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<i>Luis Duque, Antonio Molinero, Juan Carlos Oller, José Miguel Barcala, M. Antonia Folgado, Antonio M Chaparro</i>	
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<i>Kazuma Shinozaki, Shuji Kajiya, Shunsuke Yamakawa, Naoki Hasegawa, Takahisa Suzuki, Masao Shibata, Ryosuke Jinnouchi</i>	
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<i>Hikaru Ogawa, Miho Kageyama, Hisaaki Gyoten, Motoaki Kawase</i>	
Development of PEFC Low Pt-Loading Graphene Catalyst Layer By Electrospray Method for Increasing Output Power	1880
<i>Masaya Okano, Suguru Uemura, Yutaka Tabe</i>	

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<i>Tanvir Alam Arman, Aman Uddin, Shuo Ding, Yanghua He, Cankur Cetinbas, Jui kun Peng, Xiaohua Wang, Rajesh Ahluwalia, Hui Xu, Gang Wu, Siddharth Komini Babu, Shawn Litster, Ugur Pasaogullari, Jacob S. Spendelow</i>	
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<i>Takashi Sasabe, Toshihiko Ogura, Koki Okada, Katsunori Sakai, Shuichiro Hirai</i>	
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<i>Matthew Coats, Samantha Medina, Jonathan Braaton, Lei Cheng, Nathan Craig, Christina Johnston, Svitlana Pylypenko</i>	
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<i>Elliot Padgett, Guido Bender, Andrew Haug, Krzysztof A. Lewinski, Fuxia Sun, Haoran Yu, David A. Cullen, Andrew Steinbach, Shaun M Alia</i>	
Decoding the Electro-Chemo-Mechanical Coupling in Core-Shell Nanoparticles for PEFC Catalyst Layers.....	1890
<i>Navneet Goswami, Partha P. Mukherjee</i>	
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<i>Prantik Saha, Tim Van Cleve, Kenneth C. Neyerlin</i>	
Multi-Atom PGM Based Catalyst for Highly Efficient Oxygen Reduction Reaction(ORR) and Hydrogen Oxidation Reaction (HOR) in Alkaline Environment.....	1893
<i>Horie Adabi Firouzjaie, Abolfazl Shakouri, Christopher Williams, John R Regalbuto, Alexey Serov, William Earl Mustain, Andrea Zitolo, Tristan Asset, Frederic Jaouen, Horie Adabi Firouzjaie</i>	
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<i>Jacob A Wrubel, Jason Zack, Andrew M Park, Guido Bender</i>	
Using Distribution of Relaxation Times Analysis to Explore Overpotentials in Proton Exchange Membrane Water Electrolyzers Utilizing Sintered Metal and Fibrous Titanium Porous Transport Layers.....	1897
<i>Alanna M. Gado, Stoyan Bliznakov, Leonard J. Bonville, Radenka Maric</i>	
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<i>Rodrigo Lira Garcia Barros, Matheus Theodorus de Groot, John van der Schaaf</i>	

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Automating Correlative Electron Microscopy for Heavy Duty Fuel Cell Development.....	1901
<i>David A. Cullen, Haoran Yu, Michael J. Zachman, Jaehyung Park, Nancy N. Kariuki, Leiming Hu, Rangachary Mukundan, K.C. Neyerlin, Deborah J. Myers</i>	
Atomic-Scale Structural Analysis of Pt-Based Nanoparticles Using Scanning Transmission Electron Microscopy.....	1902
<i>Akihide Kuwabara, Yuki Omori, Hsin-Hui Huang, Shunsuke Kobayashi</i>	
Investigation of Liquid Water Behavior and Performance of PEFC Catalyst Layers Using a Microdevice and in-Operando Infrared Microscopy	1903
<i>Takahiro Suzuki, Ryota Kobayashi, Katsuyoshi Kakinuma, Makoto Uchida, Akihiro Iiyama, Shohji Tsushima</i>	
Advanced Electron Microscopy Techniques for PGM-Free Catalyst Characterization.....	1905
<i>Michael J. Zachman, Haoran Yu, Shengwen Liu, Yachao Zeng, Yi Li, Gang Wu, David A. Cullen</i>	
Operando Neutron Radiography Measurements of a Zero-Gap Alkaline Electrolysis Cell	1907
<i>Stefanie Renz, Tobias Arlt, Nikolay Kardjilov, Lukas Helfen, Cyrille Couture, Alessandro Tenggattini, Felix Lohmann-Richters, Werner Lehnert</i>	
Fuel Cell Imaging with a Wolter Optics Neutron Microscope	1909
<i>Daniel Hussey, Michael Cyrus Daugherty, Youngju Kim, Jacob Michael LaManna, David Jacobson</i>	
Fast Neutron Tomography of Fuel Cells Enabled By Seeded Tomography Reconstruction	1911
<i>Jacob Michael LaManna, Michael Cyrus Daugherty, Youngju Kim, Daniel Hussey, Eli Baltic, David Jacobson</i>	
Probing Heterogeneous Water Distributions within Fuel Cell Membranes Using Combined Neutron and X-Ray Tomography (NeXT).....	1913
<i>Pranay Shrestha, Jacob Michael LaManna, Kieran Fahy, Junseob Kim, ChungHyuk Lee, Keonhag Keonhag Lee, Eli Baltic, David Jacobson, Daniel Hussey, Aimy Bazylak</i>	

