
Editorships

- [1] E. Ivers-Tiffée, A. Weber, O. Bucheli (Guest Editors), Special Issue, "*Fuel Cells – From Fundamentals to Systems*" journal (ISSN 1615-6854), Proceedings of the 13th European SOFC & SOE Forum, Vol. **19**, Issue 4 (2019).
- [2] E. Ivers-Tiffée, J. Maier, S. Singhal (Guest Editors), Special Issue, "*Solid State Ionics*" journal (ISSN 0167-2738), Proceedings of the 15th International Conference on Solid State Ionics, Part I: Vol. **177**, Issues 19-25 (2006).
- [3] E. Ivers-Tiffée, J. Maier, S. Singhal (Guest Editors), Special Issue, "*Solid State Ionics*" journal (ISSN 0167-2738), Proceedings of the 15th International Conference on Solid State Ionics, Part II: Vol. **177**, Issues 26-32 (2006).

Books and Book Contributions

- [1] E. Ivers-Tiffée, A. Leonide, H. Schichlein, V. Sonn, A. Weber, "Impedance Spectroscopy for High-Temperature Fuel Cells", in D. Stolten, B. Emonts (Eds.), *Fuel Cell Science and Engineering*, Vol. 1, Weinheim: Wiley-VCH, pp. 441-467 (2012).
- [2] E. Ivers-Tiffée, S. F. Wagner, "Das Potenzial nanoskaliger Kathoden für die Hochtemperatur-Brennstoffzelle", in Technoseum – Landesmuseum für Technik und Arbeit (Ed.), *nano! – Nutzen und Visionen einer neuen Technologie*, Mannheim: Technoseum, pp. 190-197 (2010).
- [3] E. Ivers-Tiffée, "Electrolytes | Solid: Oxygen Ions", in J. Garche (Ed.), *Encyclopedia of Electrochemical Power Sources*, Vol. 2, Amsterdam: Elsevier, pp. 181-187 (2009).
- [4] E. Ivers-Tiffée, "Mixed Ionic-Electronic conductors", in J. Garche (Ed.), *Encyclopedia of Electrochemical Power Sources*, Vol. 2, Amsterdam: Elsevier, pp. 174-180 (2009).
- [5] E. Ivers-Tiffée, H. Timmermann, A. Leonide, N. H. Menzler, J. Malzbender, "Methane reforming kinetics, carbon deposition, and redox durability of Ni/8 yttria-stabilized zirconia (YSZ) anodes", in W. Vielstich, H. Yokokawa, H. A. Gasteiger (Eds.), *Handbook of Fuel Cells – Fundamentals, Technology and Applications*, Vol. 6, Chichester: John Wiley & Sons Ltd, pp. 933-956 (2009).
- [6] E. Ivers-Tiffée, "Die Brennstoffzelle - emissionsarm und effizient: Wo bleibt sie?", in V. ter Meulen (Ed.), *Jahrbuch 2007 der Deutschen Akademie der Naturforscher Leopoldina (Halle/Saale)*, Vol. **53**, Halle/Saale: Deutsche Akademie der Naturforscher Leopoldina, pp. 525-530 (2008).
- [7] E. Ivers-Tiffée, W. von Münch, *Werkstoffe der Elektrotechnik*, 10th ed., Wiesbaden, Germany: B.G. Teubner Verlag (2007), ISBN: 978-3-8351-0052-7.
- [8] E. Ivers-Tiffée, W. von Münch, *Werkstoffe der Elektrotechnik*, 9th ed., Stuttgart Leipzig Wiesbaden: B.G. Teubner Verlag (2004), ISBN: 3-519-30115-6.

- [9] E. Ivers-Tiffée, A. V. Virkar, "Electrode Polarisation", in S. C. Singhal, K. Kendall (Eds.), *High Temperature Solid Oxide Fuel Cells – Fundamentals, Design and Applications*, Oxford: Elsevier Ltd., pp. 229-260 (2003).
- [10] E. Ivers-Tiffée, A. Weber, H. Schichlein, "O₂-reduction at high temperatures: SOFC", in W. Vielstich, H. A. Gasteiger, A. Lamm (Eds.), *Handbook of Fuel Cells – Fundamentals, Technology and Applications*, Vol. 2, Chichester: John Wiley & Sons Ltd., pp. 587-600 (2003).
- [11] E. Ivers-Tiffée, A. Weber, H. Schichlein, "Electrochemical impedance spectroscopy", in W. Vielstich, H. A. Gasteiger, A. Lamm (Eds.), *Handbook of Fuel Cells – Fundamentals, Technology and Applications*, Vol. 2, Chichester: John Wiley & Sons Ltd., pp. 220-235 (2003).
- [12] E. Ivers-Tiffée, "Zirkonoxid als Festelektrolyt in der Hochtemperatur-Brennstoffzelle SOFC", in U. Löber (Ed.), *Keramik in der Technik*, Koblenz: Verlag der Museen des Westerwaldkreises, pp. 157-159 (1997).

Peer-Reviewed Papers (since 1990)

h-index: 52 (Web of Science, as of March 2021)

- [1] J. Costard, J. Joos, A. Schmidt, E. Ivers-Tiffée, "Charge Transfer Parameters of $\text{Ni}_x\text{Mn}_y\text{Co}_{1-x-y}$ Cathodes Evaluated by a Transmission Line Modeling Approach", *Energy Technol.*, 2000866 (2021).
- [2] A. Schmidt, E. Ramani, T. Carraro, J. Joos, A. Weber, M. Kamlah, E. Ivers-Tiffée, "Understanding Deviations between Spatially Resolved and Homogenized Cathode Models of Lithium-Ion Batteries", *Energy Technol.*, 2000881 (2021).
- [3] J. Joos, A. Buchele, A. Schmidt, A. Weber, E. Ivers-Tiffée, "Virtual Electrode Design for Lithium-Ion Battery Cathodes", *Energy Technol.*, 2000891 (2021).
- [4] M. Meffert, F. Wankmüller, H. Störmer, A. Weber, P. Lupetin, E. Ivers-Tiffée, D. Gerthsen, "Optimization of Material Contrast for Efficient FIB-SEM Tomography of Solid Oxide Fuel Cells", *Fuel Cells* **20**, pp. 580-591 (2020).
- [5] S. Randau, D. A. Weber, O. Kötz, R. Koerver, P. Braun, A. Weber, E. Ivers-Tiffée, T. Adermann, J. Kulisch, W. G. Zeier, F. H. Richter, J. Janek, "Benchmarking the performance of all-solid-state lithium batteries", *Nature Energy* **5**, pp. 259-270 (2020).
- [6] S. Dierickx, A. Weber, E. Ivers-Tiffée, "How the distribution of relaxation times enhances complex equivalent circuit models for fuel cells", *Electrochim. Acta* **355**, 136764 (2020).
- [7] F. Wankmüller, M. Meffert, N. Russner, A. Weber, J. Schmieg, H. Störmer, T. Dickel, P. Lupetin, N. Maier, D. Gerthsen, E. Ivers-Tiffée, "Multi-scale characterization of ceramic inert-substrate-supported and co-sintered solid oxide fuel cells", *J. Mater. Sci.* **55**, pp. 11120-11136 (2020).
- [8] V. Weber, M. Meffert, S. Wagner, H. Störmer, L.-S. Unger, E. Ivers-Tiffée, D. Gerthsen, "Influence of B-site doping with Ti and Nb on microstructure and phase constitution of $(\text{Ba}_{0.5}\text{Sr}_{0.5})(\text{Co}_{0.8}\text{Fe}_{0.2})\text{O}_{3-\delta}$ ", *J. Mater. Sci.* **55**, pp. 947-966 (2020).
- [9] N. Russner, S. Dierickx, A. Weber, R. Reimert, E. Ivers-Tiffée, "Multiphysical modelling of planar solid oxide fuel cell stack layers", *J. Power Sources* **451**, 227552 (2020).
- [10] S. Gantenbein, M. Schönleber, M. Weiss, E. Ivers-Tiffée, "Capacity Fade in Lithium-Ion Batteries and Cyclic Aging over Various State-of-Charge Ranges", *Sustainability* **11**, 6697 (2019).
- [11] E. Ivers-Tiffée, A. Weber, O. Bucheli, "Progress in Solid Oxide Technologies: From Fundamentals to Systems – EFCF2018", *Fuel Cells* **19**, p. 310 (2019).
- [12] M. Heinzmann, A. Weber, E. Ivers-Tiffée, "Impedance modeling of porous electrode structures in polymer electrolyte membrane fuel cells", *J. Power Sources* **444**, 227279 (2019).
- [13] L. Almar, J. Joos, A. Weber, E. Ivers-Tiffée, "Microstructural feature analysis of commercial Li-ion battery cathodes by focused ion beam tomography", *J. Power Sources* **427**, pp. 1-14 (2019).

-
- [14] S. Dierickx, T. Mundloch, A. Weber, E. Ivers-Tiffée, "Advanced impedance model for double-layered solid oxide fuel cell cermet anodes", *J. Power Sources* **415**, pp. 69-82 (2019), plus Corrigendum: *J. Power Sources* **435**, 226700 (2019).
- [15] M. Meffert, L.-S. Unger, H. Störmer, F. Sigloch, S.F. Wagner, E. Ivers-Tiffée, D. Gerthsen, "The effect of B-site Y substitution on cubic phase stabilization in $(\text{Ba}_{0.5}\text{Sr}_{0.5})(\text{Co}_{0.8}\text{Fe}_{0.2})\text{O}_{3-\delta}$ ", *J. Am. Ceram. Soc.* **102**, pp. 4929-4942 (2019).
- [16] V. Wilde, H. Störmer, J. Szász, F. Wankmüller, E. Ivers-Tiffée, D. Gerthsen, "Gd_{0.2}Ce_{0.8}O₂ Diffusion Barrier Layer between $(\text{La}_{0.58}\text{Sr}_{0.4})(\text{Co}_{0.2}\text{Fe}_{0.8})\text{O}_{3-\delta}$ Cathode and Y_{0.16}Zr_{0.84}O₂ Electrolyte for Solid Oxide Fuel Cells: Effect of Barrier Layer Sintering Temperature on Microstructure", *ACS Appl. Energy Mater.* **1**, pp. 6790-6800 (2018).
- [17] M. Heinzmann, A. Weber, E. Ivers-Tiffée, "Advanced Impedance Study of Polymer Electrolyte Membrane Single Cells by means of Distribution of Relaxation Times", *J. Power Sources* **402**, pp. 24-33 (2018).
- [18] L. Almar, H. Störmer, M. Meffert, J. Szász, F. Wankmüller, D. Gerthsen, E. Ivers-Tiffée, "Improved Phase Stability and CO₂ Poisoning Robustness of Y-doped BSCF SOFC Cathodes at Intermediate Temperatures", *ACS Appl. Energy Mater.* **1**, pp. 1316-1327 (2018).
- [19] J. Szász, F. Wankmüller, V. Wilde, H. Störmer, D. Gerthsen, N. H. Menzler, E. Ivers-Tiffée, "Nature and Functionality of $\text{La}_{0.58}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ / $\text{Gd}_{0.2}\text{Ce}_{0.8}\text{O}_{2-\delta}$ / $\text{Y}_{0.16}\text{Zr}_{0.84}\text{O}_{2-\delta}$ Interfaces in SOFCs", *J. Electrochem. Soc.* **165**, pp. F898-F906 (2018).
- [20] P. Braun, C. Uhlmann, M. Weiss, A. Weber, E. Ivers-Tiffée, "Assessment of All-Solid-State Lithium-Ion Batteries", *J. Power Sources* **393**, pp. 119-127 (2018).
- [21] S. Dierickx, J. Joos, A. Weber, E. Ivers-Tiffée, "Advanced impedance modelling of Ni/8YSZ Cermet Anodes", *Electrochim. Acta* **265**, pp. 736-750 (2018).
- [22] S. Gantenbein, M. Weiss, E. Ivers-Tiffée, "Impedance based time-domain modeling of lithium-ion batteries: Part I", *J. Power Sources* **379**, pp. 317-327 (2018).
- [23] L.-S. Unger, R. Ruhl, M. Meffert, C. Niedrig, W. Menesklou, S. F. Wagner, D. Gerthsen, H. J. M. Bouwmeester, E. Ivers-Tiffée, "Yttrium doping of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ part II: Influence on oxygen transport and phase stability", *J. Eur. Ceram. Soc.* **38**, pp. 2388-2395 (2018).
- [24] L.-S. Unger, C. Niedrig, S. F. Wagner, W. Menesklou, S. Baumann, W. A. Meulenber, E. Ivers-Tiffée, "Yttrium doping of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ part I: Influence on oxygen permeation, electrical properties, reductive stability, and lattice parameters", *J. Eur. Ceram. Soc.* **38**, pp. 2378-2387 (2018).
- [25] F. Wankmüller, J. Szász, J. Joos, V. Wilde, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "Correlative tomography at the cathode/electrolyte interfaces of solid oxide fuel cells", *J. Power Sources* **360**, pp. 399-408 (2017).
- [26] M. Schönleber, C. Uhlmann, P. Braun, A. Weber, E. Ivers-Tiffée, "A Consistent Derivation of the Impedance of a Lithium-Ion Battery Electrode and its Dependency on the State-of-Charge", *Electrochim. Acta* **243**, pp. 250-259 (2017).
- [27] E. Ivers-Tiffée, A. Weber, "Evaluation of Electrochemical Impedance Spectra by the Distribution of Relaxation Times", *J. Ceram. Soc. Jpn.* **125**, pp. 193-201 (2017).

-
- [28] J. Szász, S. Seils, D. Klotz, H. Störmer, M. Heilmaier, D. Gerthsen, H. Yokokawa, E. Ivers-Tiffée, "High-Resolution Studies on Nanoscaled Ni/YSZ Anodes", *Chem. Mater.* **29**, pp. 5113–5123 (2017).
- [29] L. Almar, J. Szász, A. Weber, E. Ivers-Tiffée, "Oxygen Transport Kinetics of Mixed Ionic-Electronic Conductors by coupling Focused Ion Beam Tomography and Electrochemical Impedance Spectroscopy", *J. Electrochem. Soc.* **164**, pp. F289-F297 (2017).
- [30] E. Ivers-Tiffée, L. Almar, J. Szász, M. Meffert, H. Störmer, D. Gerthsen, "Enhancing Phase Stability and CO₂ Tolerance of Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ}", *ECS Trans.* **80**, pp. 13-19 (2017).
- [31] D. Gerthsen, M. Meffert, H. Störmer, V. Wilde, L. Almar, F. Sigloch, L.-S. Unger, S. F. Wagner, E. Ivers-Tiffée, "The Effect of Dopants on the Stabilization of the Cubic BSCF Phase in O₂- and CO₂-Containing Atmospheres", *ECS Trans.* **77**, pp. 35-39 (2017).
- [32] J. Szász, F. Wankmüller, J. Joos, V. Wilde, H. Störmer, D. Gerthsen and E. Ivers-Tiffée, "Correlating Cathode/Electrolyte Interface Characteristics to SOFC Performance", *ECS Trans.* **77**, pp. 27-34 (2017).
- [33] P. Braun, C. Uhlmann, A. Weber, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "Separation of the bulk and grain boundary contributions to the total conductivity of solid lithium-ion conducting electrolytes", *J. Electroceram.* **38**, pp. 157-167 (2017).
- [34] D. Klotz, A. Weber, E. Ivers-Tiffée, "Practical Guidelines for Reliable Electrochemical Characterization of Solid Oxide Fuel Cells", *Electrochim. Acta* **227**, pp. 110-126 (2017).
- [35] M. Meffert, L.-S. Unger, L. Grünwald, H. Störmer, S. F. Wagner, E. Ivers-Tiffée, D. Gerthsen, "The impact of grain size, A/B-cation ratio, and Y-doping on secondary phase formation in (Ba_{0.5}Sr_{0.5})(Co_{0.8}Fe_{0.2})O_{3-δ}", *J. Materials Sci.* **52**, pp. 2705-2719 (2017).
- [36] J. Costard, M. Ender, M. Weiss, E. Ivers-Tiffée, "Three-Electrode Setups for Lithium-Ion Batteries: II. Experimental Study of Different Reference Electrode Designs and Their Implications for Half-Cell Impedance Spectra", *J. Electrochem. Soc.* **164**, pp. A80-A87 (2017).
- [37] M. Ender, J. Illig, E. Ivers-Tiffée, "Three-Electrode Setups for Lithium-Ion Batteries: I. FEM-Simulation of Different Reference Electrode Designs and Their Implications for Half-Cell Impedance Spectra", *J. Electrochem. Soc.* **164**, pp. A71-A79 (2017).
- [38] L.-S. Unger, M. Meffert, V. Wilde, H. Störmer, C. Niedrig, W. Menesklou, S. F. Wagner, D. Gerthsen, E. Ivers-Tiffée, "Influence of a La_{0.6}Sr_{0.4}CoO_{3-δ} Functional Layer on (Ba_{0.5}Sr_{0.5})(Co_{0.8}Fe_{0.2})O_{3-δ} Oxygen Transport Membranes (OTMs)", *ECS Trans.* **72**, pp. 37-45 (2016).
- [39] J. P. Schmidt, E. Ivers-Tiffée, "Pulse-fitting – A novel method for the evaluation of pulse measurements, demonstrated for the low frequency behavior of lithium-ion cells", *J. Power Sources* **315**, pp. 316-323 (2016).
- [40] C. Uhlmann, P. Braun, J. Illig, A. Weber, E. Ivers-Tiffée, "Interface and grain boundary resistance of a lithium lanthanum titanate (Li_{3x}La_{2/3-x}TiO₃, LLTO) solid electrolyte", *J. Power Sources* **307**, pp. 578-586 (2016).
- [41] K. Asano, C. Niedrig, W. Menesklou, S. F. Wagner, E. Ivers-Tiffée, "(Ba_{0.5}Sr_{0.5})(Co_{0.8}Fe_{0.2})O_{3-δ} Thin Films Derived by Metal-Organic Deposition: Preparation of Nanoscaled Surface Modifications and Electrochemical Characterization", *J. Electrochem. Soc.* **163**, pp. F302-F307 (2016).

