

Subject Index of Volume 166

- Acetone oligomerization
Polypropylene membrane; Nickel–cadmium cell; Electrochemical properties (Ciszewski, A. (166) 526)
- Activation
DMFCs; Pt–Ru catalyst; Sensitization (Zhu, J. (166) 331)
- Activation overpotential
Proton exchange membrane fuel cell; Shoulder/channel ratio; Electrochemical reaction; Cell performance (Chiang, M.-S. (166) 362)
- Adjoint
SOFC; Fuel cell; Design; Sensitivity analysis (Kapadia, S. (166) 376)
- Air exposure
Hard carbon; Carbon coating; Irreversible capacity; Negative-electrode material; Lithium-ion battery (Lee, J.-H. (166) 250)
- Alcohol-reduction process
PtRu/C; PtSn/C; PtSnRu/C; Methanol oxidation; Ethanol oxidation; Fuel cell (Neto, A.O. (166) 87)
- Al-doped spinels
Cycling performance; Oxygen deficiency; Mn dissolution; Lithium-ion batteries (Xia, Y. (166) 485)
- Alternate energy systems
Inverter; Ripple (dc-bus voltage ripple); DSP (Shireen, W. (166) 445)
- Aluminate cement
Graphite; Corrosion; Fuel cell; Bipolar plate (Shen, C. (166) 419)
- Aluminium alloy
PEMFCs; Endplates; Surface treatments (Fu, Y. (166) 435)
- Aluminum
Hypochlorite; Catalytic metals; Zinc; Batteries; Cells (Cardenas-Valencia, A.M. (166) 273)
- Aluminum
Lithium ion battery; Tin oxide; Anode; Surface modification (Lei, X. (166) 509)
- Aluminum electrolytic capacitor
Hyperbranched polymer; Poly(3,4-ethylenedioxythiophene) (Nogami, K. (166) 584)
- Anode
Lithium ion battery; Aluminum; Tin oxide; Surface modification (Lei, X. (166) 509)
- Anode
Lithium ion battery; Current collector; Electrodeposition (Jiang, T. (166) 503)
- Anode
Solid oxide fuel cell; Y-doped SrTiO₃; Electrical conductivity (Li, X. (166) 47)
- Anode functional layer (AFL)
Solid oxide fuel cell (SOFC); Gradient anode; Ni–YSZ cermet; Microstructure; Cell performance (Kong, J. (166) 337)
- Asymmetric capacitor
Li-ion; Capacitor; Nanogate carbon; Automotive (Aida, T. (166) 462)
- Automotive
Li-ion; Capacitor; Asymmetric capacitor; Nanogate carbon (Aida, T. (166) 462)
- Balance-of-plant
Proton-exchange membrane fuel cell; Cathode inlet manifold; Polarization curve; Power; Efficiency (Kim, S.Y. (166) 430)
- Batteries
Goal-seeking; Decision-maker; Coordinated discharge (Sastry, S. (166) 284)
- Batteries
Hypochlorite; Catalytic metals; Zinc; Aluminum; Cells (Cardenas-Valencia, A.M. (166) 273)
- Batteries
Li-ion; Cathode; V₂O₅; Conducting polymer; Hybrid material (Boyano, I. (166) 471)
- Biomass fuel
Mechanistic modelling; Tubular SOFC; Cathode-supported; Synthesis gas (Suwanwarangkul, R. (166) 386)
- Biomass gasification
Molten carbonate fuel cell; Computational fluid dynamics; Nanotechnology; Carbon; Fluidization (Gidaspow, D. (166) 400)
- Bipolar plate
Aluminate cement; Graphite; Corrosion; Fuel cell (Shen, C. (166) 419)
- Capacitance
Electric double layer capacitor; Ionic liquid electrolyte; Ionic dissociation; Composite electrode (Nagao, Y. (166) 595)
- Capacitor
Li-ion; Asymmetric capacitor; Nanogate carbon; Automotive (Aida, T. (166) 462)
- Capacity loss simulation
Lithium-ion battery; Carbon anode; Self-discharge; Storage (Ramasamy, R.P. (166) 266)
- Capacity retention
Lithium manganese oxide; Lithium-ion battery; Hydrofluoric acid; Zirconium oxide particles (Park, S.B. (166) 219)
- Carbon
Molten carbonate fuel cell; Biomass gasification; Computational fluid dynamics; Nanotechnology; Fluidization (Gidaspow, D. (166) 400)
- Carbon aerogel
Cellulose acetate; Electrocatalyst support; Platinum nanoparticles; PEM fuel cell (Guilminot, E. (166) 104)
- Carbon anode
Lithium-ion battery; Self-discharge; Capacity loss simulation; Storage (Ramasamy, R.P. (166) 266)
- Carbon coating
Hard carbon; Irreversible capacity; Air exposure; Negative-electrode material; Lithium-ion battery (Lee, J.-H. (166) 250)
- Carbon distribution
LiFePO₄-C composite; Vibrant type ball-milling; Microwave heating; Particle size; Discharge capacity; Lithium battery (Song, M.-S. (166) 260)
- Carbon nano-tubes
Hydrothermal synthesis; Nano-mixed oxides; Electrochemical capacitor; Cyclic voltammetry (Jayalakshmi, M. (166) 578)

- Catalyst
Proton exchange membrane fuel cell; Reformer; Methanol–steam reforming reaction; Conversion rate; Yield rate (Huang, C.-Y. (166) 450)
- Catalyst
Solid oxide fuel cell; Nanoparticle; Ruthenium; Lanthanum chromite (Madsen, B.D. (166) 64)
- Catalyst-gradient
Proton-exchange membrane fuel cell; Platinum usage (Prasanna, M. (166) 53)
- Catalytic metals
Hypochlorite; Zinc; Aluminum; Batteries; Cells (Cardenas-Valencia, A.M. (166) 273)
- Cathode
Batteries; Li-ion; V_2O_5 ; Conducting polymer; Hybrid material (Boyano, I. (166) 471)
- Cathode
Lithium ion battery; $Li_{1+z}Ni_{1-x-y}Co_xM_yO_2$; CO_2 ; Ni valence (Shizuka, K. (166) 233)
- Cathode inlet manifold
Proton-exchange membrane fuel cell; Balance-of-plant; Polarization curve; Power; Efficiency (Kim, S.Y. (166) 430)
- Cathode material
 $Li_{1.05}Ni_{0.35}Co_{0.25}Mn_{0.4}O_2$; Sol–gel coating; $LiCoO_2$; Lithium ion battery (Son, J.T. (166) 343)
- Cathode material
 $LiFePO_4$; Mechanical activation; Rechargeable lithium battery; Discharge capacity; Cycling performance (Kim, J.-K. (166) 211)
- Cathode-supported
Mechanistic modelling; Tubular SOFC; Synthesis gas; Biomass fuel (Suwanwarangkul, R. (166) 386)
- Cell performance
Proton exchange membrane fuel cell; Shoulder/channel ratio; Electrochemical reaction; Activation overpotential (Chiang, M.-S. (166) 362)
- Cell performance
Solid oxide fuel cell (SOFC); Gradient anode; Anode functional layer (AFL); Ni–YSZ cermet; Microstructure (Kong, J. (166) 337)
