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Publikationer

Stepwise Understanding on Hydrolysis Formation of the IrO_x Nanoparticles as Highly Active Electrocatalyst for Oxygen Evolution Reaction

Karade, S. S., Sharma, R., Hedegaard, M. A. B. & Andersen, S. M., maj 2024, (E-pub ahead of print) I: *Electrocatalysis*. 10 s.

Tailoring iridium-palladium nanoparticles with Ir-rich skin: a highly durable anode electrocatalyst for acidic water electrolysis via a facile microwave-assisted chemical reduction method

Karade, S. S., Sharma, R., Morgen, P., Makovec, D., Gyergyek, S. & Andersen, S. M., 24. mar. 2024, I: *Physical Chemistry Chemical Physics*. 26, 11, s. 9060-9072

Limitations of Chronopotentiometry Test Protocols for Stability Study on Oxygen Evolution Reaction Electrocatalysts and Recommendations

Khan, I. A., Morgen, P., Sharma, R. & Andersen, S. M., 22. feb. 2024, I: *Journal of Physical Chemistry C*. 128, 7, s. 2828-2833

Reduced valence state of iridium supported on antimony doped tin oxide as a highly active and robust oxygen evolution reaction electrocatalyst for proton exchange membrane-based electrolysis

Ali Khan, I., Morgen, P., Gyergyek, S., Sharma, R. & Ma Andersen, S., 15. feb. 2024, I: *Applied Surface Science*. 646, 12 s., 158924.

Electrochemical Activity of Carbon-Supported Pt-Nanoparticles: Effect of Pt-Precursor Ligand and/or Presence of Anions During Polyol Synthesis

Omann, K. J., Sharma, R. & Andersen, S. M., jan. 2024, I: *Electrocatalysis*. 15, 1, s. 96-109

Multiple Bubble Removal Strategies to Promote Oxygen Evolution Reaction: Mechanistic Understandings from Orientation, Rotation, and Sonication Perspectives

Karimi, V., Sharma, R., Morgen, P. & Andersen, S. M., 25. okt. 2023, I: *ACS Applied Materials & Interfaces*. 15, 42, s. 49233–49245

Selection on antimony-doped tin oxide (ATO) as an efficient support for iridium-based oxygen evolution reaction (OER) catalyst in acidic media

Khan, I. A., Morgen, P., Gyergyek, S., Sharma, R. & Andersen, S. M., 15. okt. 2023, I: *Materials Chemistry and Physics*. 308, 11 s., 128192.

Recovery, Regeneration, and Reapplication of PFSA Polymer from End-of-Life PEMFC MEAs

Sharma, R., Morgen, P., Larsen, M. J., Roda-Serrat, M. C., Lund, P. B., Grahl-Madsen, L. & Andersen, S. M., 3. okt. 2023, I: *ACS Applied Materials & Interfaces*. 15, 41, s. 48705-48715

IrO₂/Ir Composite Nanoparticles (IrO₂@Ir) Supported on TiN_xO_y Coated TiN: Efficient and Robust Oxygen Evolution Reaction Catalyst for Water Electrolysis

Karade, S. S., Sharma, R., Gyergyek, S., Morgen, P. & Andersen, S. M., 20. feb. 2023, I: *ChemCatChem*. 15, 4, 12 s., e202201470.

Correlation between the Electrochemical Durability of Pt/C Catalysts and the Surface Functional Groups of the Support Carbon

Omann, K. J., Sharma, R., Morgen, P., Gyergyek, S., Larsen, M. J. & Andersen, S. M., 2023, I: *ACS Applied Energy Materials*. 6, 3, s. 1294-1307

A green adaptation of the critical resource of platinum group metals (PGMs) from spent autocatalysts to electrocatalysts for renewable power conversion

Sharma, R., Larsen, M. J., Larsen, L. C., Bogø, A., Grahl-Madsen, L. & Andersen, S. M., 21. nov. 2022, I: Sustainable Energy & Fuels. 6, 22, s. 5177-5186

Insights into Degradation of the Membrane–Electrode Assembly Performance in Low-Temperature PEMFC: the Catalyst, the Ionomer, or the Interface?

Sharma, R., Morgen, P., Chiriaev, S., Lund, P. B., Larsen, M. J., Sieborg, B., Grahl-Madsen, L. & Andersen, S. M., 9. nov. 2022, I: ACS Applied Materials & Interfaces. 14, 44, s. 49658–49671

Towering non-Faradaic capacitive storage based on high quality reduced graphene oxide from spent graphite: Direct approach and waste utilization

Perumal, P., Mohapatra, M., Mukherjee, A., Basu, S. & Andersen, S. M., 25. aug. 2022, I: Journal of Energy Storage. 52, Part C, 14 s., 104989.

