

# Symeon Bebelis

## List of Publications

### A. ARTICLES IN INTERNATIONAL JOURNALS

- A1. "Non-Faradaic Electrochemical Modification of Catalytic Activity", C.G. Vayenas, S. Bebelis, S. Neophytides, *J. Phys. Chem.* **92**(18) (1988) 5083-5085
- A2. "Non-Faradaic Electrochemical Modification of Catalytic Activity: 1. The case of Ethylene Oxidation on Pt", S. Bebelis, C.G. Vayenas, *J. Catalysis* **118**(1) (1989) 125-146
- A3. "In Situ High Temperature SERS of Ag Catalysts and Electrodes during Ethylene Epoxidation", S. Boghosian, S. Bebelis, C.G. Vayenas, G.N. Papatheodorou, *J. Catalysis* **117**(2) (1989) 561-565
- A4. "Non-Faradaic Electrochemical Modification of Catalytic Activity in Solid Electrolyte Cells", C.G. Vayenas, S. Bebelis, S. Neophytides, I.V. Yentekakis, *Applied Physics A (Solids and Surfaces)* **49**(1) (1989) 95-103
- A5. "Dependence of Catalytic Rates on Catalyst Work Function", C.G. Vayenas, S. Bebelis, S. Ladas, *Nature* **343**(6259) (1990) 625-627
- A6. "Non-Faradaic Electrochemical Modification of Catalytic Activity on Pt Metals", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, P. Tsiakaras, H. Karasali, *Platinum Metals Review* **34**(3) (1990) 122-130
- A7. "Non-Faradaic Electrochemical Modification of Catalytic Activity: 4. The use of  $\beta$ -Al<sub>2</sub>O<sub>3</sub> as the Solid Electrolyte", C.G. Vayenas, S. Bebelis, M. Despotopoulou, *J. Catalysis* **128**(2) (1991) 415-435
- A8. "Solid Electrolyte Cyclic Voltammetry for in situ Investigation of Catalyst Surfaces", C.G. Vayenas, A. Ioannides, S. Bebelis, *J. Catalysis* **129**(1) (1991) 67-87
- A9. "Solid Electrolytes and Catalysis. Part 1: Chemical Cogeneration", C.G. Vayenas, S. Bebelis, C. Kyriazis, *Chemtech* **21** (1991) 422-428
- A10. "Solid Electrolytes and Catalysis. Part 2: Non-Faradaic Catalysis", C.G. Vayenas, S. Bebelis, C. Kyriazis, *Chemtech* **21** (1991) 500-505
- A11. "Work Function Measurements on Catalyst Films subject to in-situ Electrochemical Promotion", S. Ladas, S. Bebelis, C.G. Vayenas, *Surface Science*, **251/252** (1991) 1062-1069
- A12. "Solid Electrolytes for in situ Promotion of Catalyst Surfaces: The NEMCA effect", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, P. Tsiakaras, H. Karasali, Ch. Karavasilis, *ISSI Letters* **2** (1991) 5-7
- A13. "Catalytic and Electrocatalytic Reactions in Solid Electrolyte Cells: The NEMCA effect", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, P. Tsiakaras, H. Karasali, Ch. Karavasilis, *Materials Science Forum* **76** (1991) 141-148
- A14. "Work Function Measurements in Solid Electrolyte Cells: Dependence of Electrode Work Function on Electrode Potential and Polarization", S. Bebelis, C.G. Vayenas, *Materials Science Forum* **76** (1991) 221-225