-
- [42] D. Manka, E. Ivers-Tiffée, "Electro-optical measurements of lithium intercalation/de-intercalation at graphite anode surfaces", *Electrochim. Acta* **186**, pp. 642-653 (2015).
- [43] M. Schönleber, E. Ivers-Tiffée, "The Distribution Function of Differential Capacity as a new tool for analyzing the capacitive properties of Lithium-Ion batteries", *Electrochem. Commun.* **61**, pp. 45-48 (2015).
- [44] C. Niedrig, S. F. Wagner, W. Menesklou, S. Baumann, E. Ivers-Tiffée, "Oxygen Equilibration Kinetics of Mixed-Conducting Perovskites BSCF, LSCF, and PSCF at 900 °C Determined by Electrical Conductivity Relaxation", *Solid State Ionics* **283**, pp. 30-37 (2015).
- [45] M. Schönleber and E. Ivers-Tiffée, "Approximability of impedance spectra by RC elements and implications for impedance analysis", *Electrochem. Commun.* **58**, pp. 15-19 (2015).
- [46] M. Schönleber and E. Ivers-Tiffée, "Analyzing Capacitive Characteristics of Lithium-Ion Batteries Using a Distribution Function of the Differential Capacity", *ECS Trans.* **69**, pp. 45-50 (2015).
- [47] H. Geisler, A. Kromp, J. Joos, A. Weber, E. Ivers-Tiffée, "Stationary 2D FEM Model Framework for SOFC Stack Performance Prediction", *ECS Trans.* **68**, pp. 3043-3050 (2015).
- [48] H. Geisler, S. Dierickx, A. Weber, E. Ivers-Tiffée, "A 2D Stationary FEM Model for Hydrocarbon Fuelled SOFC Stack Layers", *ECS Trans.* **68**, pp. 2151-2158 (2015).
- [49] A. Weber, J. Szász, S. Dierickx, C. Endler-Schuck, E. Ivers-Tiffée, "Accelerated Lifetime Tests for SOFCs", *ECS Trans.* **68**, pp. 1953-1960 (2015).
- [50] J. Szasz, F. Wankmüller, V. Wilde, H. Störmer, D. Gerthsen, N. H. Menzler, E. Ivers-Tiffée, "High-Performance Cathode/Electrolyte Interfaces for SOFC", *ECS Trans.* **68**, pp. 763-771 (2015).
- [51] C. Niedrig, S. F. Wagner, W. Menesklou, E. Ivers-Tiffée, "Characterization of Oxygen-Dependent Stability of Selected Mixed-Conducting Perovskite Oxides", *Solid State Ionics* **273**, pp. 41-45 (2015).
- [52] C. Endler-Schuck, J. Joos, C. Niedrig, A. Weber, E. Ivers-Tiffée, "The Chemical Oxygen Surface Exchange and Bulk Diffusion Coefficient Determined by Impedance Spectroscopy of Porous $\text{La}_{0.58}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ (LSCF) Cathodes", *Solid State Ionics* **269**, pp. 67-79 (2015).
- [53] J. Szász, F. Wankmüller, V. Wilde, H. Störmer, D. Gerthsen, N. H. Menzler, E. Ivers-Tiffée, "Nature and Functionality of Oxygen/Cathode/Electrolyte-Interfaces in SOFCs", *ECS Trans.* **66**, pp. 79-87 (2015).
- [54] V. Wilde, H. Störmer, J. Szász, F. Wankmüller, E. Ivers-Tiffée, D. Gerthsen, "Effect of $\text{Gd}_{0.2}\text{Ce}_{0.8}\text{O}_2$ Sintering Temperature on Formation of a SrZrO_3 Blocking Layer between $\text{Y}_{0.16}\text{Zr}_{0.84}\text{O}_2$, $\text{Gd}_{0.2}\text{Ce}_{0.8}\text{O}_2$ and $\text{La}_{0.58}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$ ", *ECS Trans.* **66**, pp. 103-107 (2015).
- [55] K. Asano, C. Niedrig, W. Menesklou, S. F. Wagner, E. Ivers-Tiffée, "Modification of oxygen / $(\text{Ba}_{0.5}\text{Sr}_{0.5})(\text{Co}_{0.8}\text{Fe}_{0.2})\text{O}_{3-\delta}$ interfaces derived by metal-organic deposition", *ECS Trans.* **66**, pp. 147-155 (2015).
- [56] J. Illig, M. Ender, A. Weber, E. Ivers-Tiffée, "Modeling graphite anodes with serial and transmission line models", *J. Power Sources* **282**, pp. 335-347 (2015).
- [57] M. Ender, "An extended homogenized porous electrode model for lithium-ion cell electrodes", *J. Power Sources* **282**, pp. 572-580 (2015).

-
- [58] C. Uhlmann, J. Illig, M. Ender, R. Schuster, E. Ivers-Tiffée, "In situ detection of lithium metal plating on graphite in experimental cells", *J. Power Sources* **279**, pp. 428-438 (2015).
- [59] J. P. Schmidt, A. Weber, E. Ivers-Tiffée, "A novel and fast method of characterizing the self-discharge behavior of lithium-ion cells using a pulse-measurement technique", *J. Power Sources* **274**, pp. 1231-1238 (2015).
- [60] K. Asano, D. Klotz, J. Hayd, J. Szász, E. Ivers-Tiffée, "Electrochemical Analysis of Nanoscaled $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ Thin-film Cathodes", *J. Electrochem. Soc.* **161**, pp. F940-943 (2014).
- [61] D. Klotz, A. Leonide, A. Weber, E. Ivers-Tiffée, "Electrochemical model for SOFC and SOEC mode predicting performance and efficiency", *Int. J. Hydrogen Energ.* **39**, pp. 20844-20849 (2014).
- [62] D. Klotz, J. P. Schmidt, A. Weber, E. Ivers-Tiffée, "Performance model for large area solid oxide fuel cells", *J. Power Sources* **259**, pp. 65-75 (2014).
- [63] D. Klotz, J. Hayd, J. Szász, N. H. Menzler, E. Ivers-Tiffée, "Nano-Scaled Mixed Conductors for High Performance SOFCs at ≤ 600 °C", *ECS Trans.* **61**, pp. 23-29 (2014).
- [64] M. Ender, J. Joos, A. Weber, E. Ivers-Tiffée, "Anode microstructures from high-energy and high-power lithium-ion cylindrical cells obtained by X-ray nano-tomography", *J. Power Sources* **269**, pp. 912-919 (2014).
- [65] H. Geisler, A. Kromp, A. Weber, E. Ivers-Tiffée, "Stationary FEM Model for Performance Evaluation of Planar Solid Oxide Fuel Cells Connected by Metal Interconnectors. I. Model Framework and Validation", *J. Electrochem. Soc.* **161**, pp. F778-F788 (2014).
- [66] A. Häffelin, C. Niedrig, S. F. Wagner, S. Baumann, W. A. Meulenber, E. Ivers-Tiffée, "Three-Dimensional Performance Model for Oxygen Transport Membranes", *J. Electrochem. Soc.* **161**, pp. F1409-F1415 (2014).
- [67] J. P. Schmidt, A. Weber, E. Ivers-Tiffée, "A novel and precise measuring method for the entropy of lithium-ion cells: ΔS via electrothermal impedance spectroscopy", *Electrochim. Acta* **137**, pp. 311-319 (2014).
- [68] A. Kromp, H. Geisler, A. Weber, E. Ivers-Tiffée, "Reactions and Transport Pathways in Syngas Fueled Ni/YSZ SOFC Anodes: Experiments and Modeling", *ECS Trans.* **61**, pp. 75-83 (2014).
- [69] H. Geisler, A. Kromp, A. Weber, E. Ivers-Tiffée, "Performance of MIEC cathodes in SOFC stacks evaluated by means of FEM modeling", *ECS Trans.* **61**, pp. 191-201 (2014).
- [70] E. Ivers-Tiffée, C. Niedrig, S. F. Wagner, "MIEC Materials for Membrane Applications: Enhancing the Oxygen Transport", *ECS Trans.* **61**, pp. 283-293 (2014).
- [71] M. Schönleber, D. Klotz, E. Ivers-Tiffée, "A Method for Improving the Robustness of linear Kramers-Kronig Validity Tests", *Electrochim. Acta* **131**, pp. 20-27 (2014).
- [72] B. Stiaszny, J. C. Ziegler, E. E. Krauß, M. Zhang, J. P. Schmidt, E. Ivers-Tiffée, "Electrochemical Characterization and Post-Mortem Analysis of Aged LiMn_2O_4 -NMC / Graphite Lithium Ion Batteries. Part II: Calendar Aging", *J. Power Sources* **258**, pp. 61-75 (2014).
- [73] B. Stiaszny, J. C. Ziegler, E. E. Krauß, J. P. Schmidt, E. Ivers-Tiffée, "Electrochemical characterization and post-mortem analysis of aged LiMn_2O_4 - $\text{Li}(\text{Ni}_{0.5}\text{Mn}_{0.3}\text{Co}_{0.2})\text{O}_2$ /graphite lithium ion batteries. Part I: Cycle aging", *J. Power Sources* **251**, pp. 439-450 (2014).

-
- [74] J. Joos, M. Ender, I. Rotscholl, N. H. Menzler, E. Ivers-Tiffée, "Quantification of double-layer Ni/YSZ fuel cell anodes from focused ion beam tomography data", *J. Power Sources* **246**, pp. 819-830 (2014).
- [75] J. P. Schmidt, S. Arnold, A. Loges, D. Werner, T. Wetzel, E. Ivers-Tiffée, "Measurement of the internal cell temperature via impedance: evaluation and application of a new method", *J. Power Sources* **243**, pp. 110-117 (2013).
- [76] K. Nagato, N. Shikazono, A. Weber, D. Klotz, M. Nakao, E. Ivers-Tiffée, "SOFC Anode Fabricated by Magnetically Aligning of Ni Particles", *ECS Trans.* **57**, pp. 1307-1311 (2013).
- [77] J. Szász, D. Klotz, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "Nanostructured Ni/YSZ Anodes: Fabrication and Performance Analysis", *ECS Trans.* **57**, pp. 1469-1478 (2013).
- [78] K. Asano, D. Klotz, J. Hayd, J. Szász, E. Ivers-Tiffée, "Electrochemical Analysis of Nanoscaled $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ Thin-Film Cathodes", *ECS Trans.* **57**, pp. 2065-2073 (2013).
- [79] A. Häffel, C. Niedrig, S. Wagner, E. Ivers-Tiffée, "Three-Dimensional Performance Model For Oxygen Transport Membranes", *ECS Trans.* **57**, pp. 2543-2552 (2013).
- [80] A. Häffel, J. Joos, A. Weber, E. Ivers-Tiffée, "Three-Dimensional Performance Simulation of SOFC Anodes Using FIB-Tomography Reconstructions", *ECS Trans.* **57**, pp. 2563-2572 (2013).
- [81] H. Geisler, A. Kromp, S. Hirn, A. Weber, E. Ivers-Tiffée, "Model Based Interpretation of Coupled Gas Conversion and Diffusion in SOFC-Anodes", *ECS Trans.* **57**, pp. 2691-2704 (2013).
- [82] D. Klotz, J. P. Schmidt, A. Weber, E. Ivers-Tiffée, "Static Performance Model for ASCs with Different Sizes and Its Experimental Validation", *ECS Trans.* **57**, pp. 2849-2856 (2013).
- [83] H. Geisler, M. Kornely, A. Weber, E. Ivers-Tiffée, "Enhancing SOFC-Stack Performance by Model-Based Adaptation of Cathode Gas Transport Conditions", *ECS Trans.* **57**, pp. 2871-2881 (2013).
- [84] A. Kromp, A. Weber, E. Ivers-Tiffée, "Electrochemistry of Reformate Fueled Ni/8YSZ Anodes for Solid Oxide Fuel Cells", *ECS Trans.* **57**, pp. 3063-3075 (2013).
- [85] J. Hayd, E. Ivers-Tiffée, "Detailed Electrochemical Study on Nanoscaled $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ SOFC Thin-Film Cathodes in Dry, Humid and CO_2 -Containing Atmospheres", *J. Electrochem. Soc.* **160**, pp. F1197-F1206 (2013).
- [86] A. Kromp, H. Geisler, A. Weber, E. Ivers-Tiffée, "Electrochemical impedance modeling of gas transport and reforming kinetics in reformate fueled solid oxide fuel cell anodes", *Electrochim. Acta* **106**, pp. 418-424 (2013).
- [87] P. Müller, H. Störmer, M. Meffert, L. Dieterle, C. Niedrig, S. F. Wagner, E. Ivers-Tiffée, D. Gerthsen, "Secondary Phase Formation in $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ Studied by Electron Microscopy", *Chem. Mater.* **25**, pp. 564-573 (2013).
- [88] J. Illig, J. P. Schmidt, M. Weiss, A. Weber, E. Ivers-Tiffée, "Understanding the impedance spectrum of 18650 LiFePO_4 -cells", *J. Power Sources* **239**, pp. 670-679 (2013).
- [89] J. P. Schmidt, H. Y. Tran, J. Richter, E. Ivers-Tiffée, M. Wohlfahrt-Mehrens, "Analysis and Prediction of the Open Circuit Potential of Lithium-Ion Cells", *J. Power Sources* **239**, pp. 696-704 (2013).