Critical thinking on baseline corrections for electrochemical surface area (ECSA) determination of Pt/C through H-adsorption/H-desorption regions of a cyclic voltammogram

Sharma, R., Gyergyek, S. & Andersen, S. M., 15. aug. 2022, I: Applied Catalysis B: Environmental. 311, 12 s., 121351.

Baseline corrections for electrochemical surface area (ECSA) determination of Pt/C through H- adsorption/H-desorption regions

Sharma, R. & Andersen, S. M., aug. 2022.

Post-degradation case study of the membrane electrode assembly from a low-temperature PEMFC stack

Sharma, R., Morgen, P., Chiriaev, S., Larsen, M. J., Sieborg, B., Grahl-Madsen, L. & Andersen, S. M., aug. 2022.

Microwave-Assisted Scalable Synthesis of Pt/C: Impact of the Microwave Irradiation and Carrier Solution Polarity on Nanoparticle Formation and Aging of the Support Carbon

Sharma, R., Gyergyek, S. & Andersen, S. M., 24. jan. 2022, I: ACS Applied Energy Materials. 5, 1, s. 705-716

Gram-size Pt/C catalyst synthesized using Pt compound directly recovered from an end-of-life PEM fuel cell stack

Chourashiya, M., Sharma, R., Gyergyek, S. & Andersen, S. M., 15. jan. 2022, I: Materials Chemistry and Physics. 276, 9 s., 125439.

Performance and future directions of transition metal sulfide-based electrode materials towards supercapacitor/supercapattery

Das, A., Raj, B., Mohapatra, M., Andersen, S. M. & Basu, S., jan. 2022, I: Wiley Interdisciplinary Reviews: Energy and Environment. 11, 1, 36 s., e414.

Leading strategies and research advances for the restoration of graphite from expired Li⁺ energy storage devices

Perumal, P., Andersen, S. M., Nikoloski, A., Basu, S. & Mohapatra, M., dec. 2021, I: Journal of Environmental Chemical Engineering. 9, 6, 17 s., 106455.

Degradation mechanisms of electrochemical activity of Pt/C during the accelerated stress test focused on catalyst support corrosion

Sharma, R. & Andersen, S. M., sep. 2021.

Recovery of Pt and Ru from Spent Low-Temperature Polymer Electrolyte Membrane Fuel Cell Electrodes and Recycling of Pt by Direct Redeposition of the Dissolved Precursor on Carbon

Sharma, R., Gyergyek, S., Lund, P. B. & Andersen, S. M., 26. jul. 2021, I: ACS Applied Energy Materials. 4, 7, s. 6842–6852

Synthesis of Pt/C from (NH₄)₂PtCl₆ through Microwave- Assisted Synthesis: A particle size-controlled growth

Sharma, R., Wang, Y., Li, F., Chamier, J. & Andersen, S. M., jul. 2021, s. 129. 322 s.

Circular use of Pt/C through Pt dissolution from spent PEMFC cathode and direct reproduction of new catalyst with microwave synthesis

Sharma, R. & Andersen, S. M., 1. jun. 2021, I: Materials Chemistry and Physics. 265, 9 s., 124472.

A method of recovering iridium

Andersen, S. & Sharma, R., 6. maj 2021, IPC nr. C22B3/00, C22B3/44, Patentnr. WO2021083758 (A1), 6. maj 2021, Prioritetsdato 28. okt. 2019, Prioritetsnr. EP20190205560

Increasing fuel cell durability during prolonged and intermittent fuel starvation using supported IrO_x

Labi, T., Van Schalkwyk, F., Andersen, S. M., Morgen, P., Ray, S. C. & Chamier, J., 1. apr. 2021, I: Journal of Power Sources. 490, 7 s., 229568.

Pt/C Electrocatalyst Durability Enhancement by Inhibition of Pt Nanoparticle Growth Through Microwave Pretreatment of Carbon Support

Sharma, R., Gyergyek, S., Chamier, J., Morgen, P. & Andersen, S. M., 12. mar. 2021, I: ChemElectroChem. 8, 6, s. 1183-1195

Crystalline Disorder, Surface Chemistry, and Their Effects on the Oxygen Evolution Reaction (OER) Activity of Mass-Produced Nanostructured Iridium Oxides

Sharma, R., Karlsen, M., Morgen, P., Chamier, J., Ravnsbæk, D. B. & Andersen, S. M., feb. 2021, I: ACS Applied Energy Materials. 4, 3, s. 2552-2562

Spent fuel cell electrocatalyst recycling through potentiodynamic dissolution of platinum

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Electrochemical Dissolution of PtRu Nanoparticles: Electrocatalyst Stability During Operation and Recycling of Spent Catalysts

Sharma, R., Gyergyek, S., Morgen, P. & Andersen, S. M., 30. aug. 2020. 1 s.

