

## Subject Index of Volume 131

- Air-permeability  
 Proton exchange membrane fuel cells; Gas diffusion media; Oxygen-gain;  
 Pore size distribution; Hydrophobicity (Prasanna, M. (131) 147)
- Alcohol fuels  
 Microtubular SOFC; *Iso*-octane; Carbon deposition; TPO (Saunders, G.J. (131) 23)
- Alkaline-earth carbonate  
 Molten carbonate; Electrolyte (Tanimoto, K. (131) 256)
- Analytical approach  
 Gas diffusion layer; Oxygen reduction reaction; Polymer electrolyte fuel cell (Mirzazadeh, J. (131) 194)
- Annealing  
 YSZ; Conductivity; High temperature; SOFC (Hattori, M. (131) 247)
- Anode degradation  
 Solid oxide fuel cell; ScSZ; Carbon deposition; Ni cermet; Power generation (Gunji, A. (131) 285)
- Anode gases  
 SOFCs; Fe–Cr alloy; Oxidation; GDOES (Horita, T. (131) 293)
- Anode  
 MCFC; Porosimetry (Sabattini, A. (131) 237)
- Australia  
 Fuel cells; Hydrogen; Energy supply (Dicks, A.L. (131) 1)
- Battery  
 Direct methanol fuel cell; Hybrid (Lee, B.-D. (131) 207)
- Bi-metallic and tri-metallic catalysts  
 Direct ethanol fuel cells; Ethanol energy (Zhou, W.J. (131) 217)
- Biogas  
 SOFC system model; Sewage sludge digestion; Thermal balance of fuel cell stack; Carbon deposition; Composite curves (Van herle, J. (131) 127)
- Biomass fuel  
 Fuel cells; SOFC; System efficiency (Omosun, A.O. (131) 96)
- Bipolar plate  
 PEM fuel cell; Electroconductive compound; Injection moulding (Heinzl, A. (131) 35)
- Bipolar plate  
 Surface treatment; Corrosion-resistance; Electrical resistance (Lee, S.-J. (131) 162)
- Buses  
 Hydrogen; Infrastructure; Modelling; London; Fuel-cell (Joffe, D. (131) 13)
- Capillary  
 PEMFC; Gas diffusion layer; PTFE; Flooding (Park, G.-G. (131) 182)
- Carbon deposition  
 Biogas; SOFC system model; Sewage sludge digestion; Thermal balance of fuel cell stack; Composite curves (Van herle, J. (131) 127)
- Carbon deposition  
 Microtubular SOFC; *Iso*-octane; Alcohol fuels; TPO (Saunders, G.J. (131) 23)
- Carbon deposition  
 Solid oxide fuel cell; ScSZ; Ni cermet; Power generation; Anode degradation (Gunji, A. (131) 285)
- Cell performance  
 Polymer electrolyte membrane fuel cell; Water management; Gas diffusion layer; Water transport (Chen, J. (131) 155)
- CFD  
 SOFC; Modelling; Experimental parameters (Autissier, N. (131) 313)
- CHP  
 PEM; Testing; Modelling (Gigliucci, G. (131) 62)
- Co-ionic electrolytes  
 SOFC (Demin, A. (131) 231)
- CO<sub>2</sub> abatement  
 MCFC fuel cells; Plant simulation (Lusardi, M. (131) 351)
- CO<sub>2</sub>-capture  
 SOFC; Gas turbine; Hybrid system; Optimisation; Genetic algorithm (Fredriksson Möller, B. (131) 320)
- Cogeneration  
 Stationary power; Distributed generation; Solid oxide fuel cell; Molten carbonate fuel cell; Hybrids (Williams, M.C. (131) 79)
- Commercial development  
 SOFC; Intermediate temperature (Bance, P. (131) 86)
- Commercialization  
 Market share; Infrastructure; Fuel cell (Cropper, M.A.J. (131) 57)
- Composite curves  
 Biogas; SOFC system model; Sewage sludge digestion; Thermal balance of fuel cell stack; Carbon deposition (Van herle, J. (131) 127)
- Composite particle  
 NiO/MgFe<sub>2</sub>O<sub>4</sub>; Mechanical coating; Molten carbonate fuel cell (Okawa, H. (131) 251)
- Conceptual study  
 SOFC; SOFC system; SOFC system development (Fontell, E. (131) 49)
- Conductivity  
 YSZ; High temperature; Annealing; SOFC (Hattori, M. (131) 247)
- Copper–nickel alloy  
 Platinum; Ruthenium; Polytetrafluoroethylene (PTFE); Ethanol electro-oxidation; Electrocatalytic activity (Sen Gupta, S. (131) 169)
- Corrosion-resistance  
 Bipolar plate; Surface treatment; Electrical resistance (Lee, S.-J. (131) 162)
- Cost reduction  
 Electrolysis; Hydrogen production; Energy consumption (Marčeta Kaninski, M.P. (131) 107)
- Cr-poisoning  
 Solid oxide fuel cell; Metallic interconnect; Half-cell (Fujita, K. (131) 270)
- Cr-poisoning  
 Solid oxide fuel cell; Metallic separator; Half-cell (Fujita, K. (131) 261)
- Current distribution  
 PEM; Fuel cell; Temperature distribution; Flow field flooding (Hakenjos, A. (131) 213)
- CuZnAl-catalyst  
 Operating parameters; Hydrogen production; Fuel cell (Yong, S.T. (131) 91)
- Desulfurization  
 Reformer; Natural gas; LPG; Sulfur (Lampert, J. (131) 27)