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(Digital Presentation) Development of Composite Graphite Plate with Multiple Functional Layers for Pemfc	1914
<i>Runlin Fan, Junsheng Zheng, Jing Chen, Yuhang Peng</i>	
(Digital Presentation) Correlative Evaluation Between Water Concentration and Voltage Fluctuation of PEFC Under Low-Humidity and Load-Change Operations Based on Laser Spectroscopy	1915
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(Digital Presentation) Thermal Management for Liquid-Cooling PEMFC: From Temperature Control Scheme Towards Control Strategy Modeling.....	1917
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<i>Shi Qitong, Feng Cong, Pingwen Ming</i>	

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Tailoring Flow Field Channel Aspect Ratio for Efficient Mass Transport and Compression in Fuel Cells.....	1920
<i>Harsharaj Birendrasingh Parmar, Eric Alexander Chadwick, Pranay Shrestha, Aimy Bazylak</i>	

An Innovative Approach to Design and Optimize Flow Field Pattern of Polymer Electrolyte Membrane Fuel Cell.....	1921
<i>Takayuki Tsukamoto, Tsutomu Takayama, Yuhei Miyamoto, Keisuke Komiyama, Masakazu Yoneda</i>	
Effects of Partially Narrowed Flow Channel on Performance of Polymer Electrolyte Fuel Cell.....	1923
<i>Yulei Ma, Hisaaki Gyoten, Miho Kageyama, Motoaki Kawase</i>	
Biomimetic Microchannels for the Passive Management of Water in PEM Fuel Cells	1925
<i>Eric Alexander Chadwick, Pranay Shrestha, Harsharaj Birendrasingh Parmar, Aimy Bazylak, Volker Schulz</i>	
Suitability of Composite Feed-Stock Material for Bi-Polar Plates Using Low-Cost Additive Manufacturing	1926
<i>David Alexander, Bianca Myraih Ceballos, David Yapell, Christian Ruiz, Rod L. Borup, Tommy Rockward</i>	
Multiwalled Carbon Nanotube-Filled Polymer Composites for Direct Injection Molding of Bipolar Plates	1927
<i>Chadwick J Kypta, Brian A Young, Anthony Santamaria, Adam S Hollinger</i>	
Gold-Reduced Graphene Oxide Composite Coating on Stainless Steel 316L As Bipolar Plate for Proton Exchange Membrane Fuel Cell.....	1929
<i>Jinmyeong Seo, Jung-Joon Park, Wang Qing, Fan Yang, Sanghwa Yoon, Bongyoung Yoo</i>	

I01B - Recycling of Fuel Cell/Electrolyzer Materials

(Invited) Sustainable Platinum Group Metal (PGM) Recycling of Proton Exchange Membrane Fuel Cells and Electrolyzer Cells (PEMFCs & ECs) As a Vital Step Towards Truly Renewable and Green Energy Conversion Technologies	1930
<i>Shuang Ma Andersen, Raghunandan Sharma, Lars Christian Larsen, Mikkel Juul Juul Larsen, Laila Grahl-Madsen</i>	
Simultaneous Generation of Clean Water and Electricity Via Desalination Fuel Cells.....	1932
<i>Matthew Suss, Shada Abu Khalla, Arunchander Asokan, Salman Abdalla</i>	
Influence of Operating Parametres on PEM Based Ecmr for Hydrogen Production in Pressurised Condition.....	1934
<i>SRI Harsha Sri Harsha Vinnakota, R Balaji, A.S Brindha, Lakshman Neelakantan, Krishnan Ramya</i>	