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Sharma, R., Morgen, P. & Andersen, S. M., 17. jun. 2020, I: Physical chemistry chemical physics : PCCP. 22, 23, s. 13030-13040

Preparation and Characterization of Poly(Vinyl Alcohol) (PVA)/SiO₂, PVA/Sulfosuccinic Acid (SSA) and PVA/SiO₂/SSA Membranes: A Comparative Study

Remiš, T., Bělský, P., Andersen, S. M., Tomáš, M., Kadlec, J. & Kovářík, T., mar. 2020, I: Journal of Macromolecular Science: Part B - Physics. 59, 3, s. 157-181

Solution combustion synthesized ceria or alumina supported Pt as cathode electrocatalyst for PEM fuel cells

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On the Electrochemical Stability of PtRu Alloy Electrodes in Aqueous Acidic Baths: A Strategy for Recycling Pt and Ru

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Method for dissolving precious metals

Andersen, S. M. & Sharma, R., 7. nov. 2019, IPC nr. C22B3/00, C25C5/02, Patentnr. WO2019211318 (A1), 1. maj 2019, Prioritetsdato 2. maj 2018, Prioritetsnr. EP20180170312 20180502

Inhibition of Ostwald ripening through surface switching species during potentiodynamic dissolution of platinum nanoparticles as an efficient strategy for platinum group metal (PGM) recovery

Sharma, R., Simonsen, S. B., Morgen, P. & Andersen, S. M., 20. okt. 2019, I: Electrochimica Acta. 321, 11 s., 134662.

Particle Size-Controlled Growth of Carbon-Supported Platinum Nanoparticles (Pt/C) through Water-Assisted Polyol Synthesis

Sharma, R., Wang, Y., Li, F., Chamier, J. & Andersen, S. M., 24. sep. 2019, I: ACS Omega. 4, 13, s. 15711-15720

Synthesis of Pt/C electrocatalyst from a user-friendly Pt precursor - ammonium hexachloroplatinate through microwave-assisted polyol synthesis

Sharma, R., Wang, Y., Li, F., Chamier, J. & Andersen, S. M., 23. sep. 2019, I: ACS Applied Energy Materials. 2, 9, s. 6875-6882

Sustainable platinum recycling through electrochemical dissolution of platinum nanoparticles from fuel cell electrodes

Sharma, R., Rode Nielsen, K., Lund, P. B., Simonsen, S. B., Grahl-Madsen, L. & Andersen, S. M., 2. sep. 2019, I: ChemElectroChem. 6, 17, s. 4471-4482

Pt/C Electrocatalyst Synthesis from Recycling of the Spent PEMFC Membrane Electrode Assembly: A Closed Loop Circular Economy

Sharma, R., Andreasen, S. J., Chamier, J. & Andersen, S. M., 22. aug. 2019, I: Journal of The Electrochemical Society. 166, 13, s. F963-F970 8 s.

Evolution of the degradation mechanisms with the number of stress cycles during an accelerated stress test of carbon supported platinum nanoparticles

Sharma, R., Gyergyek, S., Li, Q. & Andersen, S. M., 1. apr. 2019, I: Journal of Electroanalytical Chemistry. 838, s. 82-88

Influence of dispersion media on Nafion® ionomer distribution in proton exchange membrane fuel cell catalyst carbon support

Sharma, R., Grahl-Madsen, L. & Andersen, S. M., 15. mar. 2019, I: Materials Chemistry and Physics. 226, s. 66-72

Accurate Determination of Catalyst Loading on Glassy Carbon Disk and Its Impact on Thin Film Rotating Disk Electrode for Oxygen Reduction Reaction

Chourashiya, M., Sharma, R. & Andersen, S. M., 18. dec. 2018, I: Analytical Chemistry. 90, 24, s. 14181-14187

An opinion on catalyst degradation mechanisms during catalyst support focused accelerated stress test (AST) for proton exchange membrane fuel cells (PEMFCs)

Sharma, R. & Andersen, S. M., dec. 2018, I: Applied Catalysis B: Environmental. 239, s. 636-643

