

Subject Index of Volume 118

- Acrylamide
SOFC; Synthesis; Methacrylamide; Screen-printing; Dense electrolyte (Taracón, A. (118) 256)
- Afterburner sub-system
Fuel cell system (FCS); Combined heat and power (CHP); Control strategy; Aspen Plus[®] chemical engineering model; Proton exchange membrane (PEM) (Colella, W.G. (118) 118)
- Ammonia
SOFC; Biogas; Catalyst; Fuel cell (Wojcik, A. (118) 342)
- Anode
SOFC; Lanthanum chromite LaCrO₃; Thermodynamic calculation; Effect of substituents; Effect of corrosive gases (Sfeir, J. (118) 276)
- Aspen Plus[®] chemical engineering model
Fuel cell system (FCS); Combined heat and power (CHP); Afterburner sub-system; Control strategy; Proton exchange membrane (PEM) (Colella, W.G. (118) 118)
- Atmospheric pressure
Direct methanol fuel cell; Electrode impedance; Current–voltage characteristics; Catalyst loading (Nakagawa, N. (118) 248)
- Autothermal reforming
Fuel processing; Fuel cell; Hydrocarbon (Ersoz, A. (118) 384)
- Autothermal reforming
Partial oxidation; Cool flame; Mixture preparation; Diesel fuel; Fuel cell (Hartmann, L. (118) 286)
- Autothermal-reforming
Hydrogen generation; Partial oxidation (Marty, P. (118) 66)
- Auxiliary power unit
Solid oxide fuel cells; Three-dimensional dynamic modelling; Stack design; Global system simulations (Petruzzini, L. (118) 96)
- Availability and price of gold
Fuel cells; Hydrogen production and purification; Gold catalysis; Water gas shift (Cameron, D. (118) 298)
- Balance of plant
Fuel cell; Optimization; Process integration; Process synthesis (Godat, J. (118) 411)
- Biogas fuel
SOFC stack model; Energy balance; Efficiency (Van herle, J. (118) 375)
- Biogas
SOFC; Ammonia; Catalyst; Fuel cell (Wojcik, A. (118) 342)
- Biomass
Fuel cell systems; Wood gasification; CHP; MCFC; PAFC; Computer simulation (McIlveen-Wright, D.R. (118) 393)
- Bipolar plates
Carbon–carbon composite; Two-component molding process (Middelmann, E. (118) 44)
- Bipolar plates
PEMFC; Proton exchange membrane fuel cells; Electrode permeability; Flow-field configuration (Soler, J. (118) 172)
- Carbon nanotubes
Hydrogen evolution; Exchange current; Hydrogen oxidation (Prosin, P.P. (118) 265)
- Carbon–carbon composite
Bipolar plates; Two-component molding process (Middelmann, E. (118) 44)
- Carbonate fuel cell stack
Direct FuelCellTM; Internal reforming fuel cell; Full-size carbonate stack (Doyon, J. (118) 8)
- Catalysis
Electrolysis; Hydrogen; Ionic activators; Energy consumption (Stojić, D.Lj. (118) 315)
- Catalyst loading
Direct methanol fuel cell; Atmospheric pressure; Electrode impedance; Current–voltage characteristics (Nakagawa, N. (118) 248)
- Catalyst
Methanol; Reformer; Fuel cell; Start-up; Steam reforming (Lindström, B. (118) 71)
- Catalyst
SOFC; Ammonia; Biogas; Fuel cell (Wojcik, A. (118) 342)
- Cathode
Fuel cell; Performance; Impedance (Romero-Castañón, T. (118) 179)
- Cathode
Lithium–nickel oxide; Molten carbonate fuel cell; MCFC; Impedance spectroscopy; EIS (Escudero, M.J. (118) 23)
- Cathode
Performance; PEMFC; Pressure drop; Double layered (Yoon, Y.-G. (118) 189)
- Ceria-based composite electrolyte
Low temperature solid oxide fuel cells; Ion-doped ceria (Zhu, B. (118) 47)
- CHP
Fuel cell systems; Biomass; Wood gasification; MCFC; PAFC; Computer simulation (McIlveen-Wright, D.R. (118) 393)