- A15. "NEMCA: The Oxidation of CO on Ag", Ch. Karavasilis, S. Bebelis, C.G. Vayenas, *Materials Science Forum* **76** (1991) 175-197
- A16. "Non-Faradaic Electrochemical Modification of Catalytic Activity: The Work Function of Electrodes in Solid Electrolyte Cells", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, S. Neophytides, *Solid State Ionics*, **53-56** (1992) 97-110
- A17. "Non-Faradaic Electrochemical Modification of Catalytic Activity: 5. Oxygen Chemisorption on Silver", S. Bebelis, C.G. Vayenas, *J. Catalysis* **138**(2) (1992) 570-587
- A18. "Non-Faradaic Electrochemical Modification of Catalytic Activity: 6.The epoxidation of Ethylene on Ag/ZrO<sub>2</sub> (8mol%Y<sub>2</sub>O<sub>3</sub>)", S. Bebelis, C.G. Vayenas, *J. Catalysis* **138**(2) (1992) 588-610
- A19. "Study of the NEMCA Effect in a Single-Pellet Catalytic Reactor", I.V. Yentekakis, S. Bebelis, *J. Catalysis* **137**(1) (1992) 278-283
- A20. "Non-Faradaic Electrochemical Modification of Catalytic Activity: A Status Report" (Review Paper), C.G. Vayenas, S. Bebelis, I.V. Yentekakis, H.-G. Lintz, *Catalysis Today* **11**(3) (1992) 303-442
- A21. "The Origin of non-Faradaic Electrochemical Modification of Catalytic Activity", S. Ladas, S. Kennou, S. Bebelis, C.G. Vayenas, *J. Phys. Chem.* **97**(35) (1993) 8845-8848
- A22. "Electrochemical Promotion in Catalysis: Non-Faradaic Electrochemical Modification of Catalytic Activity", C.G. Vayenas, S. Ladas, S. Bebelis, I.V. Yentekakis, S. Neophytides, Jiang Yi, Ch. Karavasilis, C. Pliangos, *Electrochimica Acta* **39**(11-12) (1994) 1849-1855
- A23. "Non-Faradaic Electrochemical Modification of Catalytic Activity: Solid Electrolytes as active Catalyst Supports", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, Ch. Karavasilis, Jiang Yi, *Solid State Ionics* **72**(2) (1994) 321-327
- A24. "Selectivity Maximization of Ethylene Epoxidation via NEMCA with Zirconia and  $\beta$ -Al<sub>2</sub>O<sub>3</sub> Solid Electrolytes", Ch. Karavasilis, S. Bebelis, C.G. Vayenas, *Ionics* **1**(1) (1995) 85-91
- A25. "In Situ Controlled Promotion of Catalyst Surfaces via Solid Electrolytes: The NEMCA Effect", C.G. Vayenas, I.V. Yentekakis, S.I. Bebelis, S.G. Neophytides, *Ber. Bunsengesel. Phys. Chemie* **99** (11) (1995) 1393-1401
- A26. "Catalysis, Electrocatalysis and Electrochemical Promotion of the Steam Reforming of Methane over Ni Film and Ni-YSZ cermet Anodes", I.V. Yentekakis, Y. Jiang, S. Neophytides, S. Bebelis, C.G. Vayenas, *Ionics* **1** (5 & 6) (1995) 491-498
- A27. "Electrochemical Promotion of Catalyst Surfaces Deposited on Ionic and Mixed Conductors" A.C. Kaloyannis, C.A. Pliangos, D.T. Tsipakides, I.V. Yentekakis, S.G. Neophytides, S. Bebelis, C.G. Vayenas, *Ionics* **1** (5 & 6) (1995) 414-420
- A28. "Non-Faradaic Electrochemical Modification of Catalytic Activity: X. Ethylene epoxidation on Ag deposited on ZrO<sub>2</sub>(8mol%Y<sub>2</sub>O<sub>3</sub>) in the presence of chlorine moderators", Ch. Karavasilis, S. Bebelis, C.G. Vayenas, *J. Catalysis* **160**(2) (1996) 190-204
- A29. "In situ controlled promotion of catalyst surfaces via NEMCA: The effect of Na on the Ag catalyzed ethylene epoxidation in the presence of chlorine moderators", Ch. Karavasilis, S. Bebelis, C.G. Vayenas, *J. Catalysis* **160**(2) (1996) 205-213