Low-cost graphite as durable support for pt-based cathode electrocatalysts for proton exchange membrane based fuel cells

Chourashiya, M., Thrane Vindt, S., Palenzuela, A. A., Pedersen, C. M., Kallesøe, C. & Andersen, S. M., 19. nov. 2018, I: International Journal of Hydrogen Energy. 43, 52, s. 23275-23284

Exploring the XRF technique as a tool to estimate the degree of leaching in alloy-catalysts used for PEMFCs

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Environmentally and industrially friendly recycling of platinum nanoparticles through electrochemical dissolution–electrodeposition in acid-free/dilute acidic electrolytes

Sharma, R., Gyergyek, S. & Andersen, S. M., 11. sep. 2018, I: ChemSusChem (Print). 11, 21, s. 3742-3750

Investigating the single-step solution combustion method for synthesis of oxide supported/unsupported Pt/PtO_x, as cathode electrocatalysts for PEMFCs

Chourashiya, M. & Andersen, S. M., 19. jul. 2018.

Accurate determination of catalyst loading on glassy carbon disk and its impact on thin film rotating disk electrode for oxygen reduction reaction.

Chourashiya, M., Sharma, R. & Andersen, S. M., 18. jul. 2018.

Probing the electrolyte/electrode interface of half-cells using electrochemical impedance spectroscopy
MEDINA, J., Chourashiya, M., Sharma, R. & Andersen, S. M., 2018, s. 32-32 s.

Quantification on Degradation Mechanisms of Polymer Electrolyte Membrane Fuel Cell Catalyst Layers during an Accelerated Stress Test
Sharma, R. & Andersen, S. M., 2018, I: ACS Catalysis. 8, 4, s. 3424-3434

Zoom in catalyst/ionomer interface in polymer electrolyte membrane fuel cell electrodes: Impact of catalyst/ionomer dispersion media/solvent
Sharma, R. & Andersen, S. M., 2018, I: ACS Applied Materials & Interfaces. 10, 44, s. 38125-38133

Performance of the electrode based on silicon carbide supported platinum catalyst for proton exchange membrane fuel cells
Andersen, S. M. & Larsen, M. J., 15. apr. 2017, I: Journal of Electroanalytical Chemistry. 791, s. 175-184

Genuine electrodes Morphology Studies with Helium Ion Microscopy (HIM) for Proton Exchange Membrane Fuel Cells (PEMFCs)
Andersen, S. M. & Chiriaev, S., 2017.

Helium Ion Microscopy of proton exchange membrane fuel cell electrode structures
Chiriaev, S., Dam Madsen, N., Rubahn, H-G. & Andersen, S. M., 2017, I: AIMS Materials Science. 4, 6, s. 1289-1304

Improved Durability of Proton Exchange Membrane Fuel Cells by Introducing Sn (IV) Oxide into Electrodes using an Ion Exchange Method
Gildsig Poulsen, M., Larsen, M. J. & Andersen, S. M., 2017, I: Journal of Power Sources. 343, s. 174-182

Strengthen electrode interface structure for proton exchange membrane fuel cells
Gildsig Poulsen, M., Larsen, M. J. & Andersen, S. M., 2017.

Tungsten Carbide Support Materials for the Hydrogen Evolution Reaction Produced by the Self-Propagating High-Temperature Synthesis Method
Gildsig Poulsen, M. & Andersen, S. M., 2017.

Nano carbon supported platinum catalyst interaction behavior with perfluorosulfonic acid ionomer and their interface structures
Andersen, S. M., 1. feb. 2016, I: Applied Catalysis B: Environmental. 181, s. 146-155

Interface contribution to the electrode performance of proton exchange membrane fuel cells - Impact of the ionomer: Impact of the Ionomer Content
Andersen, S. M. & Grahl-Madsen, L., 21. jan. 2016, I: International Journal of Hydrogen Energy. 41, 3, s. 1892-1901

IMPROVED UNDERSTANDING ON ELECTRODE INTERFACE STRUCTURE
Andersen, S. M., 2016.

Importance of Electrode Hot-Pressing Conditions for the Catalyst Performance of Proton Exchange Membrane Fuel Cells
Andersen, S. M., Dhiman, R., Larsen, M. J. & Skou, E. M., aug. 2015, I: Applied Catalysis B: Environmental. 172-173, s. 82-90

Chemistry of carbon polymer composite electrode - An X-ray photoelectron spectroscopy study
Andersen, S. M., Dhiman, R. & Skou, E. M., 15. jan. 2015, I: Journal of Power Sources. 274, January, s. 1217-1223 7 s.