-
- [90] M. Ender, A. Weber, E. Ivers-Tiffée, "A Novel Method for Measuring the Effective Conductivity and the Contact Resistance of Porous Electrodes for Lithium-Ion Batteries", *Electrochem. Commun.* **34**, pp. 130-133 (2013).
- [91] A. Häffel, J. Joos, M. Ender, A. Weber, E. Ivers-Tiffée, "Time-Dependent 3D Impedance Model of Mixed-Conducting Solid Oxide Fuel Cell Cathodes", *J. Electrochem. Soc.* **160**, pp. F867-F876 (2013).
- [92] P. Pinacci, E. Louradour, L. Wimbart, M. Gindrat, M. O. Jarligo, R. Vassen, A. Comite, J. M. Serra, J. Jewulski, L. Mancuso, P. Chiesa, M. Prestat, E. Ivers-Tiffée, "Dense membranes for oxygen and hydrogen separation (DEMOYS): project overview and first results", *Energy Procedia* **37**, pp. 1030-1038 (2013).
- [93] A. Weber, S. Dierickx, A. Kromp, E. Ivers-Tiffée, "Sulfur Poisoning of Anode-Supported SOFCs under Reformate Operation", *Fuel Cells* **13**, pp. 487-493 (2013).
- [94] M. Kornely, N. H. Menzler, A. Weber, E. Ivers-Tiffée, "Degradation of a High Performance SOFC Cathode by Cr-Poisoning at OCV-Conditions", *Fuel Cells* **13**, pp. 506-510 (2013).
- [95] J. Hayd, H. Yokokawa, E. Ivers-Tiffée, "Hetero-Interfaces at Nanoscaled (La,Sr)CoO_{3-δ} Thin-Film Cathodes Enhancing Oxygen Surface-Exchange Properties", *J. Electrochem. Soc.* **160**, pp. F351-F359 (2013).
- [96] C. Niedrig, W. Menesklou, S. F. Wagner, E. Ivers-Tiffée, "High-Temperature pO₂ Stability of Metal Oxides Determined by Amperometric Oxygen Titration", *J. Electrochem. Soc.* **160**, pp. F135-F140 (2013).
- [97] J.-C. Njodzefon, D. Klotz, A. Kromp, A. Weber, E. Ivers-Tiffée, "Electrochemical Modeling of the Current-Voltage Characteristics of an SOFC in Fuel Cell and Electrolyzer Operation Modes", *J. Electrochem. Soc.* **160**, pp. F313-F323 (2013).
- [98] J. P. Schmidt, P. Berg, M. Schönleber, A. Weber, E. Ivers-Tiffée, "The distribution of relaxation times as basis for generalized time-domain models for Li-ion batteries", *J. Power Sources* **221**, pp. 70-77 (2013).
- [99] C. Niedrig, P. Braun, W. Menesklou, S. F. Wagner, E. Ivers-Tiffée, "Investigation of MIEC Materials using an Amperometric Oxygen Titration Method", *ECS Trans.* **45**, pp. 75-85 (2012).
- [100] B. Butz, A. Lefarth, H. Störmer, A. Utz, E. Ivers-Tiffée, D. Gerthsen, "Accelerated degradation of 8.5 mol% Y₂O₃-doped zirconia by dissolved Ni", *Solid State Ionics* **214**, pp. 37-44 (2012).
- [101] M. J. Heneka, E. Ivers-Tiffée, "Influence of High Current Cycling on the Performance of SOFC Single Cells", *J. Fuel Cell Sci. Technol.* **9**, 011001-1 (2012).
- [102] T. Carraro, J. Joos, B. Rüger, A. Weber, E. Ivers-Tiffée, "3D finite element model for reconstructed mixed-conducting cathodes: II. Parameter sensitivity analysis", *Electrochim. Acta* **77**, pp. 309-314 (2012).
- [103] T. Carraro, J. Joos, B. Rüger, A. Weber, E. Ivers-Tiffée, "3D finite element model for reconstructed mixed-conducting cathodes: I. Performance quantification", *Electrochim. Acta* **77**, pp. 315-323 (2012).
- [104] M. Ender, J. Joos, T. Carraro, E. Ivers-Tiffée, "Quantitative Characterization of LiFePO₄ Cathodes Reconstructed by FIB/SEM Tomography", *J. Electrochem. Soc.* **159**, pp. A972-A980 (2012).

-
- [105] M. Ender, A. Weber, E. Ivers-Tiffée, "Analysis of Three-Electrode Setups for AC-Impedance Measurements on Lithium-Ion Cells by FEM simulations", *J. Electrochem. Soc.* **159**, pp. A128-A136 (2012).
- [106] J. Illig, M. Ender, T. Chrobak, J. P. Schmidt, D. Klotz, E. Ivers-Tiffée, "Separation of Charge Transfer and Contact Resistance in LiFePO₄-Cathodes by Impedance Modeling", *J. Electrochem. Soc.* **159**, pp. A952-A960 (2012).
- [107] J. Joos, M. Ender, T. Carraro, A. Weber, E. Ivers-Tiffée, "Representative volume element size for accurate solid oxide fuel cell cathode reconstructions from focused ion beam tomography data", *Electrochim. Acta* **82**, pp. 268-276 (2012).
- [108] D. Klotz, J. C. Njodzefon, A. Weber, E. Ivers-Tiffée, "Current-Voltage and Temperature Characteristics of Anode Supported Solid Oxide Electrolyzer Cells (SOEC)", *ECS Trans.* **45**, pp. 523-530 (2012).
- [109] D. Klotz, J. Szász, A. Weber, E. Ivers-Tiffée, "Nano-Structuring of SOFC Anodes by Reverse Current Treatment", *ECS Trans.* **45**, pp. 241-249 (2012).
- [110] A. Kromp, S. Dierickx, A. Leonide, A. Weber, E. Ivers-Tiffée, "Electrochemical Analysis of Sulphur-Poisoning in Anode-Supported SOFCs under Reformate Operation", *ECS Trans.* **41**, pp. 161-169 (2012).
- [111] A. Kromp, S. Dierickx, A. Leonide, A. Weber, E. Ivers-Tiffée, "Electrochemical Analysis of Sulfur-Poisoning in Anode Supported SOFCs Fuelled with a Model Reformate", *J. Electrochem. Soc.* **159**, pp. B597-B601 (2012).
- [112] P. Müller, H. Störmer, L. Dieterle, C. Niedrig, E. Ivers-Tiffée, D. Gerthsen, "Decomposition pathway of cubic Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ} between 700 °C and 1000 °C analyzed by electron microscopic techniques", *Solid State Ionics* **206**, pp. 57-66 (2012).
- [113] J.-C. Njodzefon, D. Klotz, A. Leonide, A. Kromp, A. Weber, E. Ivers-Tiffée, "Electrochemical Studies on Anode Supported Solid Oxide Electrolyzer Cells (SOEC)", *ECS Trans.* **41**, pp. 113-122 (2012).
- [114] H. Zhu, A. Kromp, A. Leonide, E. Ivers-Tiffée, O. Deutschmann, R. J. Kee, "A Model-Based Interpretation of the Influence of Anode Surface Chemistry on Solid Oxide Fuel Cell Electrochemical Impedance Spectra", *J. Electrochem. Soc.* **159**, pp. F255-F266 (2012).
- [115] J. P. Schmidt, J. Richter, D. Klotz, E. Ivers-Tiffée, "Beneficial Use of a Virtual Reference Electrode for the Determination of SOC Dependent Half Cell Potentials", *ECS Trans.* **41**, pp. 1-8 (2012).
- [116] D. Klotz, J. P. Schmidt, A. Kromp, A. Weber, E. Ivers-Tiffée, "The Distribution of Relaxation Times as Beneficial Tool for Equivalent Circuit Modeling of Fuel Cells and Batteries", *ECS Trans.* **41**, pp. 25-33 (2012).
- [117] C. Argiris, F. Jomard, S. F. Wagner, W. Menesklou, E. Ivers-Tiffée, "Study of the Oxygen Incorporation and Diffusion in Sr(Ti_{0.65}Fe_{0.35})O₃ Ceramics", *Solid State Ionics* **192**, pp. 9-11 (2011).
- [118] W. Menesklou, F. Paul, X.H. Zhou, H. Elsenheimer, R.J. Binder, E. Ivers-Tiffée, "Nonlinear ceramics for tunable microwave devices part I: materials properties and processing", *Microsyst. Technol.* **17**, pp. 203-211 (2011).

-
- [119] C. Niedrig, S. Taufall, M. Burriel, W. Meneskluou, S. F. Wagner, S. Baumann, E. Ivers-Tiffée, "Thermal stability of the cubic phase in $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ (BSCF)", *Solid State Ionics* **197**, pp. 25-31 (2011).
- [120] L. Dieterle, P. Bockstaller, D. Gerthsen, J. Hayd, E. Ivers-Tiffée, U. Guntow, C. Kübel, "Microstructure of sol-gel derived nanoscaled $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ cathodes for intermediate-temperature SOFCs", *ECS Trans.* **35**, pp. 1909-1918 (2011).
- [121] L. Dieterle, P. Bockstaller, D. Gerthsen, J. Hayd, E. Ivers-Tiffée, U. Guntow, "Microstructure of Nanoscaled $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ Cathodes for Intermediate-Temperature Solid Oxide Fuel Cells", *Adv. Energy Mater.* **1**, pp. 249-258 (2011).
- [122] M. Ender, J. Joos, T. Carraro, E. Ivers-Tiffée, "Three-dimensional reconstruction of a composite cathode for lithium-ion cells", *Electrochem. Commun.* **13**, pp. 166-168 (2011).
- [123] C. Endler-Schuck, A. Weber, E. Ivers-Tiffée, U. Guntow, J. Ernst, J. Ruska, "Nanoscale Gd-doped CeO_2 Buffer Layer for a High Performance Solid Oxide Fuel Cell", *J. Fuel Cell Sci. Technol.* **8**, 041001-1 (2011).
- [124] C. Endler-Schuck, A. Leonide, A. Weber, S. Uhlenbruck, F. Tietz, E. Ivers-Tiffée, "Performance analysis of mixed ionic-electronic conducting cathodes in anode supported cells", *J. Power Sources* **196**, pp. 7257-7262 (2011).
- [125] J. Hayd, U. Guntow, E. Ivers-Tiffée, "Detailed Electrochemical Analysis of High-Performance Nanoscaled $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ Thin Film Cathodes", *ECS Trans.* **35**, pp. 2261-2273 (2011).
- [126] J. Hayd, L. Dieterle, U. Guntow, D. Gerthsen, E. Ivers-Tiffée, "Nanoscaled $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ as intermediate temperature SOFC cathode: Microstructure and electrochemical performance", *J. Power Sources* **196**, pp. 7263-7270 (2011).
- [127] J. Joos, T. Carraro, A. Weber, E. Ivers-Tiffée, "Reconstruction of porous electrodes by FIB/SEM for detailed microstructure modeling", *J. Power Sources* **196**, pp. 7302-7307 (2011).
- [128] J. Joos, T. Carraro, M. Ender, B. Rüger, A. Weber, E. Ivers-Tiffée, "Detailed Microstructure Analysis and 3D Simulations of Porous Electrodes", *ECS Trans.* **35**, pp. 2357-2368 (2011).
- [129] D. Klotz, M. Schönleber, J. P. Schmidt, E. Ivers-Tiffée, "New approach for the calculation of impedance spectra out of time domain data", *Electrochim. Acta* **56**, pp. 8763-8769 (2011).
- [130] D. Klotz, B. Butz, A. Leonide, J. Hayd, D. Gerthsen, E. Ivers-Tiffée, "Performance Enhancement of SOFC Anode Through Electrochemically Induced Ni/YSZ Nanostructures", *J. Electrochem. Soc.* **158**, pp. B587-B595 (2011).
- [131] J. Illig, T. Chrobak, D. Klotz, E. Ivers-Tiffée, "Evaluation of the Rate Determining Processes for LiFePO_4 as Cathode Material in Lithium-Ion-Batteries", *ECS Trans.* **33**, pp. 3-15 (2011).
- [132] E. Ivers-Tiffée, J. Hayd, D. Klotz, A. Leonide, F. Han, A. Weber, "Performance Analysis and Development Strategies for Solid Oxide Fuel Cells", *ECS Trans.* **35**, pp. 1965-1973 (2011).
- [133] A. Kromp, A. Leonide, A. Weber, E. Ivers-Tiffée, "Hydrogen Oxidation Kinetics in Reformate-Fuelled Anode Supported SOFC", *ECS Trans.* **35**, pp. 665-678 (2011).
- [134] A. Kromp, A. Leonide, A. Weber, E. Ivers-Tiffée, "Electrochemical Analysis of Reformate-Fuelled Anode Supported SOFC", *J. Electrochem. Soc.* **158**, pp. B980-B986 (2011).

-
- [135] J. P. Schmidt, D. Manka, D. Klotz, E. Ivers-Tiffée, "Investigation of the Thermal Properties of a Li-Ion Pouch-Cell by Electrothermal Impedance Spectroscopy", *J. Power Sources* **196**, pp. 8140-8146 (2011).
- [136] A. Leonide, S. Hansmann, A. Weber, E. Ivers-Tiffée, "Performance simulation of current/voltage-characteristics for SOFC single cell by means of detailed impedance analysis", *J. Power Sources* **196**, pp. 7343-7346 (2011).
- [137] D. Marinha, J. Hayd, L. Dessemond, E. Ivers-Tiffée, E. Djurado, "Performance of (La,Sr)(Co,Fe)O_{3-x} double-layer cathode films for intermediate temperature solid oxide fuel cell", *J. Power Sources* **196**, pp. 5084-5090 (2011).
- [138] V. Yurkiv, A. Utz, A. Weber, E. Ivers-Tiffée, H. R. Volpp, W. G. Bessler, "Elementary kinetic modeling and experimental validation of electrochemical CO oxidation on Ni/YSZ pattern anodes", *Electrochim. Acta* **59**, pp. 573-580 (2011).
- [139] A. Utz, A. Leonide, A. Weber, E. Ivers-Tiffée, "Studying the CO/CO₂ Characteristics of SOFC Anodes by Means of Ni Patterned Anodes", *J. Power Sources* **196**, pp. 7217-7224 (2011).
- [140] A. Utz, J. Joos, A. Weber, E. Ivers-Tiffée, "Electrochemical Oxidation at SOFC Anodes: Comparison of Patterned Ni Anodes and Technical Ni/8YSZ Cermet Anodes", *ECS Trans.* **35**, pp. 1669-1682 (2011).
- [141] A. Utz, K. V. Hansen, K. Norrman, E. Ivers-Tiffée, M. Mogensen, "Impurity Features in Ni-YSZ-H₂-H₂O Electrodes", *Solid State Ionics* **183**, pp. 60-70 (2011).
- [142] A. Utz, H. Störmer, D. Gerthsen, A. Weber, E. Ivers-Tiffée, "Microstructure Stability Studies of Ni Patterned Anodes for SOFC", *Solid State Ionics* **192**, pp. 565-570 (2011).
- [143] Q. Ma, F. Tietz, A. Leonide, E. Ivers-Tiffée, "Electrochemical performances of solid oxide fuel cells based on Y-substituted SrTiO₃ ceramic anode materials", *J. Power Sources* **196**, pp. 7308-7312 (2011).
- [144] R. Mücke, O. Büchler, M. Bram, A. Leonide, E. Ivers-Tiffée, H.P. Buchkremer, "Preparation of functional layers for anode-supported solid oxide fuel cells by the reverse roll coating process", *J. Power Sources* **196**, pp. 9528-9535 (2011).
- [145] A. Leonide, A. Weber, E. Ivers-Tiffée, "Performance limiting factors in anode supported SOFC", *ECS Trans.* **35**, pp. 2961-2968 (2011).
- [146] M. Kornely, A. Neumann, N. Menzler, A. Leonide, A. Weber, E. Ivers-Tiffée, "Degradation of anode supported cell (ASC) performance by Cr-poisoning", *J. Power Sources* **196**, pp. 7203-7208 (2011).
- [147] M. Kornely, A. Leonide, A. Weber, E. Ivers-Tiffée, "Performance limiting factors in anode-supported cells originating from metallic interconnector design", *J. Power Sources* **196**, pp. 7209-7216 (2011).
- [148] M. Kornely, A. Neumann, N.H. Menzler, A. Weber, E. Ivers-Tiffée, "Degradation of Solid Oxide Fuel Cell Performance by Cr-Poisoning", *ECS Trans.* **35**, pp. 2009-2017 (2011).
- [149] Q. Ma, F. Tietz, A Leonide, E. Ivers-Tiffée, "Impedance Studies on Solid Oxide Fuel Cells with Yttrium-Substituted SrTiO₃ Ceramic Anodes", *ECS Trans.* **35**, pp. 1421-1433 (2011).