- A30. "Atomic resolution Scanning Tunneling Microscopy imaging of electrochemically controlled reversible promoter dosing of catalysts", M. Makri, C. G. Vayenas, S. Bebelis, K. H. Besocke, C. Cavalca, *Surf. Sci.* **369**(1-3) (1996) 351-359
- A31. "In situ controlled promotion of catalyst surfaces: Non-Faradaic Electrochemical Modification of Catalytic Activity", S.G. Neophytides, S. Bebelis, I.V. Yentekakis, Y. Jiang, C. Pliangos, Ch. Karavassis, S. Ladas, C.G. Vayenas, *Kinetics and Catalysis* **37**(5) (1996) 666-675
- A32. "Atomic resolution Scanning Tunneling Microscopy imaging of Pt electrodes interfaced with  $\beta$ -Al<sub>2</sub>O<sub>3</sub>", M. Makri, C. G. Vayenas, S. Bebelis, K. H. Besocke, C. Cavalca, *Ionics* **2**(3-4) (1996) 248-253
- A33. "Electrochemical Promotion", C. G. Vayenas, S. I. Bebelis, *Solid State Ionics* **94**(1-4) (1997) 267-277
- A34. "The Electrochemical Activation of Catalytic Reactions", C.G. Vayenas, M.M. Jaksic, S.I. Bebelis, S.G. Neophytides in *Modern Aspects of Electrochemistry* (J.O'M. Bockris, B.E. Conway and R.E. White, Eds.), No.**29**, pp. 57-202 (1996)
- A35. "Electrochemical Promotion of CH<sub>4</sub> oxidation on Pd", A. Giannikos, A.D. Frantzis, C. Pliangos, S. Bebelis, C. G. Vayenas, *Ionics* **4**(1-2) (1998) 53-60
- A36. "Electrochemical promotion in heterogeneous catalysis", C. G. Vayenas, S. Bebelis, *Catal. Today* **51**(3-4) (1999) 581-594
- A37. "Electrochemical Activation of Catalytic Reactions using Anionic, Cationic and Mixed Conductors", S. Bebelis, M. Makri, A. Buekenhoudt, J. Luyten, S. Brosda, P. Petrolekas, C. Pliangos, C.G.Vayenas, *Solid State Ionics* **129**(1) (2000) 33-46
- A38. "Electrochemical Promotion (NEMCA) of CH<sub>4</sub> and C<sub>2</sub>H<sub>4</sub> Oxidation on Pd|YSZ and Investigation of the Origin of NEMCA via AC Impedance Spectroscopy", A. D. Frantzis, S. Bebelis, C. G. Vayenas, *Solid State Ionics* **136-137** (2000) 863-872
- A39. "In situ Controlled Electrochemical Promotion of Catalyst Surfaces: The Pd Catalysed Ethylene Oxidation", K. Yiokari, S. Bebelis, *J. Appl. Electrochem.* **30** (11) (2000) 1277-1283
- A40. "Intrinsic Kinetics of the Internal Steam Reforming of CH<sub>4</sub> over a Ni-YSZ-Cermet Catalyst-Electrode", S. Bebelis, A. Zeritis, C. Tiropani, S. G. Neophytides, *Ind. Eng. Chem. Res.* **39**(12) (2000) 4920-4927
- A41. "Polarization Behavior of Ni-YSZ Cermet Anodes in YSZ Fuel Cells Running on Methane under Internal Reforming Conditions", S. Bebelis, C. Tiropani, S. Neophytides, *Ionics* **7**(1-2) (2001) 32-42
- A42. "AC Impedance Study of Ni-YSZ Cermet Anodes in Methane Fuelled Internal Reforming YSZ Fuel Cells", S. Bebelis, S. Neophytides, *Solid State Ionics* **152-153** (2002) 447-453
- A43. "Electrochemical promotion of the oxidation of propane on Pt/YSZ and Rh/YSZ catalyst electrodes", N. Kotsionopoulos, S. Bebelis, *J. Appl. Electrochem.* **35**(12) (2005) 1253-1264
- A44. "Non-faradaic electrochemical modification of the catalytic activity for propane combustion of Pt/YSZ and Rh/YSZ catalyst-electrodes", S. Bebelis, N. Kotsionopoulos, *Solid State Ionics* **177**(26-32) (2006) 2205-2209
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- A46. "Electrochemical characterization of mixed conducting and composite SOFC cathodes", S. Bebelis, N. Kotsionopoulos, A. Mai, D. Rutenbeck, F. Tietz, *Solid State Ionics* **177**(19-25) (2006) 1843-1848.