Activity and stability studies of platinumized multi-walled carbon nanotubes as fuel cell electrocatalysts

Stamatin, S. N., Borghei, M., Dhiman, R., Andersen, S. M., Ruiz, V., Kauppinen, E. & Skou, E. M., 2015, I: Applied Catalysis B: Environmental. 162, January, s. 289-299 11 s.

The Importance of Ion Selectivity of Perfluorinated Sulfonic Acid Membrane for the Performance of Proton Exchange Membrane Fuel Cells

Andersen, S. M., 2015, I: Journal of Fuel Cell Science and Technology. 12, 6, 7 s., 061010.

Tin Dioxide as an Effective Antioxidant for Proton Exchange Membrane Fuel Cells

Andersen, S. M., Nørgaard, C. F., Larsen, M. J. & Skou, E. M., 2015, I: Journal of Power Sources. 273, January, s. 158-161

X-ray Photoelectron Spectroscopy Investigation on Electrochemical Degradation of Proton Exchange Membrane Fuel Cell Electrodes

Andersen, S. M., Dhiman, R. & Skou, E. M., 2015, I: Journal of Power Sources. 282, s. 87-94

Electrochemical performance and durability of carbon supported Pt catalyst in contact with aqueous and polymeric proton conductors

Andersen, S. M. & Skou, E. M., 8. okt. 2014, I: ACS Applied Materials & Interfaces. 6, 19, s. 16565-16576

Influence of different carbon nanostructures on the electrocatalytic activity and stability of Pt supported electrocatalysts

Stamatin, S. N., Borghei, M., Andersen, S. M., Veltzé, S., Ruiz, V., Kauppinen, E. & Skou, E. M., 27. maj 2014, I: International Journal of Hydrogen Energy. 39, 16, s. 8215-8224

Adsorption behavior of perfluorinated sulfonic acid ionomer on highly graphitized carbon nanofibers and their thermal stabilities

Andersen, S. M., Borghei, M., Dhiman, R., Ruiz, V., Kauppinen, E. & Skou, E. M., 28. apr. 2014, I: The Journal of Physical Chemistry Part C. 118, 20, s. 10814-10823 10 s.

Interaction of multi-walled carbon nanotubes with perfluorinated sulfonic acid ionomers and surface treatment studies

Andersen, S. M., Dhiman, R., Borghei, M., Jiang, H., Ruiz, V., Kauppinen, E. & Skou, E. M., 2014, I: Carbon. 71, s. 218-228

The interaction effect between Pt and NbO₂ support with enhanced stability in PEMFC

Stamatin, S. N., Andersen, S. M. & Skou, E. M., 2014.

Oxygen reduction and methanol oxidation behaviour of SiC based Pt nanocatalysts for proton exchange membrane fuel cells

Dhiman, R., Stamatin, S. N., Andersen, S. M., Morgen, P. & Skou, E. M., 16. okt. 2013, I: Journal of Materials Chemistry. 1, 48, s. 15509-15516 8 s.

SiC nanocrystals as Pt catalyst supports for fuel cell applications

Dhiman, R., Johnson, E., Skou, E. M., Morgen, P. & Andersen, S. M., 18. mar. 2013, I: Journal of Materials Chemistry A. 1, 19, s. 6030-6036 7 s.

Durability of Carbon Nanofiber (CNF) & Carbon Nanotube (CNT) as Catalyst Support for Proton Exchange Membrane Fuel Cells

Andersen, S. M., Borghei, M., Lund, P., Elina, Y-R., Pasanen, A., Kauppinen, E., Ruiz, V., Kauranen, P. & Skou, E. M., 2013, I: Solid State Ionics. 231, s. 94-101

Interaction between Nafion ionomer and noble metal catalyst for PEMFCs

Andersen, S. M., 12. okt. 2012.

Electrochemical recovery of platinum from PEM fuel cell electrodes

Nørgaard, C. F., Larsen, M. J., Andersen, S. M. & Skou, E. M., 22. jun. 2012.

Public Pedagogical Portfolio

Andersen, S. M., 20. jan. 2012, Syddansk Universitet. Institut for kemi-, bio- og miljøteknologi. 22 s.

Nafion degradation in DMFC due to contamination

Andersen, S. M., 6. okt. 2011.

Modified carbon nanofiber and nanotube as alternative catalyst support for PEMFCs

Andersen, S. M., 14. sep. 2011.

Activation of Engineering Students with Clickers

Andersen, S. M., 19. jul. 2011. 1 s.