-
- [150] J. P. Schmidt, T. Chrobak, M. Ender, J. Illig, D. Klotz, E. Ivers-Tiffée, "Studies on LiFePO₄ as Cathode Material using Impedance Spectroscopy", *J. Power Sources* **196**, pp. 5342-5348 (2011).
- [151] A. Leonide, A. Weber, E. Ivers-Tiffée, "Electrochemical Analysis of Biogas Fueled Anode Supported SOFC", *ECS Trans.* **35**, pp. 2961-2968 (2011).
- [152] A. Weber, A. Utz, J. Joos, E. Ivers-Tiffée, H. Störmer, D. Gerthsen, V. Yurkiv, H.-R. Volpp, W. G. Bessler, "Electrooxidation of Reformate Gases at Model Anodes", *ECS Trans.* **35**, pp. 1513-1528 (2011).
- [153] W. G. Bessler, M. Vogler, H. Störmer, D. Gerthsen, A. Utz, A. Weber, E. Ivers-Tiffée, "Model Anodes and Anode Models for Understanding the Mechanism of Hydrogen Oxidation in Solid Oxide Fuel Cells", *Phys. Chem. Chem. Phys.* **12**, pp. 13888-13903 (2010).
- [154] M. Burriel, C. Niedrig, W. Menesklou, S. F. Wagner, J. Santiso, E. Ivers-Tiffée, "BSCF epitaxial thin films: Electrical transport and oxygen surface exchange", *Solid State Ionics* **181**, pp. 602-608 (2010).
- [155] C. Endler, A. Leonide, A. Weber, F. Tietz, E. Ivers-Tiffée, "Time-Dependent Electrode Performance Changes in Intermediate Temperature Solid Oxide Fuel Cells", *J. Electrochem. Soc.* **157**, pp. B292-B298 (2010).
- [156] C. Endler, A. Leonide, B. Rüger, A. Weber, E. Ivers-Tiffée, "Oxygen Surface Exchange and Bulk Diffusion Coefficients Evaluated from Porous Mixed Ionic-Electronic Conducting Cathodes", *ECS Trans.* **28**, pp. 71-80 (2010).
- [157] J. Hayd, U. Guntow, E. Ivers-Tiffée, "Electrochemical performance of nanoscaled La_{0.6}Sr_{0.4}CoO_{3-δ} as intermediate temperature SOFC cathode", *ECS Trans.* **28**, pp. 3-15 (2010).
- [158] J. Illig, T. Chrobak, M. Ender, J. P. Schmidt, D. Klotz, E. Ivers-Tiffée, "Studies on LiFePO₄ as Cathode Material in Li-Ion Batteries", *ECS Trans.* **28**, pp. 3-17 (2010).
- [159] J. Joos, B. Rüger, T. Carraro, A. Weber and E. Ivers-Tiffée, "Electrode Reconstruction by FIB/SEM and Microstructure Modeling", *ECS Trans.* **28**, pp. 81-91 (2010).
- [160] D. Klotz, B. Butz, A. Leonide, D. Gerthsen, E. Ivers-Tiffée, "Increase of Anode Performance of SOFC by Reverse Current Treatment", *ECS Trans.* **28**, pp. 141-150 (2010).
- [161] A. Kromp, A. Leonide, H. Timmermann, A. Weber, E. Ivers-Tiffée, "Internal Reforming Kinetics in SOFC-Anodes", *ECS Trans.* **28**, pp. 205-215 (2010).
- [162] A. Leonide, B. Rüger, A. Weber, W. A. Meulenber, E. Ivers-Tiffée, "Impedance Study of Alternative (La,Sr)FeO_{3-δ} and (La,Sr)(Co,Fe)O_{3-δ} MIEC Cathode Compositions", *J. Electrochem. Soc.* **157**, pp. B234-B239 (2010).
- [163] A. Leonide, S. Hansmann, E. Ivers-Tiffée, "A 0-Dimensional Stationary Model for Anode-Supported Solid Oxide Fuel Cells", *ECS Trans.* **28**, pp. 341-346 (2010).
- [164] Q. Ma, F. Tietz, A. Leonide, E. Ivers-Tiffée, "Anode-supported planar SOFC with high performance and redox stability", *Electrochem. Commun.* **12**, pp. 1326-1328 (2010).
- [165] P. Müller, L. Dieterle, E. Müller, H. Störmer, D. Gerthsen, C. Niedrig, S. Taufall, S. F. Wagner, E. Ivers-Tiffée, "Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ} for Oxygen Separation Membranes", *ECS Trans.* **28**, pp. 309-314 (2010).

-
- [166] H. Timmermann, W. Sawady, R. Reimert, E. Ivers-Tiffée, "Kinetics of (reversible) internal reforming of methane in solid oxide fuel cells under stationary and APU conditions", *J. Power Sources* **195**, pp. 214-222 (2010).
- [167] A. Utz, H. Störmer, A. Leonide, A. Weber, E. Ivers-Tiffée, "Degradation and Relaxation Effects of Ni Patterned Anodes in H₂/H₂O Atmosphere", *J. Electrochem. Soc.* **157**, pp. B920-B930 (2010).
- [168] C. Endler, A. Leonide, A. Weber, E. Ivers-Tiffée, F. Tietz, "Long-Term Study of MIEC Cathodes for intermediate temperature Solid Oxide Fuel Cells", *ECS Trans.* **25**, pp. 2381-2390 (2009).
- [169] D. Klotz, A. Leonide, E. Ivers-Tiffée, "Recovery of Anode Performance by Reverse Current Treatment", *ECS Trans.* **25**, pp. 2049-2056 (2009).
- [170] D. Klotz, A. Weber, E. Ivers-Tiffée, "Dynamic Electrochemical Model for SOFC-Stacks", *ECS Trans.* **25**, pp. 1331-1340 (2009).
- [171] M. Kornely, A. Leonide, A. Weber, E. Ivers-Tiffée, "Impact of Flowfield Design on Solid Oxide Fuel Cell Performance", *ECS Trans.* **25**, pp. 815-824 (2009).
- [172] P. König, E. Ivers-Tiffée, "Increase of the fuel cell system efficiency - Modular testing, analysis and development environment", *J. Power Sources* **190**, pp. 121-132 (2009).
- [173] A. Leonide, Y. Apel, E. Ivers-Tiffée, "SOFC Modeling and Parameter Identification by means of Impedance Spectroscopy", *ECS Trans.* **19**, pp. 81-109 (2009).
- [174] A. Leonide, B. Rüger, A. Weber, W. A. Meulenbergh, E. Ivers-Tiffée, "Performance Study of Alternative (La,Sr)FeO_{3-δ} and (La,Sr)(Co,Fe)O_{3-δ} MIEC Cathode Compositions", *ECS Trans.* **25**, pp. 2487-2496 (2009).
- [175] C. Peters, A. Weber, B. Butz, D. Gerthsen, E. Ivers-Tiffée, "Grain-Size Effects in YSZ Thin-Film Electrolytes", *J. Am. Ceram. Soc.* **92**, pp. 2017-2024 (2009).
- [176] B. Rüger, J. Joos, T. Carraro, A. Weber, E. Ivers-Tiffée, "3D Electrode Microstructure Reconstruction and Modelling", *ECS Trans.* **25**, pp. 1211-1220 (2009).
- [177] J. Seydel, M. Becker, E. Ivers-Tiffée, H. Hahn, "Granular nanocrystalline zirconia electrolyte layers deposited on porous SOFC cathode substrates", *Mater. Sci. Eng. B* **164**, pp. 60-64 (2009).
- [178] H. Störmer, A. Weber, V. Fischer, E. Ivers-Tiffée, D. Gerthsen, "Anodically formed oxide films on niobium: Microstructural and electrical properties", *J. Eur. Ceram. Soc.* **29**, pp. 1743-1753 (2009).
- [179] A. Utz, H. Störmer, A. Leonide, A. Weber, E. Ivers-Tiffée, "Degradation Effects of Ni Patterned Anodes in H₂/H₂O Atmosphere", *ECS Trans.* **25**, pp. 2013-2021 (2009).
- [180] J. Xu, D. Zhou, W. Menesklou, E. Ivers-Tiffée, "Ferroelectric relaxor behavior and microwave dielectric properties of Ba(Zr_{0.3}Ti_{0.7})O₃ thin films grown by radio frequency magnetron sputtering", *J. Appl. Phys.* **106**, 074107-1 (2009).
- [181] B. Butz, H. Störmer, D. Gerthsen, M. Bockmeyer, R. Krüger, E. Ivers-Tiffée, M. Luysberg, "Microstructure of Nanocrystalline Ytria-Doped Zirconia Thin Films Obtained by Sol-Gel Processing", *J. Am. Ceram. Soc.* **91**, pp. 2281-2289 (2008).

-
- [182] L. Dieterle, D. Bach, R. Schneider, H. Störmer, D. Gerthsen, U. Guntow, E. Ivers-Tiffée, A. Weber, C. Peters, H. Yokokawa, "Structural and chemical properties of nanocrystalline $\text{La}_{0.5}\text{Sr}_{0.5}\text{CoO}_{3-\delta}$ layers on yttria-stabilized zirconia analyzed by transmission electron microscopy", *J. Mater. Sci.* **43**, pp. 3135-3143 (2008).
- [183] A. Leonide, V. Sonn, A. Weber, E. Ivers-Tiffée, "Evaluation and modeling of the cell resistance in anode-supported solid oxide fuel cells", *J. Electrochem. Soc.* **155**, pp. B36-B41 (2008).
- [184] C. Peters, A. Weber, E. Ivers-Tiffée, "Nanoscaled ($\text{La}_{0.5}\text{Sr}_{0.5}$) $\text{CoO}_{3-\delta}$ Thin Film Cathodes for SOFC Application at $500^\circ\text{C} < T < 700^\circ\text{C}$ ", *J. Electrochem. Soc.* **155**, pp. B730-B737 (2008).
- [185] V. Sonn, A. Leonide, E. Ivers-Tiffée, "Combined Deconvolution and CNLS Fitting Approach Applied on the Impedance Response of Technical Ni/8YSZ Cermet Electrodes", *J. Electrochem. Soc.* **155**, pp. B675-B679 (2008).
- [186] H. Timmermann, W. Sawady, D. Campbell, A. Weber, R. Reimert, E. Ivers-Tiffée, "Coke Formation and Degradation in SOFC Operation with a Model reformat from liquid hydrocarbons", *J. Electrochem. Soc.* **155**, pp. B356-B359 (2008).
- [187] S. Gewies, W. G. Bessler, V. Sonn, E. Ivers-Tiffée, "Experimental and Modeling Study of the Impedance of Ni/YSZ Cermet Anodes", *ECS Trans.* **7**, pp. 1573-1581 (2007).
- [188] P. König, A. Weber, N. Lewald, T. Aicher, L. Jörissen, E. Ivers-Tiffée, "Model-aided testing of a PEMFC CHP system", *Fuel Cells* **7**, pp. 70-77 (2007).
- [189] A. Leonide, V. Sonn, A. Weber, E. Ivers-Tiffée, "Evaluation and Modelling of the Cell Resistance in Anode Supported Solid Oxide Fuel Cells", *ECS Trans.* **7**, pp. 521-531 (2007).
- [190] B. Rüger, A. Weber, E. Ivers-Tiffée, "3D-Modelling and Performance Evaluation of Mixed Conducting (MIEC) Cathodes", *ECS Trans.* **7**, pp. 2065-2074 (2007).
- [191] W. Sawady, H. Timmermann, R. Reimert, E. Ivers-Tiffée, "Umsetzung flüssiger Kohlenwasserstoffe mittels katalytisch partieller Oxidation zur Erzeugung eines Brenngases für die SOFC", *Chemie Ingenieur Technik* **9**, p. 1313 (2007).
- [192] V. Sonn, A. Leonide, E. Ivers-Tiffée, "Towards Understanding the Impedance Response of Ni/YSZ Anodes", *ECS Trans.* **7**, pp. 1363-1372 (2007).
- [193] H. Timmermann, W. Sawady, D. Campbell, A. Weber, R. Reimert, E. Ivers-Tiffée, "Coke formation in hydrocarbons containing fuel gas and effects on SOFC degradation phenomena", *ECS Trans.* **7**, pp. 1429-1435 (2007).
- [194] B. Butz, P. Kruse, H. Störmer, D. Gerthsen, A. C. Müller, A. Weber, E. Ivers-Tiffée, "Correlation between microstructure and degradation in conductivity for cubic Y_2O_3 -doped ZrO_2 ", *Solid State Ionics* **177**, pp. 3275-3284 (2006).
- [195] M. Haschka, T. Weickert, V. Krebs, S. Schäfer, E. Ivers-Tiffée, "Identification of a nonlinear model for the electrical behavior of a solid oxide fuel cell", *J. Power Sources* **156**, pp. 71-77 (2006).
- [196] P. König, E. Ivers-Tiffée, "Modular Testing and Simulation Environment for Analysis and Optimization of Fuel Cell Systems", *ECS Trans.* **5**, pp. 297-308 (2006).

-
- [197] A. Mai, M. Becker, W. Assenmacher, F. Tietz, D. Hathiramani, E. Ivers-Tiffée, D. Stöver, W. Mader, "Time-dependent performance of mixed-conducting SOFC cathodes", *Solid State Ionics* **177**, pp. 1965-1968 (2006).
- [198] A. Rothschild, W. Menesklou, H. L. Tuller, E. Ivers-Tiffée, "Electronic structure, defect chemistry, and transport properties of $\text{SrTi}_{1-x}\text{Fe}_x\text{O}_{3-y}$ solid solutions", *Chem. Mater.* **18**, pp. 3651-3659 (2006).
- [199] H. Störmer, E. Ivers-Tiffée, C. Schnitter, D. Gerthsen, "Microstructure and dielectric properties of nanoscale oxide layers on sintered capacitor-grade niobium and V-doped niobium powder compacts", *Int. J. Mater. Res.* **97**, pp. 794-801 (2006).
- [200] H. Timmermann, D. Fouquet, A. Weber, E. Ivers-Tiffée, U. Hennings, R. Reimert, "Internal reforming of methane at Ni/YSZ and Ni/CGO SOFC cermet anodes", *Fuel Cells* **6**, pp. 307-313 (2006).
- [201] S. F. Wagner, C. Warnke, W. Menesklou, C. Argirusis, T. Damjanovic, G. Borchardt, E. Ivers-Tiffée, "Enhancement of oxygen surface kinetics of SrTiO_3 by alkaline earth metal oxides", *Solid State Ionics* **177**, pp. 1607-1612 (2006).
- [202] M. J. Heneka, E. Ivers-Tiffée, "Accelerated Life Tests for Fuel Cells", *ECS Trans.* **1**, pp. 377-384 (2006).
- [203] P. König, A. Weber, E. Ivers-Tiffée, "Modeling and Simulation Approach for Standardized Testing and Analysis of PEMFC CHP Systems", *ECS Trans.* **1**, pp. 453-462 (2006).
- [204] C. Argirusis, S. F. Wagner, W. Menesklou, C. Warnke, T. Damjanović, G. Borchardt, E. Ivers-Tiffée, "Enhancement of oxygen surface exchange kinetics of SrTiO_3 by alkaline earth metal oxides", *Phys. Chem. Chem. Phys.* **7**, pp. 3523-3525 (2005).
- [205] P. König, A. Weber, N. Lewald, T. Aicher, L. Jorissen, E. Ivers-Tiffée, R. Szolak, M. Brendel, J. Kaczerowski, "Testing and model-aided analysis of a 2 kW_(el) PEMFC CHP-system", *J. Power Sources* **145**, pp. 327-335 (2005).
- [206] A. Rothschild, S. J. Litzelman, H. L. Tuller, W. Menesklou, T. Schneider, E. Ivers-Tiffée, "Temperature-independent resistive oxygen sensors based on $\text{SrTi}_{1-x}\text{Fe}_x\text{O}_{3-\delta}$ solid solutions", *Sens. Act. B* **108**, pp. 223-230 (2005).
- [207] J. Xu, W. Menesklou, E. Ivers-Tiffée, "Investigation of BZT thin films for tunable microwave applications", *J. Eur. Ceram. Soc.* **25**, pp. 2289-2293 (2005).
- [208] T. Hilpert, E. Ivers-Tiffée, "Correlation of electrical and mechanical properties of zirconia based thermal barrier coatings", *Solid State Ionics* **175**, pp. 471-476 (2004).
- [209] E. Ivers-Tiffée, A. Weber, K. Schmid, V. Krebs, "Macroscale modeling of cathode formation in SOFC", *Solid State Ionics* **174**, pp. 223-232 (2004).
- [210] A.C. Müller, J.R. Opfermann, E. Ivers-Tiffée, "Modelling and optimisation of solid electrolyte sintering behaviour by thermokinetic analysis", *Thermochim. Acta* **414**, pp. 11-17 (2004).
- [211] H. Timmermann, D. Fouquet, U. Hennings, E. Ivers-Tiffée, R. Reimert, "Untersuchung der internen Reformierung an Anoden der Hochtemperatur-Brennstoffzelle im Methanbetrieb", *Chemie Ingenieur Technik* **9**, pp. 1267-1268 (2004).

