminum–air cell; Modeling; Cell performance (Yang, S.H. (124) 572)
- Anode material
Li-ion battery; Ca-ferrite; NaFeSnO₄; Cycle performance (Sharma, N. (124) 204)
- Anode
Li-ion batteries; Capacity; Elastic modulus; Silicide (Wolfenstine, J. (124) 241)
- Artificial neural network
Fuel cell modeling; PEM fuel cell; Automotive applications (Jemeï, S. (124) 479)
- Automotive applications
Fuel cell modeling; Artificial neural network; PEM fuel cell (Jemeï, S. (124) 479)
- Automotive battery
Distribution of current and potential; Lead-acid battery; Positive plate (Guo, Y. (124) 271)
- Ball-milling
Ceramic; Sintering; Ceria; Electrolyte; Solid oxide fuel cell (Zhang, T.S. (124) 26)
- Base metal anode catalyst
Direct alcohol fuel cell; 2-Propanol fuel; Adsorbate; Mobile applications (Kobayashi, T. (124) 34)
- Battery collection
Battery recycling; Battery disposal (Moura Bernardes, A. (124) 586)
- Battery deterioration
Lithium-ion battery; Chemical transformation; Surface analysis; Solid electrolyte interface; TEM image (Araki, K. (124) 124)
- Battery disposal
Battery recycling; Battery collection (Moura Bernardes, A. (124) 586)
- Battery material
Phase transition; Temperature hysteresis; Temperature dependence; Lithium ion battery; LiMn₂O₄ (Abiko, H. (124) 526)
- Battery recycling
Battery collection; Battery disposal (Moura Bernardes, A. (124) 586)
- Battery
Cycle life; Hybrid electric vehicle; Lead–acid; Valve regulated; Low emission (Nakayama, Y. (124) 551)
- Battery
Hydrides; AB₅ compound; Cavity microelectrode (Vivier, V. (124) 564)
- Battery
Secondary lithium; Polymer; Electrolyte; Ionic conductivity; Swelling (Chung, N.K. (124) 148)
- Bipolar
Polyaniline; Rechargeable; Dry battery; Zinc; Capacity (Karami, H. (124) 303)
- Bismuth telluride
Thermoelectric generation; Thermoelectric device; Heat transfer; Thermal fluid (Suzuki, R.O. (124) 293)
- Bromine
Redox flow cell; Vanadium redox couple; Polyhalide; Tribromide (Skylas-Kazacos, M. (124) 299)
- Ca-ferrite
Li-ion battery; Anode material; NaFeSnO₄; Cycle performance (Sharma, N. (124) 204)
- Capacity degradation
LiV₂O₅; AC impedance; Surface morphology (Moss, P.L. (124) 261)
- Capacity fade
Impedance rise; Power fade (Bloom, I. (124) 538)
- Capacity fade
Lithium battery; Cathode material; LiFe_{0.5}Mn_{1.5}O₄; LiBF₄; Cyclability; Al₂O₃ coating (Eftekhari, A. (124) 182)
- Capacity
Anode; Li-ion batteries; Elastic modulus; Silicide (Wolfenstine, J. (124) 241)
- Capacity
Polyaniline; Bipolar; Rechargeable; Dry battery; Zinc (Karami, H. (124) 303)
- Capacity
Self-assembled monolayer; Diphenyl disulfide; Cathode material; Rechargeable lithium battery; Coulombic efficiency (Maddanmath, T. (124) 133)
- Carbon electrodes
Electrochemical impedance spectroscopy; Double layer capacitor; Nafion membrane; Pore size distribution (Lufrano, F. (124) 314)

- Carbon nanotubes
Specific capacitance; ECDL capacitor; Activated carbon; Supercapacitors (Emmenegger, Ch. (124) 321)
- Catalyst ink
PEMFC; PEFC; Fuel cell; Membrane electrode assembly; Fabrication; Kapton (Bender, G. (124) 114)
- Cathode flooding
PEMFC; Two-phase flow; Water transport; Diffusion layer; Mathematical model (Tüber, K. (124) 403)
- Cathode material
Li-ion batteries; Thin film; Nickel oxide-vanadium oxide composite film; Pulsed laser deposition (Liu, H.-R. (124) 163)
- Cathode material
Lithium batteries; Chromium oxide (Ramasamy, R.P. (124) 155)
- Cathode material
Lithium battery; $\text{LiFe}_{0.5}\text{Mn}_{1.5}\text{O}_4$; LiBF_4 ; Cyclability; Capacity fade; Al_2O_3 coating (Eftekhari, A. (124) 182)
- Cathode material
Self-assembled monolayer; Diphenyl disulfide; Rechargeable lithium battery; Coulombic efficiency; Capacity (Maddanimath, T. (124) 133)
- Cathode material
Sodium manganese oxide; Lithium battery; Rapid discharge; Composite material (Hibino, M. (124) 143)
- Cathode
LSM; Solid oxide fuel-cell; Microstructure; Interface; Electrode behaviour (Jiang, S.P. (124) 390)
- Cavity microelectrode
Hydrides; AB_5 compound; Battery (Vivier, V. (124) 564)
- Cell performance
Aluminum-air cell; Modeling; Analysis (Yang, S.H. (124) 572)
- Ceramic
Sintering; Ceria; Electrolyte; Solid oxide fuel cell; Ball-milling (Zhang, T.S. (124) 26)
- Ceria
Ceramic; Sintering; Electrolyte; Solid oxide fuel cell; Ball-milling (Zhang, T.S. (124) 26)
- Chemical transformation
Lithium-ion battery; Battery deterioration; Surface analysis; Solid electrolyte interface; TEM image (Araki, K. (124) 124)
- Chemical/electrochemical reactions
Heat/mass transfer; Tubular SOFC; Stimulation (Li, P.-W. (124) 487)
- Chromium oxide
Lithium batteries; Cathode material (Ramasamy, R.P. (124) 155)
- Chromium oxides
Polypyrrole; Lithium ion batteries (Ramasamy, R.P. (124) 197)
- CO oxidation
Pt; Alumina; PROX; Infrared thermography; Deactivation; Water-pre-treatment; Fuel cells (Son, I.H. (124) 415)
- Coal gas
Fluoride; HF; LiF; MCFC (Kawase, M. (124) 52)
- Cobalt catalyst
Ethanol; Steam reforming; Hydrogen production; Fuel cell (Batista, M.S. (124) 99)
- Combined cycle
Solid oxide fuel cell; Gas turbine; HAT cycle; Power generation system (Kuchonthara, P. (124) 65)
- Composite gel polymer electrolyte
 TiO_2 filler; Lithium-ion polymer battery; Cycling performance; High rate (Kim, H.-S. (124) 221)
- Composite LiFePO_4 cathode