Degradation of Nafion due to contamination from Swelling-Dehydration Cycles

Andersen, S. M., Morgen, P. & Skou, E. M., 3. jul. 2011.

CNF & CNT supported catalyst for Proton Exchange Membrane Fuel Cells

Andersen, S. M., Lund, P., Elina, Y-R., Pasanen, A., Kauranen, P. & Skou, E. M., 12. jun. 2011.

Activation of Students with Various Teaching Methods

Andersen, S. M., 9. maj 2011. 1 s.

Graphitised Carbon Nanofibres as Catalyst Support for PEMFC

Yli-Rantala, E., Pasanen, A., Kauranen, P., Ruiz, V., Borghei, M., Kauppinen, E., Oyarce, A., Lindbergh, G., Lagergren, C., Darab, M., Sunde, S., Thomassen, M., Ma-Andersen, S., Andersen, S. M. & Skou, E., 2011, I: Fuel Cells. 11, 6, s. 715-725 11 s.

Studies on PEM fuel cell noble metal catalyst dissolution

Andersen, S. M., Grahl-Madsen, L. & Skou, E. M., 2011, I: Solid State Ionics. 192, 1, s. 602-606 5 s.

Degradation and contamination of perfluorinated sulfonic acid membrane due to swelling-dehydration cycles

Andersen, S. M., Morgen, P. & Skou, E. M., 30. sep. 2010.

Microscopy studies on proton exchange membrane fuel cell electrodes with different ionomer contents

Ma, S., Solterbeck, C. H., Odgaard, M. & Skou, E. M., 2009, I: Applied Physics A. 96, 3, s. 581-589

Platinum Porous Electrodes for Fuel Cells: with focus on Proton Exchange Membrane Fuel Cells (PEMFCs)

Andersen, S. M., 2009, Odense: Verlag Dr. Müller. 208 s.

Progress on PEMFC noble metal catalyst dissolution

Andersen, S. M. & Skou, E. M., 2009.

Wetting properties of Proton Exchange Membrane Fuel Cell electrodes

Andersen, S. M. & Skou, E. M., 2009.

Studies on PEM Fuel Cell Noble Metal Catalyst Dissolution

Ma, S. & Skou, E. M., 2009.

Characterizing Carbon Nanotube Supported Platinum Catalyst by Electrochemistry

Veltzé, S., Andersen, S. M. & Skou, E. M., 2008. 1 s.

PEMFC Durability Issues

Ma, S., 2008.

PEM Fuel Cell Catalyst and Carbon Durability

Ma, S., 2008.

¹⁹F NMR studies of Nafion™ ionomer adsorption on PEMFC catalysts and supporting carbons

Ma, S., Chen, Q., Jørgensen, F., Stein, P. C. & Skou, E. M., 2007, I: Solid State Ionics. 178, 29-30, s. 1568-1575

CO₂ permeability in Nafion EW1100 at elevated temperature

Ma, S. & Skou, E. M., 2007, I: Solid State Ionics. 178, 7-10, s. 615-619 5 s.

Investigations on Platinum Porous Electrodes for Proton Exchange Membrane Fuel Cells (PEMFCs)

Andersen, S. M., 2007

Microscopy study on proton exchange membrane fuel cell electrodes with different ionomer content

Ma, S. & Skou, E. M., 2007.

¹⁹F-NMR Studies of Nafion™ ionomer Adsorption on PEMFC Catalysts and Supporting Carbons

Ma, S. & Skou, E. M., 2007.

CO₂ Permeability in Nafion® EW1100 at Elevated Temperature

Ma, S. & Skou, E. M., 2006.

Novel method of Proton Exchange Membrane Fuel Cell catalyst characterization

Ma, S. & Skou, E. M., 2006.

Carbon dioxide permeability of proton exchange membranes for fuel cells

Andersen, S. M., Odgaard, M. & Skou, E., 2005, I: Solid State Ionics. 176, 39-40, s. 2923-2927

Investigation on Platinum Catalyst Utilization in Porous Electrodes of MEA for PEMFCs

Ma, S. & Skou, E. M., 2005.

Gas Permeability of PEMs for Fuel cells

Ma, S. & Skou, E. M., 2004.