- CO poisoning
Methanol electro-oxidation; Electrochemistry; Direct methanol fuel cell; Platinum–Ruthenium; Nafion ionomer (Chu, Y.-H. (118) 334)
- CO₂ concentrator
MCFC; Thermal power plant; Electrochemistry (Sugiura, K. (118) 218)
- CO₂ emissions
Hydrogen; Hydrocarbon; Fuel reformer; Fuel cell (Muradov, N. (118) 320)
- Combined heat and power (CHP)
Fuel cell system (FCS); Afterburner sub-system; Control strategy; Aspen Plus[®] chemical engineering model; Proton exchange membrane (PEM) (Colella, W.G. (118) 118)
- Combined heat and power (CHP)
Fuel cell system (FCS); Domestic heating (cooling) loop; Thermal and electrical efficiency; English electricity market structure; Pinch Point Analysis (Colella, W.G. (118) 129)
- Combined reforming
In situ FTIR and QMS; Gold; Methanol; Steam reforming (Bocuzzi, F. (118) 304)
- Complex hydrides
Hydrogen storage; Thermal desorption (Züttel, A. (118) 1)
- Compressor
PEMFC; Water management; Heat management (Mallant, R.K.A.M. (118) 424)

- Computational fluid dynamics
 Fuel cells; Transport phenomena; Heat transfer; Electrochemistry (Beale, S.B. (118) 79)
- Computer simulation
 Fuel cell systems; Biomass; Wood gasification; CHP; MCFC; PAFC (McIlveen-Wright, D.R. (118) 393)
- Contact resistance
 PEMFC; Titanium sinter; Gas diffusion backing (Hottinen, T. (118) 183)
- Control strategy
 Fuel cell system (FCS); Combined heat and power (CHP); Afterburner sub-system; Aspen Plus[®] chemical engineering model; Proton exchange membrane (PEM) (Colella, W.G. (118) 118)
- Control strategy
 Integrated energy systems; Fuel cells; Fuzzy logic; Stochastic model (Entchev, E. (118) 212)
- Cool flame
 Partial oxidation; Autothermal reforming; Mixture preparation; Diesel fuel; Fuel cell (Hartmann, L. (118) 286)
- Current
 Segment; Single cell; PEMFC; Distribution; Electrochemical reaction (Yoon, Y.-G. (118) 193)
- Current-voltage characteristics
 Direct methanol fuel cell; Atmospheric pressure; Electrode impedance; Catalyst loading (Nakagawa, N. (118) 248)
- Debye-Hückel theory
 Vapor-liquid equilibria; Lattice fluid model; Solid polymer electrolyte (Kim, T.H. (118) 157)
- Dense electrolyte
 SOFC; Synthesis; Acrylamide; Methacrylamide; Screen-printing (Tarancón, A. (118) 256)
- Diesel fuel
 Partial oxidation; Autothermal reforming; Cool flame; Mixture preparation; Fuel cell (Hartmann, L. (118) 286)
- DIR-MCFC
 Reforming catalyst; Pollution; Mass change performance (Sugiura, K. (118) 228)
- Direct FuelCellTM
 Carbonate fuel cell stack; Internal reforming fuel cell; Full-size carbonate stack (Doyon, J. (118) 8)
- Direct methanol fuel cell (DMFC)
 Nanocomposite membrane; Montmorillonite; Nafion[®] (Jung, D.H. (118) 205)
- Direct methanol fuel cell
 Atmospheric pressure; Electrode impedance; Current-voltage characteristics; Catalyst loading (Nakagawa, N. (118) 248)
- Direct methanol fuel cell
 Liquid-feed direct oxidation fuel cell; Neat 2-propanol; Methanol (Qi, Z. (118) 54)
- Direct methanol fuel cell
 Methanol electro-oxidation; Electrochemistry; Platinum-Ruthenium; Nafion ionomer; CO poisoning (Chu, Y.-H. (118) 334)
- Distribution
 Segment; Single cell; PEMFC; Current; Electrochemical reaction (Yoon, Y.-G. (118) 193)
- DMFC
 MEAs; H₂-PEFC (Gülzow, E. (118) 405)