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Optical Observation of Water and Hydrogen Bubble in Cathode Toluene-Methylcyclohexane Flow inside Direct Toluene Hydrogenation Cell	1935
<i>Kaito Shigemasa, Sunpil Jang, Fatima Reyna, Kaisei Inoue, Takuto Araki, Takuma Terao, Kensaku Nagasawa, Shigenori Mitsushima</i>	
Visualization of Hydrogen Bubbles in Porous Transport Layer in Toluene Direct Electro-Hydrogenation Electrolyzer Using X-Ray CT System.....	1937
<i>Sunpil Jang, Fatima Reyna, Kaito Shigemasa, Takuto Araki, Kensaku Nagasawa, Shigenori Mitsushima</i>	

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High Volume Fuel Cell Stack Manufacturing.....	1941
<i>Karen Swider-Lyons, Manikandan Ramani, Chuck Carlstrom, John Lawler, Jon Owejan</i>	

Setting Development Targets for Fuel Cells and Systems for Heavy-Duty Trucks Using a Comprehensive Model-Based Approach	1942
<i>Takao Watanabe, Masao Shibata, Norihiro Fukaya, Tomoyuki Nagai, Takahisa Suzuki</i>	
Electrochemical Hydrogen Compression: Modeling, Internal States Estimation and System Control	1943
<i>Yifan Wang, Sai Vudata, Paul Brooker, James M. Fenton</i>	
Quantifying Temperature Effects in Large-Scale PEM Water Electrolysis Stacks	1945
<i>Tobias Krenz, Oskar Weiland, Patrick Trinke, Lennard Helmers, Boris Bensmann, Richard Hanke-Rauschenbach</i>	
Flooding Characteristics and Countermeasures in a PEM Fuel Cell System	1947
<i>Jonas Breitingner, Mark Hellmann, Helerson Kemmer, Stephan Kabelac</i>	

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Assembly and Testing of a Hydrogen Fuel Cell System to Power an Airship	1949
<i>Antonio Molinero, Juan Carlos Oller, José Miguel Barcala, Luis Duque, M. Antonia Folgado, Antonio M Chaparro</i>	
Study on Long-Term Decomposition Conditions of Hydrogen Peroxide for Oxygen Supply to Pemfcs	1950
<i>Chaehyeok Han, Hyungjun Cheon, Joongmyeon Bae, Junghun Lee, Hyunki Yoon, Heesook Roh</i>	
Superior Performance and Durability Water Electrolysis with a Highly Conductive and Stable Anion-Exchange Membrane	1952
<i>sun Young Kang, Yong-Hun Cho, Yung-Eun Sung</i>	
Synthesis and Characterization of a Polyaniline-Polyvinyl Alcohol (PANI-PVA) Composite As Anion-Exchange Membrane	1953
<i>Maria Susana Susana, Nicolas Segura-Carvajal, Carlos Ignacio Sanchez</i>	
Power Generation Performance of Polymer Electrolyte Fuel Cells with Electrocatalysts Supported on SnO ₂ in High Current Density Range	1954
<i>Taichi Ogawa, Yusuke Inoue, Kotaro Yamamoto, Masahiro Yasutake, Zhiyun Noda, Stephen Matthew Lyth, Junko Matsuda, Masamichi Nishihara, Akari Hayashi, Kazunari Sasaki</i>	
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<i>Noor Ul Hassan, Mrinmay Mandal, Surachet Duanghathairornsuk, Barr Zulevi, Paul Kohl, William Earl Mustain</i>	

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Effects of Wet Film Application Parameters on the Structure and Performance of Fuel Cell Catalyst Layers Prepared Using Scalable Methods	1959
<i>Jonas Stoll, Erik Kjeang, Philip Huynh</i>	
Optimized Decal Transfer Method for the Mitigation of Incidental Particle Deposition at the Interface of Proton Exchange Membranes and Catalyst Layers	1962
<i>Amin Bahrami, Nitish Kumar, Yixuan Chen, Francesco P Orfino, Monica Dutta, Erin Setzler, Alexander Agapov, Erik Kjeang</i>	
Tuning the Rheology of Anode Inks with Aging for Low-Temperature Polymer Electrolyte Membrane Water Electrolyzers	1965
<i>Sunilkumar Khandavalli, Jaehyung Park, Robin Rice, Guido Bender, Deborah J. Myers, Michael Ulsh, Scott A Mauger</i>	
Surface Texture Design of FBR-ALD Pt/C Catalyst to Enhance PEMFC Performance	1966
<i>Ji-Hu Baek, Myung-Jin Jung, Sung Lee, Yu-Jin Jung, Woo-Jae Lee, Se-Hun Kwon</i>	
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Platinum Group Metal-Free ORR Catalysts for Anion Exchange Membrane Fuel Cells.....	1968
<i>Hanguang Zhang, Piotr Zelenay</i>	
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<i>Chenzhao Li, Shengwen Liu, Yachao Zeng, Yadong Liu, David A. Cullen, Gang Wu, Jian Xie</i>	
Multiscale Study of PEMFC in Marine Environment: Impact of a NaCl Spray on Durability	1970
<i>Marie Lamard, Bruno Auvity, Paul Buttin, Sébastien Rosini, Clément Retière</i>	