Polyethyleneoxide; Solvent-free preparation; Hot-pressing; Nanocomposite electrolyte membrane; Li/ LiFePO_4 polymer cells and batteries (Appetecchi, G.B. (124) 246)
- Composite material
Sodium manganese oxide; Cathode material; Lithium battery; Rapid discharge (Hibino, M. (124) 143)
- Composite
Fuel cell; Membrane; Sulfonated hydrocarbon; Layered silicate; Proton conductivity (Chang, J.-H. (124) 18)
- Composite
Polypyrrole; Polyimide; Conducting polymers; Potential step amperometry (Levine, K.L. (124) 355)
- Computational modelling
PEM fuel cells; Fuel cell modelling; Parametric study; Contact resistance (Berning, T. (124) 440)
- Conducting polymers
Micropower; Electrochemical capacitors; Microcapacitors; Photolithography (Sung, J.-H. (124) 343)
- Conducting polymers
Polypyrrole; Polyimide; Composite; Potential step amperometry (Levine, K.L. (124) 355)
- Contact resistance
PEM fuel cells; Fuel cell modelling; Computational modelling; Parametric study (Berning, T. (124) 440)
- Coulombic efficiency
Self-assembled monolayer; Diphenyl disulfide; Cathode material; Rechargeable lithium battery; Capacity (Maddanimath, T. (124) 133)
- Counterflow
Proton exchange membrane fuel cell; Water transport; Mathematical model; Flow mode (Ge, S.-H. (124) 1)
- Coupling agent
Soluble polypyrrole; Tantalum electrolytic capacitors; Electrolyte; Surfactant (Jang, K.S. (124) 338)
- Cu/Au current collector
Proton exchange membrane fuel cell; Miniature fuel cell; Micro-fabrication; Silicon wafer (Yu, J. (124) 40)
- Cyclability
Lithium battery; Cathode material; $\text{LiFe}_{0.5}\text{Mn}_{1.5}\text{O}_4$; LiBF_4 ; Capacity fade; Al_2O_3 coating (Eftekhari, A. (124) 182)
- Cycle life
Battery; Hybrid electric vehicle; Lead-acid; Valve regulated; Low emission (Nakayama, Y. (124) 551)
- Cycle performance
Li-ion battery; Anode material; Ca-ferrite; NaFeSnO_4 (Sharma, N. (124) 204)
- Cyclic voltammetry
Electrochemical capacitor; Electro-conducting polymer; Polypyrrole; Pseudo-capacitance; Surface roughness (Noh, K.A. (124) 593)
- Cyclic voltammetry
Lithium-ion battery; Electrolyte; Electrochemical stability (Georén, P. (124) 213)
- Cycling performance
Composite gel polymer electrolyte; TiO_2 filler; Lithium-ion polymer battery; High rate (Kim, H.-S. (124) 221)
- Deactivation
Pt; CO oxidation; Alumina; PROX; Infrared thermography; Water-pre-treatment; Fuel cells (Son, I. H. (124) 415)
- Diffusion coefficient
Lithium rechargeable battery; High rate properties; Vanadium pentoxide; Porous electrode (Suzuki, S. (124) 513)
- Diffusion coefficient
 $\text{LiTi}_2(\text{PO}_4)_3$ NASICON; Lithium insertion; Impedance spectroscopy; Lithium-ion battery; Storage capacity (Wang, G.X. (124) 231)
- Diffusion layer
PEMFC; Two-phase flow; Water transport; Cathode flooding; Mathematical model (Tüber, K. (124) 403)
- Diffusion layer
Polymer electrolyte; Fuel cells (Dohle, H. (124) 371)
- Diphenyl disulfide
Self-assembled monolayer; Cathode material; Rechargeable lithium battery; Coulombic efficiency; Capacity (Maddanimath, T. (124) 133)

- Direct alcohol fuel cell
Base metal anode catalyst; 2-Propanol fuel; Adsorbate; Mobile applications (Kobayashi, T. (124) 34)
- Direct fuel cell
2-Propanol; Methanol (Cao, D. (124) 12)
- Distribution of current and potential
Automotive battery; Lead-acid battery; Positive plate (Guo, Y. (124) 271)
- DMFC
Nafion; Polypyrrole; Proton exchange membrane (Smit, M.A. (124) 59)
- Double layer capacitor
Electrochemical impedance spectroscopy; Nafion membrane; Pore size distribution; Carbon electrodes (Lufrano, F. (124) 314)
- Dry battery
Polyaniline; Bipolar; Rechargeable; Zinc; Capacity (Karami, H. (124) 303)
- ECDL capacitor
Carbon nanotubes; Specific capacitance; Activated carbon; Supercapacitors (Emmenegger, Ch. (124) 321)
- Elastic modulus
Anode; Li-ion batteries; Capacity; Silicide (Wolfenstine, J. (124) 241)
- Electrically-heated catalyst
Partial oxidation reactor; Methane; Metallic monolith; Palladium; Start-up time (Jung, H. (124) 76)
- Electro-conducting polymer
Cyclic voltammetry; Electrochemical capacitor; Polypyrrole; Pseudocapacitance; Surface roughness (Noh, K.A. (124) 593)
- Electrocatalysis
Ni-metal hydride batteries; Hydride cathodes; Surface Pd films; Hydrogen/dehydrogenating reactions (Barsellini, D. (124) 309)
- Electrochemical capacitor
Cyclic voltammetry; Electro-conducting polymer; Polypyrrole; Pseudocapacitance; Surface roughness (Noh, K.A. (124) 593)
- Electrochemical capacitors
Micropower; Microcapacitors; Conducting polymers; Photolithography (Sung, J.-H. (124) 343)
- Electrochemical characteristics
Hydrogen storage alloys; Rapidly quenched treatment; Microstructure (Li, P. (124) 285)
- Electrochemical impedance spectroscopy
Double layer capacitor; Nafion membrane; Pore size distribution; Carbon electrodes (Lufrano, F. (124) 314)
- Electrochemical stability
Lithium-ion battery; Electrolyte; Cyclic voltammetry (Georén, P. (124) 213)
- Electrode behaviour
LSM; Cathode; Solid oxide fuel-cell; Microstructure; Interface (Jiang, S.P. (124) 390)
- Electrolyte
Ceramic; Sintering; Ceria; Solid oxide fuel cell; Ball-milling (Zhang, T.S. (124) 26)
- Electrolyte
Lithium-ion battery; Electrochemical stability; Cyclic voltammetry (Georén, P. (124) 213)
- Electrolyte
Secondary lithium; Battery; Polymer; Ionic conductivity; Swelling (Chung, N.K. (124) 148)
- Electrolyte
Soluble polypyrrole; Tantalum electrolytic capacitors; Surfactant; Coupling agent (Jang, K.S. (124) 338)