- Domestic heating (cooling) loop
 Fuel cell system (FCS); Combined heat and power (CHP); Thermal and electrical efficiency; English electricity market structure; Pinch Point Analysis (Colella, W.G. (118) 129)
- Double layered
 Performance; Cathode; PEMFC; Pressure drop (Yoon, Y.-G. (118) 189)
- Effect of corrosive gases
 SOFC; Anode; Lanthanum chromite LaCrO₃; Thermodynamic calculation; Effect of substituents (Sfeir, J. (118) 276)
- Effect of substituents
 SOFC; Anode; Lanthanum chromite LaCrO₃; Thermodynamic calculation; Effect of corrosive gases (Sfeir, J. (118) 276)
- Efficiency
 Biogas fuel; SOFC stack model; Energy balance (Van herle, J. (118) 375)
- EIS
 Lithium-nickel oxide; Molten carbonate fuel cell; MCFC; Cathode; Impedance spectroscopy (Escudero, M.J. (118) 23)
- Electrochemical reaction
 Segment; Single cell; PEMFC; Current; Distribution (Yoon, Y.-G. (118) 193)
- Electrochemistry
 Fuel cells; Transport phenomena; Computational fluid dynamics; Heat transfer (Beale, S.B. (118) 79)
- Electrochemistry
 MCFC; CO₂ concentrator; Thermal power plant (Sugiura, K. (118) 218)
- Electrochemistry
 Methanol electro-oxidation; Direct methanol fuel cell; Platinum-Ruthenium; Nafion ionomer; CO poisoning (Chu, Y.-H. (118) 334)
- Electrode impedance
 Direct methanol fuel cell; Atmospheric pressure; Current-voltage characteristics; Catalyst loading (Nakagawa, N. (118) 248)
- Electrode permeability
 PEMFC; Proton exchange membrane fuel cells; Flow-field configuration; Bipolar plates (Soler, J. (118) 172)
- Electrolysis
 Hydrogen; Catalysis; Ionic activators; Energy consumption (Stojić, D.Lj. (118) 315)
- Electrolysis
 Hydrogen; Metal hydride; Fuel cell (Varkaraki, E. (118) 14)
- Electrolytic hydriding
 Intermetallic compounds; Hydrogen storage (Casellato, U. (118) 237)
- Energy balance
 Biogas fuel; SOFC stack model; Efficiency (Van herle, J. (118) 375)
- Energy consumption
 Electrolysis; Hydrogen; Catalysis; Ionic activators (Stojić, D.Lj. (118) 315)
- English electricity market structure
 Fuel cell system (FCS); Combined heat and power (CHP); Domestic heating (cooling) loop; Thermal and electrical efficiency; Pinch Point Analysis (Colella, W.G. (118) 129)
- Exchange current
 Carbon nanotubes; Hydrogen evolution; Hydrogen oxidation (Prosini, P.P. (118) 265)
- Fe-Cr alloy
 Solid oxide fuel cells (SOFCs); Interconnects; Oxide scales (Horita, T. (118) 35)
- FEM
 Fuel cell simulation; Volume averaging; Multiphysics simulation (Roos, M. (118) 86)
- Flow-field configuration
 PEMFC; Proton exchange membrane fuel cells; Electrode permeability; Bipolar plates (Soler, J. (118) 172)
- Fuel cell catalyst
 Pt; Voltammetry; Methanol (Koponen, U. (118) 325)
- Fuel cell simulation
 Volume averaging; FEM; Multiphysics simulation (Roos, M. (118) 86)
- Fuel cell system (FCS)
 Combined heat and power (CHP); Afterburner sub-system; Control strategy; Aspen Plus[®] chemical engineering model; Proton exchange membrane (PEM) (Colella, W.G. (118) 118)
- Fuel cell system (FCS)
 Combined heat and power (CHP); Domestic heating (cooling) loop; Thermal and electrical efficiency; English electricity market structure; Pinch Point Analysis (Colella, W.G. (118) 129)

- Fuel cell systems
 Biomass; Wood gasification; CHP; MCFC; PAFC; Computer simulation (McIlveen-Wright, D.R. (118) 393)