- Cells
Hypochlorite; Catalytic metals; Zinc; Aluminum; Batteries (Cardenas-Valencia, A.M. (166) 273)
- Cellulose acetate
Carbon aerogel; Electrocatalyst support; Platinum nanoparticles; PEM fuel cell (Guilminot, E. (166) 104)
- CH_4 conversion ratio
Tubular type reformer; Molten carbonate fuel cell (MCFC); S/C ratio (steam to carbon ratio); CO conversion ratio; Efficiency of reformer (Seo, H.-K. (166) 165)
- Characterization
Nano-nickel; Electrodeposition; Ethanol oxidation (Jin, G.-P. (166) 80)
- Chemical manganese dioxide
Factorial designs; Solid characterisation (Pagnanelli, F. (166) 567)
- Clamping pressure
Proton exchange membrane fuel cell; Electro-physical properties (Chang, W.R. (166) 149)
- CO conversion ratio
Tubular type reformer; Molten carbonate fuel cell (MCFC); S/C ratio (steam to carbon ratio); CH_4 conversion ratio; Efficiency of reformer (Seo, H.-K. (166) 165)
- CO poisoning
Transient model; Two-phase; Oxygen bleeding; Platinum–ruthenium (Shah, A.A. (166) 1)
- CO_2
Lithium ion battery; Cathode; $Li_{1+z}Ni_{1-x-y}Co_xM_yO_2$; Ni valence (Shizuka, K. (166) 233)
- Composite electrode
Electric double layer capacitor; Ionic liquid electrolyte; Capacitance; Ionic dissociation (Nagao, Y. (166) 595)
- Composite electrode
Polyaniline; Ruthenium oxide; Supercapacitor; Pseudocapacitance; Specific capacitance (Song, R.Y. (166) 297)
- Composite polymer electrolyte
Mesoporous; Lithium aluminate (Hu, L. (166) 226)
- Computational fluid dynamics
Molten carbonate fuel cell; Biomass gasification; Nanotechnology; Carbon; Fluidization (Gidaspow, D. (166) 400)
- Conducting polymer
Batteries; Li-ion; Cathode; V_2O_5 ; Hybrid material (Boyano, I. (166) 471)
- Conductivity
Lithium secondary batteries; $Li_4Ti_5O_{12}$; High tap-density; Spherical (Gao, J. (166) 255)
- Constant current discharge
Silver–zinc battery; Model; Porous electrodes; Multiple electrode reactions (Venkatraman, M. (166) 537)
- Conversion rate
Proton exchange membrane fuel cell; Reformer; Methanol–steam reforming reaction; Catalyst; Yield rate (Huang, C.-Y. (166) 450)
- Coordinated discharge
Goal-seeking; Decision-maker; Batteries (Sastry, S. (166) 284)
- Copper substrate
Lead electrodeposition; Sorbitol; Voltammetry; Scanning electron microscopy; Energy-dispersive X-ray spectroscopy (Siqueira, J.L.P. (166) 519)
- Corrosion
Aluminate cement; Graphite; Fuel cell; Bipolar plate (Shen, C. (166) 419)
- Current collector
Lithium ion battery; Anode; Electrodeposition (Jiang, T. (166) 503)
- Cyclic voltammetry
Hydrothermal synthesis; Nano-mixed oxides; Electrochemical capacitor; Carbon nano-tubes (Jayalakshmi, M. (166) 578)
- Cycling performance
Al-doped spinels; Oxygen deficiency; Mn dissolution; Lithium-ion batteries (Xia, Y. (166) 485)
- Cycling performance
 $LiFePO_4$; Mechanical activation; Rechargeable lithium battery; Discharge capacity; Cathode material (Kim, J.-K. (166) 211)
- Cylindrical fuel cell
Expanded graphite; Diffusion layer; DMFC (Yazici, M.S. (166) 137)
- Decision-maker
Goal-seeking; Batteries; Coordinated discharge (Sastry, S. (166) 284)
- Design
SOFC; Fuel cell; Adjoint; Sensitivity analysis (Kapadia, S. (166) 376)
- DFFC
Direct-flame solid oxide fuel cell; SOFC; Hydrocarbon; Reforming; Partial oxidation (Kronemayer, H. (166) 120)
- Different buffer solutions
Direct methanol fuel cell; Methanol electrooxidation; Pt–Ru/C nanoparticle electrocatalyst (Wang, Z.-B. (166) 317)
- Diffusion
Mass transfer layer; DMFC; Expanded graphite; Perforation (Yazici, M.S. (166) 424)
- Diffusion layer
Expanded graphite; Cylindrical fuel cell; DMFC (Yazici, M.S. (166) 137)
- Direct methanol fuel cell
Methanol electrooxidation; Pt–Ru/C nanoparticle electrocatalyst; Different buffer solutions (Wang, Z.-B. (166) 317)
- Direct methanol fuel cell
Porous media; Water transport; Dry-out; Two-phase flow (Shi, M.H. (166) 303)
- Direct methanol fuel cell
Sputter-deposition; Mass activities (Makino, K. (166) 30)
- Direct methanol fuel cell peak power
Polyaniline, Sol–gel modified Nafion; Methanol crossover; Membrane electrode assembly (Chen, C.-Y. (166) 324)

- Direct-flame solid oxide fuel cell
 DFFC; SOFC; Hydrocarbon; Reforming; Partial oxidation (Kronemayer, H. (166) 120)
- Discharge capacity
 LiFePO₄; Mechanical activation; Rechargeable lithium battery; Cathode material; Cycling performance (Kim, J.-K. (166) 211)
- Discharge capacity
 LiFePO₄-C composite; Vibrant type ball-milling; Microwave heating; Particle size; Carbon distribution; Lithium battery (Song, M.-S. (166) 260)
- DMFC
 Expanded graphite; Diffusion layer; Cylindrical fuel cell (Yazici, M.S. (166) 137)
- DMFC
 Mass transfer layer; Diffusion; Expanded graphite; Perforation (Yazici, M.S. (166) 424)
- DMFCs
 Pt-Ru catalyst; Sensitization; Activation (Zhu, J. (166) 331)
- Dry-out
 Direct methanol fuel cell; Porous media; Water transport; Two-phase flow (Shi, M.H. (166) 303)
- DSP
 Alternate energy systems; Inverter; Ripple (dc-bus voltage ripple) (Shireen, W. (166) 445)
- Dy
 Molten carbonate fuel cell; Ni-Dy alloys; NiO solubility; Electrochemical polarization (Liu, Z.P. (166) 348)
- Dynamic model
 Hydrogen production; Steam electrolyser; SOEC; Intermediate temperature; Planar (Udagawa, J. (166) 127)
- Efficiency
 Proton-exchange membrane fuel cell; Balance-of-plant; Cathode inlet manifold; Polarization curve; Power (Kim, S.Y. (166) 430)
- Efficiency
 Solid oxide fuel cell; Gas turbine; Hybrid system; Part-load performance; Power (Yang, J.S. (166) 155)
- Efficiency of reformer