- Emulsion
Li-ion battery; Oxides (Lala, S.M. (124) 118)
- Ethanol
Steam reforming; Cobalt catalyst; Hydrogen production; Fuel cell (Batista, M.S. (124) 99)
- Expander
Lignin; Lead oxide; Lead-acid battery; Negative active material; Scanning electron microscope (Saito, K. (124) 266)
- Fabrication
PEMFC; PEFC; Fuel cell; Membrane electrode assembly; Catalyst ink; Kapton (Bender, G. (124) 114)
- Flooding
Mass distribution; Water distribution; PEFC; Solid polymer electrolyte (Mench, M.M. (124) 90)
- Flow mode
Proton exchange membrane fuel cell; Water transport; Mathematical model; Counterflow (Ge, S.-H. (124) 1)
- Fluoride
Coal gas; HF; LiF; MCFC (Kawase, M. (124) 52)
- Fuel cell modeling
Artificial neural network; PEM fuel cell; Automotive applications (Jemei, S. (124) 479)
- Fuel cell modelling
PEM fuel cells; Computational modelling; Parametric study; Contact resistance (Berning, T. (124) 440)
- Fuel cell
Ethanol; Steam reforming; Cobalt catalyst; Hydrogen production (Batista, M.S. (124) 99)
- Fuel cell
Membrane; Composite; Sulfonated hydrocarbon; Layered silicate; Proton conductivity (Chang, J.-H. (124) 18)
- Fuel cell
Nanowire; Platinum-ruthenium; Methanol electro-oxidation; Mass transfer; Membrane-electrode assembly (Choi, W.C. (124) 420)
- Fuel cell
PEMFC (Spinacé, E.V. (124) 426)
- Fuel cell
PEMFC; PEFC; Membrane electrode assembly; Fabrication; Catalyst ink; Kapton (Bender, G. (124) 114)
- Fuel cell
Water gas shift; Fuel processing; Methanol steam reforming; Hydrogen; Reformer (Choi, Y. (124) 432)
- Fuel cells
Diffusion layer; Polymer electrolyte (Dohle, H. (124) 371)
- Fuel cells
Pt; CO oxidation; Alumina; PROX; Infrared thermography; Deactivation; Water-pretreatment (Son, I. H. (124) 415)
- Fuel processing
Water gas shift; Methanol steam reforming; Fuel cell; Hydrogen; Reformer (Choi, Y. (124) 432)
- Gas turbine
Solid oxide fuel cell; HAT cycle; Combined cycle; Power generation system (Kuchonthara, P. (124) 65)
- Graphite electrode
Lithium ion battery; Propylene carbonate (Egashira, M. (124) 237)
- HAT cycle
Solid oxide fuel cell; Gas turbine; Combined cycle; Power generation system (Kuchonthara, P. (124) 65)
- Heat transfer
Thermoelectric generation; Thermoelectric device; Thermal fluid; Bismuth telluride (Suzuki, R.O. (124) 293)
- Heat/mass transfer
Chemical/electrochemical reactions; Tubular SOFC; Stimulation (Li, P.-W. (124) 487)
- Heteropolyacid hydrate
Ni/MH battery; Solid-state battery; Solid electrolyte; MnO₂/MH battery (Hatakeyama, K. (124) 559)
- HF
Coal gas; Fluoride; LiF; MCFC (Kawase, M. (124) 52)

- High rate properties
Lithium rechargeable battery; Vanadium pentoxide; Porous electrode; Diffusion coefficient (Suzuki, S. (124) 513)
- High rate
Composite gel polymer electrolyte; TiO₂ filler; Lithium-ion polymer battery; Cycling performance (Kim, H.-S. (124) 221)
- Hot-pressing
Polyethyleneoxide; Solvent-free preparation; Nanocomposite electrolyte membrane; Composite LiFePO₄ cathode; Li/LiFePO₄ polymer cells and batteries (Appetecchi, G.B. (124) 246)
- Hybrid electric vehicle
Battery; Cycle life; Lead-acid; Valve regulated; Low emission (Nakayama, Y. (124) 551)
- Hydride cathodes
Ni-metal hydride batteries; Surface Pd films; Electrocatalysis; Hydriding/dehydriding reactions (Barsellini, D. (124) 309)
- Hydrides
AB₅ compound; Cavity microelectrode; Battery (Vivier, V. (124) 564)
- Hydriding/dehydriding reactions
Ni-metal hydride batteries; Hydride cathodes; Surface Pd films; Electrocatalysis (Barsellini, D. (124) 309)
- Hydrogen production
Ethanol; Steam reforming; Cobalt catalyst; Fuel cell (Batista, M.S. (124) 99)
- Hydrogen storage alloys
Rapidly quenched treatment; Electrochemical characteristics; Microstructure (Li, P. (124) 285)
- Hydrogen
Water gas shift; Fuel processing; Methanol steam reforming; Fuel cell; Reformer (Choi, Y. (124) 432)
- Impedance rise
Capacity fade; Power fade (Bloom, I. (124) 538)
- Impedance spectroscopy
LiTi₂(PO₄)₃ NASICON; Lithium insertion; Lithium-ion battery; Storage capacity; Diffusion coefficient (Wang, G.X. (124) 231)
- Impedance
PTFE; Nafion; Proton exchange membrane; Self-humidification (Liu, F. (124) 81)
- Infrared thermography
Pt; CO oxidation; Alumina; PROX; Deactivation; Water-pretreatment; Fuel cells (Son, I. H. (124) 415)
- Infrared
Lithium surface; Passivating layer; Raman; Lithium carbonate; Lithium acetylde (Naudin, C. (124) 518)
- Interface
LSM; Cathode; Solid oxide fuel-cell; Microstructure; Electrode behaviour (Jiang, S.P. (124) 390)
- Ionic conductivity
Polymer electrolytes; Poly(vinyl alcohol); Lithium tetrafluoroborate; Lithium-ion battery; Thermal analysis (Rajendran, S. (124) 225)
- Ionic conductivity
Secondary lithium; Battery; Polymer; Electrolyte; Swelling (Chung, N.K. (124) 148)
- Jet-milling
Natural graphite; Rate capability; Rhombohedral phase (Herstedt, M. (124) 191)
- Kapton
PEMFC; PEFC; Fuel cell; Membrane electrode assembly; Fabrication; Catalyst ink (Bender, G. (124) 114)
- Laminate construction
PEMFC; Miniature; Printed-circuit board; Planar array; Rapid prototyping (O'Hayre, R. (124) 459)
- Layer-structured cathode
All-solid-state cells; Oxysulfide glass; Solid electrolyte; LiNi_{0.5}Mn_{0.5}O₂; Lithium secondary batteries (Mizuno, F. (124) 170)
- Layered silicate
Fuel cell; Membrane; Composite; Sulfonated hydrocarbon; Proton conductivity (Chang, J.-H. (124) 18)