- Direct ethanol fuel cells  
Bi-metallic and tri-metallic catalysts; Ethanol energy (Zhou, W.J. (131) 217)
- Direct introduction  
Hydrocarbon fuels; Secondary ion mass spectrometry (SIMS); SOFC (Horita, T. (131) 299)
- Direct methanol fuel cell  
Hybrid; Battery (Lee, B.-D. (131) 207)
- Direct methanol  
Proton exchange membrane; Fuel cells; Flow-field design; Portable application; Fractals (Tüber, K. (131) 175)
- Distributed generation  
Stationary power; Cogeneration; Solid oxide fuel cell; Molten carbonate fuel cell; Hybrids (Williams, M.C. (131) 79)
- Electrical resistance  
Bipolar plate; Surface treatment; Corrosion-resistance (Lee, S.-J. (131) 162)
- Electrocatalytic activity  
Copper–nickel alloy; Platinum; Ruthenium; Polytetrafluoroethylene (PTFE); Ethanol electro-oxidation (Sen Gupta, S. (131) 169)
- Electroconductive compound  
PEM fuel cell; Bipolar plate; Injection moulding (Heinzel, A. (131) 35)
- Electrolysis  
Hydrogen production; Energy consumption; Cost reduction (Marčeta Kaninski, M.P. (131) 107)
- Electrolyte  
Molten carbonate; Alkaline-earth carbonate (Tanimoto, K. (131) 256)
- Energy consumption  
Electrolysis; Hydrogen production; Cost reduction (Marčeta Kaninski, M.P. (131) 107)
- Energy recovery  
MCFC; LCA; Environmental issue (Lunghi, P. (131) 120)
- Energy supply  
Fuel cells; Hydrogen; Australia (Dicks, A.L. (131) 1)
- Energy  
Optimization; Power plant; Exergy analysis; SOFC (Douvartzides, S. (131) 224)
- Environmental issue  
MCFC; LCA; Energy recovery (Lunghi, P. (131) 120)
- Ethanol electro-oxidation  
Copper–nickel alloy; Platinum; Ruthenium; Polytetrafluoroethylene (PTFE); Electrocatalytic activity (Sen Gupta, S. (131) 169)
- Ethanol energy  
Direct ethanol fuel cells; Bi-metallic and tri-metallic catalysts (Zhou, W.J. (131) 217)
- Exergy analysis  
Optimization; Power plant; Energy; SOFC (Douvartzides, S. (131) 224)
- Experimental parameters  
SOFC; Modelling; CFD (Autissier, N. (131) 313)
- Fe–Cr alloy  
SOFCs; Oxidation; Anode gases; GDOES (Horita, T. (131) 293)
- Flooding  
PEMFC; Gas diffusion layer; PTFE; Capillary (Park, G.-G. (131) 182)
- Flow distribution  
Modelling micro-tubular SOFC; Fluent computational fluid dynamics; Temperature profile (Lockett, M. (131) 243)
- Flow-field design  
Proton exchange membrane; Direct methanol; Fuel cells; Portable application; Fractals (Tüber, K. (131) 175)
- Flow field flooding  
PEM; Fuel cell; Current distribution; Temperature distribution (Hakenjos, A. (131) 213)
- Fluent computational fluid dynamics  