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Self-Supporting Ag Nanowire Mat Electrodes on PTFE Gas Diffusion Layers for Electrochemical Conversion of CO ₂ to CO	1972
<i>David Raciti, Trevor Michael Braun, Brian Tackett, Heng Xu, Mutya Cruz, Benjamin Wiley, Thomas P Moffat</i>	
Metallic Gas Diffusion Layers for Polymer Electrolyte Fuel Cells.....	1974
<i>Kotaro Yamamoto, Masahiro Yasutake, Zhiyun Noda, Stephen Matthew Lyth, Junko Matsuda, Masamichi Nishihara, Akari Hayashi, Kazunari Sasaki</i>	
Optimization of the Cathode Gas Diffusion Layer Also Matters for Water Electrolyzers.....	1976
<i>Abdurrahman Yilmaz, Siddharth Komini Babu, Ugur Pasaogullari, Jacob S. Spendelow, Rangachary Mukundan</i>	
Self-Standing MPL and Its In-Situ Liquid Water Measurement in PEFC	1977
<i>Yudai Ishikawa, Rikuo Aihara, Hiroshi Naito, Katsunori Sakai, Takashi Sasabe, Akihiko Tanioka, Shuichiro Hirai</i>	
Development of Micro-Porous Layers for Unitized Reversible Fuel Cell and Water Electrolyzes.....	1978
<i>Abdurrahman Yilmaz, Siddharth Komini Babu, Vijay K Ramani, Ugur Pasaogullari, Jacob S. Spendelow</i>	

I01B - High Temperature Fuel Cell Operation

PBI-Membrane for High-Temperature PEMFC	1979
<i>Kobra Azizi, Hans Hjuler, Nedjeljko Seselj, Jens Oluf Jensen, Qingfeng Li, Lars Nilausen Cleemann</i>	
The Possibility of Intermediate-Temperature (120 °C)-Operated Polymer Electrolyte Fuel Cells	1980
<i>Katsuyoshi Kakinuma, Hitoshi Taniguchi, Takayuki Asakawa, Toshihiro Miyao, Makoto Uchida, Yasuhito Aoki, Tsuyoshi Akiyama, Akihiro Masuda, Nobuyuki Sato, Akihiro Iiyama</i>	
Optimization Strategies for Commercialization of High-Temperature Pemfcs	1982
<i>Nedjeljko Seselj, Silvia Martinez Alfaro, Kobra Azizi, Eftychia Bompolaki, Denys Gromadskyi, Larysa Hromadska, Hans Hjuler, Lars Nilausen Cleemann</i>	

I01C-POLYMER ELECTROLYTE FUEL CELLS & ELECTROLYZERS 22(PEFC&E 22) - ION-EXCHANGE MEMBRANE DEVELOPMENT, PERFORMANCE, AND DURABILITY

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Hydrogen Crossover Flux through Two-Dimensional Nanomaterials.....	1984
<i>Karli Ann Gaffrey, Saheed Bukola, Jeff Blackburn, Bryan S. Pivovar</i>	
Nafion Composite Membrane Reinforced By Phosphonated Polypentafluorostyrene Nanofibers	1985
<i>Jochen Alfred Kerres, Muhammad Mu'min Solihul, Miriam Komma, Thomas Böhm, Maximilian Wagner, Anja Krieger, Simon Thiele</i>	
Development of Pore-Filling Anion Exchange Membranes for Anion Exchange Membrane Water Electrolysis: Enhancement of Resistance	1987
<i>Dahye Jeong, Minyoung Lee, Mahamuda Akter, Jin Soo Park</i>	
Development of Pore-Filling Anion Exchange Membranes for Anion Exchange Membrane Water Electrolysis: Enhancement of Alkaline Stability	1988
<i>Minyoung Lee, Dahye Jeong, Mahamuda Akter, Jin Soo Park</i>	