- Fuel cell
 Cathode; Performance; Impedance (Romero-Castañón, T. (118) 179)
- Fuel cell
 Fuel processing; Autothermal reforming; Hydrocarbon (Ersoz, A. (118) 384)
- Fuel cell
 Hydrogen; Electrolysis; Metal hydride (Varkaraki, E. (118) 14)
- Fuel cell
 Hydrogen; Hydrocarbon; Fuel reformer; CO₂ emissions (Muradov, N. (118) 320)
- Fuel cell
 Methanol; Reformer; Start-up; Steam reforming; Catalyst (Lindström, B. (118) 71)
- Fuel cell
 Optimization; Process integration; Process synthesis; Balance of plant (Godat, J. (118) 411)
- Fuel cell
 Partial oxidation; Autothermal reforming; Cool flame; Mixture preparation; Diesel fuel (Hartmann, L. (118) 286)
- Fuel cell
 SOFC; Ammonia; Biogas; Catalyst (Wojcik, A. (118) 342)
- Fuel cells
 Hydrogen production and purification; Gold catalysis; Water gas shift; Availability and price of gold (Cameron, D. (118) 298)
- Fuel cells
 Integrated energy systems; Fuzzy logic; Control strategy; Stochastic model (Entchev, E. (118) 212)
- Fuel cells
 Transport phenomena; Computational fluid dynamics; Heat transfer; Electrochemistry (Beale, S.B. (118) 79)
- Fuel processing
 Autothermal reforming; Fuel cell; Hydrocarbon (Ersoz, A. (118) 384)
- Fuel reformer
 Hydrogen; Hydrocarbon; Fuel cell; CO₂ emissions (Muradov, N. (118) 320)
- Full-size carbonate stack
 Direct FuelCellTM; Carbonate fuel cell stack; Internal reforming fuel cell (Doyon, J. (118) 8)
- Fuzzy logic
 Integrated energy systems; Fuel cells; Control strategy; Stochastic model (Entchev, E. (118) 212)
- Gas diffusion backing
 PEMFC; Titanium sinter; Contact resistance (Hottinen, T. (118) 183)
- Global system simulations
 Solid oxide fuel cells; Three-dimensional dynamic modelling; Stack design; Auxiliary power unit (Petruzzzi, L. (118) 96)
- Gold catalysis
 Fuel cells; Hydrogen production and purification; Water gas shift; Availability and price of gold (Cameron, D. (118) 298)
- Gold
 In situ FTIR and QMS; Methanol; Steam reforming; Combined reforming (Bocuzzi, F. (118) 304)
- H₂-PEFC
 MEAs; DMFC (Gülzow, E. (118) 405)
- Heat and power
 PEFC; Stationary fuel cell system; Stand-alone (Wallmark, C. (118) 358)
- Heat management
 PEMFC; Water management; Compressor (Mallant, R.K.A.M. (118) 424)
- Heat transfer
 Fuel cells; Transport phenomena; Computational fluid dynamics; Electrochemistry (Beale, S.B. (118) 79)
- High efficiency
 MCFC; Indirect gas turbine; Hybrid cycles (Lunghi, P. (118) 108)
- Hybrid bus
 PEM fuel cell system; Test; Hydrogen (Folkesson, A. (118) 349)
- Hybrid cycles
 MCFC; Indirect gas turbine; High efficiency (Lunghi, P. (118) 108)
- Hydrocarbon reforming
 Protonic ceramic; Steam permeation (Grover Coors, W. (118) 150)
- Hydrocarbon
 Fuel processing; Autothermal reforming; Fuel cell (Ersoz, A. (118) 384)
- Hydrocarbon
 Hydrogen; Fuel reformer; Fuel cell; CO₂ emissions (Muradov, N. (118) 320)
- Hydrocarbons
 Hydrogen production; RESC; Reformer (Hacker, V. (118) 311)
- Hydrogen evolution
 Carbon nanotubes; Exchange current; Hydrogen oxidation (Prosini, P.P. (118) 265)
- Hydrogen generation
 Partial oxidation; Autothermal-reforming (Marty, P. (118) 66)
- Hydrogen generation
 Water gas shift; PEM; SelectraTM catalysts/absorbents (Ruettinger, W. (118) 61)
- Hydrogen oxidation