Modelling micro-tubular SOFC; Temperature profile; Flow distribution (Lockett, M. (131) 243)
- Foil technology  
Micro fuel cell; Membrane electrode assembly patterning; Microstructures (Hahn, R. (131) 73)
- Fractals  
Proton exchange membrane; Direct methanol; Fuel cells; Flow-field design; Portable application (Tüber, K. (131) 175)
- Fuel cell system  
Solar; Photovoltaic cell (Hedström, L. (131) 340)
- Fuel cell  
Commercialization; Market share; Infrastructure (Cropper, M.A.J. (131) 57)
- Fuel cell  
Modelling; Polarisation; Genetic algorithms (Mohamed, I. (131) 142)
- Fuel cell  
Nafion<sup>®</sup>; Proton exchange membrane; Polymer dispersion (Curtin, D.E. (131) 41)
- Fuel cell  
Operating parameters; CuZnAl-catalyst; Hydrogen production (Yong, S.T. (131) 91)
- Fuel cells  
Hydrogen; Energy supply; Australia (Dicks, A.L. (131) 1)
- Fuel cell  
PEM; Current distribution; Temperature distribution; Flow field flooding (Hakenjos, A. (131) 213)
- Fuel cells  
Micrereactor; Fuel processing; Methanol reformer (Holladay, J.D. (131) 69)
- Fuel cells  
Proton exchange membrane; Direct methanol; Flow-field design; Portable application; Fractals (Tüber, K. (131) 175)
- Fuel cells  
SOFC; Biomass fuel; System efficiency (Omosun, A.O. (131) 96)
- Fuel processing  
Micrereactor; Methanol reformer; Fuel cells (Holladay, J.D. (131) 69)
- Fuel-cell  
Hydrogen; Infrastructure; Modelling; London; Buses (Joffe, D. (131) 13)
- Gas diffusion layer  
Analytical approach; Oxygen reduction reaction; Polymer electrolyte fuel cell (Mirzazadeh, J. (131) 194)
- Gas diffusion layer  
PEMFC; PTFE; Capillary; Flooding (Park, G.-G. (131) 182)
- Gas diffusion layer  
PEMFC; Thickness of electrode; Nafion impregnation (Lee, H.-K. (131) 200)
- Gas diffusion layer  
Polymer electrolyte membrane fuel cell; Water management; Water transport; Cell performance (Chen, J. (131) 155)
- Gas diffusion media  
Proton exchange membrane fuel cells; Oxygen-gain; Air-permeability; Pore size distribution; Hydrophobicity (Prasanna, M. (131) 147)
- Gas turbine  
SOFC; Hybrid system; Optimisation; Genetic algorithm; CO<sub>2</sub>-capture (Fredriksson Möller, B. (131) 320)
- GDOES  
SOFCs; Fe–Cr alloy; Oxidation; Anode gases (Horita, T. (131) 293)
- Genetic algorithm  
SOFC; Gas turbine; Hybrid system; Optimisation; CO<sub>2</sub>-capture (Fredriksson Möller, B. (131) 320)
- Genetic algorithms  
Fuel cell; Modelling; Polarisation (Mohamed, I. (131) 142)
- Half-cell  
Solid oxide fuel cell; Cr-poisoning; Metallic interconnect (Fujita, K. (131) 270)