- A47. "Electrochemical characterization of perovskite-based SOFC cathodes", S. Bebelis, N. Kotsionopoulos, A. Mai, F. Tietz, *J. Appl. Electrochem.* **37**(2007) 15-20
- A48. "In situ electrochemical modification of the catalytic activity for propane combustion of Pt/ $\beta$ -Al<sub>2</sub>O<sub>3</sub> catalyst-electrodes", S. Bebelis, N. Kotsionopoulos, *Topics in Catalysis* **44**(3) (2007) 379-389
- A49. "Synthesis and Study of Ti-O Based Materials for SOFC Anode Application", V. S. Kozhukharov, Y. V. Tsvetkova, S. Bebelis, V. Ch. Kournoutis, *ECS Transactions* **7**(1) (2007) 1631-1638
- A50. "Electrochemical promotion of the CO<sub>2</sub> hydrogenation on Pd/YSZ and Pd/ $\beta$ -Al<sub>2</sub>O<sub>3</sub> catalyst-electrodes", S. Bebelis, H. Karasali, C.G.Vayenas, *Solid State Ionics* **179** (27-32) (2008) 1391-1395
- A51. "Cyclic Voltammetry of La<sub>0.78</sub>Sr<sub>0.2</sub>FeO<sub>3- $\delta$</sub>  and La<sub>0.78</sub>Sr<sub>0.2</sub>Co<sub>0.2</sub>FeO<sub>3- $\delta$</sub>  electrodes interfaced to CGO/YSZ", S. Bebelis, V. Kournoutis, A. Mai, F. Tietz, *Solid State Ionics* **179**(21-26) (2008) 1080-1084
- A52. "Electrochemical promotion of CO<sub>2</sub> hydrogenation on Rh/YSZ electrodes", S. Bebelis, H. Karasali, C.G.Vayenas, *J. Appl. Electrochem.* **38**(8) (2008) 1127-1133
- A53. "AC Impedance characterization of a La<sub>0.8</sub>Sr<sub>0.2</sub>Co<sub>0.2</sub>Fe<sub>0.8</sub>O<sub>3- $\delta$</sub>  electrode", V. Ch. Kournoutis, F. Tietz, S. Bebelis, *Fuel Cells* **9**(6) (2009) 852-860
- A54. "Electrochemical Characterization of a La<sub>0.8</sub>Sr<sub>0.2</sub>Ni<sub>0.4</sub>Fe<sub>0.6</sub>O<sub>3- $\delta$</sub>  Electrode Interfaced with La<sub>9.83</sub>Si<sub>5</sub>Al<sub>0.75</sub>Fe<sub>0.25</sub>O<sub>26± $\delta$</sub>  Apatite-Type Electrolyte", H. Gasparyan, Chr. Argiridis, Ch. Szepanski, G. Sourkouni, V. Stathopoulos, T. Kharlamova, V. Sadykov, S. Bebelis, *ECS Transactions* **25**(2) (2009) 2681-2688
- A55. "Electricity generation from synthetic substrates and cheese whey using a two chamber microbial fuel cell", G. Antonopoulou, K. Stamatelatou, S. Bebelis, G. Lyberatos, *Biochemical Engineering J.* **50**(1-2) (2010) 10-15
- A56. "Electrochemical characterization of the Pt/ $\beta$ -alumina system under conditions of electrochemical promotion of propane combustion", N. Kotsionopoulos, S. Bebelis, *J. Appl. Electrochem.* **40**(10) (2010) 1883-1891
- A57. "Cyclic voltammetry characterization of a La<sub>0.8</sub>Sr<sub>0.2</sub>Co<sub>0.2</sub>Fe<sub>0.8</sub>O<sub>3- $\delta$</sub>  electrode interfaced to CGO/YSZ", V. Ch. Kournoutis, F. Tietz, S. Bebelis, *Solid State Ionics* **197**(1) (2011) 13-17
- A58. "Synthesis and characterization of doped apatite-type lanthanum silicates for SOFC applications", H. Gasparyan, S. Neophytides, D. Niakolas, V. Stathopoulos, T. Kharlamova, V. Sadykov, O. Van der Biest, E. Jothinathan, E. Louradour, J.-P. Joulin, S. Bebelis, *Solid State Ionics* **192** (1) (2011) 158-162
- A59. "Characterization and carbon tolerance of new Au-Mo-Ni/GDC cermet powders for use as anode materials in methane fuelled SOFCs", D. K. Niakolas, M. Athanasiou, S.G. Neophytides, S. Bebelis, *ECS Transactions* **35**(2) (2011) 1329-1336
- A60. "Operation and characterization of a microbial fuel cell fed with pretreated cheese whey at different organic loads", A. Tremouli, G. Antonopoulou, S. Bebelis, G. Lyberatos, *Bioresource Technology* **131** (2013) 380-389