- Layered structure
Li-ion secondary batteries; Li(Li,Ni,Mn)O₂; Quenching (Kang, S.-H. (124) 533)
- Lead oxide
Lignin; Lead-acid battery; Expander; Negative active material; Scanning electron microscope (Saito, K. (124) 266)
- Lead-acid battery
Lignin; Lead oxide; Expander; Negative active material; Scanning electron microscope (Saito, K. (124) 266)
- Lead-acid
Battery; Cycle life; Hybrid electric vehicle; Valve regulated; Low emission (Nakayama, Y. (124) 551)
- Lead-acid battery
Automotive battery; Distribution of current and potential; Positive plate (Guo, Y. (124) 271)
- Leak rates
Phlogopite mica; Solid oxide fuel cell; Thermal cycle (Chou, Y.-S. (124) 473)
- Li(Li,Ni,Mn)O₂
Li-ion secondary batteries; Layered structure; Quenching (Kang, S.-H. (124) 533)
- Li-ion batteries
Anode; Capacity; Elastic modulus; Silicide (Wolfenstine, J. (124) 241)
- Li-ion batteries
Cathode material; Thin film; Nickel oxide-vanadium oxide composite film; Pulsed laser deposition (Liu, H.-R. (124) 163)
- Li-ion battery
Anode material; Ca-ferrite; NaFeSnO₄; Cycle performance (Sharma, N. (124) 204)
- Li-ion battery
Oxides; Emulsion (Lala, S.M. (124) 118)
- Li-ion secondary batteries
Layered structure; Li(Li,Ni,Mn)O₂; Quenching (Kang, S.-H. (124) 533)
- Li/LiFePO₄ polymer cells and batteries
Polyethyleneoxide; Solvent-free preparation; Hot-pressing; Nanocomposite electrolyte membrane; Composite LiFePO₄ cathode (Appetecchi, G.B. (124) 246)
- LiBF₄
Lithium battery; Cathode material; LiFe_{0.5}Mn_{1.5}O₄; Cyclability; Capacity fade; Al₂O₃ coating (Eftekhari, A. (124) 182)
- LiF
Coal gas; Fluoride; HF; MCFC (Kawase, M. (124) 52)
- LiFe_{0.5}Mn_{1.5}O₄
Lithium battery; Cathode material; LiBF₄; Cyclability; Capacity fade; Al₂O₃ coating (Eftekhari, A. (124) 182)
- Lignin
Lead oxide; Lead-acid battery; Expander; Negative active material; Scanning electron microscope (Saito, K. (124) 266)
- LiMn₂O₄
Phase transition; Temperature hysteresis; Temperature dependence; Lithium ion battery; Battery material (Abiko, H. (124) 526)
- LiNi_{0.5}Mn_{0.5}O₂
All-solid-state cells; Oxysulfide glass; Solid electrolyte; Layer-structured cathode; Lithium secondary batteries (Mizuno, F. (124) 170)
- Lithium acetylde
Lithium surface; Passivating layer; Raman; Infrared; Lithium carbonate (Naudin, C. (124) 518)
- Lithium batteries
Chromium oxide; Cathode material (Ramasamy, R.P. (124) 155)
- Lithium battery
Cathode material; LiFe_{0.5}Mn_{1.5}O₄; LiBF₄; Cyclability; Capacity fade; Al₂O₃ coating (Eftekhari, A. (124) 182)

- Lithium battery
Sodium manganese oxide; Cathode material; Rapid discharge; Composite material (Hibino, M. (124) 143)
- Lithium carbonate
Lithium surface; Passivating layer; Raman; Infrared; Lithium acetylide (Naudin, C. (124) 518)
- Lithium insertion
LiTi₂(PO₄)₃ NASICON; Impedance spectroscopy; Lithium-ion battery; Storage capacity; Diffusion coefficient (Wang, G.X. (124) 231)
- Lithium intercalation
Natural graphite; Particle size (Zaghib, K. (124) 505)
- Lithium ion batteries
Polypyrrole; Chromium oxides (Ramasamy, R.P. (124) 197)
- Lithium ion battery
Graphite electrode; Propylene carbonate (Egashira, M. (124) 237)
- Lithium ion battery
Phase transition; Temperature hysteresis; Temperature dependence; LiMn₂O₄; Battery material (Abiko, H. (124) 526)
- Lithium rechargeable battery
High rate properties; Vanadium pentoxide; Porous electrode; Diffusion coefficient (Suzuki, S. (124) 513)
- Lithium secondary batteries
All-solid-state cells; Oxysulfide glass; Solid electrolyte; LiNi_{0.5}Mn_{0.5}O₂; Layer-structured cathode (Mizuno, F. (124) 170)
- Lithium surface
Passivating layer; Raman; Infrared; Lithium carbonate; Lithium acetylide (Naudin, C. (124) 518)
- Lithium tetrafluoroborate
Polymer electrolytes; Poly(vinyl alcohol); Lithium-ion battery; Ionic conductivity; Thermal analysis (Rajendran, S. (124) 225)
- Lithium-ion battery
Battery deterioration; Chemical transformation; Surface analysis; Solid electrolyte interface; TEM image (Araki, K. (124) 124)
- Lithium-ion battery
Electrolyte; Electrochemical stability; Cyclic voltammetry (Georén, P. (124) 213)
- Lithium-ion battery
LiTi₂(PO₄)₃ NASICON; Lithium insertion; Impedance spectroscopy; Storage capacity; Diffusion coefficient (Wang, G.X. (124) 231)
- Lithium-ion battery
Manganese oxide cathode; Rancieite; Manganese oxide; Mechanochemical synthesis; Soft X-ray absorption (Woo, S.-g. (124) 174)
- Lithium-ion battery
Polymer electrolytes; Poly(vinyl alcohol); Lithium tetrafluoroborate; Ionic conductivity; Thermal analysis (Rajendran, S. (124) 225)
- Lithium-ion polymer battery
Composite gel polymer electrolyte; TiO₂ filler; Cycling performance; High rate (Kim, H.-S. (124) 221)
- LiTi₂(PO₄)₃ NASICON
Lithium insertion; Impedance spectroscopy; Lithium-ion battery; Storage capacity; Diffusion coefficient (Wang, G.X. (124) 231)
- LiV₂O₅
Capacity degradation; AC impedance; Surface morphology (Moss, P.L. (124) 261)
- Low emission
Battery; Cycle life; Hybrid electric vehicle; Lead-acid; Valve regulated (Nakayama, Y. (124) 551)
- LSM
Cathode; Solid oxide fuel-cell; Microstructure; Interface; Electrode behaviour (Jiang, S.P. (124) 390)
- Manganese oxide cathode
Lithium-ion battery; Rancieite; Manganese oxide; Mechanochemical synthesis; Soft X-ray absorption (Woo, S.-g. (124) 174)
- Manganese oxide