- Half-cell  
 Solid oxide fuel cell; Cr-poisoning; Metallic separator (Fujita, K. (131) 261)
- High temperature  
 YSZ; Conductivity; Annealing; SOFC (Hattori, M. (131) 247)
- Hybrid system  
 SOFC; Gas turbine; Optimisation; Genetic algorithm; CO<sub>2</sub>-capture (Fredriksson Möller, B. (131) 320)
- Hybrid  
 Direct methanol fuel cell; Battery (Lee, B.-D. (131) 207)
- Hybrids  
 Stationary power; Distributed generation; Cogeneration; Solid oxide fuel cell; Molten carbonate fuel cell (Williams, M.C. (131) 79)
- Hydrocarbon fuels  
 Direct introduction; Secondary ion mass spectrometry (SIMS); SOFC (Horita, T. (131) 299)
- Hydrogen production  
 Electrolysis; Energy consumption; Cost reduction (Marčeta Kaninski, M.P. (131) 107)
- Hydrogen production  
 Operating parameters; CuZnAl-catalyst; Fuel cell (Yong, S.T. (131) 91)
- Hydrogen  
 Fuel cells; Energy supply; Australia (Dicks, A.L. (131) 1)
- Hydrogen  
 Infrastructure; Modelling; London; Buses; Fuel-cell (Joffe, D. (131) 13)
- Hydrophobicity  
 Proton exchange membrane fuel cells; Gas diffusion media; Oxygen-gain; Air-permeability; Pore size distribution (Prasanna, M. (131) 147)
- Infrastructure  
 Commercialization; Market share; Fuel cell (Cropper, M.A.J. (131) 57)
- Infrastructure  
 Hydrogen; Modelling; London; Buses; Fuel-cell (Joffe, D. (131) 13)
- Injection moulding  
 PEM fuel cell; Bipolar plate; Electroconductive compound (Heinzel, A. (131) 35)
- Intermediate temperature  
 SOFC; Commercial development (Bance, P. (131) 86)
- Ionic transport number  
 Zr-substituted BaCeO<sub>3</sub>; Open circuit voltage; Proton conductivity (Shimada, T. (131) 289)
- Iso*-octane  
 Microtubular SOFC; Alcohol fuels; Carbon deposition; TPO (Saunders, G.J. (131) 23)
- Lanthanum intensity  
 SOFC; Resource management; Recycling; Scenario development; Technology assessment (Fukushima, Y. (131) 327)
- LCA  
 MCFC; Energy recovery; Environmental issue (Lunghi, P. (131) 120)
- London  
 Hydrogen; Infrastructure; Modelling; Buses; Fuel-cell (Joffe, D. (131) 13)
- LPG  
 Reformer; Natural gas; Sulfur; Desulfurization (Lampert, J. (131) 27)
- Market share  
 Commercialization; Infrastructure; Fuel cell (Cropper, M.A.J. (131) 57)
- MCFC fuel cells  
 CO<sub>2</sub> abatement; Plant simulation (Lusardi, M. (131) 351)
- MCFC  
 Anode; Porosimetry (Sabattini, A. (131) 237)
- MCFCC  
 LCA; Energy recovery; Environmental issue (Lunghi, P. (131) 120)
- Mechanical coating  
 NiO/MgFe<sub>2</sub>O<sub>4</sub>; Composite particle; Molten carbonate fuel cell (Okawa, H. (131) 251)
- Membrane electrode assembly patterning  