 Carbon nanotubes; Hydrogen evolution; Exchange current (Prosini, P.P. (118) 265)
- Hydrogen production and purification
 Fuel cells; Gold catalysis; Water gas shift; Availability and price of gold (Cameron, D. (118) 298)
- Hydrogen production
 RESC; Reformer; Hydrocarbons (Hacker, V. (118) 311)
- Hydrogen storage
 Intermetallic compounds; Electrolytic hydriding (Casellato, U. (118) 237)
- Hydrogen storage
 Thermal desorption; Complex hydrides (Züttel, A. (118) 1)
- Hydrogen
 Electrolysis; Catalysis; Ionic activators; Energy consumption (Stojić, D.Lj. (118) 315)
- Hydrogen
 Electrolysis; Metal hydride; Fuel cell (Varkaraki, E. (118) 14)
- Hydrogen
 Hydrocarbon; Fuel reformer; Fuel cell; CO₂ emissions (Muradov, N. (118) 320)
- Hydrogen
 PEM fuel cell system; Hybrid bus; Test (Folkesson, A. (118) 349)
- Impedance spectroscopy
 Lithium-nickel oxide; Molten carbonate fuel cell; MCFC; Cathode; EIS (Escudero, M.J. (118) 23)
- Impedance
 Fuel cell; Cathode; Performance (Romero-Castañón, T. (118) 179)
- In situ FTIR and QMS
 Gold; Methanol; Steam reforming; Combined reforming (Bocuzzi, F. (118) 304)
- Indirect gas turbine
 MCFC; Hybrid cycles; High efficiency (Lunghi, P. (118) 108)
- Integrated energy systems
 Fuel cells; Fuzzy logic; Control strategy; Stochastic model (Entchev, E. (118) 212)
- Interconnects
 Fe-Cr alloy; Solid oxide fuel cells (SOFCs); Oxide scales (Horita, T. (118) 35)
- Intermetallic compounds
 Hydrogen storage; Electrolytic hydriding (Casellato, U. (118) 237)
- Internal reforming fuel cell
 Direct FuelCellTM; Carbonate fuel cell stack; Full-size carbonate stack (Doyon, J. (118) 8)

- Ion-doped ceria
 Low temperature solid oxide fuel cells; Ceria-based composite electrolyte (Zhu, B. (118) 47)
- Ionic activators
 Electrolysis; Hydrogen; Catalysis; Energy consumption (Stojić, D.Lj. (118) 315)
- Kinetics
 Solid oxide fuel cell; Model; Local heating (Larrain, D. (118) 367)
- Lanthanum chromite LaCrO_3
 SOFC; Anode; Thermodynamic calculation; Effect of substituents; Effect of corrosive gases (Sfeir, J. (118) 276)
- Lattice fluid model
 Vapor–liquid equilibria; Solid polymer electrolyte; Debye–Hückel theory (Kim, T.H. (118) 157)
- Liquid-feed direct oxidation fuel cell
 Direct methanol fuel cell; Neat 2-propanol; Methanol (Qi, Z. (118) 54)
- Lithium–nickel oxide
 Molten carbonate fuel cell; MCFC; Cathode; Impedance spectroscopy; EIS (Escudero, M.J. (118) 23)
- Local heating
 Solid oxide fuel cell; Model; Kinetics (Larrain, D. (118) 367)
- Low temperature solid oxide fuel cells
 Ion-doped ceria; Ceria-based composite electrolyte (Zhu, B. (118) 47)
- Mass change performance
 DIR-MCFC; Reforming catalyst; Pollution (Sugiura, K. (118) 228)
- MCFC
 CO_2 concentrator; Thermal power plant; Electrochemistry (Sugiura, K. (118) 218)
- MCFC
 Fuel cell systems; Biomass; Wood gasification; CHP; PAFC; Computer simulation (McIlveen-Wright, D.R. (118) 393)
- MCFC
 Indirect gas turbine; Hybrid cycles; High efficiency (Lunghi, P. (118) 108)
- MCFC
 Lithium–nickel oxide; Molten carbonate fuel cell; Cathode; Impedance spectroscopy; EIS (Escudero, M.J. (118) 23)
- MEAs
 H_2 -PEFC; DMFC (Gülzow, E. (118) 405)
- Metal hydride
 Hydrogen; Electrolysis; Fuel cell (Varkaraki, E. (118) 14)
- Methacrylamide
 SOFC; Synthesis; Acrylamide; Screen-printing; Dense electrolyte (Tarancón, A. (118) 256)