-
- [212] S. F. Wagner, W. Menesklou, T. Schneider, E. Ivers-Tiffée, "Kinetics of oxygen incorporation into SrTiO₃ investigated by frequency-domain analysis", *J. Electroceram.* **13**, pp. 645-651 (2004).
- [213] A. Weber, E. Ivers-Tiffée, "Materials and concepts for solid oxide fuel cells (SOFCs) in stationary and mobile applications", *J. Power Sources* **127**, pp. 273-283 (2004).
- [214] J. Xu, W. Menesklou, E. Ivers-Tiffée, "Annealing effects on structural and dielectric properties of tunable BZT thin films", *J. Electroceram.* **13**, pp. 229-233 (2004).
- [215] J. Xu, W. Menesklou, E. Ivers-Tiffée, "Processing and properties of BST thin films for tunable microwave devices", *J. Eur. Ceram. Soc.* **24**, pp. 1735-1739 (2004).
- [216] F. Zimmermann, W. Menesklou, E. Ivers-Tiffée, "Investigation of Ag(Ta,Nb)O₃ as tunable microwave dielectric", *J. Eur. Ceram. Soc.* **24**, pp. 1811-1814 (2004).
- [217] F. Zimmermann, W. Menesklou, E. Ivers-Tiffée, "Ba_{0.6}Sr_{0.4}TiO₃ and BaZr_{0.3}Ti_{0.7}O₃ thick films as tunable microwave dielectrics", *J. Eur. Ceram. Soc.* **24**, pp. 1729-1733 (2004).
- [218] D. Fouquet, A. C. Müller, A. Weber, E. Ivers-Tiffée, "Kinetics of Oxidation and Reduction of Ni/YSZ Cermets", *Ionics* **9**, pp. 103-108 (2003).
- [219] S. F. Wagner, W. Menesklou, E. Ivers-Tiffée, "Kinetics of oxygen exchange in strontium titanate", *Ionics* **9**, pp. 109-114 (2003).
- [220] A. C. Müller, D. Herbstritt, E. Ivers-Tiffée, "Development of a multilayer anode for solid oxide fuel cells", *Solid State Ionics* **152**, pp. 537-542 (2002).
- [221] A. C. Müller, A. Krügel, E. Ivers-Tiffée, "Engineering of SOFC anode/electrolyte interface", *Materialwiss. Werkst.* **33**, pp. 343-347 (2002).
- [222] H. Schichlein, A. C. Müller, M. Voigts, A. Krügel, E. Ivers-Tiffée, "Deconvolution of electrochemical impedance spectra for the identification of electrode reaction mechanisms in solid oxide fuel cells", *J. Appl. Electrochem.* **32**, pp. 875-882 (2002).
- [223] K. Schmid, V. Krebs, E. Ivers-Tiffée, "Qualitative dynamic models for materials development of solid oxide fuel cells", *ATP* **44**, pp. 55-60 (2002).
- [224] A. Weber, B. Sauer, A. C. Müller, D. Herbstritt, E. Ivers-Tiffée, "Oxidation of H₂, CO and methane in SOFCs with Ni/YSZ-cermet anodes", *Solid State Ionics* **152**, pp. 543-550 (2002).
- [225] F. Zimmermann, W. Menesklou, E. Ivers-Tiffée, "Electrical properties of silver-tantalate-niobate thick films", *Integr. Ferroelectr.* **50**, pp. 181-188 (2002).
- [226] D. Herbstritt, A. Weber, E. Ivers-Tiffée, "Modelling and DC-polarisation of a three dimensional electrode/electrolyte interface", *J. Eur. Ceram. Soc.* **21**, pp. 1813-1816 (2001).
- [227] T. Horita, K. Yamaji, N. Sakai, H. Yokokawa, A. Weber, E. Ivers-Tiffée, "Oxygen reduction mechanism at porous La_{1-x}Sr_xCoO_{3-d} cathodes / La_{0.8}Sr_{0.2}Ga_{0.8}Mg_{0.2}O_{2.8} electrolyte interface for solid oxide fuel cells", *Electrochim. Acta* **46**, pp. 1837-1845 (2001).
- [228] T. Horita, K. Yamaji, N. Sakai, H. Yokokawa, A. Weber, E. Ivers-Tiffée, "Electrode reaction of La_{1-x}Sr_xCoO_{3-d} cathodes on La_{0.8}Sr_{0.2}Ga_{0.8}Mg_{0.2}O_{3-y} electrolyte in solid oxide fuel cells", *J. Electrochem. Soc.* **148**, pp. A456-A462 (2001).
- [229] E. Ivers-Tiffée, A. Weber, D. Herbstritt, "Materials and technologies for SOFC-components", *J. Eur. Ceram. Soc.* **21**, pp. 1805-1811 (2001).

-
- [230] E. Ivers-Tiffée, K. H. Härdtl, W. Menesklou, J. Riegel, "Principles of solid state oxygen sensors for lean combustion gas control", *Electrochim. Acta* **47**, pp. 807-814 (2001).
- [231] M. Voigts, W. Menesklou, E. Ivers-Tiffée, "Dielectric properties and tunability of BST and BZT thick films for microwave applications", *Integr. Ferroelectr.* **39**, pp. 1333-1342 (2001).
- [232] F. Zimmermann, M. Voigts, C. Weil, R. Jakoby, P. Wang, W. Menesklou, E. Ivers-Tiffée, "Investigation of barium strontium titanate thick films for tunable phase shifters", *J. Eur. Ceram. Soc.* **21**, pp. 2019-2023 (2001).
- [233] T. Horita, K. Yamaji, N. Sakai, H. Yokokawa, A. Weber, E. Ivers-Tiffée, "Stability at $\text{La}_{0.6}\text{Sr}_{0.4}\text{CO}_{3-d}$ cathode/ $\text{La}_{0.8}\text{Sr}_{0.2}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_{2.8}$ electrolyte interface under current flow for solid oxide fuel cells", *Solid State Ionics* **133**, pp. 143-152 (2000).
- [234] R. A. de Souza, M. S. Islam, E. Ivers-Tiffée, "Formation and migration of cation defects in the perovskite oxide LaMnO_3 ", *J. Mater. Chem.* **9**, pp. 1621-1628 (1999).
- [235] W. Menesklou, H.-J. Schreiner, K. H. Härdtl, E. Ivers-Tiffée, "High temperature oxygen sensors based on doped SrTiO_3 ", *Sens. Act. B* **59**, pp. 184-189 (1999).
- [236] A. Weber, R. Männer, R. Waser, E. Ivers-Tiffée, "Interaction between microstructure and electrical properties of screen printed cathodes in SOFC single cells", *Denki Kagaku* **64**, pp. 582-589 (1996).
- [237] R. Schachtner, E. Ivers-Tiffée, W. Weppner, R. Männer, W. Wersing, "Investigations on Stoichiometric and Substoichiometric $\text{La}_{1-x-y}\text{Sr}_x\text{MnO}_{3-d}$ used as Cathode Material in the Solid Oxide Fuel Cell", *Ionics* **1**, pp. 63-69 (1995).
- [238] W. Drenckhahn, H. Greiner, E. Ivers-Tiffée, "Materials for Solid-Oxide High-Temperature Fuel Cells", *Power Journal* **1**, pp. 35-39 (1994).
- [239] A. Iberl, H. von Philipsborn, M. Schießl, E. Ivers-Tiffée, W. Wersing, G. Zorn, "Temperature Expansion in $(\text{La,Sr})(\text{Mn,Co})\text{O}_{3-d}$ Cathode Materials for Solid Oxide Fuel Cells", *Materials Science Forum* **79-82**, pp. 869-874 (1991).
- [240] E. Ivers-Tiffée, B. Jobst, I. Kraus, R. Schachtner, M. Schießl, "Characterization of Oxygen-Electrode/Electrolyte Interface Reactions in Solid Oxide Fuel Cells by X-Ray Diffraction Measurements", *Materials Science Forum* **79-82**, pp. 875-882 (1991).
- [241] M. Schießl, E. Ivers-Tiffée, W. Wersing, "Ceramic Cathode Materials $(\text{La}_{1-u}\text{Sr}_u\text{Mn}_{1-x}\text{Co}_x\text{O}_{3-d})$ for Solid Oxide Fuel Cell (SOFC) Applications", *Materials Science Monographs* **66**, pp. 2607-2614 (1991).
- [242] E. Ivers-Tiffée, W. Wersing, M. Schießl, H. Greiner, "Ceramic and metallic components for a planar SOFC", *Ber. Bunsenges. Phys. Chem.* **94**, pp. 978-981 (1990).

Papers in Conference Proceedings

- [1] S. Dierickx, F. Wankmüller, A. Weber, E. Ivers-Tiffée, "Transmission Line Modeling of Composite Electrodes", Proc. 14th European SOFC & SOE Forum 2020 Lucerne/Switzerland (2020).
- [2] N. Russner, S. Dierickx, A. Weber, E. Ivers-Tiffée, "High-resolution modelling of SOFC stack layers", Proc. 14th European SOFC & SOE Forum 2020 Lucerne/Switzerland (2020).
- [3] F. Wankmüller, J. Szász, M. Meffert, H. Störmer, J. Schmiege, P. Lupetin, D. Gerthsen, E. Ivers-Tiffée, "Performance of LSM-YSZ cathodes in an inert-supported and co-sintered SOFC design", Proc. 13th European SOFC & SOE Forum Lucerne/Switzerland, B0307, pp. 1-9 (2018).
- [4] N. Russner, D. Horny, J. Joos, E. Ivers-Tiffée, "Mass and heat transport in porous SOFC electrodes", Proc. 13th European SOFC & SOE Forum Lucerne/Switzerland, A1302, pp. 1-9 (2018).
- [5] N. Russner, S. Dierickx, H. Geisler, A. Weber, E. Ivers-Tiffée, "Performance optimization by means of a non-isothermal FEM model for SOFC stack layers", Proc. 13th European SOFC & SOE Forum Lucerne/Switzerland, A1324, pp. 1-11 (2018).
- [6] T. Mundloch, S. Dierickx, A. Weber, E. Ivers-Tiffée, "Development and parameterization of a transmission line model for Ni/YSZ anodes", Proc. 13th European SOFC & SOE Forum Lucerne/Switzerland, A1325, pp. 1-8 (2018).
- [7] S. Dierickx, N. Russner, A. Weber, E. Ivers-Tiffée, "A predictive degradation model for SOFC-cells and stacks", Proc. 13th European SOFC & SOE Forum Lucerne/Switzerland, A1401, pp. 1-12 (2018).
- [8] J. Szász, F. Wankmüller, J. Joos, V. Wilde, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "Mixed conducting LSCF cathodes: Performance limitations by secondary phases", Proc. 13th European SOFC & SOE Forum Lucerne/Switzerland, A1512, pp. 1-10 (2018).
- [9] J. Szász, C. Endler-Schuck, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "Performance and durability of SOFC cathodes – effects of sulfur dioxide", Proc. 13th European SOFC & SOE Forum Lucerne/Switzerland, B1401, pp. 1-10 (2018).
- [10] H. Geisler, J. Joos, A. Weber, E. Ivers-Tiffée, "Performance Modelling of anode supported cells on a SOFC stack layer level", Proc. 12th European SOFC & SOE Forum Lucerne/ Switzerland, pp. A11-317-A11-325 (2016).
- [11] T. Dickel, A. Weber, M. Scharrer, C.P. Kluge, "Sulfur Tolerant WGS-Catalysts", Proc. 12th European SOFC & SOE Forum Lucerne/Switzerland, pp. A13-58-A13-66 (2016).
- [12] S. Dierickx, A. Weber, E. Ivers-Tiffée, "Electrochemical Analysis of Sulfur Poisoning in Ni/8YSZ Cermet Anodes", Proc. 12th European SOFC & SOE Forum Lucerne/Switzerland, pp. B05-27-B05-34 (2016).
- [13] A. Weber, T. Dickel, E. Ivers-Tiffée, "Sulfur-Tolerance of Ceria-based Anodes", Proc. 12th European SOFC & SOE Forum Lucerne/Switzerland, pp. B05-48-B05-55 (2016).
- [14] J. Joos, H. Geisler, A. Weber, E. Ivers-Tiffée, "Designing Porous Cathode Structures for SOFCs", Proc. 12th European SOFC & SOE Forum Lucerne/Switzerland, pp. B08-29-B08-35 (2016).

-
- [15] F. Wankmüller, J. Szász, J. Joos, V. Wilde, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "Understanding performance limiting impacts in SOFCs - visualizing the nature of cathode/electrolyte interfaces using advanced focused ion beam/scanning electron microscope (FIB-SEM) tomography techniques", Proc. 12th European SOFC & SOE Forum Lucerne/Switzerland, pp. B12-19-B12-24 (2016).
- [16] L. Almar, J. Szász, A. Weber, E. Ivers-Tiffée, "Determining the Oxygen Transport Kinetics of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ by a Detailed Electrochemical Study", Proc. 12th European SOFC & SOE Forum Lucerne/Switzerland, pp. B12-54-B12-63 (2016).
- [17] J. Szász, F. Wankmüller, V. Wilde, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "High-Performance Cathode/Electrolyte Interfaces for SOFC", Proc. 12th European SOFC & SOE Forum Lucerne/Switzerland, pp. B15-13-B15-19 (2016).
- [18] H. Geisler, A. Kromp, A. Weber, E. Ivers-Tiffée, "How SOFC stack performance depends on the interaction of MIC design and cathode material", Proceedings of the 11th European SOFC & SOE Forum, pp. A0904-24-A0904-29 (2014).
- [19] J. Szász, D. Klotz, N. H. Menzler, E. Ivers-Tiffée, "Towards large-scale/industrial Fabrication of Anode-Supported Cells – Detailed Performance Study of Different Coating Techniques for Anode and Electrolyte", Proceedings of the 11th European SOFC & SOE Forum, pp. A1101-5-A1101-10 (2014).
- [20] J. Hayd, H. Yokokawa, E. Ivers-Tiffée, "Solid-gas interactions at the surface of $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ cathodes and their impacts", Proceedings of the 11th European SOFC & SOE Forum, pp. B0301-6-B0301-10 (2014).
- [21] K. Nagato, N. Shikazono, M. Nakao, J. Hayd, D. Klotz, E. Ivers-Tiffée, "Parameter Identification on Polarization Resistance of SOFC Anode with Magnetically Aligned Ni", Proceedings of the 11th European SOFC & SOE Forum, pp. B0304-29-B0304-33 (2014).
- [22] A. Messner, J. Joos, M. Ender, A. Weber, E. Ivers-Tiffée, "Custom Tailoring High-Performance MIEC Cathodes", Proceedings of the 11th European SOFC & SOE Forum, pp. B0814-157-B0814-163 (2014).
- [23] D. Klotz, J. Hayd, J. Szász, N. H. Menzler, E. Ivers-Tiffée, "Nanoscaling SOFC Electrodes – Boosting the Performance of Anode Supported Cells", Proceedings of the 11th European SOFC & SOE Forum, pp. B0507-20-B0507-24 (2014).
- [24] A. Weber, J. Szász, A. Kromp, C. Endler-Schuck, E. Ivers-Tiffée, "Design of Accelerated Lifetime Tests for SOFCs", Proceedings of the 11th European SOFC & SOE Forum, pp. B0601-6-B0601-15 (2014).
- [25] C. Endler-Schuck, J. Joos, A. Weber, E. Ivers-Tiffée, "Durability Aspects of MIEC Cathodes", Proceedings of the 11th European SOFC & SOE Forum, pp. B0614-105-B0614-112 (2014).
- [26] D. Klotz, A. Weber, E. Ivers-Tiffée, "From Cell Measurement to Stack Modeling – What can we learn from Small Area Cell Measurements?", Proceedings of the 11th European SOFC & SOE Forum, pp. B1201-8-B1201-12 (2014).
- [27] A. Weber, E. Ivers-Tiffée, "Testing SOFCs at high Current Densities", Proceedings of the 11th European SOFC & SOE Forum, pp. A1307-192-A1307-201 (2014).

-
- [28] M. Schreivogel, D. Kunz, R.-R. Rosenberger, W. Menesklou, E. Ivers-Tiffée, "Metal-Insulator-Metal Gas Sensor Based on Polarizable Thin Films", *SENSORDEVICES 2013 : Proc. 4th Int. Conf. on Sensor Device Technologies and Applications*, pp. 122-127 (2013).
- [29] J. Hayd, A. Weber, E. Ivers-Tiffée, "Modified oxygen surface-exchange properties by nanoparticulate Co_3O_4 and SrO in $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-d}$ thin-film cathodes", in F. Lefebvre-Joud (Ed.), *Proceedings of the 10th European Solid Oxide Fuel Cell Forum*, pp. B0411-1-B0411-10 (2012).
- [30] A. Häffelin, J. Joos, J. Hayd, A. Weber, E. Ivers-Tiffée, "3D FEM Impedance Model for LSCF-Cathodes", in F. Lefebvre-Joud (Ed.), *Proceedings of 10th European SOFC Forum*, pp. 1-11 (2012).
- [31] A. Häffelin, J. Joos, A. Weber, E. Ivers-Tiffée, "Transient 3D Impedance Model for mixed-conducting SOFC Cathodes", in *Proceedings of the 221th ECS Meeting*, pp. 1-13 (2012).
- [32] J. Joos, M. Ender, I. Rotscholl, N. Menzler, A. Weber, E. Ivers-Tiffée, "Quantification of Ni/YSZ-Anode Microstructure Parameters derived from FIB-tomography", in F. Lefebvre-Joud (Ed.), *Proceedings of 10th European SOFC Forum*, pp. 1-12 (2012).
- [33] M. Kornely, A. Weber, E. Ivers-Tiffée, "Advanced impedance study of LSM/8YSZ-cathodes by means of distribution of relaxation times (DRT)", in F. Lefebvre-Joud (Ed.), *Proceedings of 10th European SOFC Forum*, pp. 102-109 (2012).
- [34] M. Kornely, N. Menzler, A. Weber, E. Ivers-Tiffée, "Degradation of a High Performance Cathode by Cr-Poisoning at OCV-Conditions", in F. Lefebvre-Joud (Ed.), *Proceedings of 10th European SOFC Forum, Luzern*, pp. 83-91 (2012).
- [35] A. Kromp, A. Leonide, A. Weber, E. Ivers-Tiffée, "Electrochemistry of Reformate-Fuelled Anode-Supported SOFC", in F. Lefebvre-Joud (Ed.), *Proceedings of 10th European SOFC Forum*, pp. 6-13 (2012).
- [36] A. Kromp, H. I. Geisler, A. Weber, E. Ivers-Tiffée, "Electrochemical Impedance Modeling of Reformate-Fuelled Anode-Supported SOFC", in F. Lefebvre-Joud (Ed.), *Proceedings of 10th European SOFC Forum*, pp. 92-101 (2012).
- [37] J.-C. Njodzefon, D. Klotz, N. Menzler, A. Weber, E. Ivers-Tiffée, "Detailed Study of an Anode Supported Cell in Electrolyzer Mode under Thermo-Neutral Operation", in M. Spirit, O. Bucheli, and F. Lefebvre-Joud (Eds.), *Proceedings of the 10th European Solid Oxide Fuel Cell Forum*, p. B0713 (2012).
- [38] J. Illig, M. Ender, T. Chrobak, J. P. Schmidt, D. Klotz, E. Ivers-Tiffée, "Evaluation of LiFePO_4 -Cathodes by Impedance Modeling", in Dominique Guyomard (Ed.), *Proceedings of the Lithium Batteries Discussion 2011*, p. O11 (2011).
- [39] J. P. Schmidt, D. Klotz, J. Richter, E. Ivers-Tiffée, "Insertion potentials of Li-ion battery electrodes quickly identified by a mathematical transformation of OCV curves", in Dominique Guyomard (Ed.), *Proceedings of the Lithium Batteries Discussion 2011*, p. P12 (2011).
- [40] S.F. Wagner, S. Taufall, C. Niedrig, H. Götz, W. Menesklou, S. Baumann, E. Ivers-Tiffée, " $p\text{O}_2$ stability of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ ", *Materials Research Society Symposium Proceedings Vol. 1309*, p. 57 (2011).