 Micro fuel cell; Foil technology; Microstructures (Hahn, R. (131) 73)
- Metallic interconnect  
 Solid oxide fuel cell; Cr-poisoning; Half-cell (Fujita, K. (131) 270)
- Metallic separator  
 Solid oxide fuel cell; Cr-poisoning; Half-cell (Fujita, K. (131) 261)
- Methanol reformer  
 Microreactor; Fuel processing; Fuel cells (Holladay, J.D. (131) 69)
- Micro fuel cell  
 Membrane electrode assembly patterning; Foil technology; Microstructures (Hahn, R. (131) 73)
- Microreactor  
 Fuel processing; Methanol reformer; Fuel cells (Holladay, J.D. (131) 69)
- Microstructures  
 Micro fuel cell; Membrane electrode assembly patterning; Foil technology (Hahn, R. (131) 73)
- Microtubular SOFC  
*Iso*-octane; Alcohol fuels; Carbon deposition; TPO (Saunders, G.J. (131) 23)
- Model  
 SOFC; Repeat element; Validation (Larraín, D. (131) 304)
- Modelling micro-tubular SOFC  
 Fluent computational fluid dynamics; Temperature profile; Flow distribution (Lockett, M. (131) 243)
- Modelling  
 Fuel cell; Polarisation; Genetic algorithms (Mohamed, I. (131) 142)
- Modelling  
 Hydrogen; Infrastructure; London; Buses; Fuel-cell (Joffe, D. (131) 13)
- Modelling  
 PEM; CHP; Testing (Gigliucci, G. (131) 62)
- Modelling  
 SOFC; CFD; Experimental parameters (Autissier, N. (131) 313)
- Molten carbonate fuel cell  
 NiO/MgFe<sub>2</sub>O<sub>4</sub>; Composite particle; Mechanical coating (Okawa, H. (131) 251)
- Molten carbonate fuel cell  
 Stationary power; Distributed generation; Cogeneration; Solid oxide fuel cell; Hybrids (Williams, M.C. (131) 79)
- Molten carbonate  
 Electrolyte; Alkaline-earth carbonate (Tanimoto, K. (131) 256)
- Nafion impregnation  
 PEMFC; Gas diffusion layer; Thickness of electrode (Lee, H.-K. (131) 200)
- Nafion<sup>®</sup>  
 Proton exchange membrane; Polymer dispersion; Fuel cell (Curtin, D.E. (131) 41)
- Natural gas  
 Reformer; LPG; Sulfur; Desulfurization (Lampert, J. (131) 27)
- Ni cermet  
 Solid oxide fuel cell; ScSZ; Carbon deposition; Power generation; Anode degradation (Gunji, A. (131) 285)
- NiO/MgFe<sub>2</sub>O<sub>4</sub>  
 Composite particle; Mechanical coating; Molten carbonate fuel cell (Okawa, H. (131) 251)
- Open circuit voltage  
 Zr-substituted BaCeO<sub>3</sub>; Proton conductivity; Ionic transport number (Shimada, T. (131) 289)
- Operating parameters  
 CuZnAl-catalyst; Hydrogen production; Fuel cell (Yong, S.T. (131) 91)
- Optimisation  
 SOFC; Gas turbine; Hybrid system; Genetic algorithm; CO<sub>2</sub>-capture (Fredriksson Möller, B. (131) 320)
- Optimization  
 Power plant; Energy; Exergy analysis; SOFC (Douvartzides, S. (131) 224)