Manganese oxide cathode; Lithium-ion battery; Rancieite; Mechanochemical synthesis; Soft X-ray absorption (Woo, S.-g. (124) 174)
- Mass distribution
Water distribution; PEFC; Flooding; Solid polymer electrolyte (Mench, M.M. (124) 90)
- Mass transfer
Nanowire; Fuel cell; Platinum-rhuthenium; Methanol electro-oxidation; Membrane-electrode assembly (Choi, W.C. (124) 420)
- Mathematical model
PEMFC; Two-phase flow; Water transport; Cathode flooding; Diffusion layer (Tüber, K. (124) 403)
- Mathematical model
Proton exchange membrane fuel cell; Water transport; Flow mode; Counterflow (Ge, S.-H. (124) 1)
- Matrix retaining electrolyte
Non-volatile solvent; *n*-Methyl-2-pyrrolidone (NMP); Phosphoric acid fuel cell (Yoon, K.H. (124) 47)
- MCFC
Coal gas; Fluoride; HF; LiF (Kawase, M. (124) 52)
- Mechanochemical synthesis
Manganese oxide cathode; Lithium-ion battery; Rancieite; Manganese oxide; Soft X-ray absorption (Woo, S.-g. (124) 174)
- Membrane electrode assembly
PEMFC; PEFC; Fuel cell; Fabrication; Catalyst ink; Kapton (Bender, G. (124) 114)
- Membrane
Fuel cell; Composite; Sulfonated hydrocarbon; Layered silicate; Proton conductivity (Chang, J.-H. (124) 18)
- Membrane-electrode assembly
Nanowire; Fuel cell; Platinum-rhuthenium; Methanol electro-oxidation; Mass transfer (Choi, W.C. (124) 420)
- Metallic monolith
Partial oxidation reactor; Methane; Electrically-heated catalyst; Palladium; Start-up time (Jung, H. (124) 76)
- Methane
Partial oxidation reactor; Metallic monolith; Electrically-heated catalyst; Palladium; Start-up time (Jung, H. (124) 76)
- Methanol electro-oxidation
Nanowire; Fuel cell; Platinum-rhuthenium; Mass transfer; Membrane-electrode assembly (Choi, W.C. (124) 420)
- Methanol steam reforming
Water gas shift; Fuel processing; Fuel cell; Hydrogen; Reformer (Choi, Y. (124) 432)
- Methanol
2-Propanol; Direct fuel cell (Cao, D. (124) 12)
- Micro-fabrication
Proton exchange membrane fuel cell; Miniature fuel cell; Silicon wafer; Cu/Au current collector (Yu, J. (124) 40)
- Microcapacitors
Micropower; Electrochemical capacitors; Conducting polymers; Photolithography (Sung, J.-H. (124) 343)
- Micropower
Electrochemical capacitors; Microcapacitors; Conducting polymers; Photolithography (Sung, J.-H. (124) 343)
- Microstructure
Hydrogen storage alloys; Rapidly quenched treatment; Electrochemical characteristics (Li, P. (124) 285)
- Microstructure
LSM; Cathode; Solid oxide fuel-cell; Interface; Electrode behaviour (Jiang, S.P. (124) 390)
- Miniature fuel cell
Proton exchange membrane fuel cell; Micro-fabrication; Silicon wafer; Cu/Au current collector (Yu, J. (124) 40)
- Miniature
PEMFC; Printed-circuit board; Planar array; Laminate construction; Rapid prototyping (O'Hayre, R. (124) 459)
- MnO₂
Xerogel; Ambigel; Pseudocapacitors (Reddy, R.N. (124) 330)

- MnO₂/MH battery
Ni/MH battery; Solid-state battery; Heteropolyacid hydrate; Solid electrolyte (Hatakeyama, K. (124) 559)
- Mobile applications
Direct alcohol fuel cell; Base metal anode catalyst; 2-Propanol fuel; Adsorbate (Kobayashi, T. (124) 34)
- Modeling
Aluminum–air cell; Analysis; Cell performance (Yang, S.H. (124) 572)
- Modeling
Polymer electrolyte membrane fuel cells (PEMFC); Simulation (Yerramalla, S. (124) 104)
- NaFeSnO₄
Li-ion battery; Anode material; Ca-ferrite; Cycle performance (Sharma, N. (124) 204)
- Nafion membrane
Electrochemical impedance spectroscopy; Double layer capacitor; Pore size distribution; Carbon electrodes (Lufrano, F. (124) 314)
- Nafion
Polypyrrole; DMFC; Proton exchange membrane (Smit, M.A. (124) 59)
- Nafion
PTFE; Proton exchange membrane; Impedance; Self-humidification (Liu, F. (124) 81)
- Nanocomposite electrolyte membrane
Polyethyleneoxide; Solvent-free preparation; Hot-pressing; Composite LiFePO₄ cathode; Li/LiFePO₄ polymer cells and batteries (Appetecchi, G.B. (124) 246)
- Nanowire
Fuel cell; Platinum–ruthenium; Methanol electro-oxidation; Mass transfer; Membrane–electrode assembly (Choi, W.C. (124) 420)
- Natural graphite
Jet-milling; Rate capability; Rhombohedral phase (Herstedt, M. (124) 191)
- Natural graphite
Lithium intercalation; Particle size (Zaghib, K. (124) 505)
- Negative active material
Lignin; Lead oxide; Lead–acid battery; Expander; Scanning electron microscope (Saito, K. (124) 266)
- Ni-metal hydride batteries
Hydride cathodes; Surface Pd films; Electrocatalysis; Hydriding/dehydriding reactions (Barsellini, D. (124) 309)
- Ni/MH battery
Solid-state battery; Heteropolyacid hydrate; Solid electrolyte; MnO₂/MH battery (Hatakeyama, K. (124) 559)
- Nickel oxide–vanadium oxide composite film
Li-ion batteries; Cathode material; Thin film; Pulsed laser deposition (Liu, H.-R. (124) 163)
- n*-Methyl-2-pyrrolidone (NMP)
Matrix retaining electrolyte; Non-volatile solvent; Phosphoric acid fuel cell (Yoon, K.H. (124) 47)
- Non-volatile solvent
Matrix retaining electrolyte; *n*-Methyl-2-pyrrolidone (NMP); Phosphoric acid fuel cell (Yoon, K.H. (124) 47)
- Oxides
Li-ion battery; Emulsion (Lala, S.M. (124) 118)
- Oxysulfide glass
All-solid-state cells; Solid electrolyte; LiNi_{0.5}Mn_{0.5}O₂; Layer-structured cathode; Lithium secondary batteries (Mizuno, F. (124) 170)
- Palladium
Partial oxidation reactor; Methane; Metallic monolith; Electrically-heated catalyst; Start-up time (Jung, H. (124) 76)
- Parametric study