-
- [41] T. Chrobak, M. Ender, J. Illig, J. P. Schmidt, D. Klotz, E. Ivers-Tiffée, "Studies on LiFePO_4 as Cathode Materials in Li-Ion-Batteries", in DECHEMA (Ed.), First International Conference on Materials for Energy, Extended Abstracts - Book B: DECHEMA, pp. 593-595 (2010).
- [42] C. Endler, A. Leonide, A. Weber, S. Uhlenbruck, F. Tietz, E. Ivers-Tiffée, "Performance analysis of MIEC cathodes in anode supported cells", in J. T. S. Irvine and U. Bossel (Eds.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 10-33-10-42 (2010).
- [43] J. Hayd, U. Guntow, E. Ivers-Tiffée, "Nanoscaled $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ as intermediate temperature SOFC cathode: Microstructure and electrochemical performance", in P. Connor (Ed.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 10-106-10-112 (2010).
- [44] J. Hayd, U. Guntow, E. Ivers-Tiffée, "Electrochemical performance of nanoscaled $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_{3-\delta}$ as intermediate temperature SOFC cathodes", in DECHEMA (Ed.), First International Conference on Materials for Energy, Extended Abstracts - Book A, Karlsruhe, Germany, pp. 79-81 (2010).
- [45] J. Joos, B. Rüger, A. Weber, T. Carraro, E. Ivers-Tiffée, "3D Reconstruction of Porous Electrodes and Microstructure Modelling", in DECHEMA (Ed.), First International Conference on Materials for Energy, Extended Abstracts - Book A, Karlsruhe, Germany, pp. 42-44 (2010).
- [46] J. Joos, T. Carraro, A. Weber, E. Ivers-Tiffée, "Reconstruction of Porous Electrodes by FIB/SEM for Detailed Microstructure Modeling", in J. T. S. Irvine and U. Bossel (Eds.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 6-75-6/81 (2010).
- [47] D. Klotz, J. P. Schmidt, A. Weber, E. Ivers-Tiffée, "Dynamic Electrochemical Model for SOFC Stacks", in First International Conference on Materials for Energy, Extended Abstracts - Book A, Frankfurt am Main: DECHEMA, pp. 102-104 (2010).
- [48] D. Klotz, A. Leonide, E. Ivers-Tiffée, "Increase of Anode Performance of SOFC by Reverse Current Treatment", in First International Conference on Materials for Energy, Extended Abstracts - Book A, Frankfurt am Main: DECHEMA, pp. 75-77 (2010).
- [49] D. Klotz, J. P. Schmidt, A. Weber, E. Ivers-Tiffée, "Dynamic Electrochemical Model for SOFC-Stacks", in P. Connor (Ed.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 1-6 (2010).
- [50] M. Kornely, A. Neumann, N. Menzler, E. Ivers-Tiffée, "Degredation of ASC Performance by Cr-Poisoning", in P. Connor, J. Irvine, M. Cassidy, C. Savaniu, M. Smith, and S. Knowles (Eds.), 9th European Solid Oxide Fuel Cell Forum, p. 065 (2010).
- [51] M. Kornely, A. Weber, E. Ivers-Tiffée, "Performance Limiting factors in anode-supported Cells Originating from Metallic Interconnector (MIC) Design", in P. Connor, J. Irvine, M. Cassidy, C. Savaniu, M. Smith, and S. Knowles (Eds.), 9th European Solid Oxide Fuel Cell Forum, p. 066 (2010).
- [52] M. Kornely, A. Weber, E. Ivers-Tiffée, "SOFC Performance Simulation Based on a Finite Element Methode (FEM) Model Approach", in DECHEMA (Ed.), First International Conference on Materials for Energy, pp. A111-113 (2010).
- [53] A. Kromp, A. Leonide, H. Timmermann, A. Weber, E. Ivers-Tiffée, "FEM-Modeling of Internal Reforming in SOFC-Anodes", in DECHEMA (Ed.), First International Conference on Materials for Energy, Extended Abstracts - Book A, pp. 114-116 (2010).

-
- [54] A. Kromp, A. Leonide, H. Timmermann, A. Weber, E. Ivers-Tiffée, "Internal Reforming Kinetics in SOFC-Anodes", in J. T. S. Irvine and U. Bossel (Eds.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 6-103-6-110 (2010).
- [55] A. Leonide, S. Hansmann, E. Ivers-Tiffée, "Performance Simulation of C/V-characteristics for ASC by means of detailed impedance analysis", in J. T. S. Irvine and U. Bossel (Eds.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 6-1-6-6 (2010).
- [56] A. Leonide, S. Hansmann, E. Ivers-Tiffée, "A 0-Dimensional Stationary Model for Anode-Supported Solid Oxide Fuel Cells (SOFC)", in DECHEMA (Ed.), First International Conference on Materials for Energy, Extended Abstracts - Book A, Frankfurt am Main: DECHEMA e. V., pp. 124-126 (2010).
- [57] Q. Ma, F. Tietz, A. Leonide, E. Ivers-Tiffée, "SOFCs based on Y-substituted SrTiO₃ ceramic anode materials", in J. T. S. Irvine and U. Bossel (Eds.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 9-71-9-80 (2010).
- [58] C. Niedrig, S. Taufall, S. F. Wagner, P. Müller, H. Störmer, D. Gerthsen, E. Ivers-Tiffée, "Thermal Stability of mixed ionic-electronic conducting Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ}", in First International Conference on Materials for Energy, Extended Abstracts - Book A: Dechema, pp. 48-50 (2010).
- [59] H. Störmer, A. Utz, E. Ivers-Tiffée, D. Gerthsen, "Patterned Nickel Anodes for SOFC: Micro-structure and Impurity Analysis", in P. Connor, J. T. S. Irvine, M. Cassidy, C. Savaniu, M. Smith, and S. Knowles (Eds.), Proceedings of the 9th EUROPEAN SOFC FORUM, pp. 5-122-5-127 (2010).
- [60] A. Utz, A. Weber, E. Ivers-Tiffée, "Electrochemical Characterization of Ni Patterned Anodes in H₂/H₂O Atmosphere", in First International Conference on Materials for Energy, Extended Abstracts - Book A, Karlsruhe, Germany: DECHEMA, pp. 69-71 (2010).
- [61] A. Utz, A. Leonide, A. Weber, E. Ivers-Tiffée, "Studying the CO/CO₂ characteristics of SOFC anodes by means of Ni patterned anodes", in J. T. S. Irvine and U. Bossel (Eds.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 9-55-9-70 (2010).
- [62] A. Utz, H. Störmer, T. Knapp, K. Ilin, P.-J. Jakobs, M. Siegel, E. Ivers-Tiffée, "A Comparative Study of Fabrication Procedures for Ni-Patterned Anodes", in P. Connor, J. T. S. Irvine, M. Cassidy, C. Savaniu, M. Smith, and S. Knowles (Eds.), Proceedings of the 9th EUROPEAN SOFC FORUM, pp. 5-91-5-103 (2010).
- [63] M. Vogler, H. Störmer, D. Gerthsen, A. Utz, A. Weber, E. Ivers-Tiffée, W. G. Bessler, "Electrochemistry and Mechanism of Hydrogen Oxidation at Ni/YSZ Patterned Anodes", in P. Connor, J. T. S. Irvine, M. Cassidy, C. Savaniu, M. Smith, and S. Knowles (Eds.), Proceedings of the 9th EUROPEAN SOFC FORUM, pp. 9-94-9-103 (2010).
- [64] T. Yamamoto, H. Morita, Y. Mugikura, D. Klotz, A. Leonide, A. Weber, E. Ivers-Tiffée, "Investigation of SOFC Performance and Durability Evaluations", in J. T. S. Irvine and U. Bossel (Eds.), Proceedings of the 9th European Solid Oxide Fuel Cell Forum, pp. 7-86-7-95 (2010).
- [65] E. Ivers-Tiffée, "Leistungsfähigkeit von SOFC-Einzelzellen", in D. Stöver (Ed.), DGM Fortbildungsseminar Werkstofffragen der Hochtemperatur-Brennstoffzelle (SOFC), Jülich, Germany, pp. 1-9 (2009).

-
- [66] P. Müller, H. Störmer, D. Gerthsen, J. Santiso, J. Roqueta, M. Burriel, C. Niedrig, S. F. Wagner, E. Ivers-Tiffée, "TEM investigations of mixed ionic/electronic conducting $Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}$ materials", in W. Grogger, F. Hofer, and P. Pölt (Eds.), Proc.MC2009 3, Graz, Austria: Verlag der TU Graz, pp. 295-296 (2009).
- [67] C. Endler, A. Weber, E. Ivers-Tiffée, U. Guntow, S. Stolz, J. Ernst, "Nanoscale Gd-doped CeO_2 Buffer Layer for a High Performance Solid Oxide Fuel Cell", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. A0618 (2008).
- [68] E. Ivers-Tiffée, U. Guntow, J. Hayd, B. Rüger, "Potential of Nanoscaled LSC Thin Film Cathodes: Modelling and Experimental Verification", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, pp. A0403-1-A0403-9 (2008).
- [69] M. H. Kim, H. Timmermann, R. Reimert, E. Ivers-Tiffée, "Development and Validation of a Model for Internal Reforming of Methane Reflecting Anode Characteristics ", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. A0213 (2008).
- [70] D. Klotz, A. Weber, E. Ivers-Tiffée, "Thermal Behaviour of SOFC Single Cells in Operation with Dynamic Loads", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. B0909 (2008).
- [71] A. Leonide, S. Ngo Dinh, A. Weber, E. Ivers-Tiffée, "Performance limiting factors in anode supported SOFC", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. A0501 (2008).
- [72] B. Rüger, T. Carraro, J. Joos, V. Heuveline, E. Ivers-Tiffée, "A Numerical Method for the Optimization of MIEC Cathode Microstructures", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. A0616 (2008).
- [73] W. Sawady, H. Timmermann, R. Reimert, E. Ivers-Tiffée, "Process Analysis of a Liquid Fuel-Based SOFC System", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. A0211 (2008).
- [74] V. Sonn, E. Ivers-Tiffée, "Degradation in Ionic Conductivity of Ni/YSZ Anode Cermets", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. B1005 (2008).
- [75] A. Utz, A. Weber, E. Ivers-Tiffée, H. Störmer, "Studies on Pattern Anode Stability for SOFC", in R. Steinberger-Wilckens and U. Bossel (Eds.), Proceedings of the 8th European Solid Oxide Fuel Cell Forum, p. A0509 (2008).
- [76] M. J. Heneka, E. Ivers-Tiffée, "Influence of High Current Cycling on the Performance of SOFC Single Cells", in S. Linderoth, A. Smith, N. Bonanos, A. Hagen, L. Mikkelsen, K. Kammer, D. Lybye, P. V. Hendriksen, F. W. Poulsen, M. Mogensen, and W. G. Wang (Eds.), Proc. 26th Risoe Int. Symp. on Materials Science: Solid State Electrochemistry 1, pp. 215-222 (2007).
- [77] B. Rüger, A. Weber, E. Ivers-Tiffée, "3D-Microstructure Modeling and Performance Evaluation for Solid Oxide Fuel Cell (MIEC) Cathodes", in J.-M. Petit and O. Squalli (Eds.), Proceedings of the European COMSOL Conference 2007, pp. 421-427 (2007).

-
- [78] C. Endler, A. Weber, E. Ivers-Tiffée, "Evaluation of Electrodes for Single Chamber SOFC", in J. A. Kilner and U. Bossel (Eds.), Proceedings of the 7th European Solid Oxide Fuel Cell Forum, p. P0307-Endler (2006).
- [79] S. Gewies, W. G. Bessler, J. Warnatz, V. Sonn, E. Ivers-Tiffée, "Coupled Electrochemistry and Transport in Ni/YSZ Cermets: Impedance Simulations and Experimental Validation", in J. A. Kilner and U. Bossel (Eds.), Proceedings of the 7th European Solid Oxide Fuel Cell Forum, pp. P0713-131 (2006).
- [80] P. König, H. Timmermann, E. Ivers-Tiffée, "Development and Validation of a Modelling Tool for SOFC Systems", in J. A. Kilner and U. Bossel (Eds.), Proceedings of the 7th European Solid Oxide Fuel Cell Forum, pp. P0903-045 (2006).
- [81] C. Peters, M. Bockmeyer, R. Krüger, A. Weber, E. Ivers-Tiffée, "Processing of Dense Nano-crystalline Zirconia Thin Films by Sol-Gel Method", in D. Kumar, V. Cracuin, M. Alexe, and K. K. Singh (Eds.), Current and Future Trends of Functional Oxide Films - Materials Research Society Symposium Proceedings **928**, Warrendale, p. 0928-GG16-01 (2006).
- [82] R. Krüger, A. Weber, D. Fouquet, E. Ivers-Tiffée, "SOFC Performance Evaluated by FEM-Modelling of Electrode Microstructures with a Randomly Generated Geometry", in J. A. Kilner and U. Bossel (Eds.), Proceedings of the 7th European Solid Oxide Fuel Cell Forum, p. B075 (2006).
- [83] V. Sonn, A. Leonide, E. Ivers-Tiffée, "An Impedance Study of Ni/YSZ and Ni/ScSZ Cermet Anodes in a Broad Range of Operating Conditions", in J. A. Kilner and U. Bossel (Eds.), Proceedings of the 7th European Solid Oxide Fuel Cell Forum, pp. P0723-164 (2006).
- [84] H. Timmermann, A. Weber, U. Hennings, E. Ivers-Tiffée, R. Reimert, "Development of a fuel flexible SOFC stack model", in J. A. Kilner and U. Bossel (Eds.), Proceedings of the 7th European Solid Oxide Fuel Cell Forum, pp. P0305-066 (2006).
- [85] M. Becker, A. Mai, E. Ivers-Tiffée, F. Tietz, "Long-Term Measurements of Anode-Supported Solid Oxide Fuel Cells with LSCF Cathodes under various Operating Conditions", in S. C. Singhal and J. Mizusaki (Eds.), Proceedings of the Ninth International Symposium on Solid Oxide Fuel Cells (SOFC IX) 1, pp. 514-523 (2005).
- [86] M. J. Heneka, E. Ivers-Tiffée, "Degradation of SOFC Single Cells under severe Current Cycles", in S. C. Singhal and J. Mizusaki (Eds.), Proceedings of the Ninth International Symposium on Solid Oxide Fuel Cells (SOFC IX) 1, pp. 534-543 (2005).
- [87] P. König, A. Weber, L. Jörissen, T. Aicher, N. Lewald, E. Ivers-Tiffée, "Model-Aided Testing of a PEMFC CHP System", in C. Hebling (Ed.), Proceedings of the 3rd European PEFC Forum , p. B104 (2005).
- [88] T. Schneider, C. Peters, S. F. Wagner, W. Menesklou, E. Ivers-Tiffée, "Sr(Ti,Fe)O_{3-δ} Exhaust Gas Sensors", in S. Seal, M.-I. Baraton, C. Parrish, and N. Murayama (Eds.), Semiconductor Materials for Sensing - Materials Research Society Symposium Proceedings **828**, Warrendale PA, USA, pp. 139-144 (2005).
- [89] H. Timmermann, D. Fouquet, U. Hennings, E. Ivers-Tiffée, R. Reimert, "Modelling of the Methane Conversion on a Ni/CGO-Anode", in S. C. Singhal and J. Mizusaki (Eds.), Proceedings of the Ninth International Symposium on Solid Oxide Fuel Cells (SOFC IX) 1, pp. 796-805 (2005).