- Oxidation  
SOFCs; Fe–Cr alloy; Anode gases; GDOES (Horita, T. (131) 293)
- Oxygen reduction reaction  
Gas diffusion layer; Analytical approach; Polymer electrolyte fuel cell (Mirzazadeh, J. (131) 194)
- Oxygen-gain  
Proton exchange membrane fuel cells; Gas diffusion media; Air-permeability; Pore size distribution; Hydrophobicity (Prasanna, M. (131) 147)
- PEM fuel cell  
Bipolar plate; Electroconductive compound; Injection moulding (Heinkel, A. (131) 35)
- PEM fuel cell  
Steam reformer; Selective oxidation; Residential power supply (Mathiak, J. (131) 112)
- PEM  
CHP; Testing; Modelling (Gigliucci, G. (131) 62)
- PEM  
Fuel cell; Current distribution; Temperature distribution; Flow field flooding (Hakenjos, A. (131) 213)
- PEMFC  
Gas diffusion layer; PTFE; Capillary; Flooding (Park, G.-G. (131) 182)
- PEMFC  
Gas diffusion layer; Thickness of electrode; Nafion impregnation (Lee, H.-K. (131) 200)
- Photovoltaic cell  
Solar; Fuel cell system (Hedström, L. (131) 340)
- Plant simulation  
CO<sub>2</sub> abatement; MCFC fuel cells (Lusardi, M. (131) 351)
- Platinum  
Copper–nickel alloy; Ruthenium; Polytetrafluoroethylene (PTFE); Ethanol electro-oxidation; Electrocatalytic activity (Sen Gupta, S. (131) 169)
- Polarisation  
Fuel cell; Modelling; Genetic algorithms (Mohamed, I. (131) 142)
- Polymer dispersion  
Nafion®; Proton exchange membrane; Fuel cell (Curtin, D.E. (131) 41)
- Polymer electrolyte fuel cell  
Gas diffusion layer; Analytical approach; Oxygen reduction reaction (Mirzazadeh, J. (131) 194)
- Polymer electrolyte membrane fuel cell  
Water management; Gas diffusion layer; Water transport; Cell performance (Chen, J. (131) 155)
- Polypyrrole  
URFC; Pt/PPy/Nafion electrode (Lee, H. (131) 188)
- Polytetrafluoroethylene (PTFE)  
Copper–nickel alloy; Platinum; Ruthenium; Ethanol electro-oxidation; Electrocatalytic activity (Sen Gupta, S. (131) 169)
- Pore size distribution  
Proton exchange membrane fuel cells; Gas diffusion media; Oxygen-gain; Air-permeability; Hydrophobicity (Prasanna, M. (131) 147)
- Porosimetry  
MCFC; Anode (Sabattini, A. (131) 237)
- Portable application  
Proton exchange membrane; Direct methanol; Fuel cells; Flow-field design; Fractals (Tüber, K. (131) 175)
- Power generation  
Solid oxide fuel cell; ScSZ; Carbon deposition; Ni cermet; Anode degradation (Gunji, A. (131) 285)
- Power plant  
Optimization; Energy; Exergy analysis; SOFC (Douvartzides, S. (131) 224)
- Proton conductivity  
Zr-substituted BaCeO<sub>3</sub>; Open circuit voltage; Ionic transport number (Shimada, T. (131) 289)
- Proton exchange membrane fuel cells  
Gas diffusion media; Oxygen-gain; Air-permeability; Pore size distribution; Hydrophobicity (Prasanna, M. (131) 147)
- Proton exchange membrane  
Direct methanol; Fuel cells; Flow-field design; Portable application; Fractals (Tüber, K. (131) 175)
- Proton exchange membrane  
Nafion®; Polymer dispersion; Fuel cell (Curtin, D.E. (131) 41)
- Pt/PPy/Nafion electrode  
Polypyrrole; URFC (Lee, H. (131) 188)
- PTFE  
PEMFC; Gas diffusion layer; Capillary; Flooding (Park, G.-G. (131) 182)
- Recycling  
SOFC; Resource management; Lanthanum intensity; Scenario development; Technology assessment (Fukushima, Y. (131) 327)
- Reformer  
Natural gas; LPG; Sulfur; Desulfurization (Lampert, J. (131) 27)
- Repeat element  
SOFC; Model; Validation (Larraín, D. (131) 304)
- Residential power supply  
PEM fuel cell; Steam reformer; Selective oxidation (Mathiak, J. (131) 112)
- Residual stress  
SOFC; Stack; X-ray stress measurements (Yakabe, H. (131) 278)
- Resource management  
SOFC; Lanthanum intensity; Recycling; Scenario development; Technology assessment (Fukushima, Y. (131) 327)
- Ruthenium  
Copper–nickel alloy; Platinum; Polytetrafluoroethylene (PTFE); Ethanol electro-oxidation; Electrocatalytic activity (Sen Gupta, S. (131) 169)
- Scenario development  
SOFC; Resource management; Lanthanum intensity; Recycling; Technology assessment (Fukushima, Y. (131) 327)
- ScSZ  
Solid oxide fuel cell; Carbon deposition; Ni cermet; Power generation; Anode degradation (Gunji, A. (131) 285)
- Secondary ion mass spectrometry (SIMS)  
Hydrocarbon fuels; Direct introduction; SOFC (Horita, T. (131) 299)
- Selective oxidation  
PEM fuel cell; Steam reformer; Residential power supply (Mathiak, J. (131) 112)
- Sewage sludge digestion  
Biogas; SOFC system model; Thermal balance of fuel cell stack; Carbon deposition; Composite curves (Van herle, J. (131) 127)
- SOFC system development  
SOFC; SOFC system; Conceptual study (Fontell, E. (131) 49)
- SOFC system model  
Biogas; Sewage sludge digestion; Thermal balance of fuel cell stack; Carbon deposition; Composite curves (Van herle, J. (131) 127)
- SOFC system  
SOFC; Conceptual study; SOFC system development (Fontell, E. (131) 49)
- SOFC  
Co-ionic electrolytes (Demin, A. (131) 231)
- SOFC  
Commercial development; Intermediate temperature (Bance, P. (131) 86)
- SOFC  
Fuel cells; Biomass fuel; System efficiency (Omosun, A.O. (131) 96)
- SOFC  
Model; Repeat element; Validation (Larraín, D. (131) 304)
- SOFC  
Modelling; CFD; Experimental parameters (Autissier, N. (131) 313)