Aktiviteter

I01F-2092 - TiN_xO_y/TiN Supported Ir-Oxide/Ir As Efficient OER Electrocatalyst for Acidic Water Electrolysis

Sharma, R. (Oplægsholder) & Andersen, S. M. (Medforfatter)

8. okt. 2023 → 12. okt. 2023

Quantification of Degradation Mechanisms in Acidic Water Electrozer Catalysts: Roles of Bulk structure and Surface Chemistry

Sharma, R. (Oplægsholder), Morgen, P. (Medforfatter), Gyergyek, S. (Medforfatter) & Andersen, S. M. (Medforfatter)

4. jul. 2023 → 7. jul. 2023

Study of the catalyst/ionomer interface in PEMFC electrodes through quantification of the degradation mechanisms during an accelerated stress test

Sharma, R. (Oplægsholder) & Andersen, S. M. (Andet)

31. okt. 2019 → 1. nov. 2019

Internal Examiner (censor) Individuel studieaktivitet: Genvinding og oprensning af ædelmetaller fra katalysatorer fra tunge køretøjer - i samarbejde med Landson Emission Technologies A/S

Christensen, K. V. (Censor) & Andersen, S. M. (Eksaminator)

21. jun. 2018

Internal Examiner (censor) bachelor project: Analysis of the filtration of platinum nanoparticles dissolved in hydrochloric acid

Christensen, K. V. (Censor) & Andersen, S. M. (Eksaminator)

6. jun. 2018

7th International Colloids Conference

Andersen, S. M. (Deltager)

18. jun. 2017 → 21. jun. 2017

First International Conference on Electrolysis

Andersen, S. M. (Deltager)

12. jun. 2017 → 15. jun. 2017

Danscatt annual meeting 2017

Andersen, S. M. (Deltager)

1. jun. 2017 → 2. jun. 2017

6th International Conference on Fuel Cell & Hydrogen Technology

Andersen, S. M. (Deltager)

11. apr. 2017 → 13. apr. 2017

Engineering programmes in Chemical Engineering and Biotechnology

Andersen, S. M. (Underviser)

10. apr. 2017

Den danske brint- og brændselscelledag 2016

Andersen, S. M. (Arrangør)

10. nov. 2016

2016 Annual Meeting of the Danish Electrochemical Society

Andersen, S. M. (Deltager)

23. okt. 2016 → 24. okt. 2016

Progress on Modification of Electrode Interface Structure in Proton Exchange Membrane Fuel cells (PEMFCs)

Andersen, S. M. (Oplægsholder)

9. jun. 2016

DanScatt annual meeting 2016

Andersen, S. M. (Deltager)

26. maj 2016 → 27. maj 2016

International Society of Electrochemistry

Andersen, S. M. (Deltager)

31. aug. 2014 → 5. sep. 2014

School of physics and engineering

Andersen, S. M. (Gæsteforsker)

16. mar. 2014 → 19. mar. 2014

Electrochemical Conference on Energy & the Environment

Andersen, S. M. (Deltager)
13. mar. 2014 → 16. mar. 2014

BIT's 4th Annual Global Congress of Catalysis

Andersen, S. M. (Oplægsholder)
30. jun. 2013

Physical Chemistry Atkins 9th edition (3 chapters) (Tidsskrift)

Andersen, S. M. (Peer reviewer)
13. nov. 2012

Medlemskab af Partnerskabet for brint og brændselsceller (Ekstern organisation)

Andersen, S. M. (Medlem)
9. nov. 2012

Communication with publisher (Oxford) - regarding to the teaching book Physical Chemistry Atkins

Andersen, S. M. (Underviser)
5. nov. 2012

Interactions between Nafion® ionomer and catalyst / support materials

Andersen, S. M. (Oplægsholder)
12. okt. 2012

36th International Conference on Improving University Teaching

Andersen, S. M. (Deltager)
19. jul. 2011 → 21. jul. 2011

Pedagogical conference, improving university teaching

Andersen, S. M. (Deltager)
19. jul. 2011 → 22. jul. 2011

Solid State Ionic Conference - 18

Andersen, S. M. (Deltager)
3. jul. 2011 → 8. jul. 2011

Workshop and summer school in connection with NanoduraMEA project

Andersen, S. M. (Deltager)
12. jun. 2011

Solid State Ionics (Tidsskrift)

Andersen, S. M. (Peer reviewer)
27. maj 2011

Adjunktpædagogikum

Andersen, S. M. (Deltager)
9. maj 2011

Journal of Physics and Chemistry of Solids (Tidsskrift)

Andersen, S. M. (Peer reviewer)
7. feb. 2011

Dansk Elektrokemisk Forenings Årsmøde

Andersen, S. M. (Deltager)
30. sep. 2010 → 1. okt. 2010

University of Applied Sciences Kiel

Andersen, S. M. (Gæsteforsker)

26. jul. 2010 → 27. jul. 2010

Nanoduramea summer school

Andersen, S. M. (Deltager)