 Tubular type reformer; Molten carbonate fuel cell (MCFC); S/C ratio (steam to carbon ratio); CH₄ conversion ratio; CO conversion ratio (Seo, H.-K. (166) 165)
- Electric double layer capacitor
 Ionic liquid electrolyte; Capacitance; Ionic dissociation; Composite electrode (Nagao, Y. (166) 595)
- Electrical conductivity
 Hebb-Wagner polarization; Oxygen ion conductivity; Oxygen vacancy; Lanthanum gallate (Wang, S. (166) 22)
- Electrical conductivity
 Solid oxide fuel cell; Anode; Y-doped SrTiO₃ (Li, X. (166) 47)
- Electrocatalyst
 Hydrogen production; Methanol electrolysis; Hydrogen evolution; Tungsten carbide (Hu, Z. (166) 458)
- Electrocatalyst support
 Cellulose acetate; Carbon aerogel; Platinum nanoparticles; PEM fuel cell (Guilminot, E. (166) 104)
- Electrochemical capacitor
 Hydrothermal synthesis; Nano-mixed oxides; Carbon nano-tubes; Cyclic voltammetry (Jayalakshmi, M. (166) 578)
- Electrochemical polarization
 Molten carbonate fuel cell; Dy; Ni-Dy alloys; NiO solubility (Liu, Z.P. (166) 348)
- Electrochemical properties
 Polypropylene membrane; Nickel-cadmium cell; Acetone oligomerization (Ciszewski, A. (166) 526)
- Electrochemical reaction
 Proton exchange membrane fuel cell; Shoulder/channel ratio; Activation overpotential; Cell performance (Chiang, M.-S. (166) 362)
- Electrodeposition
 Lithium ion battery; Anode; Current collector (Jiang, T. (166) 503)
- Electrodeposition
 Nano-nickel; Characterization; Ethanol oxidation (Jin, G.-P. (166) 80)
- Electrolyte
 Lithium bis(oxalato)borate; Salt; LiMn₂O₄ (Yu, B.-T. (166) 499)
- Electrolyte
 SOFC; LSGM; GNP (Lee, D. (166) 35)
- Electrolytic deposition
 Nano-sized Co₃O₄; Thin film; Raman spectroscopy (Liu, H.-C. (166) 478)
- Electro-physical properties
 Proton exchange membrane fuel cell; Clamping pressure (Chang, W.R. (166) 149)
- Endplates
 PEMFCs; Aluminium alloy; Surface treatments (Fu, Y. (166) 435)
- Energy-dispersive X-ray spectroscopy
 Lead electrodeposition; Copper substrate; Sorbitol; Voltammetry; Scanning electron microscopy (Siqueira, J.L.P. (166) 519)
- Environmental contamination
 Proton exchange membrane fuel cell (PEMFC); NO_x; SO₂ (Jing, F. (166) 172)
- Eosin Y
 Photosensitized; Silica gel; Hydrogen evolution; Visible-light irradiation (Zhang, X. (166) 74)
- Ethanol oxidation
 Nano-nickel; Electrodeposition; Characterization (Jin, G.-P. (166) 80)
- Ethanol oxidation
 PtRu/C; PtSn/C; PtSnRu/C; Alcohol-reduction process; Methanol oxidation; Fuel cell (Neto, A.O. (166) 87)
- Expanded graphite
 Diffusion layer; Cylindrical fuel cell; DMFC (Yazici, M.S. (166) 137)
- Expanded graphite
 Mass transfer layer; Diffusion; DMFC; Perforation (Yazici, M.S. (166) 424)
- Factorial designs
 Chemical manganese dioxide; Solid characterisation (Pagnanelli, F. (166) 567)
- Fluidization
 Molten carbonate fuel cell; Biomass gasification; Computational fluid dynamics; Nanotechnology; Carbon (Gidaspow, D. (166) 400)
- Fuel buffer/distributor
 Miniature fuel cell; PEMFC stack; Small hydrogen storage canister (Zhang, X. (166) 441)
- Fuel cell
 Aluminate cement; Graphite; Corrosion; Bipolar plate (Shen, C. (166) 419)
- Fuel cell
 Hydrogen evolution reaction (HER); PtPd-WC/C electrocatalyst; Tungsten carbide (WC) (Wu, M. (166) 310)
- Fuel cell
 Methanol conversion; Packed-bed reformer; Wall-coated reformer (Lee, M.-t. (166) 194)
- Fuel cell
 PtRu/C; PtSn/C; PtSnRu/C; Alcohol-reduction process; Methanol oxidation; Ethanol oxidation (Neto, A.O. (166) 87)
- Fuel cell
 SOFC; Design; Adjoint; Sensitivity analysis (Kapadia, S. (166) 376)
- Fuel cells
 Nickel solubility; MCFC (Bodén, A. (166) 59)
- Fuel cells
 Platinum electrodeposition; Graphite functionalization; Scharifker and Hills electrocrystallisation model (Massoni, N. (166) 68)
- Fuel processing
 Portable power; Microreactor; PEMFC; Methanol steam reformer; Thermal management (Shah, K. (166) 177)
- Gas diffusion layer
 Polymer electrolyte fuel cells; Micro-porous layer; Graded porosity (Tang, H. (166) 41)

- Gas turbine
Solid oxide fuel cell; Hybrid system; Part-load performance; Efficiency; Power (Yang, J.S. (166) 155)
- Gel polymer electrolyte
Membrane; Phase inversion; Interpenetrating polymer network; Ionic conductivity (Wang, Y.-J. (166) 202)
- GNP
SOFC; LSGM; Electrolyte (Lee, D. (166) 35)
- Goal-seeking
Decision-maker; Batteries; Coordinated discharge (Sastry, S. (166) 284)
- Graded porosity
Polymer electrolyte fuel cells; Micro-porous layer; Gas diffusion layer (Tang, H. (166) 41)
- Gradient anode
Solid oxide fuel cell (SOFC); Anode functional layer (AFL); Ni-YSZ cermet; Microstructure; Cell performance (Kong, J. (166) 337)
- Graphite
Aluminate cement; Corrosion; Fuel cell; Bipolar plate (Shen, C. (166) 419)
- Graphite functionalization
Platinum electrodeposition; Fuel cells; Scharifker and Hills electrocrystallisation model (Massoni, N. (166) 68)
- Hard carbon
Carbon coating; Irreversible capacity; Air exposure; Negative-electrode material; Lithium-ion battery (Lee, J.-H. (166) 250)
- Hebb–Wagner polarization
Electrical conductivity; Oxygen ion conductivity; Oxygen vacancy; Lanthanum gallate (Wang, S. (166) 22)
- High rate performance
Nanocrystalline anatase TiO₂; Lithium insertion (Jiang, C. (166) 239)
- High tap-density
Lithium secondary batteries; Li₄Ti₅O₁₂; Spherical; Conductivity (Gao, J. (166) 255)
- Hollow sphere
Spinel Li₄Ti₅O₁₂; Li-ion battery; Rate capability (Jiang, C. (166) 514)
- Hybrid material
Batteries; Li-ion; Cathode; V₂O₅; Conducting polymer (Boyano, I. (166) 471)
- Hybrid system