PEM fuel cells; Fuel cell modelling; Computational modelling; Contact resistance (Berning, T. (124) 440)
- Partial oxidation reactor
Methane; Metallic monolith; Electrically-heated catalyst; Palladium; Start-up time (Jung, H. (124) 76)
- Particle size
Lithium intercalation; Natural graphite (Zaghib, K. (124) 505)
- Passivating layer
Lithium surface; Raman; Infrared; Lithium carbonate; Lithium acetylidyde (Naudin, C. (124) 518)
- PEFC
Mass distribution; Water distribution; Flooding; Solid polymer electrolyte (Mench, M.M. (124) 90)
- PEFC
PEMFC; Fuel cell; Membrane electrode assembly; Fabrication; Catalyst ink; Kapton (Bender, G. (124) 114)
- PEM fuel cell
Fuel cell modeling; Artificial neural network; Automotive applications (Jemei, S. (124) 479)
- PEM fuel cells
Fuel cell modelling; Computational modelling; Parametric study; Contact resistance (Berning, T. (124) 440)
- PEMFC
Fuel cell (Spinacé, E.V. (124) 426)
- PEMFC
Miniature; Printed-circuit board; Planar array; Laminate construction; Rapid prototyping (O'Hayre, R. (124) 459)
- PEMFC
PEFC; Fuel cell; Membrane electrode assembly; Fabrication; Catalyst ink; Kapton (Bender, G. (124) 114)
- PEMFC
Two-phase flow; Water transport; Cathode flooding; Diffusion layer; Mathematical model (Tüber, K. (124) 403)
- Perovskite catalyst
Air-electrode (Wang, X. (124) 278)
- Phase transition
Temperature hysteresis; Temperature dependence; Lithium ion battery; LiMn₂O₄; Battery material (Abiko, H. (124) 526)
- Phlogopite mica
Solid oxide fuel cell; Leak rates; Thermal cycle (Chou, Y.-S. (124) 473)
- Phosphoric acid fuel cell
Matrix retaining electrolyte; Non-volatile solvent; *n*-Methyl-2-pyrrolidone (NMP) (Yoon, K.H. (124) 47)
- Photolithography
Micropower; Electrochemical capacitors; Microcapacitors; Conducting polymers (Sung, J.-H. (124) 343)
- Planar array
PEMFC; Miniature; Printed-circuit board; Laminate construction; Rapid prototyping (O'Hayre, R. (124) 459)
- Platinum–ruthenium
Nanowire; Fuel cell; Methanol electro-oxidation; Mass transfer; Membrane–electrode assembly (Choi, W.C. (124) 420)
- Poly(vinyl alcohol)
Polymer electrolytes; Lithium tetrafluoroborate; Lithium-ion battery; Ionic conductivity; Thermal analysis (Rajendran, S. (124) 225)
- Polyaniline
Bipolar; Rechargeable; Dry battery; Zinc; Capacity (Karami, H. (124) 303)
- Polyaniline
Supercapacitor; Sulfonated poly(ether ether ketone); Solid electrolyte (Sivaraman, P. (124) 351)
- Polyethyleneoxide
Solvent-free preparation; Hot-pressing; Nanocomposite electrolyte membrane; Composite LiFePO₄ cathode; Li/LiFePO₄ polymer cells and batteries (Appetecchi, G.B. (124) 246)
- Polyhalide
Redox flow cell; Vanadium redox couple; Bromine; Tribromide (Skylas-Kazacos, M. (124) 299)

- Polyimide
 Polypyrrole; Composite; Conducting polymers; Potential step amperometry (Levine, K.L. (124) 355)
- Polymer electrolyte membrane fuel cells (PEMFC)
 Modeling; Simulation (Yerramalla, S. (124) 104)
- Polymer electrolyte
 Diffusion layer; Fuel cells (Dohle, H. (124) 371)
- Polymer electrolyte
 Regenerative fuel cell; PTFE; Water electrolysis (Ioroi, T. (124) 385)
- Polymer electrolytes
 Poly(vinyl alcohol); Lithium tetrafluoroborate; Lithium-ion battery; Ionic conductivity; Thermal analysis (Rajendran, S. (124) 225)
- Polymer
 Secondary lithium; Battery; Electrolyte; Ionic conductivity; Swelling (Chung, N.K. (124) 148)
- Polypyrrole
 Cyclic voltammetry; Electrochemical capacitor; Electro-conducting polymer; Pseudo-capacitance; Surface roughness (Noh, K.A. (124) 593)
- Polypyrrole
 Lithium ion batteries; Chromium oxides (Ramasamy, R.P. (124) 197)
- Polypyrrole
 Nafion; DMFC; Proton exchange membrane (Smit, M.A. (124) 59)
- Polypyrrole
 Polyimide; Composite; Conducting polymers; Potential step amperometry (Levine, K.L. (124) 355)
- Pore size distribution
 Electrochemical impedance spectroscopy; Double layer capacitor; Nafion membrane; Carbon electrodes (Lufrano, F. (124) 314)
- Porous electrode
 Lithium rechargeable battery; High rate properties; Vanadium pentoxide; Diffusion coefficient (Suzuki, S. (124) 513)
- Positive plate
 Automotive battery; Distribution of current and potential; Lead-acid battery (Guo, Y. (124) 271)
- Potential step amperometry
 Polypyrrole; Polyimide; Composite; Conducting polymers (Levine, K.L. (124) 355)
- Power fade
 Capacity fade; Impedance rise (Bloom, I. (124) 538)
- Power generation system
 Solid oxide fuel cell; Gas turbine; HAT cycle; Combined cycle (Kuchonthara, P. (124) 65)
- Printed-circuit board
 PEMFC; Miniature; Planar array; Laminate construction; Rapid prototyping (O'Hayre, R. (124) 459)
- 2-Propanol fuel
 Direct alcohol fuel cell; Base metal anode catalyst; Adsorbate; Mobile applications (Kobayashi, T. (124) 34)
- 2-Propanol
 Methanol; Direct fuel cell (Cao, D. (124) 12)
- Propylene carbonate
 Lithium ion battery; Graphite electrode (Egashira, M. (124) 237)
- Proton conductivity
 Fuel cell; Membrane; Composite; Sulfonated hydrocarbon; Layered silicate (Chang, J.-H. (124) 18)
- Proton exchange membrane fuel cell
 Miniature fuel cell; Micro-fabrication; Silicon wafer; Cu/Au current collector (Yu, J. (124) 40)
- Proton exchange membrane fuel cell
 Water transport; Mathematical model; Flow mode; Counterflow (Ge, S.-H. (124) 1)
- Proton exchange membrane
 Nafion; Polypyrrole; DMFC (Smit, M.A. (124) 59)
- Proton exchange membrane
 PTFE; Nafion; Impedance; Self-humidification (Liu, F. (124) 81)