- Methanol electro-oxidation
 Electrochemistry; Direct methanol fuel cell; Platinum–Ruthenium; Nafion ionomer; CO poisoning (Chu, Y.-H. (118) 334)
- Methanol
 In situ FTIR and QMS; Gold; Steam reforming; Combined reforming (Boccuzzi, F. (118) 304)
- Methanol
 Liquid-feed direct oxidation fuel cell; Direct methanol fuel cell; Neat 2-propanol (Qi, Z. (118) 54)
- Methanol
 Pt; Voltammetry; Fuel cell catalyst (Koponen, U. (118) 325)
- Methanol
 Reformer; Fuel cell; Start-up; Steam reforming; Catalyst (Lindström, B. (118) 71)
- Mixture preparation
 Partial oxidation; Autothermal reforming; Cool flame; Diesel fuel; Fuel cell (Hartmann, L. (118) 286)
- Model
 Solid oxide fuel cell; Kinetics; Local heating (Larrain, D. (118) 367)
- Modeling
 SOFC; Object-based; Transient characteristics (Ota, T. (118) 430)
- Molten carbonate fuel cell
 Lithium–nickel oxide; MCFC; Cathode; Impedance spectroscopy; EIS (Escudero, M.J. (118) 23)
- Montmorillonite
 Nanocomposite membrane; Nafion[®]; Direct methanol fuel cell (DMFC) (Jung, D.H. (118) 205)
- Multiphysics simulation
 Fuel cell simulation; Volume averaging; FEM (Roos, M. (118) 86)
- Nafion ionomer
 Methanol electro-oxidation; Electrochemistry; Direct methanol fuel cell; Platinum–Ruthenium; CO poisoning (Chu, Y.-H. (118) 334)
- Nafion[®]
 Nanocomposite membrane; Montmorillonite; Direct methanol fuel cell (DMFC) (Jung, D.H. (118) 205)
- Nanocomposite membrane
 Montmorillonite; Nafion[®]; Direct methanol fuel cell (DMFC) (Jung, D.H. (118) 205)
- Neat 2-propanol
 Liquid-feed direct oxidation fuel cell; Direct methanol fuel cell; Methanol (Qi, Z. (118) 54)
- Object-based
 SOFC; Modeling; Transient characteristics (Ota, T. (118) 430)
- Open cathode
 Planar PEMFC; Self-breathing; Printed circuit board (PCB) (Schmitz, A. (118) 162)
- Optimization
 Fuel cell; Process integration; Process synthesis; Balance of plant (Godat, J. (118) 411)
- Oxide scales
 Fe–Cr alloy; Solid oxide fuel cells (SOFCs); Interconnects (Horita, T. (118) 35)
- Oxygen separation membrane
 Permeation flux; Stability; Perovskite (Diethelm, S. (118) 270)
- PAFC
 Fuel cell systems; Biomass; Wood gasification; CHP; MCFC; Computer simulation (McIlveen-Wright, D.R. (118) 393)
- Partial oxidation
 Autothermal reforming; Cool flame; Mixture preparation; Diesel fuel; Fuel cell (Hartmann, L. (118) 286)
- Partial oxidation
 Hydrogen generation; Autothermal-reforming (Marty, P. (118) 66)
- PEFC
 Stationary fuel cell system; Stand-alone; Heat and power (Wallmark, C. (118) 358)
- PEM fuel cell system
 Hybrid bus; Test; Hydrogen (Folkesson, A. (118) 349)
- PEM
 Water gas shift; Hydrogen generation; Selectra[™] catalysts/absorbents (Ruettinger, W. (118) 61)
- PEMFC
 Performance; Cathode; Pressure drop; Double layered (Yoon, Y.-G. (118) 189)
- PEMFC
 Proton exchange membrane fuel cells; Electrode permeability; Flow-field configuration; Bipolar plates (Soler, J. (118) 172)
- PEMFC
 Segment; Single cell; Current; Distribution; Electrochemical reaction (Yoon, Y.-G. (118) 193)
- PEMFC
 Self-humidifying membrane; Sputtering technique (Kwak, S.-H. (118) 200)
- PEMFC
 Titanium sinter; Gas diffusion backing; Contact resistance (Hottinen, T. (118) 183)

- PEMFC
Water management; Heat management; Compressor (Mallant, R.K.A.M. (118) 424)