Solid oxide fuel cell; Gas turbine; Part-load performance; Efficiency; Power (Yang, J.S. (166) 155)
- Hydrocarbon
Direct-flame solid oxide fuel cell; DFFC; SOFC; Reforming; Partial oxidation (Kronemayer, H. (166) 120)
- Hydrofluoric acid
Lithium manganese oxide; Lithium-ion battery; Capacity retention; Zirconium oxide particles (Park, S.B. (166) 219)
- Hydrogen evolution
Hydrogen production; Methanol electrolysis; Electrocatalyst; Tungsten carbide (Hu, Z. (166) 458)
- Hydrogen evolution
Photosensitized; Silica gel; Eosin Y; Visible-light irradiation (Zhang, X. (166) 74)
- Hydrogen evolution reaction (HER)
PtPd-WC/C electrocatalyst; Tungsten carbide (WC); Fuel cell (Wu, M. (166) 310)
- Hydrogen production
Methanol electrolysis; Hydrogen evolution; Electrocatalyst; Tungsten carbide (Hu, Z. (166) 458)
- Hydrogen production
Steam electrolyser; SOEC; Intermediate temperature; Planar; Dynamic model (Udagawa, J. (166) 127)
- Hydrogen-fuel-cell vehicle
Plug-in hybrid; Plug-out hybrid; Mobile Electricity innovation; Vehicle-to-grid power; Vehicular distributed generation (Williams, B.D. (166) 549)
- Hydrothermal synthesis
Nano-mixed oxides; Electrochemical capacitor; Carbon nano-tubes; Cyclic voltammetry (Jayalakshmi, M. (166) 578)
- Hyperbranched polymer
Poly(3,4-ethylenedioxythiophene); Aluminum electrolytic capacitor (Nogami, K. (166) 584)
- Hypochlorite
Catalytic metals; Zinc; Aluminum; Batteries; Cells (Cardenas-Valencia, A.M. (166) 273)
- In situ spectroscopy
Manganese oxide; Pseudo-capacitance; Supercapacitor; X-ray absorption (Chang, J.-K. (166) 590)
- Intermediate temperature
Hydrogen production; Steam electrolyser; SOEC; Planar; Dynamic model (Udagawa, J. (166) 127)
- Interpenetrating polymer network
Gel polymer electrolyte; Membrane; Phase inversion; Ionic conductivity (Wang, Y.-J. (166) 202)
- Inverter
Alternate energy systems; Ripple (dc-bus voltage ripple); DSP (Shireen, W. (166) 445)
- Ionic conductivity
Gel polymer electrolyte; Membrane; Phase inversion; Interpenetrating polymer network (Wang, Y.-J. (166) 202)
- Ionic dissociation
Electric double layer capacitor; Ionic liquid electrolyte; Capacitance; Composite electrode (Nagao, Y. (166) 595)
- Ionic liquid electrolyte
Electric double layer capacitor; Capacitance; Ionic dissociation; Composite electrode (Nagao, Y. (166) 595)
- Irreversible capacity
Hard carbon; Carbon coating; Air exposure; Negative-electrode material; Lithium-ion battery (Lee, J.-H. (166) 250)
- Lanthanum chromite
Solid oxide fuel cell; Nanoparticle; Catalyst; Ruthenium (Madsen, B.D. (166) 64)
- Lanthanum gallate
Electrical conductivity; Hebb–Wagner polarization; Oxygen ion conductivity; Oxygen vacancy (Wang, S. (166) 22)
- Lanthanum strontium cobalt iron oxide (LSCF)
Solid oxide fuel cell (SOFC); Micro-hotplate; Thin film; Spray pyrolysis; Thermal cycling (Beckel, D. (166) 143)
- Lead electrodeposition
Copper substrate; Sorbitol; Voltammetry; Scanning electron microscopy; Energy-dispersive X-ray spectroscopy (Siqueira, J.L.P. (166) 519)
- Li_{1.05}Ni_{0.35}Co_{0.25}Mn_{0.4}O₂
Cathode material; Sol–gel coating; LiCoO₂; Lithium ion battery (Son, J.T. (166) 343)
- Li_{1+z}Ni_{1-x-y}Co_xM_yO₂
Lithium ion battery; Cathode; CO₂; Ni valence (Shizuka, K. (166) 233)
- Li₄Ti₅O₁₂
Lithium secondary batteries; High tap-density; Spherical; Conductivity (Gao, J. (166) 255)
- Li-battery
Nanobelts; Polyethyleneglycol; V₂O₅ Xerogel (Reddy, C.V.S. (166) 244)
- LiCoO₂
Cathode material; Li_{1.05}Ni_{0.35}Co_{0.25}Mn_{0.4}O₂; Sol–gel coating; Lithium ion battery (Son, J.T. (166) 343)
- LiFePO₄
Mechanical activation; Rechargeable lithium battery; Discharge capacity; Cathode material; Cycling performance (Kim, J.-K. (166) 211)
- LiFePO₄-C composite
Vibrant type ball-milling; Microwave heating; Particle size; Carbon distribution; Discharge capacity; Lithium battery (Song, M.-S. (166) 260)
- Li-ion
Batteries; Cathode; V₂O₅; Conducting polymer; Hybrid material (Boyano, I. (166) 471)

- Li-ion
Capacitor; Asymmetric capacitor; Nanogate carbon; Automotive (Aida, T. (166) 462)
- Li-ion battery
Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$; Hollow sphere; Rate capability (Jiang, C. (166) 514)
- LiMn_2O_4
Lithium batteries; Lithium manganese spinel; Template method; Silica gel (Cabana, J. (166) 492)
- LiMn_2O_4
Lithium bis(oxalato)borate; Electrolyte; Salt (Yu, B.-T. (166) 499)
- Lithium aluminate
Mesoporous; Composite polymer electrolyte (Hu, L. (166) 226)
- Lithium batteries
 LiMn_2O_4 ; Lithium manganese spinel; Template method; Silica gel (Cabana, J. (166) 492)
- Lithium battery
 LiFePO_4 -C composite; Vibrant type ball-milling; Microwave heating; Particle size; Carbon distribution; Discharge capacity (Song, M.-S. (166) 260)
- Lithium bis(oxalato)borate
Electrolyte; Salt; LiMn_2O_4 (Yu, B.-T. (166) 499)
- Lithium insertion
Nanocrystalline anatase TiO_2 ; High rate performance (Jiang, C. (166) 239)
- Lithium ion battery
Aluminum; Tin oxide; Anode; Surface modification (Lei, X. (166) 509)
- Lithium ion battery
Anode; Current collector; Electrodeposition (Jiang, T. (166) 503)
- Lithium ion battery
Cathode; $\text{Li}_{1+z}\text{Ni}_{1-x-y}\text{Co}_x\text{M}_y\text{O}_2$; CO_2 ; Ni valence (Shizuka, K. (166) 233)
- Lithium ion battery
Cathode material; $\text{Li}_{1.05}\text{Ni}_{0.35}\text{Co}_{0.25}\text{Mn}_{0.4}\text{O}_2$; Sol-gel coating; LiCoO_2 (Son, J.T. (166) 343)
- Lithium manganese oxide
Lithium-ion battery; Capacity retention; Hydrofluoric acid; Zirconium oxide particles (Park, S.B. (166) 219)
- Lithium manganese spinel