- PROX
 Pt; CO oxidation; Alumina; Infrared thermography; Deactivation; Water-pretreatment; Fuel cells (Son, I. H. (124) 415)
- Pseudo-capacitance
 Cyclic voltammetry; Electrochemical capacitor; Electro-conducting polymer; Polypyrrole; Surface roughness (Noh, K.A. (124) 593)
- Pseudocapacitors
 MnO₂; Xerogel; Ambigel (Reddy, R.N. (124) 330)
- Pt
 CO oxidation; Alumina; PROX; Infrared thermography; Deactivation; Water-pretreatment; Fuel cells (Son, I. H. (124) 415)
- PTFE
 Nafion; Proton exchange membrane; Impedance; Self-humidification (Liu, F. (124) 81)
- PTFE
 Regenerative fuel cell; Polymer electrolyte; Water electrolysis (Ioroi, T. (124) 385)
- Pulse power characterization test
 Accelerated power degradation; Statistical experimental design (Thomas, E.V. (124) 254)
- Pulsed laser deposition
 Li-ion batteries; Cathode material; Thin film; Nickel oxide-vanadium oxide composite film (Liu, H.-R. (124) 163)
- Quenching
 Li-ion secondary batteries; Layered structure; Li(Li,Ni,Mn)O₂ (Kang, S.-H. (124) 533)
- Radiative heat transfer
 Thermal-fluid modeling; Solid oxide fuel cells (Murthy, S. (124) 453)
- Raman
 Lithium surface; Passivating layer; Infrared; Lithium carbonate; Lithium acetylide (Naudin, C. (124) 518)
- Rancieite
 Manganese oxide cathode; Lithium-ion battery; Manganese oxide; Mechanochemical synthesis; Soft X-ray absorption (Woo, S.-g. (124) 174)
- Rapid discharge
 Sodium manganese oxide; Cathode material; Lithium battery; Composite material (Hibino, M. (124) 143)
- Rapid prototyping
 PEMFC; Miniature; Printed-circuit board; Planar array; Laminate construction (O'Hayre, R. (124) 459)
- Rapidly quenched treatment
 Hydrogen storage alloys; Electrochemical characteristics; Microstructure (Li, P. (124) 285)
- Rate capability
 Natural graphite; Jet-milling; Rhombohedral phase (Herstedt, M. (124) 191)
- Rechargeable lithium battery
 Self-assembled monolayer; Diphenyl disulfide; Cathode material; Coulombic efficiency; Capacity (Maddanmath, T. (124) 133)
- Rechargeable
 Polyaniline; Bipolar; Dry battery; Zinc; Capacity (Karami, H. (124) 303)
- Redox flow cell
 Vanadium redox couple; Bromine; Polyhalide; Tribromide (Skylas-Kazacos, M. (124) 299)
- Reformer
 Water gas shift; Fuel processing; Methanol steam reforming; Fuel cell; Hydrogen (Choi, Y. (124) 432)
- Regenerative fuel cell
 Polymer electrolyte; PTFE; Water electrolysis (Ioroi, T. (124) 385)
- Rhombohedral phase
 Natural graphite; Jet-milling; Rate capability (Herstedt, M. (124) 191)

- Scanning electron microscope
Lignin; Lead oxide; Lead-acid battery; Expander; Negative active material (Saito, K. (124) 266)
- Secondary lithium
Battery; Polymer; Electrolyte; Ionic conductivity; Swelling (Chung, N.K. (124) 148)
- Self-assembled monolayer
Diphenyl disulfide; Cathode material; Rechargeable lithium battery; Coulombic efficiency; Capacity (Maddanimath, T. (124) 133)
- Self-humidification
PTFE; Nafion; Proton exchange membrane; Impedance (Liu, F. (124) 81)
- Silicide
Anode; Li-ion batteries; Capacity; Elastic modulus (Wolfenstine, J. (124) 241)
- Silicon wafer
Proton exchange membrane fuel cell; Miniature fuel cell; Micro-fabrication; Cu/Au current collector (Yu, J. (124) 40)
- Simulation
Chemical/electrochemical reactions; Heat/mass transfer; Tubular SOFC (Li, P.-W. (124) 487)
- Simulation
Polymer electrolyte membrane fuel cells (PEMFC); Modeling (Yerramalla, S. (124) 104)
- Sintering
Ceramic; Ceria; Electrolyte; Solid oxide fuel cell; Ball-milling (Zhang, T.S. (124) 26)
- Sodium manganese oxide
Cathode material; Lithium battery; Rapid discharge; Composite material (Hibino, M. (124) 143)
- Soft X-ray absorption
Manganese oxide cathode; Lithium-ion battery; Rancieite; Manganese oxide; Mechanochemical synthesis (Woo, S.-g. (124) 174)
- Solid electrolyte interface
Lithium-ion battery; Battery deterioration; Chemical transformation; Surface analysis; TEM image (Araki, K. (124) 124)
- Solid electrolyte
All-solid-state cells; Oxysulfide glass; $\text{LiNi}_{0.5}\text{Mn}_{0.5}\text{O}_2$; Layer-structured cathode; Lithium secondary batteries (Mizuno, F. (124) 170)
- Solid electrolyte
Ni/MH battery; Solid-state battery; Heteropolyacid hydrate; MnO_2/MH battery (Hatakeyama, K. (124) 559)
- Solid electrolyte
Supercapacitor; Polyaniline; Sulfonated poly(ether ether ketone) (Sivaraman, P. (124) 351)
- Solid oxide fuel cell
Ceramic; Sintering; Ceria; Electrolyte; Ball-milling (Zhang, T.S. (124) 26)
- Solid oxide fuel cell
Gas turbine; HAT cycle; Combined cycle; Power generation system (Kuchonthara, P. (124) 65)
- Solid oxide fuel cell
Phlogopite mica; Leak rates; Thermal cycle (Chou, Y.-S. (124) 473)
- Solid oxide fuel cells (SOFCs)
Sr- and Mg-doped lanthanum gallate (LSGM); Ytria-stabilized zirconia (YSZ) (Kesapragada, S.V. (124) 499)
- Solid oxide fuel cells
Thermal-fluid modeling; Radiative heat transfer (Murthy, S. (124) s453)
- Solid oxide fuel-cell
LSM; Cathode; Microstructure; Interface; Electrode behaviour (Jiang, S.P. (124) 390)
- Solid polymer electrolyte
Mass distribution; Water distribution; PEFC; Flooding (Mench, M.M. (124) 90)
- Solid-state battery
Ni/MH battery; Heteropolyacid hydrate; Solid electrolyte; MnO_2/MH battery (Hatakeyama, K. (124) 559)
- Soluble polypyrrole
Tantalum electrolytic capacitors; Electrolyte; Surfactant; Coupling agent (Jang, K.S. (124) 338)