- Performance
Cathode; PEMFC; Pressure drop; Double layered (Yoon, Y.-G. (118) 189)
- Performance
Fuel cell; Cathode; Impedance (Romero-Castañón, T. (118) 179)
- Permeation flux
Oxygen separation membrane; Stability; Perovskite (Diethelm, S. (118) 270)
- Perovskite
Oxygen separation membrane; Permeation flux; Stability (Diethelm, S. (118) 270)
- Pinch Point Analysis
Fuel cell system (FCS); Combined heat and power (CHP); Domestic heating (cooling) loop; Thermal and electrical efficiency; English electricity market structure (Colella, W.G. (118) 129)
- Planar PEMFC
Self-breathing; Open cathode; Printed circuit board (PCB) (Schmitz, A. (118) 162)
- Platinum–Ruthenium
Methanol electro-oxidation; Electrochemistry; Direct methanol fuel cell; Nafion ionomer; CO poisoning (Chu, Y.-H. (118) 334)
- Pollution
DIR-MCFC; Reforming catalyst; Mass change performance (Sugiura, K. (118) 228)
- Pressure drop
Performance; Cathode; PEMFC; Double layered (Yoon, Y.-G. (118) 189)
- Printed circuit board (PCB)
Planar PEMFC; Self-breathing; Open cathode (Schmitz, A. (118) 162)
- Process integration
Fuel cell; Optimization; Process synthesis; Balance of plant (Godat, J. (118) 411)
- Process synthesis
Fuel cell; Optimization; Process integration; Balance of plant (Godat, J. (118) 411)
- Proton exchange membrane (PEM)
Fuel cell system (FCS); Combined heat and power (CHP); Afterburner sub-system; Control strategy; Aspen Plus[®] chemical engineering model (Colella, W.G. (118) 118)
- Proton exchange membrane fuel cells
PEMFC; Electrode permeability; Flow-field configuration; Bipolar plates (Soler, J. (118) 172)
- Protonic ceramic
Steam permeation; Hydrocarbon reforming (Grover Coors, W. (118) 150)
- Pt
Voltammetry; Fuel cell catalyst; Methanol (Koponen, U. (118) 325)
- Reformer
Hydrogen production; RESC; Hydrocarbons (Hacker, V. (118) 311)
- Reformer
Methanol; Fuel cell; Start-up; Steam reforming; Catalyst (Lindström, B. (118) 71)
- Reforming catalyst
DIR-MCFC; Pollution; Mass change performance (Sugiura, K. (118) 228)
- RESC
Hydrogen production; Reformer; Hydrocarbons (Hacker, V. (118) 311)
- Screen-printing
SOFC; Synthesis; Acrylamide; Methacrylamide; Dense electrolyte (Tarancón, A. (118) 256)
- Segment
Single cell; PEMFC; Current; Distribution; Electrochemical reaction (Yoon, Y.-G. (118) 193)
- Selectra[™] catalysts/absorbents
Water gas shift; PEM; Hydrogen generation (Ruettinger, W. (118) 61)
- Self-breathing
Planar PEMFC; Open cathode; Printed circuit board (PCB) (Schmitz, A. (118) 162)
- Self-humidifying membrane
PEMFC; Sputtering technique (Kwak, S.-H. (118) 200)
- Single cell
Segment; PEMFC; Current; Distribution; Electrochemical reaction (Yoon, Y.-G. (118) 193)
- SOFC stack model
Biogas fuel; Energy balance; Efficiency (Van herle, J. (118) 375)
- SOFC
Ammonia; Biogas; Catalyst; Fuel cell (Wojcik, A. (118) 342)
- SOFC
Anode; Lanthanum chromite LaCrO₃; Thermodynamic calculation; Effect of substituents; Effect of corrosive gases (Sfeir, J. (118) 276)
- SOFC
Modeling; Object-based; Transient characteristics (Ota, T. (118) 430)
- SOFC
Synthesis; Acrylamide; Methacrylamide; Screen-printing; Dense electrolyte (Tarancón, A. (118) 256)
- Solid oxide fuel cell
Model; Kinetics; Local heating (Larrain, D. (118) 367)
- Solid oxide fuel cells (SOFCs)