-
- [90] D. Fouquet, H. Timmermann, U. Hennings, E. Ivers-Tiffée, R. Reimert, "Analysis of Internal Reforming in SOFC Anodes Operated with Methane", in M. Mogensen (Ed.), Proceedings of the 6th European Solid Oxide Fuel Cell Forum 3, p. 1468 (2004).
- [91] M. Haschka, B. Rüger, V. Krebs, A. Weber, V. Sonn, E. Ivers-Tiffée, "Diagnosis of SOFC-Systems Using Fractional Calculus", in M. Mogensen (Ed.), Proceedings of the 6th European Solid Oxide Fuel Cell Forum 2, p. 557 (2004).
- [92] M. Haschka, T. Weickert, V. Krebs, S. Schäfer, E. Ivers-Tiffée, "Identification of a Nonlinear Model for the Electrical Behavior of a Solid Oxide Fuel Cell", in P. Stevens (Ed.), France - Deutschland Fuel Cell Conference (FDFC 2002) 2, pp. 305-310 (2004).
- [93] M. J. Heneka, N. Kikilius, E. Ivers-Tiffée, "Design of Experiments for Lifetime Modelling of Solid Oxide Fuel Cell", in M. Mogensen (Ed.), Proceedings of the 6th European Solid Oxide Fuel Cell Forum 2, pp. 908-919 (2004).
- [94] A.C. Müller, A. Weber, E. Ivers-Tiffée, "Degradation of Zirconia Electrolytes", in M. Mogensen (Ed.), Proceedings of the 6th European Solid Oxide Fuel Cell Forum 3, pp. 1231-1238 (2004).
- [95] S. Schäfer, A. Krügel, A. Weber, E. Ivers-Tiffée, "Cathode Polarisation Resistances: A Modelling Approach", in M. Mogensen (Ed.), Proceedings of the 6th European Solid Oxide Fuel Cell Forum 3, p. 1253 (2004).
- [96] A. Weber, E. Ivers-Tiffée, T. Horita, H. Yokokawa, "Chemical Potential Diagrams for polarized (La,Sr)MnO_{3+δ}-Cathode/8YSZ-Electrolyte-Interfaces", Proceedings of the Fifth International Symposium on Ionic and Mixed Conducting Ceramics, Pennington, USA: The Electrochemical Society (2004).
- [97] M. Becker, A. Weber, A. C. Müller, E. Ivers-Tiffée, "Characterization of Cathode Supported Thin Film Electrolytes", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 222-228 (2003).
- [98] V. Fischer, H. Störmer, D. Gerthsen, M. Stenzel, H. Zillgen, E. Ivers-Tiffée, "Niobium as New Material for Electrolyte Capacitors with Nanoscale Dielectric Oxide Layers", Proceedings of the 7th International Conference on Properties and Applications of Dielectric Materials: IEEE, p. 1 (2003).
- [99] D. Fouquet, D. Klotz, E. Dannhäuser, A. C. Müller, A. Weber, E. Ivers-Tiffée, "SOFC single cell test setup for the use of various hydrocarbons", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 1167-1169 (2003).
- [100] D. Herbstritt, A. C. Müller, A. Weber, E. Ivers-Tiffée, "Analytical and FEM-Modelling Approach for a 3-Dimensional of Cathode/Solid Electrolyte Interface", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 1330-1337 (2003).
- [101] T. Hilpert, E. Ivers-Tiffée, S. Wagner, R. Oberacker, "Non-destructive Testing of Thermal Barrier Coatings by Impedance Spectroscopy", in R. E. Green, Jr., B. B. Djordjevic, and M. P. Hentschel (Eds.), Nondestructive Characterization of Materials XI, Berlin Heidelberg New York: Springer-Verlag, pp. 725-731 (2003).

-
- [102] A. Krügel, S. Schäfer, K. Schmid, A. Weber, E. Ivers-Tiffée, "Control Theory Based Models for Dynamic SOFC Operations", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 1358-1367 (2003).
- [103] A.C. Müller, A. Weber, D. Herbstritt, E. Ivers-Tiffée, "Long term stability of yttria and scandia doped zirconia electrolytes", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 196-199 (2003).
- [104] A.C. Müller, A. Krügel, E. Ivers-Tiffée, "Characterization of Anode/Electrolyte Interface for Advanced Anode Structures", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 680-685 (2003).
- [105] A.C. Müller, J. R. Opfermann, E. Ivers-Tiffée, "Modeling of Binder Burnout and Sintering of Solid Oxide Electrolyte Tapes by Thermokinetic Analysis", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 229-237 (2003).
- [106] E. Proß, J. Laube, A. Weber, A. C. Müller, E. Ivers-Tiffée, "Low Cost (La,Sr)MnO₃ Cathode Material with Excellent Electrochemical Properties", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 391-399 (2003).
- [107] S. Schäfer, K. Schmid, A. Krügel, A. Weber, E. Ivers-Tiffée, "Verification of Control Theory Based Models for Dynamic SOFC Operation", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 1368-1377 (2003).
- [108] T. Schneider, S. F. Wagner, W. Menesklou, E. Ivers-Tiffée, "Kinetics of Oxygen Exchange in Sr(Ti_{0.65}Fe_{0.35})O₃", in P. Knauth, J.-M. Tarascon, E. Traversa, and H. L. Tuller (Eds.), Solid State Ionics - Materials Research Society Symposium Proceedings 756, Warrendale PA, USA, pp. 145-150 (2003).
- [109] H. Yokokawa, K. Yamaji, T. Horita, Y. P. Xiong, N. Sakai, E. Ivers-Tiffée, A. Weber, A. C. Müller, D. Fouquet, K. Eguchi, T. Takeguchi, R. Kikuchi, T. Norby, R. Haugsrud, "Study of an efficient and flexible SOFC system", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Eighth International Symposium on Solid Oxide Fuel Cells (SOFC-VIII), pp. 1200-1209 (2003).
- [110] V. Fischer, A. Weber, A. Krügel, M. Stenzel, H. Zillgen, E. Ivers-Tiffée, "Nanoscale anodic oxide layers for new niobium capacitors: electrical and structural properties", in E. J. Brandon, A. Ryan, J. Harb, and R. Ulrich (Eds.), Proceedings of the 202nd Meeting of the Electrochemical Society PV 2002-25, Pennington, NJ: The Electrochemical Society, pp. 78-86 (2002).
- [111] V. Fischer, M. J. Heneka, A. Weber, A. Krügel, E. Ivers-Tiffée, M. Stenzel, H. Zillgen, "Long term measurements and first analytic modelling approach for electrical properties of new niobium capacitors", in N.N. (Ed.), Werkstoffwoche 2002, p. 1 (2002).
- [112] V. Fischer, M. J. Heneka, A. Weber, A. Krügel, M. Stenzel, H. Zillgen, E. Ivers-Tiffée, "Analytic Modeling of the Electrical Properties of New Niobium Capacitors", in E. J. Brandon, A. Ryan, J. Harb, and R. Ulrich (Eds.), Proceedings of the 202nd Meeting of the Electrochemical Society PV 2002-25, Pennington, NJ: The Electrochemical Society, pp. 106-115 (2002).
- [113] Fouquet, A. C. Müller, A. Weber, E. Ivers-Tiffée, "Kinetics of Oxidation and Reduction of Ni/YSZ Cermets", in J. Huijmans (Ed.), Proceedings of the 5th European Solid Oxide Fuel Cell Forum, p. 467 (2002).

-
- [114] E. Ivers-Tiffée, "Brennstoffzellen: Grundlagen, Werkstoffe und Baukonzepte für PEMFC und SOFC", in: HdT-Seminar Brennstoffzellen, Essen: Haus der Technik, pp. 1-126 (2002).
- [115] A.C. Müller, A. Krügel, A. Weber, E. Ivers-Tiffée, "Engineering of Anode/Electrolyte Interface For Advanced Anode Structures", in J. Huijmans (Ed.), Proceedings of the 5th European Solid Oxide Fuel Cell Forum, p. 737 (2002).
- [116] M. Voigts, F. Zimmermann, J. Xu, W. Menesklou, E. Ivers-Tiffée, "Investigation of thick films for tunable microwave devices", in N.N. (Ed.), Proc. Werkstoffwoche 2002, p. 1 (2002).
- [117] C. Argirusis, M. Kilo, P. Fielitz, G. Borchardt, U. Guntow, A. Weber, A. C. Müller, E. Ivers-Tiffée, "Chemical Diffusion of Cobalt in the System $\text{La}_{0.9}\text{Sr}_{0.1}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_{3-d}/\text{La}_{1-x}\text{Sr}_x\text{CoO}_{3-d}$ ($x=0.3$ to 0.4)", in H. Yokokawa and S. C. Singhal (Eds.), Proceedings of the Seventh International Symposium on Solid Oxide Fuel Cells (SOFC-VII), pp. 914-921 (2001).
- [118] D. Herbstritt, A. Krügel, A. Weber, E. Ivers-Tiffée, "Thermocyclic Load Delamination Defects and Electrical Performance of Single Cells", in H. Yokokawa and S. C. Singhal (Eds.), Proceedings of the Seventh International Symposium on Solid Oxide Fuel Cells (SOFC-VII), pp. 942-951 (2001).
- [119] D. Herbstritt, C. Warga, A. Weber, E. Ivers-Tiffée, "Long term stability of SOFC with Sc doped zirconia electrolyte", in H. Yokokawa and S. C. Singhal (Eds.), Proceedings of the Seventh International Symposium on Solid Oxide Fuel Cells (SOFC-VII), pp. 349-357 (2001).
- [120] E. Ivers-Tiffée, K. H. Härdtl, W. Menesklou, J. Riegel, "Oxygen Sensors for Lean Combustion Engines", in J. G. Heinrich and F. Aldinger (Eds.), Ceramic Materials and Components for Engines, Weinheim: Wiley-VCH, pp. 39-44 (2001).
- [121] E. Ivers-Tiffée, K. H. Härdtl, W. Menesklou, J. Riegel, "Oxygen Sensors for Lean Combustion Engines", in J. Heinrich and F. Aldinger (Eds.), Proceedings of the 7th International Symp.on Ceramic Materials and Components for Engines, p. 1 (2001).
- [122] A.C. Müller, A. Krügel, E. Ivers-Tiffée, "Engineering of SOFC Anode/Electrolyte Interface", Proc. SOFC Symposium Jülich, p. 1 (2001).
- [123] H. Schichlein, A. C. Müller, M. Voigts, A. Krügel, E. Ivers-Tiffée, "System Identification of SOFC Oxygen Reaction Parameters by Distributions of Relaxation Times", in H. Yokokawa and S. C. Singhal (Eds.), Proceedings of the Seventh International Symposium on Solid Oxide Fuel Cells (SOFC-VII), pp. 564-573 (2001).
- [124] K. Schmid, V. Krebs, H. Schichlein, A. Weber, A. Krügel, E. Ivers-Tiffée, "Optimization of the Startup Process of Solid Oxide Fuel Cells (SOFC)", in Proceedings of Materials Week 2001 (2001).
- [125] A. Weber, A. C. Müller, D. Herbstritt, E. Ivers-Tiffée, "Characterization of SOFC Single Cells", in H. Yokokawa and S. C. Singhal (Eds.), Proceedings of the Seventh International Symposium on Solid Oxide Fuel Cells (SOFC-VII), pp. 952-962 (2001).
- [126] C. Argirusis, M. Kilo, A. C. Müller, A. Weber, G. Borchardt, E. Ivers-Tiffée, "Interdiffusion between Electrode and Electrolyte Materials for Cathode Supported SOFC's with Thin Film Electrolytes", in K. Hilpert, F. W. Froben, and L. Singheiser (Eds.), High Temperature Materials Chemistry: Proceedings of the 10th International IUPAC Conference 2, Jülich: Forschungszentrum Jülich, pp. 727-730 (2000).

-
- [127] D. Herbstritt, A. Weber, U. Guntow, G. Müller, E. Ivers-Tiffée, "Cathode-Performance: Influence of MOD-Intermediate Layer and Electrolyte Surface Enlargement", in A. J. McEvoy (Ed.), Proceedings of the 4th European Solid Oxide Fuel Cell Forum 2, pp. 697-706 (2000).
- [128] D. Herbstritt, U. Guntow, A. Weber, A. C. Müller, E. Ivers-Tiffée, "Increased cathode performance using a thin film LSM layer on a structured 8YSZ electrolyte surface", in K. Hilpert, F. W. Froben, and L. Singheiser (Eds.), High Temperature Materials Chemistry: Proceedings of the 10th International IUPAC Conference 2, Jülich: Forschungszentrum Jülich, pp. 683-686 (2000).
- [129] D. Herbstritt, A. Krügel, A. Weber, E. Ivers-Tiffée, "Modelling of a high active three dimensional interface for SOFC", in Proc. Werkstoffwoche 2000 (2000).
- [130] B. Hippauf, S. Schöllhammer, A. Krügel, E. Ivers-Tiffée, "Investigation of the kinetic of self-supported open porous oxygen sensors based on Sr(Ti,Fe)O₃", in K. Grassie (Ed.), Functional materials (2000).
- [131] E. Ivers-Tiffée, D. Herbstritt, A. C. Müller, A. Weber, "Electrode reaction and electrochemical performance: Materials and technology development for low temperature SOFC", in Proc. 41st Battery Symposium Nagoya (2000).
- [132] W. Menesklou, H.-J. Schreiner, R. Moos, K. H. Härdtl, E. Ivers-Tiffée, "Sr(Ti,Fe)O₃: Material for a temperature independent resistive oxygen sensor", in M. Wun-Fogle, K. Uchino, Y. Ito, and R. Gotthardt (Eds.), Materials Research Society Symposium Proceedings **604**, pp. 305-310 (2000).
- [133] A.C. Müller, D. Herbstritt, A. Weber, E. Ivers-Tiffée, "Properties of Ni/8YSZ Cermets for SOFC Anodes: First Steps in Development of a Multilayer Anode", in A. J. McEvoy (Ed.), Proceedings of the 4th European Solid Oxide Fuel Cell Forum, pp. 579-588 (2000).
- [134] A.C. Müller, B. Pei, A. Weber, E. Ivers-Tiffée, "Properties of Ni/YSZ-cermets depending on their microstructure", in K. Hilpert, F. W. Froben, and L. Singheiser (Eds.), High Temperature Materials Chemistry: Proceedings of the 10th International IUPAC Conference 2, Jülich: Forschungszentrum Jülich, pp. 731-734 (2000).
- [135] H. Schichlein, A. C. Müller, A. Krügel, E. Ivers-Tiffée, "System identification of reaction mechanisms in SOFC electrodes by deconvolution of electrochemical impedance spectra", in A. J. McEvoy (Ed.), Proceedings of the 4th European Solid Oxide Fuel Cell Forum 1, pp. 325-334 (2000).
- [136] H.-J. Schreiner, W. Menesklou, K. H. Härdtl, E. Ivers-Tiffée, A. Kölmel, "Resistive Sauerstoffsensoren auf der Basis von Strontium-Titanat-Ferrit zur Regelung von Verbrennungsvorgängen", in ITG-Fachbericht, p. 1 (2000).
- [137] A. Weber, W. Menesklou, E. Ivers-Tiffée, "Ceramic Materials for Fuel Cells and Sensors", in Proc. Fischer Symposium (2000).
- [138] A. Weber, D. Herbstritt, A. C. Müller, E. Ivers-Tiffée, "Electronic, Ionic and Mixed Type Conductors in SOFC", in Proc. Werkstoffwoche 2000 (2000).
- [139] F. Zimmermann, J. Xu, M. Voigts, E. Ivers-Tiffée, "Development and Characterization of Tunable Microwave Dielectrics", in Proc. Werkstoffwoche 2000 (2000).