Lithium batteries; LiMn_2O_4 ; Template method; Silica gel (Cabana, J. (166) 492)
- Lithium secondary batteries
 $\text{Li}_4\text{Ti}_5\text{O}_{12}$; High tap-density; Spherical; Conductivity (Gao, J. (166) 255)
- Lithium-ion batteries
Al-doped spinels; Cycling performance; Oxygen deficiency; Mn dissolution (Xia, Y. (166) 485)
- Lithium-ion battery
Carbon anode; Self-discharge; Capacity loss simulation; Storage (Ramasamy, R.P. (166) 266)
- Lithium-ion battery
Hard carbon; Carbon coating; Irreversible capacity; Air exposure; Negative-electrode material (Lee, J.-H. (166) 250)
- Lithium-ion battery
Lithium manganese oxide; Capacity retention; Hydrofluoric acid; Zirconium oxide particles (Park, S.B. (166) 219)
- LSGM
SOFC; GNP; Electrolyte (Lee, D. (166) 35)
- Manganese oxide
Pseudo-capacitance; Supercapacitor; X-ray absorption; In situ spectroscopy (Chang, J.-K. (166) 590)
- Mass activities
Direct methanol fuel cell; Sputter-deposition (Makino, K. (166) 30)
- Mass transfer layer
Diffusion; DMFC; Expanded graphite; Perforation (Yazici, M.S. (166) 424)
- MCFC
Nickel solubility; Fuel cells (Bodén, A. (166) 59)
- Mechanical activation
 LiFePO_4 ; Rechargeable lithium battery; Discharge capacity; Cathode material; Cycling performance (Kim, J.-K. (166) 211)
- Mechanistic modelling
Tubular SOFC; Cathode-supported; Synthesis gas; Biomass fuel (Suwanwarangkul, R. (166) 386)
- Membrane
Gel polymer electrolyte; Phase inversion; Interpenetrating polymer network; Ionic conductivity (Wang, Y.-J. (166) 202)
- Membrane electrode assembly
Polyaniline, Sol-gel modified Nafion; Methanol crossover; Direct methanol fuel cell peak power (Chen, C.-Y. (166) 324)
- Mesoporous
Lithium aluminate; Composite polymer electrolyte (Hu, L. (166) 226)
- Methanol conversion
Fuel cell; Packed-bed reformer; Wall-coated reformer (Lee, M.-t. (166) 194)
- Methanol crossover
Polyaniline, Sol-gel modified Nafion; Direct methanol fuel cell peak power; Membrane electrode assembly (Chen, C.-Y. (166) 324)
- Methanol electrolysis
Hydrogen production; Hydrogen evolution; Electrocatalyst; Tungsten carbide (Hu, Z. (166) 458)
- Methanol electrooxidation
Direct methanol fuel cell; Pt-Ru/C nanoparticle electrocatalyst; Different buffer solutions (Wang, Z.-B. (166) 317)
- Methanol oxidation
PtRu/C; PtSn/C; PtSnRu/C; Alcohol-reduction process; Ethanol oxidation; Fuel cell (Neto, A.O. (166) 87)
- Methanol steam reformer
Portable power; Microreactor; PEMFC; Fuel processing; Thermal management (Shah, K. (166) 177)
- Methanol-steam reforming reaction
Proton exchange membrane fuel cell; Reformer; Catalyst; Conversion rate; Yield rate (Huang, C.-Y. (166) 450)
- Micro-hotplate
Solid oxide fuel cell (SOFC); Thin film; Spray pyrolysis; Lanthanum strontium cobalt iron oxide (LSCF); Thermal cycling (Beckel, D. (166) 143)
- Micro-porous layer
Polymer electrolyte fuel cells; Graded porosity; Gas diffusion layer (Tang, H. (166) 41)
- Microreactor
Portable power; PEMFC; Fuel processing; Methanol steam reformer; Thermal management (Shah, K. (166) 177)
- Microstructure
Solid oxide fuel cell (SOFC); Gradient anode; Anode functional layer (AFL); Ni-YSZ cermet; Cell performance (Kong, J. (166) 337)
- Microwave heating
 LiFePO_4 -C composite; Vibrant type ball-milling; Particle size; Carbon distribution; Discharge capacity; Lithium battery (Song, M.-S. (166) 260)
- Miniature fuel cell
PEMFC stack; Fuel buffer/distributor; Small hydrogen storage canister (Zhang, X. (166) 441)
- Mn dissolution
Al-doped spinels; Cycling performance; Oxygen deficiency; Lithium-ion batteries (Xia, Y. (166) 485)
- Mobile Electricity innovation
Hydrogen-fuel-cell vehicle; Plug-in hybrid; Plug-out hybrid; Vehicle-to-grid power; Vehicular distributed generation (Williams, B.D. (166) 549)
- Model
Silver-zinc battery; Constant current discharge; Porous electrodes; Multiple electrode reactions (Venkatraman, M. (166) 537)
- Modeling
Molten carbonate fuel cell (MCFC); Takagi-Sugeno (T-S) fuzzy model (Yang, F. (166) 354)
- Modeling
PEM fuel cell; Water management (Vorobev, A. (166) 92)
- Molten carbonate fuel cell
Biomass gasification; Computational fluid dynamics; Nanotechnology; Carbon; Fluidization (Gidaspow, D. (166) 400)

- Molten carbonate fuel cell
Dy; Ni–Dy alloys; NiO solubility; Electrochemical polarization (Liu, Z.P. (166) 348)
- Molten carbonate fuel cell (MCFC)
Modeling; Takagi–Sugeno (T–S) fuzzy model (Yang, F. (166) 354)
- Molten carbonate fuel cell (MCFC)
Tubular type reformer; S/C ratio (steam to carbon ratio); CH₄ conversion ratio; CO conversion ratio; Efficiency of reformer (Seo, H.-K. (166) 165)
- Multi-objective optimization
Polymer electrolyte membrane fuel cells (Na, W. (166) 411)
- Multiple electrode reactions
Silver–zinc battery; Model; Constant current discharge; Porous electrodes (Venkatraman, M. (166) 537)
- Nafion/SiO₂ hybrid membrane
Vanadium redox flow battery; Vanadium permeability (Xi, J. (166) 531)
- Nanobelts
Polyethyleneglycol; V₂O₅ Xerogel; Li-battery (Reddy, C.V.S. (166) 244)
- Nanocrystalline anatase TiO₂
Lithium insertion; High rate performance (Jiang, C. (166) 239)
- Nanogate carbon
Li-ion; Capacitor; Asymmetric capacitor; Automotive (Aida, T. (166) 462)
- Nano-mixed oxides
Hydrothermal synthesis; Electrochemical capacitor; Carbon nano-tubes; Cyclic voltammetry (Jayalakshmi, M. (166) 578)
- Nano-nickel
Electrodeposition; Characterization; Ethanol oxidation (Jin, G.-P. (166) 80)
- Nanoparticle
Solid oxide fuel cell; Catalyst; Ruthenium; Lanthanum chromite (Madsen, B.D. (166) 64)