Molecular Dynamics Simulations of Cerium Ion Transport Phenomena in Polymer Electrolyte Membranes of Polymer Electrolyte Fuel Cells.....	1989
<i>Hiroto Suzuki, Takuya Mabuchi, Takashi Tokumasu</i>	
Electrode Ionomer Accelerated Stress Test Applied to High Oxygen Permeability Ionomer in Fuel Cells.....	1991
<i>Juan Mesa, Scott Blackburn, Austin Plymill, Gerald Brown, Andrew M Park, Devproshad Paul, Shawn Litster</i>	

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(Invited) Anion Exchange Membrane Fuel Cells in LIME Laboratory: From Commercial Polymers Towards Biomass Based Materials.....	1992
<i>Riccardo Narducci</i>	
(Invited) Novel Ionomers and Ionomer Membranes for Fuel Cells and Redox-Flow Batteries.....	1994
<i>Jochen Alfred Kerres</i>	
Cross-Linking of Proton Exchange Membranes with Enhanced Stability and Reduced Fuel Crossover for Direct-Isopropanol Fuel Cells.....	1995
<i>Sebastian Auffarth, Jochen Alfred Kerres</i>	
Alkyl Phosphonic Acids: An Alternative to Phosphoric Acid in HT-Pemfcs	1996
<i>Sandip Maurya, Katie Lim, Zhendong Hu, Hongfei Jia, Jeffrey Michael Klein, Yu Seung Kim</i>	
Toward Improved Polymer Electrolyte Membranes in a High Temperature, Low Relative Humidity Environment	1997
<i>Pranathi Gangavarapu, Shane Foister, Thomas A. Zawodzinski</i>	

I01C - Electrode Ionomers

(Invited) Structure-Property Relationships in Highly Permeable Dioxolane-Based Perfluorinated Ionomers.....	1998
<i>Adlai Katzenberg, Ahmet Kusoglu, Miguel A Modestino</i>	
Probing the Electrochemical Behavior of High-Temperature Ionomer Blends	2000
<i>Karthik Arunagiri, Christopher G Arges</i>	
Evaluation of High Oxygen Permeability Ionomer (HOPI) Oxygen Permeability for Proton Exchange Membrane Fuel Cells (PEMFCs).....	2002
<i>Jiawei Liu, Jonathan Braaten, Nicholas Tiwari, Xiaoxiao Wang, Scott Blackburn, Gerald Brown, Andrew M Park, Zachary Ulissi, Shawn Litster</i>	
Quantitative Analysis of H ⁺ Transportation of Nafion film on Different Substrate using Planar Inter Digitated Electrodes	2003
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The Ionomer Molecular Structure Effect in the PEFC Ink & Applications.....	2005
<i>Won young Choi, Hyunguk Choi, Seo Won Choi, Young Je Park, CHI-Young Jung, Nam Jin Lee, Jong min Lee, Young Gi Yoon</i>	
Chemically Tuning Ionomer Thin Film Properties for Improved Electrode Function.....	2006
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<i>Eun Joo Park, Santosh Adhikari, Daniel P Leonard, Katie Lim, Cy Fujimoto, Oscar Morales, Joan F. Brennecke, Zhendong Hu, Hongfei Jia, Yu Seung Kim</i>	
Cationic Ionomer Thin Films for Alkaline Electrochemical Energy Conversion	2008
<i>Douglas Kushner, Adlai Katzenberg, Xiaoyan Luo, Ahmet Kusoglu</i>	
Self-Adhesive Ionomers for Durable Alkaline Water Electrolysis	2009
<i>Parin Shah, Mengjie Chen, Katelyn Groenhout, Hui Min Tee, Habin Park, Paul Kohl</i>	

I01C - Membrane Durability

Crown Ether As a Chemical Stabilizer for Enhanced Cerium Stability and Radical Scavenging in Proton Exchange Membranes.....	2010
<i>Tanya Agarwal, Siddharth Komini Babu, Allen Sievert, Andrew M Park, Tim Hopkins, Suresh Advani, Ajay Krishna Prasad, Rod L. Borup</i>	
Chemical Stability Enhancement of Aromatic Proton Exchange Membranes Using a Damage Repair Mechanism.....	2011
<i>Tym de Wild, Tamas Nemeth, Thomas Nauser, Thomas J. Schmidt, Lorenz Gubler</i>	
Assessing Free Radical Scavenging Activity of Various Cerium Materials for Proton Exchange Membrane Fuel Cells Using Fluorescence Spectroscopy Presentation Format.....	2012
<i>Alisa Chakraborty, Christopher G. Arges</i>	
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