-
- [140] D. Herbstritt, A. Weber, E. Ivers-Tiffée, "Increased Cathode Performance using a Structured Electrolyte Surface", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Sixth International Symposium on Solid Oxide Fuel Cells (SOFC-VI), pp. 972-980 (1999).
- [141] D. Herbstritt, A. Krügel, E. Ivers-Tiffée, "Elektrische Charakterisierung dünner $\text{La}_{0.75}\text{Sr}_{0.2}\text{MnO}_3$ -Schichten auf 8YSZ-Substrat", in H. Dimigen and W. Paatsch (Eds.), Proc. Werkstoffwoche 1998 9, Weinheim: Wiley-VCH, pp. 147-153 (1999).
- [142] A.C. Müller, H. Schichlein, M. Feuerstein, A. Weber, A. Krügel, E. Ivers-Tiffée, "Identification of Polarization Processes in SOFC Electrodes", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Sixth International Symposium on Solid Oxide Fuel Cells (SOFC-VI), pp. 925-931 (1999).
- [143] A.C. Müller, A. Weber, A. Krügel, D. Gerthsen, E. Ivers-Tiffée, "Degradationsprozesse in Nickel-YSZ-Cermet Anoden für die Hochtemperatur-Festelektrolyt-Brennstoffzelle SOFC (Solid Oxide Fuel Cell)", in A. Kranzmann and U. Gramberg (Eds.), Proc. Werkstoffwoche 1998 3, Weinheim: Wiley-VCH, pp. 171-176 (1999).
- [144] H. Schichlein, M. Feuerstein, A. C. Müller, A. Weber, A. Krügel, E. Ivers-Tiffée, "System identification: a new modelling approach for SOFC single cells", in S. C. Singhal and M. Dokiya (Eds.), Proceedings of the Sixth International Symposium on Solid Oxide Fuel Cells (SOFC-VI), pp. 1069-1077 (1999).
- [145] H. Schichlein, A. C. Müller, F. Zimmermann, A. Krügel, E. Ivers-Tiffée, "Berechnung der Verteilungsfunktion von Relaxationszeiten zur strukturfreien Modellierung der Hochtemperatur-Festelektrolyt-Brennstoffzelle SOFC", in J. Heinrich, G. Ziegler, W. Hermel, and H. Riedel (Eds.), Proc. Werkstoffwoche 1998 7, Weinheim: Wiley-VCH, pp. 787-792 (1999).
- [146] H.-J. Schreiner, W. Menesklou, O. Wolf, K. H. Härdtl, E. Ivers-Tiffée, "Temperaturunabhängiger Sauerstoffsensoren auf der Basis von $\text{Sr}(\text{Ti},\text{Fe})\text{O}_3$ ", in J. Heinrich, G. Ziegler, W. Hermel, and H. Riedel (Eds.), Proc. Werkstoffwoche 1998 7, Weinheim: Wiley-VCH, pp. 661-665 (1999).
- [147] A.C. Müller, A. Weber, H. J. Beie, A. Krügel, D. Gerthsen, E. Ivers-Tiffée, "Influence of current density and fuel utilization on the degradation of the anode", in P. Stevens (Ed.), Proceedings of the 3rd European Solid Oxide Fuel Cell Forum, pp. 353-362 (1998).
- [148] A.C. Müller, A. Weber, A. Krügel, D. Gerthsen, E. Ivers-Tiffée, "Degradation Processes in Nickel-YSZ-Cermet Anodes for Solid Oxide Fuel Cells", in R. Gadow (Ed.), Proceedings of the 6th Interregional European Colloquium on Ceramics and Composites, Stuttgart: Expert Verlag (1998).
- [149] A. Weber, R. Männer, B. Jobst, M. Schiele, H. Cerva, R. Waser, E. Ivers-Tiffée, "The influence of a-site-deficiency on the performance of strontium doped lanthanum-manganate perovskite type SOFC-cathodes", in F. W. Poulsen, N. Bonanos, S. Linderoth, M. Mogensen, and B. Zachau-Christiansen (Eds.), Proceedings of the 17th Risoe International Symposium on Materials Science: High Temperature Electrochemistry: Ceramics and Metals, Roskilde, Denmark: Risoe National Laboratory, pp. 473-478 (1996).
- [150] L. Blum, W. Drenckhahn, H. Greiner, E. Ivers-Tiffée, "Multi-kW-SOFC Development at Siemens", in M. Dokiya, O. Yamamoto, H. Tagawa, and S. C. Singhal (Eds.), Proceedings of the Fourth International Symposium on Solid Oxide Fuel Cells (SOFC-IV), pp. 163-167 (1995).

-
- [151] R. A. de Souza, J. A. Kilner, B. C. H. Steele, B. Jobst, E. Ivers-Tiffée, "Ionic transport in $\text{La}_{0.8}\text{Sr}_{0.2}\text{Mn}_{1-\gamma}\text{Co}_{\gamma}\text{O}_3$ perovskites", in M. Dokiya (Ed.), Supplement to Solid Oxide Fuel Cells IV: The Electrochemical Society, pp. 15-23 (1995).
- [152] E. Ivers-Tiffée, W. Lohwasser, R. Männer, G. Preu, W. Wersing, "The materials and technology development of ceramic components for a reduced temperature SOFC", in M. Dokiya, O. Yamamoto, H. Tagawa, and S. C. Singhal (Eds.), Proceedings of the Fourth International Symposium on Solid Oxide Fuel Cells (SOFC-IV), pp. 1039-1048 (1995).
- [153] A. Weber, E. Ivers-Tiffée, R. Waser, "Wechselwirkungen zwischen Gefüge- und elektrischen Eigenschaften von Kathoden für die Festelektrolyt-Brennstoffzelle (SOFC: Solid Oxide Fuel Cell)", in Deutsche Keramische Gesellschaft (Ed.), DKG-Jahrestagung, pp. 142-144 (1995).
- [154] E. Ivers-Tiffée, W. Drenckhahn, H. Greiner, "Hochtemperatur-Brennstoffzelle: Werkstoffentwicklung heute für die Energieversorgung von morgen", in W. Boeck (Ed.), ETG-Fachbericht 54, Berlin Offenbach: vde-verlag, pp. 115-122 (1994).
- [155] E. Ivers-Tiffée, W. Wersing, H. Greiner, "Ceramic Components for a Solid Oxide Fuel Cell (SOFC) with Metallic Interconnector", in R. Waser (Ed.), Electroceramics IV: Electroceramics and Applications I-III, p. 1 (1994).
- [156] E. Ivers-Tiffée, M. Schießl, H. J. Oel, W. Wersing, "SOFC Cathodes with Mixed Conduction: Advantages and Limitations of Co Containing Perovskites", in F. W. Poulsen, J. J. Bentzen, T. Jacobsen, E. Skou, and M. J. L. Ostergard (Eds.), Proceedings of the 14th Risø International Symposium on Materials Science: High Temperature Electrochemical Behaviour of Fast Ion and Mixed Conductors, pp. 69-88 (1993).
- [157] E. Ivers-Tiffée, M. Schießl, H. J. Oel, W. Wersing, "Investigations of Cobalt-Containing Perovskites in SOFC Single Cells with respect to Interface Reactions and Cell Performance", in S. C. Singhal and H. Iwahara (Eds.), Proceedings of the Third International Symposium on Solid Oxide Fuel Cells (SOFC-III) 1, pp. 613-622 (1993).
- [158] R. Männer, E. Ivers-Tiffée, H. Kleinlein, W. Wersing, "Characterization of YSZ Electrolyte Materials with Various Ytria Contents", in G. Ziegler and H. Hausner (Eds.), Electroceramics and Ceramics for Special Applications 3, Frankfurt: Deutsche Keramische Gesellschaft e. V., pp. 2085-2089 (1993).
- [159] A. Iberl, H. von Philipsborn, M. Schießl, E. Ivers-Tiffée, W. Wersing, G. Zorn, "High-Temperature X-Ray Diffraction Measurements of Phase Transitions and Thermal Expansion in $(\text{La,Sr})(\text{Mn,Co})\text{O}_3$ -Cathode Materials", in F. Grosz, P. Zegers, S. C. Singhal, and O. Yamamoto (Eds.), Proceedings of the Second International Symposium on Solid Oxide Fuel Cells (SOFC-II), pp. 527-535 (1991).
- [160] E. Ivers-Tiffée, B. Jobst, I. Kraus, R. Schachtner, M. Schießl, "Characterization of Oxygen-Electrode/Electrolyte Interface reactions in Solid Oxide Fuel Cells by X-Ray Diffraction Measurements", in F. Grosz, P. Zegers, S. C. Singhal, and O. Yamamoto (Eds.), Proceedings of the Second International Symposium on Solid Oxide Fuel Cells (SOFC-II), p. 671 (1991).
- [161] R. Männer, E. Ivers-Tiffée, W. Wersing, "Characterization of YSZ Electrolyte Materials with various Ytria Contents", in F. Grosz, P. Zegers, S. C. Singhal, and O. Yamamoto (Eds.), Proceedings of the Second International Symposium on Solid Oxide Fuel Cells (SOFC-II), pp. 715-725 (1991).

- [162] E. Ivers-Tiffée, W. Wersing, B. Reichelt, "Multilayer Electrodes for Planar SOFC", in N.N. (Ed.), Proceedings of the 1990 Fuel Cell Seminar, Phoenix, Arizona, pp. 698-701 (1990).
- [163] W. Wersing, E. Ivers-Tiffée, M. Schießl, H. Greiner, "New Planar Solid Oxide Fuel Cell with Metallic Bipolar Plate", in O. Yamamoto, M. Dokiya, and H. Tagawa (Eds.), Proceedings of the International Symposium on Solid Oxide Fuel Cells, Nagoya, p. 33 (1989).

Patents

- [1] "Verfahren zur Herstellung dotierter Zinkoxid-Varistor-Keramik", H. Schmelz, E. Ivers-Tiffée, E.-H. Scheuchenpflug, German patent DE 33 35 354 A1, laid open: 18.4.1985
- [2] "Verfahren zur Herstellung reagierten Rohstoffes für Elektrokeramik", E. Ivers-Tiffée, German patent DE 34 07 059 C2, issued: 8.3.1990
- [3] "Verfahren zur Herstellung eines einstückigen Ultraschallwandlers mit angepasstem Wellenwiderstand", E. Ivers-Tiffée, V. Mágori, German patent DE 34 09 815 C2, issued: 8.3.1990
- [4] "Gassensor und Verfahren zu seiner Herstellung", H.-J. Beie, A. Gnörich, E. Ivers-Tiffée, German patent DE 40 27 905 A1, laid open: 28.3.1991
- [5] "Festelektrolyt-Hochtemperatur-Brennstoffzellenmodul", H. Greiner, W. Wersing, E. Ivers-Tiffée, German patent DE 39 35 722 A1, laid open: 2.5.1991
- [6] "Verfahren zur Herstellung keramischen Varistormaterials auf der Basis von Zinkoxid und Anwendung des Verfahrens", E. Ivers-Tiffée, K. Seitz, German patent DE 36 19 620 C2, issued: 4.3.1993
- [7] "Hochtemperaturbrennstoffzelle und Verfahren zu deren Herstellung", E. Ivers-Tiffée, W. Wersing, German patent DE 39 22 673 C2, issued: 17.6.1993
- [8] "Festelektrolyt-Hochtemperatur-Brennstoffzellenmodul", H. Greiner, E. Ivers-Tiffée, W. Wersing, European patent EP 0 425 939 B1, issued: 19.1.1994
- [9] "Hochtemperatur-Brennstoffzellen-Stapel und Verfahren zu seiner Herstellung", B. Brückner, W. Gajewski, H. Greiner, M. Schnöller, E. Ivers-Tiffée, W. Wersing, T. Jansing, T. Marthens, H. Landes, M. Schießl, German patent DE 42 37 602 A1, laid open: 11.5.1994
- [10] "High-Temperature Fuel Cell Stack and Process for Producing It", B. Brückner, W. Gajewski, H. Greiner, M. Schnöller, E. Ivers-Tiffée, W. Wersing, T. Jansing, T. Marthens, H. Landes, M. Schießl, patent WO 94/11913, laid open: 26.5.1994
- [11] "High-Temperature Fuel Cell with Improved Solid-Electrolyte/Electrode Interface and Method of Producing the Interface", W. Wersing, E. Ivers-Tiffée, H. Landes, R. Männer, C. Nölscher, H. Schmidt, M. Schnöller, patent WO 94/25994, laid open: 10.11.1994
- [12] "High-Temperature Fuel Cell with Improved Solid-Electrolyte/Electrode Interface and Method of Producing the Interface", W. Wersing, E. Ivers-Tiffée, H. Landes, R. Männer, C. Nölscher, H. Schmidt, M. Schnöller, Australian patent AU-B-65023/94, laid open: 21.11.1994
- [13] "Elektrolytfolie für planare Hochtemperaturbrennstoffzellen und Verfahren zu ihrer Herstellung", W. Wersing, E. Ivers-Tiffée, German patent DE 43 07 727 C3, issued: 5.1.1995 (changed: 26.10.2000)
- [14] "Verfahren zur Herstellung einer integrierten vollkeramischen Hochtemperaturbrennstoffzelle", W. Wersing, E. Ivers-Tiffée, German patent DE 43 07 967 C2, issued: 30.11.1995
- [15] "High-Temperature Fuel Cell with Improved Solid-Electrolyte/Electrode Interface and Method of Producing the Interface", W. Wersing, E. Ivers-Tiffée, H. Landes, R. Männer, C. Nölscher, H. Schmidt, M. Schnöller, US patent US 5,629,103, issued: 13.5.1997

-
- [16] "Hochtemperaturbrennstoffzelle mit verbesserter Festelektrolyt/Elektroden-Grenzfläche und Verfahren zur Herstellung der Grenzfläche", W. Wersing, E. Ivers-Tiffée, H. Landes, R. Männer, C. Nölscher, H. Schmidt, M. Schnöller, European patent EP 0 696 386 B1, issued: 25.6.1997
- [17] "Hochtemperaturbrennstoffzelle mit verbesserter Festelektrolyt/Elektroden-Grenzfläche und Verfahren zur Herstellung eines Mehrschichtaufbaus mit verbesserter Festelektrolyt/Elektroden-Grenzfläche", W. Wersing, H. Landes, C. Nölscher, M. Schnöller, E. Ivers-Tiffée, R. Männer, H. Schmidt, German patent DE 43 14 323 C2, issued: 22.1.1998
- [18] "Combined system comprising electric batteries and solid oxide fuel cell apparatus", C.-H. Dustmann, E. Ivers-Tiffée, European patent EP 1 302 998 A1, laid open: 16.4.2003
- [19] "High-Temperature Solid Electrolyte Fuel Cell Comprising a Composite of Nanoporous Thin-Film Electrodes and a Structured Electrolyte", U. Guntow, E. Ivers-Tiffée, D. Herbstritt, A. Weber, patent WO 2003/092089 A3, laid open: 6.11.2003
- [20] "High-Temperature Solid Electrolyte Fuel Cell Comprising a Composite of Nanoporous Thin-Film Electrodes and a Structured Electrolyte", U. Guntow, E. Ivers-Tiffée, D. Herbstritt, A. Weber, Canadian patent CA 2483815 A1, laid open: 6.11.2003
- [21] "High-Temperature Solid Electrolyte Fuel Cell Comprising a Composite of Nanoporous Thin-Film Electrodes and a Structured Electrolyte", U. Guntow, E. Ivers-Tiffée, D. Herbstritt, A. Weber, Australian patent AU 2003229677 B2, laid open: 10.11.2003
- [22] "Hochtemperatur-Festelektrolyt-Brennstoffzelle umfassend einen Verbund aus nanoporösen Dünnschichtelektroden und einem strukturiertem Elektrolyt", U. Guntow, E. Ivers-Tiffée, D. Herbstritt, A. Weber, German patent DE 102 18 074 A1, laid open: 13.11.2003
- [23] "Impedanztransformator, Phasenschieber und Verfahren zum Betreiben eines Phasenschiebers", F. Zimmermann, W. Menesklou, U. Hackenberg, E. Ivers-Tiffée, German patent DE 102 53 927 A1, laid open: 17.6.2004
- [24] "Hochtemperatur-Festelektrolyt-Brennstoffzelle umfassend einen Verbund aus nanoporösen Dünnschichtelektroden und einem strukturierten Elektrolyt", U. Guntow, E. Ivers-Tiffée, D. Herbstritt, A. Weber, German patent DE 102 51 263 A1, laid open: 13.5.2004; European patent EP 1 497 884 A2, laid open: 19.1.2005
- [25] "High-Temperature Solid Electrolyte Fuel Cell Comprising a Composite of Nanoporous Thin-Film Electrodes and a Structured Electrolyte", U. Guntow, E. Ivers-Tiffée, D. Herbstritt, A. Weber, US patent US 2006/0057455 A1, laid open: 16.3.2006
- [26] "Hochtemperatur-Festelektrolyt-Brennstoffzelle (SOFC) für einen weiten Betriebstemperaturbereich", E. Ivers-Tiffée, W. Lohwasser, W. Wersing, German patent DE 198 36 132 B4, issued: 23.11.2006