- Nano-sized Co₃O₄
Electrolytic deposition; Thin film; Raman spectroscopy (Liu, H.-C. (166) 478)
- Nanotechnology
Molten carbonate fuel cell; Biomass gasification; Computational fluid dynamics; Carbon; Fluidization (Gidaspow, D. (166) 400)
- Negative-electrode material
Hard carbon; Carbon coating; Irreversible capacity; Air exposure; Lithium-ion battery (Lee, J.-H. (166) 250)
- Ni valence
Lithium ion battery; Cathode; Li_{1+z}Ni_{1-x-y}Co_xM_yO₂; CO₂ (Shizuka, K. (166) 233)
- Nickel solubility
MCFC; Fuel cells (Bodén, A. (166) 59)
- Nickel–cadmium cell
Polypropylene membrane; Acetone oligomerization; Electrochemical properties (Ciszewski, A. (166) 526)
- Ni–Dy alloys
Molten carbonate fuel cell; Dy; NiO solubility; Electrochemical polarization (Liu, Z.P. (166) 348)
- NiO solubility
Molten carbonate fuel cell; Dy; Ni–Dy alloys; Electrochemical polarization (Liu, Z.P. (166) 348)
- Ni–YSZ cermet
Solid oxide fuel cell (SOFC); Gradient anode; Anode functional layer (AFL); Microstructure; Cell performance (Kong, J. (166) 337)
- NO_x
Proton exchange membrane fuel cell (PEMFC); Environmental contamination; SO₂ (Jing, F. (166) 172)
- Oxygen bleeding
Transient model; Two-phase; CO poisoning; Platinum–ruthenium (Shah, A.A. (166) 1)
- Oxygen deficiency
Al-doped spinels; Cycling performance; Mn dissolution; Lithium-ion batteries (Xia, Y. (166) 485)
- Oxygen ion conductivity
Electrical conductivity; Hebb–Wagner polarization; Oxygen vacancy; Lanthanum gallate (Wang, S. (166) 22)
- Oxygen vacancy
Electrical conductivity; Hebb–Wagner polarization; Oxygen ion conductivity; Lanthanum gallate (Wang, S. (166) 22)
- Packed-bed reformer
Fuel cell; Methanol conversion; Wall-coated reformer (Lee, M.-t. (166) 194)
- Partial oxidation
Direct-flame solid oxide fuel cell; DFFC; SOFC; Hydrocarbon; Reforming (Kronemayer, H. (166) 120)
- Particle size
LiFePO₄-C composite; Vibrant type ball-milling; Microwave heating; Carbon distribution; Discharge capacity; Lithium battery (Song, M.-S. (166) 260)
- Part-load performance
Solid oxide fuel cell; Gas turbine; Hybrid system; Efficiency; Power (Yang, J.S. (166) 155)
- Pellet fuel cell
Solid oxide fuel cell; Temperature mapping; Thermal imaging (Brett, D.J.L. (166) 112)
- PEM fuel cell
Cellulose acetate; Carbon aerogel; Electrocatalyst support; Platinum nanoparticles (Guilminot, E. (166) 104)
- PEM fuel cell
Modeling; Water management (Vorobev, A. (166) 92)
- PEMFC
Portable power; Microreactor; Fuel processing; Methanol steam reformer; Thermal management (Shah, K. (166) 177)
- PEMFC stack
Miniature fuel cell; Fuel buffer/distributor; Small hydrogen storage canister (Zhang, X. (166) 441)
- PEMFCs
Endplates; Aluminium alloy; Surface treatments (Fu, Y. (166) 435)
- Perforation
Mass transfer layer; Diffusion; DMFC; Expanded graphite (Yazici, M.S. (166) 424)
- Phase inversion
Gel polymer electrolyte; Membrane; Interpenetrating polymer network; Ionic conductivity (Wang, Y.-J. (166) 202)
- Photosensitized
Silica gel; Eosin Y; Hydrogen evolution; Visible-light irradiation (Zhang, X. (166) 74)
- Planar
Hydrogen production; Steam electrolyser; SOEC; Intermediate temperature; Dynamic model (Udagawa, J. (166) 127)
- Platinum electrodeposition
Graphite functionalization; Fuel cells; Scharifker and Hills electrocrystallisation model (Massoni, N. (166) 68)
- Platinum nanoparticles
Cellulose acetate; Carbon aerogel; Electrocatalyst support; PEM fuel cell (Guilminot, E. (166) 104)
- Platinum usage
Proton-exchange membrane fuel cell; Catalyst-gradient (Prasanna, M. (166) 53)
- Platinum–ruthenium
Transient model; Two-phase; CO poisoning; Oxygen bleeding (Shah, A.A. (166) 1)
- Plug-in hybrid
Hydrogen-fuel-cell vehicle; Plug-out hybrid; Mobile Electricity innovation; Vehicle-to-grid power; Vehicular distributed generation (Williams, B.D. (166) 549)
- Plug-out hybrid
Hydrogen-fuel-cell vehicle; Plug-in hybrid; Mobile Electricity innovation; Vehicle-to-grid power; Vehicular distributed generation (Williams, B.D. (166) 549)

- Polarization curve
Proton-exchange membrane fuel cell; Balance-of-plant; Cathode inlet manifold; Power; Efficiency (Kim, S.Y. (166) 430)
- Poly(3,4-ethylenedioxythiophene)
Hyperbranched polymer; Aluminum electrolytic capacitor (Nogami, K. (166) 584)
- Polyaniline
Composite electrode; Ruthenium oxide; Supercapacitor; Pseudocapacitance; Specific capacitance (Song, R.Y. (166) 297)
- Polyaniline, Sol-gel modified Nafion
Methanol crossover; Direct methanol fuel cell peak power; Membrane electrode assembly (Chen, C.-Y. (166) 324)
- Polyethyleneglycol
Nanobelts; V_2O_5 Xerogel; Li-battery (Reddy, C.V.S. (166) 244)
- Polymer electrolyte fuel cells
Micro-porous layer; Graded porosity; Gas diffusion layer (Tang, H. (166) 41)
- Polymer electrolyte membrane fuel cells
Multi-objective optimization (Na, W. (166) 411)
- Polypropylene membrane
Nickel-cadmium cell; Acetone oligomerization; Electrochemical properties (Ciszewski, A. (166) 526)
- Porous electrodes
Silver-zinc battery; Model; Constant current discharge; Multiple electrode reactions (Venkatraman, M. (166) 537)
- Porous media
Direct methanol fuel cell; Water transport; Dry-out; Two-phase flow (Shi, M.H. (166) 303)
- Portable power
Microreactor; PEMFC; Fuel processing; Methanol steam reformer; Thermal management (Shah, K. (166) 177)
- Power
Proton-exchange membrane fuel cell; Balance-of-plant; Cathode inlet manifold; Polarization curve; Efficiency (Kim, S.Y. (166) 430)
- Power
Solid oxide fuel cell; Gas turbine; Hybrid system; Part-load performance; Efficiency (Yang, J.S. (166) 155)