- Solvent-free preparation
Polyethyleneoxide; Hot-pressing; Nanocomposite electrolyte membrane; Composite LiFePO_4 cathode; Li/LiFePO_4 polymer cells and batteries (Appetecchi, G.B. (124) 246)
- Specific capacitance
Carbon nanotubes; ECDL capacitor; Activated carbon; Supercapacitors (Emmenegger, Ch. (124) 321)
- Sr- and Mg-doped lanthanum gallate (LSGM)
Solid oxide fuel cells (SOFCs); Ytria-stabilized zirconia (YSZ) (Kesapragada, S.V. (124) 499)
- Start-up time
Partial oxidation reactor; Methane; Metallic monolith; Electrically-heated catalyst; Palladium (Jung, H. (124) 76)
- Statistical experimental design
Accelerated power degradation; Pulse power characterization test (Thomas, E.V. (124) 254)
- Steam reforming
Ethanol; Cobalt catalyst; Hydrogen production; Fuel cell (Batista, M.S. (124) 99)
- Storage capacity
 $\text{LiTi}_2(\text{PO}_4)_3$; NASICON; Lithium insertion; Impedance spectroscopy; Lithium-ion battery; Diffusion coefficient (Wang, G.X. (124) 231)
- Sulfonated hydrocarbon
Fuel cell; Membrane; Composite; Layered silicate; Proton conductivity (Chang, J.-H. (124) 18)
- Sulfonated poly(ether ether ketone)
Supercapacitor; Polyaniline; Solid electrolyte (Sivaraman, P. (124) 351)
- Supercapacitor
Polyaniline; Sulfonated poly(ether ether ketone); Solid electrolyte (Sivaraman, P. (124) 351)
- Supercapacitors
Carbon nanotubes; Specific capacitance; ECDL capacitor; Activated carbon (Emmenegger, Ch. (124) 321)
- Surface analysis
Lithium-ion battery; Battery deterioration; Chemical transformation; Solid electrolyte interface; TEM image (Araki, K. (124) 124)
- Surface morphology
Capacity degradation; LiV_2O_5 ; AC impedance (Moss, P.L. (124) 261)
- Surface Pd films
Ni-metal hydride batteries; Hydride cathodes; Electrocatalysis; Hydriding/dehydriding reactions (Barsellini, D. (124) 309)
- Surface roughness
Cyclic voltammetry; Electrochemical capacitor; Electro-conducting polymer; Polypyrrole; Pseudo-capacitance (Noh, K.A. (124) 593)
- Surfactant
Soluble polypyrrole; Tantalum electrolytic capacitors; Electrolyte; Coupling agent (Jang, K.S. (124) 338)
- Swelling
Secondary lithium; Battery; Polymer; Electrolyte; Ionic conductivity (Chung, N.K. (124) 148)
- Tantalum electrolytic capacitors
Soluble polypyrrole; Electrolyte; Surfactant; Coupling agent (Jang, K.S. (124) 338)
- TEM image
Lithium-ion battery; Battery deterioration; Chemical transformation; Surface analysis; Solid electrolyte interface (Araki, K. (124) 124)
- Temperature dependence
Phase transition; Temperature hysteresis; Lithium ion battery; LiMn_2O_4 ; Battery material (Abiko, H. (124) 526)
- Temperature hysteresis
Phase transition; Temperature dependence; Lithium ion battery; LiMn_2O_4 ; Battery material (Abiko, H. (124) 526)

- Thermal analysis
Polymer electrolytes; Poly(vinyl alcohol); Lithium tetrafluoroborate; Lithium-ion battery; Ionic conductivity (Rajendran, S. (124) 225)
- Thermal cycle
Phlogopite mica; Solid oxide fuel cell; Leak rates (Chou, Y.-S. (124) 473)
- Thermal fluid
Thermoelectric generation; Thermoelectric device; Heat transfer; Bismuth telluride (Suzuki, R.O. (124) 293)
- Thermal-fluid modeling
Solid oxide fuel cells; Radiative heat transfer (Murthy, S. (124) 453)
- Thermoelectric device
Thermoelectric generation; Heat transfer; Thermal fluid; Bismuth telluride (Suzuki, R.O. (124) 293)
- Thermoelectric generation
Thermoelectric device; Heat transfer; Thermal fluid; Bismuth telluride (Suzuki, R.O. (124) 293)
- Thin film
Li-ion batteries; Cathode material; Nickel oxide-vanadium oxide composite film; Pulsed laser deposition (Liu, H.-R. (124) 163)
- TiO₂ filler
Composite gel polymer electrolyte; Lithium-ion polymer battery; Cycling performance; High rate (Kim, H.-S. (124) 221)
- Tribromide
Redox flow cell; Vanadium redox couple; Bromine; Polyhalide (Skylas-Kazacos, M. (124) 299)
- Tubular SOFC
Chemical/electrochemical reactions; Heat/mass transfer; Stimulation (Li, P.-W. (124) 487)
- Two-phase flow
PEMFC; Water transport; Cathode flooding; Diffusion layer; Mathematical model (Tüber, K. (124) 403)
- Valve regulated
Battery; Cycle life; Hybrid electric vehicle; Lead-acid; Low emission (Nakayama, Y. (124) 551)
- Vanadium pentoxide
Lithium rechargeable battery; High rate properties; Porous electrode; Diffusion coefficient (Suzuki, S. (124) 513)
- Vanadium redox couple
Redox flow cell; Bromine; Polyhalide; Tribromide (Skylas-Kazacos, M. (124) 299)
- Water distribution
Mass distribution; PEFC; Flooding; Solid polymer electrolyte (Mench, M.M. (124) 90)
- Water electrolysis
Regenerative fuel cell; Polymer electrolyte; PTFE (Ioroi, T. (124) 385)
- Water gas shift
Fuel processing; Methanol steam reforming; Fuel cell; Hydrogen; Reformer (Choi, Y. (124) 432)
- Water transport
PEMFC; Two-phase flow; Cathode flooding; Diffusion layer; Mathematical model (Tüber, K. (124) 403)
- Water transport
Proton exchange membrane fuel cell; Mathematical model; Flow mode; Counterflow (Ge, S.-H. (124) 1)
- Water-pretreatment
Pt; CO oxidation; Alumina; PROX; Infrared thermography; Deactivation; Fuel cells (Son, I. H. (124) 415)
- Xerogel
MnO₂; Ambigel; Pseudocapacitors (Reddy, R.N. (124) 330)
- Yttria-stabilized zirconia (YSZ)
Sr- and Mg-doped lanthanum gallate (LSGM); Solid oxide fuel cells (SOFCs) (Kesapragada, S.V. (124) 499)
- Zinc
Polyaniline; Bipolar; Rechargeable; Dry battery; Capacity (Karami, H. (124) 303)