22. jun. 2010 → 24. jun. 2010

Solid State Ionics (Tidsskrift)

Andersen, S. M. (Peer reviewer)

3. jan. 2010

Solid State Ionics (Tidsskrift)

Andersen, S. M. (Peer reviewer)

4. nov. 2009

Electrochemical Science and Technology 2009

Andersen, S. M. (Deltager)

1. okt. 2009 → 2. okt. 2009

Smart material # 3

Andersen, S. M. (Deltager)

18. aug. 2009 → 21. aug. 2009

Solid State Ionics - 17

Andersen, S. M. (Deltager)

27. jun. 2009 → 5. jul. 2009

Nanoduramea 2009

Andersen, S. M. (Deltager)

7. jun. 2009 → 9. jun. 2009

Syddansk Universitet

Andersen, S. M. (Gæsteforsker)

25. maj 2009

Udlands studerende udvikling

Andersen, S. M. (Deltager)

5. apr. 2009 → 9. apr. 2009

Electrochemical Science and Technology 2008

Andersen, S. M. (Deltager)

2. okt. 2008 → 3. okt. 2008

14th International Conference on Solid State Protonic Conductors

Andersen, S. M. (Deltager)

7. sep. 2008 → 11. sep. 2008

Fuel Cells Norfa Workshop: New Materials and Technologies for Low Temperature Fuel Cells 2008

Andersen, S. M. (Deltager)

13. aug. 2008 → 16. aug. 2008

Summer school: Carbon nanotubes and nanofibers

Andersen, S. M. (Deltager)
11. aug. 2008 → 12. aug. 2008

Electrochemical Science and Technology 2007

Andersen, S. M. (Deltager)
4. okt. 2007 → 5. okt. 2007

Fuel Cell Durability

Andersen, S. M. (Deltager)
19. sep. 2007 → 21. sep. 2007

2nd Smart Materials & Structures

Andersen, S. M. (Deltager)
29. aug. 2007 → 31. aug. 2007

Solid State Ionics - 16 (SSI-16)

Andersen, S. M. (Deltager)
1. jul. 2007 → 7. jul. 2007

Syddansk Universitet

Andersen, S. M. (Gæsteforsker)
2. apr. 2007 → 27. apr. 2007

Advances in Materials for Proton Exchange Membrane Fuel Cell Systems 2007

Andersen, S. M. (Deltager)
18. feb. 2007 → 21. feb. 2007

University of Applied Sciences Upper Austria

Andersen, S. M. (Gæsteforsker)
5. feb. 2007 → 9. feb. 2007

Syddansk Universitet

Andersen, S. M. (Gæsteforsker)
13. nov. 2006 → 12. dec. 2006

Electrochemical Science and Technology 2006

Andersen, S. M. (Deltager)
5. okt. 2006 → 6. okt. 2006

Nodic PEMFC 06

Andersen, S. M. (Deltager)
25. sep. 2006 → 27. sep. 2006

Solid State Protonic Conductor - 13 (SSPC-13)

Andersen, S. M. (Deltager)
4. sep. 2006 → 6. sep. 2006

Impedance Day 2006

Andersen, S. M. (Deltager)
29. mar. 2006 → 31. mar. 2006

University of Applied Sciences Upper Austria

Andersen, S. M. (Gæsteforsker)
6. mar. 2006 → 11. mar. 2006

Nordic Hydrogen Seminar 2006

Andersen, S. M. (Deltager)
6. feb. 2006 → 9. feb. 2006

Energy Camp 05

Andersen, S. M. (Deltager)
23. nov. 2005 → 24. nov. 2005

Fuel Cells Norfa Workshop: New Materials and Technologies for Low Temperature Fuel Cells 2005

Andersen, S. M. (Deltager)
30. aug. 2005 → 4. sep. 2005

Summer School: Hands-On Nano-Technology 2005

Andersen, S. M. (Deltager)
25. jul. 2005 → 19. aug. 2005

Electrochemistry Summer School 2005

Andersen, S. M. (Deltager)
25. jun. 2005 → 1. jul. 2005

Advances in Materials for Proton Exchange Membrane Fuel Cell Systems 2005

Andersen, S. M. (Deltager)
20. feb. 2005 → 23. feb. 2005

Solid State Protonic Conductor - 12 (SSPC-12)

Andersen, S. M. (Deltager)
15. aug. 2004 → 19. aug. 2004

Fuel Cells Norfa Workshop: New Materials and Technologies for Low Temperature Fuel Cells 2004

Andersen, S. M. (Deltager)
12. aug. 2004 → 15. aug. 2004