- Proton exchange membrane fuel cell
Electro-physical properties; Clamping pressure (Chang, W.R. (166) 149)
- Proton exchange membrane fuel cell
Reformer; Methanol-steam reforming reaction; Catalyst; Conversion rate; Yield rate (Huang, C.-Y. (166) 450)
- Proton exchange membrane fuel cell
Shoulder/channel ratio; Electrochemical reaction; Activation overpotential; Cell performance (Chiang, M.-S. (166) 362)
- Proton exchange membrane fuel cell (PEMFC)
Environmental contamination; NO_x ; SO_2 (Jing, F. (166) 172)
- Proton-exchange membrane fuel cell
Balance-of-plant; Cathode inlet manifold; Polarization curve; Power; Efficiency (Kim, S.Y. (166) 430)
- Proton-exchange membrane fuel cell
Platinum usage; Catalyst-gradient (Prasanna, M. (166) 53)
- Pseudo-capacitance
Manganese oxide; Supercapacitor; X-ray absorption; In situ spectroscopy (Chang, J.-K. (166) 590)
- Pseudocapacitance
Polyaniline; Composite electrode; Ruthenium oxide; Supercapacitor; Specific capacitance (Song, R.Y. (166) 297)
- PtPd-WC/C electrocatalyst
Hydrogen evolution reaction (HER); Tungsten carbide (WC); Fuel cell (Wu, M. (166) 310)
- Pt-Ru catalyst
DMFCs; Sensitization; Activation (Zhu, J. (166) 331)
- PtRu/C
PtSn/C; PtSnRu/C; Alcohol-reduction process; Methanol oxidation; Ethanol oxidation; Fuel cell (Neto, A.O. (166) 87)
- Pt-Ru/C nanoparticle electrocatalyst
Direct methanol fuel cell; Methanol electrooxidation; Different buffer solutions (Wang, Z.-B. (166) 317)
- PtSn/C
PtRu/C; PtSnRu/C; Alcohol-reduction process; Methanol oxidation; Ethanol oxidation; Fuel cell (Neto, A.O. (166) 87)
- PtSnRu/C
PtRu/C; PtSn/C; Alcohol-reduction process; Methanol oxidation; Ethanol oxidation; Fuel cell (Neto, A.O. (166) 87)
- Raman spectroscopy
Electrolytic deposition; Nano-sized Co_3O_4 ; Thin film (Liu, H.-C. (166) 478)
- Rate capability
Spinel $Li_4Ti_5O_{12}$; Hollow sphere; Li-ion battery (Jiang, C. (166) 514)
- Rechargeable lithium battery
 $LiFePO_4$; Mechanical activation; Discharge capacity; Cathode material; Cycling performance (Kim, J.-K. (166) 211)
- Reformer
Proton exchange membrane fuel cell; Methanol-steam reforming reaction; Catalyst; Conversion rate; Yield rate (Huang, C.-Y. (166) 450)
- Reforming
Direct-flame solid oxide fuel cell; DFFC; SOFC; Hydrocarbon; Partial oxidation (Kronemayer, H. (166) 120)
- Ripple (dc-bus voltage ripple)
Alternate energy systems; Inverter; DSP (Shireen, W. (166) 445)
- Ruthenium
Solid oxide fuel cell; Nanoparticle; Catalyst; Lanthanum chromite (Madsen, B.D. (166) 64)
- Ruthenium oxide
Polyaniline; Composite electrode; Supercapacitor; Pseudocapacitance; Specific capacitance (Song, R.Y. (166) 297)
- S/C ratio (steam to carbon ratio)
Tubular type reformer; Molten carbonate fuel cell (MCFC); CH_4 conversion ratio; CO conversion ratio; Efficiency of reformer (Seo, H.-K. (166) 165)
- Salt
Lithium bis(oxalato)borate; Electrolyte; $LiMn_2O_4$ (Yu, B.-T. (166) 499)
- Scanning electron microscopy
Lead electrodeposition; Copper substrate; Sorbitol; Voltammetry; Energy-dispersive X-ray spectroscopy (Siqueira, J.L.P. (166) 519)
- Scharifker and Hills electrocrystallisation model
Platinum electrodeposition; Graphite functionalization; Fuel cells (Massoni, N. (166) 68)
- Self-discharge
Lithium-ion battery; Carbon anode; Capacity loss simulation; Storage (Ramasamy, R.P. (166) 266)
- Sensitivity analysis
SOFC; Fuel cell; Design; Adjoint (Kapadia, S. (166) 376)
- Sensitization
DMFCs; Pt-Ru catalyst; Activation (Zhu, J. (166) 331)
- Shoulder/channel ratio
Proton exchange membrane fuel cell; Electrochemical reaction; Activation overpotential; Cell performance (Chiang, M.-S. (166) 362)
- Silica gel
Lithium batteries; $LiMn_2O_4$; Lithium manganese spinel; Template method (Cabana, J. (166) 492)
- Silica gel
Photosensitized; Eosin Y; Hydrogen evolution; Visible-light irradiation (Zhang, X. (166) 74)
- Silver-zinc battery
Model; Constant current discharge; Porous electrodes; Multiple electrode reactions (Venkatraman, M. (166) 537)
- Small hydrogen storage canister
Miniature fuel cell; PEMFC stack; Fuel buffer/distributor (Zhang, X. (166) 441)
- SO_2
Proton exchange membrane fuel cell (PEMFC); Environmental contamination; NO_x (Jing, F. (166) 172)
- SOEC
Hydrogen production; Steam electrolyser; Intermediate temperature; Planar; Dynamic model (Udagawa, J. (166) 127)

- SOFC
Direct-flame solid oxide fuel cell; DFFC; Hydrocarbon; Reforming; Partial oxidation (Kronemayer, H. (166) 120)
- SOFC
Fuel cell; Design; Adjoint; Sensitivity analysis (Kapadia, S. (166) 376)
- SOFC
LSGM; GNP; Electrolyte (Lee, D. (166) 35)
- Sol-gel coating
Cathode material; $\text{Li}_{1.05}\text{Ni}_{0.35}\text{Co}_{0.25}\text{Mn}_{0.4}\text{O}_2$; LiCoO_2 ; Lithium ion battery (Son, J.T. (166) 343)
- Solid characterisation
Chemical manganese dioxide; Factorial designs (Pagnanelli, F. (166) 567)
- Solid oxide fuel cell
Anode; Y-doped SrTiO_3 ; Electrical conductivity (Li, X. (166) 47)
- Solid oxide fuel cell
Gas turbine; Hybrid system; Part-load performance; Efficiency; Power (Yang, J.S. (166) 155)
- Solid oxide fuel cell
Nanoparticle; Catalyst; Ruthenium; Lanthanum chromite (Madsen, B.D. (166) 64)
- Solid oxide fuel cell
Pellet fuel cell; Temperature mapping; Thermal imaging (Brett, D.J.L. (166) 112)
- Solid oxide fuel cell (SOFC)
Gradient anode; Anode functional layer (AFL); Ni-YSZ cermet; Microstructure; Cell performance (Kong, J. (166) 337)
- Solid oxide fuel cell (SOFC)
Micro-hotplate; Thin film; Spray pyrolysis; Lanthanum strontium cobalt iron oxide (LSCF); Thermal cycling (Beckel, D. (166) 143)