## SOFC

Gas turbine; Hybrid system; Optimisation; Genetic algorithm; CO<sub>2</sub>-capture (Fredriksson Möller, B. (131) 320)

## SOFC

Hydrocarbon fuels; Direct introduction; Secondary ion mass spectrometry (SIMS) (Horita, T. (131) 299)

## SOFC

Optimization; Power plant; Energy; Exergy analysis (Douvartzides, S. (131) 224)

## SOFC

Residual stress; Stack; X-ray stress measurements (Yakabe, H. (131) 278)

## SOFC

Resource management; Lanthanum intensity; Recycling; Scenario development; Technology assessment (Fukushima, Y. (131) 327)

## SOFC

SOFC system; Conceptual study; SOFC system development (Fontell, E. (131) 49)

## SOFC

YSZ; Conductivity; High temperature; Annealing (Hattori, M. (131) 247)

## SOFCs

Fe–Cr alloy; Oxidation; Anode gases; GDOES (Horita, T. (131) 293)

## Solar

Fuel cell system; Photovoltaic cell (Hedström, L. (131) 340)

## Solid oxide fuel cell

Cr-poisoning; Metallic interconnect; Half-cell (Fujita, K. (131) 270)

## Solid oxide fuel cell

Cr-poisoning; Metallic separator; Half-cell (Fujita, K. (131) 261)

## Solid oxide fuel cell

ScSZ; Carbon deposition; Ni cermet; Power generation; Anode degradation (Gunji, A. (131) 285)

## Solid oxide fuel cell

Stationary power; Distributed generation; Cogeneration; Molten carbonate fuel cell; Hybrids (Williams, M.C. (131) 79)

## Stack

SOFC; Residual stress; X-ray stress measurements (Yakabe, H. (131) 278)

## Stationary power

Distributed generation; Cogeneration; Solid oxide fuel cell; Molten carbonate fuel cell; Hybrids (Williams, M.C. (131) 79)

## Steam reformed

PEM fuel cell; Selective oxidation; Residential power supply (Mathiak, J. (131) 112)

## Sulfur

Reformer; Natural gas; LPG; Desulfurization (Lampert, J. (131) 27)

## Surface treatment

Bipolar plate; Corrosion-resistance; Electrical resistance (Lee, S.-J. (131) 162)

## System efficiency

Fuel cells; SOFC; Biomass fuel (Omosun, A.O. (131) 96)

## Technology assessment

SOFC; Resource management; Lanthanum intensity; Recycling; Scenario development (Fukushima, Y. (131) 327)

## Temperature distribution

PEM; Fuel cell; Current distribution; Flow field flooding (Hakenjos, A. (131) 213)

## Temperature profile

Modelling micro-tubular SOFC; Fluent computational fluid dynamics; Flow distribution (Lockett, M. (131) 243)

## Testing

PEM; CHP; Modelling (Gigliucci, G. (131) 62)

## Thermal balance of fuel cell stack

Biogas; SOFC system model; Sewage sludge digestion; Carbon deposition; Composite curves (Van herle, J. (131) 127)

## Thickness of electrode

PEMFC; Gas diffusion layer; Nafion impregnation (Lee, H.-K. (131) 200)

## TPO

Microtubular SOFC; Iso-octane; Alcohol fuels; Carbon deposition (Saunders, G.J. (131) 23)

## URFC

Polyppyrrole; Pt/PPy/Nafion electrode (Lee, H. (131) 188)

## Water management

Polymer electrolyte membrane fuel cell; Gas diffusion layer; Water transport; Cell performance (Chen, J. (131) 155)

## Water transport

Polymer electrolyte membrane fuel cell; Water management; Gas diffusion layer; Cell performance (Chen, J. (131) 155)

## Validation

SOFC; Model; Repeat element (Larraín, D. (131) 304)

## X-ray stress measurements

SOFC; Residual stress; Stack (Yakabe, H. (131) 278)

## YSZ

Conductivity; High temperature; Annealing; SOFC (Hattori, M. (131) 247)

Zr-substituted BaCeO<sub>3</sub>

Open circuit voltage; Proton conductivity; Ionic transport number (Shimada, T. (131) 289)