Fe–Cr alloy; Interconnects; Oxide scales (Horita, T. (118) 35)
- Solid oxide fuel cells
Three-dimensional dynamic modelling; Stack design; Global system simulations; Auxiliary power unit (Petruzzzi, L. (118) 96)
- Solid polymer electrolyte
Vapor–liquid equilibria; Lattice fluid model; Debye–Hückel theory (Kim, T.H. (118) 157)
- Sputtering technique
PEMFC; Self-humidifying membrane (Kwak, S.-H. (118) 200)
- Stability
Oxygen separation membrane; Permeation flux; Perovskite (Diethelm, S. (118) 270)
- Stack design
Solid oxide fuel cells; Three-dimensional dynamic modelling; Global system simulations; Auxiliary power unit (Petruzzzi, L. (118) 96)
- Stand-alone
PEFC; Stationary fuel cell system; Heat and power (Wallmark, C. (118) 358)
- Start-up
Methanol; Reformer; Fuel cell; Steam reforming; Catalyst (Lindström, B. (118) 71)
- Stationary fuel cell system
PEFC; Stand-alone; Heat and power (Wallmark, C. (118) 358)
- Steam permeation
Protonic ceramic; Hydrocarbon reforming (Grover Coors, W. (118) 150)
- Steam reforming
In situ FTIR and QMS; Gold; Methanol; Combined reforming (Bocuzzi, F. (118) 304)
- Steam reforming
Methanol; Reformer; Fuel cell; Start-up; Catalyst (Lindström, B. (118) 71)
- Stochastic model
Integrated energy systems; Fuel cells; Fuzzy logic; Control strategy (Entchev, E. (118) 212)
- Synthesis
SOFC; Acrylamide; Methacrylamide; Screen-printing; Dense electrolyte (Tarancón, A. (118) 256)
- Test
PEM fuel cell system; Hybrid bus; Hydrogen (Folkesson, A. (118) 349)
- Thermal and electrical efficiency

- Fuel cell system (FCS); Combined heat and power (CHP); Domestic heating (cooling) loop; English electricity market structure; Pinch Point Analysis (Colella, W.G. (118) 129)
- Thermal desorption
Hydrogen storage; Complex hydrides (Züttel, A. (118) 1)
- Thermal power plant
MCFC; CO₂ concentrator; Electrochemistry (Sugiura, K. (118) 218)
- Thermodynamic calculation
SOFC; Anode; Lanthanum chromite LaCrO₃; Effect of substituents; Effect of corrosive gases (Sfeir, J. (118) 276)
- Three-dimensional dynamic modelling
Solid oxide fuel cells; Stack design; Global system simulations; Auxiliary power unit (Petruzzi, L. (118) 96)
- Titanium sinter
PEMFC; Gas diffusion backing; Contact resistance (Hottinen, T. (118) 183)
- Transient characteristics
SOFC; Modeling; Object-based (Ota, T. (118) 430)
- Transport phenomena
Fuel cells; Computational fluid dynamics; Heat transfer; Electrochemistry (Beale, S.B. (118) 79)
- Two-component molding process
Bipolar plates; Carbon-carbon composite (Middelman, E. (118) 44)
- Vapor-liquid equilibria
Lattice fluid model; Solid polymer electrolyte; Debye-Hückel theory (Kim, T.H. (118) 157)
- Voltammetry
Pt; Fuel cell catalyst; Methanol (Koponen, U. (118) 325)
- Volume averaging
Fuel cell simulation; FEM; Multiphysics simulation (Roos, M. (118) 86)
- Water gas shift
Fuel cells; Hydrogen production and purification; Gold catalysis; Availability and price of gold (Cameron, D. (118) 298)
- Water gas shift
PEM; Hydrogen generation; SelectraTM catalysts/absorbents (Ruettinger, W. (118) 61)
- Water management
PEMFC; Heat management; Compressor (Mallant, R.K.A.M. (118) 424)
- Wood gasification
Fuel cell systems; Biomass; CHP; MCFC; PAFC; Computer simulation (McIlveen-Wright, D.R. (118) 393)