- Sorbitol
Lead electrodeposition; Copper substrate; Voltammetry; Scanning electron microscopy; Energy-dispersive X-ray spectroscopy (Siqueira, J.L.P. (166) 519)
- Specific capacitance
Polyaniline; Composite electrode; Ruthenium oxide; Supercapacitor; Pseudocapacitance (Song, R.Y. (166) 297)
- Spherical
Lithium secondary batteries; $\text{Li}_4\text{Ti}_5\text{O}_{12}$; High tap-density; Conductivity (Gao, J. (166) 255)
- Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$
Hollow sphere; Li-ion battery; Rate capability (Jiang, C. (166) 514)
- Spray pyrolysis
Solid oxide fuel cell (SOFC); Micro-hotplate; Thin film; Lanthanum strontium cobalt iron oxide (LSCF); Thermal cycling (Beckel, D. (166) 143)
- Sputter-deposition
Direct methanol fuel cell; Mass activities (Makino, K. (166) 30)
- Steam electrolyser
Hydrogen production; SOEC; Intermediate temperature; Planar; Dynamic model (Udagawa, J. (166) 127)
- Storage
Lithium-ion battery; Carbon anode; Self-discharge; Capacity loss simulation (Ramasamy, R.P. (166) 266)
- Supercapacitor
Manganese oxide; Pseudo-capacitance; X-ray absorption; In situ spectroscopy (Chang, J.-K. (166) 590)
- Supercapacitor
Polyaniline; Composite electrode; Ruthenium oxide; Pseudocapacitance; Specific capacitance (Song, R.Y. (166) 297)
- Surface modification
Lithium ion battery; Aluminum; Tin oxide; Anode (Lei, X. (166) 509)
- Surface treatments
PEMFCs; Endplates; Aluminium alloy (Fu, Y. (166) 435)
- Synthesis gas
Mechanistic modelling; Tubular SOFC; Cathode-supported; Biomass fuel (Suwanwarangkul, R. (166) 386)
- Temperature mapping
Pellet fuel cell; Solid oxide fuel cell; Thermal imaging (Brett, D.J.L. (166) 112)
- Template method
Lithium batteries; LiMn_2O_4 ; Lithium manganese spinel; Silica gel (Cabana, J. (166) 492)
- Thermal cycling
Solid oxide fuel cell (SOFC); Micro-hotplate; Thin film; Spray pyrolysis; Lanthanum strontium cobalt iron oxide (LSCF) (Beckel, D. (166) 143)
- Thermal imaging
Pellet fuel cell; Solid oxide fuel cell; Temperature mapping (Brett, D.J.L. (166) 112)
- Thermal management
Portable power; Microreactor; PEMFC; Fuel processing; Methanol steam reformer (Shah, K. (166) 177)
- Thin film
Electrolytic deposition; Nano-sized Co_3O_4 ; Raman spectroscopy (Liu, H.-C. (166) 478)
- Thin film
Solid oxide fuel cell (SOFC); Micro-hotplate; Spray pyrolysis; Lanthanum strontium cobalt iron oxide (LSCF); Thermal cycling (Beckel, D. (166) 143)
- Tin oxide
Lithium ion battery; Aluminum; Anode; Surface modification (Lei, X. (166) 509)
- Transient model
Two-phase; CO poisoning; Oxygen bleeding; Platinum-ruthenium (Shah, A.A. (166) 1)
- Tubular SOFC
Mechanistic modelling; Cathode-supported; Synthesis gas; Biomass fuel (Suwanwarangkul, R. (166) 386)
- Tubular type reformer
Molten carbonate fuel cell (MCFC); S/C ratio (steam to carbon ratio); CH_4 conversion ratio; CO conversion ratio; Efficiency of reformer (Seo, H.-K. (166) 165)
- Tungsten carbide
Hydrogen production; Methanol electrolysis; Hydrogen evolution; Electrocatalyst (Hu, Z. (166) 458)
- Tungsten carbide (WC)
Hydrogen evolution reaction (HER); PtPd-WC/C electrocatalyst; Fuel cell (Wu, M. (166) 310)
- Two-phase
Transient model; CO poisoning; Oxygen bleeding; Platinum-ruthenium (Shah, A.A. (166) 1)
- Two-phase flow
Direct methanol fuel cell; Porous media; Water transport; Dry-out (Shi, M.H. (166) 303)
- V_2O_5
Batteries; Li-ion; Cathode; Conducting polymer; Hybrid material (Boyano, I. (166) 471)
- V_2O_5 Xerogel
Nanobelts; Polyethyleneglycol; Li-battery (Reddy, C.V.S. (166) 244)
- Vanadium permeability
Vanadium redox flow battery; Nafion/ SiO_2 hybrid membrane (Xi, J. (166) 531)
- Vanadium redox flow battery
Nafion/ SiO_2 hybrid membrane; Vanadium permeability (Xi, J. (166) 531)
- Vehicle-to-grid power
Hydrogen-fuel-cell vehicle; Plug-in hybrid; Plug-out hybrid; Mobile Electricity innovation; Vehicular distributed generation (Williams, B.D. (166) 549)
- Vehicular distributed generation
Hydrogen-fuel-cell vehicle; Plug-in hybrid; Plug-out hybrid; Mobile Electricity innovation; Vehicle-to-grid power (Williams, B.D. (166) 549)
- Vibrant type ball-milling
 LiFePO_4 -C composite; Microwave heating; Particle size; Carbon distribution; Discharge capacity; Lithium battery (Song, M.-S. (166) 260)
- Takagi-Sugeno (T-S) fuzzy model
Modeling; Molten carbonate fuel cell (MCFC) (Yang, F. (166) 354)

- Visible-light irradiation
 Photosensitized; Silica gel; Eosin Y; Hydrogen evolution (Zhang, X. (166) 74)
- Voltammetry
 Lead electrodeposition; Copper substrate; Sorbitol; Scanning electron microscopy; Energy-dispersive X-ray spectroscopy (Siqueira, J.L.P. (166) 519)
- Wall-coated reformer
 Fuel cell; Methanol conversion; Packed-bed reformer (Lee, M.-t. (166) 194)
- Water management
 PEM fuel cell; Modeling (Vorobev, A. (166) 92)
- Water transport
 Direct methanol fuel cell; Porous media; Dry-out; Two-phase flow (Shi, M.H. (166) 303)
- X-ray absorption
 Manganese oxide; Pseudo-capacitance; Supercapacitor; In situ spectroscopy (Chang, J.-K. (166) 590)
- Y-doped SrTiO₃
 Solid oxide fuel cell; Anode; Electrical conductivity (Li, X. (166) 47)
- Yield rate
 Proton exchange membrane fuel cell; Reformer; Methanol–steam reforming reaction; Catalyst; Conversion rate (Huang, C.-Y. (166) 450)
- Zinc
 Hypochlorite; Catalytic metals; Aluminum; Batteries; Cells (Cardenas-Valencia, A.M. (166)273)
- Zirconium oxide particles
 Lithium manganese oxide; Lithium-ion battery; Capacity retention; Hydrofluoric acid (Park, S.B. (166) 219)