- A61. "Study of the synergistic interaction between nickel, gold and molybdenum in novel modified NiO/GDC cermets, possible anode materials for CH<sub>4</sub> fuelled SOFCs", D.K. Niakolas, M. Athanasiou, V. Dracopoulos, I. Tsiaouassis, S. Bebelis, S.G. Neophytides, , *Applied Catalysis A: General* 456 ( 2013) 223-232

## B. ARTICLES IN SCIENTIFIC SERIES

- B1. "Optimal Catalyst Distribution in Pellets with Shell Progressive Poisoning", T. Bacaros, S. Bebelis, S. Pavlou, C.G. Vayenas, *Studies in Surface Science and Catalysis* **34** ("Catalyst Deactivation 1987", P. Delmon, G.F. Froment, Eds.), Elsevier Sci. Publ. B.V., pp. 459-468 (1987)
- B2. "Non-Faradaic Electrochemical Modification of Catalytic Activity: Partial Oxidation of C<sub>2</sub>H<sub>4</sub> on Ag and CH<sub>3</sub>OH on Pt", C.G. Vayenas, S. Bebelis and S. Neophytides, *Studies in Surface Science and Catalysis* **55** ("New Developments in Selective Oxidation", G. Centi and F. Trifiro, Eds.), pp. 643-652, Elsevier Sci. Publ. B. V. (1990)
- B3. "Solid Electrolytes for In Situ Promotion of Catalyst Surfaces: The NEMCA Effect", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, P. Tsiakaras, H. Karasali, Ch. Karavasilis, *Studies in Surface Science and Catalysis* **75** ("New Frontiers in Catalysis", L. Guczi, F. Solymosi and P. Tetenyi, Eds.), pp. 2135-2138, Elsevier Sci. Publ. B.V. (1993)
- B4. "Ion Spillover as the Origin of the NEMCA Effect", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, S. Neophytides, Jiang Yi, *Studies in Surface Science and Catalysis* **77** ("New Aspects of Spillover Effect in Catalysis", T. Inui, K. Fujimoto, T. Uchijima and M. Masai, Eds.), pp. 111-116, Elsevier Sci. Publ. B.V. (1993)
- B5. "Hydrotreatment of Spent Lube Oils: Catalysts and Reactor Performance", C. Yiokari, S. Morphi, E. Siokou, F. Satra, S. Bebelis, C. G. Vayenas, *Studies in Surface Science and Catalysis* **106** ("Hydrotreatment and Hydrocracking of Oil Fractions", G. F. Froment, B. Delmon and P. Grams, Eds.), pp. 323 - 331, Elsevier Science B. V. (1997)
- B6. "In Situ Electrochemically Controlled Promotion of Complete and Partial Oxidation Reactions", C.G. Vayenas, S. I. Bebelis, *Studies in Surface Science and Catalysis* **110** (3<sup>rd</sup> World Congress on Oxidation Catalysis, R.K. Grasselli, S. T. Oyama, A. M. Gaffney & J.E. Lyons, Eds.), pp. 77 - 92, Elsevier Science B.V. (1997)
- B7. "Direct STM, XPS and TPD Observation of Spillover Phenomena over mm Distances on Metal Catalyst Films Interfaced with Solid Electrolytes", C.G. Vayenas, R.M. Lambert, S. Ladas, S. Bebelis, S. Neophytides, M.S. Tikhov, N.C. Filkin, M. Makri, D. Tsipakides, C. Cavalca, K. Besocke, *Studies in Surface Science and Catalysis* **112** ("Spillover and Migration of Surface Species on Catalysts", Can Li and Qin Xin, Eds.), pp. 39 - 47, Elsevier Sci. B.V. (1997)
- B8. "Electrocatalysis, Catalysis and Electrochemical Promotion in Solid Electrolytes", C.G. Vayenas, S.I. Bebelis, *NATO ASI SERIES: Oxygen Ion and Mixed Conductors and their Technological Applications* (H.L. Tuller et al., Eds.), pp. 123-164, Kluwer Academic Publishers, Netherlands (2000)
- B9. "Nanoscale Materials via Intercalation", V. Kozhukharov, N. Velinov, N. Brashkova, S. Bebelis, *Nanoscience & Nanotechnology* (E. Balabanova & I. Dragieva, Eds.), Vol. **3**, pp.227-229, Heron Press, Sofia, Bulgaria (2003)

## C. BOOKS AND CHAPTERS IN BOOKS

- C1. "Electrocatalysis and Electrochemical Reactors", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, S. N. Neophytides in: *CRC Handbook of Solid State Electrochemistry* (P.J. Gellings & H.J.M. Bouwmeester, Eds.), Chapter 13, pp.447-483, CRC Press Inc. (1996)
- C2. "Electrochemical Activation of Catalysis", C. G. Vayenas, S. Bebelis, C. Pliangos, S. Brosda, D. Tsiplakides, ISBN 0-306-46719-4, Kluwer Academic/Plenum Publishers, New York (2001), pp.1-574
- C3. "Doped Lanthanum Silicates with the Apatite Structure as Oxide-Ion Conducting Electrolytes: Synthesis, Characterization and Application for Design of Intermediate Temperature Solid Oxide Fuel Cell", V.A. Sadykov, T.S. Kharlamova, S.N. Pavlova, V.S. Muzykantov, A.V. Ishchenko, T.A. Krieger, O.B. Lapina, N. Uvarov, M. Chaikina, Yu. Pavlyukhin, Ch. Argirasis, S. Bebelis, H. Gasparyan, V. Stathopoulos, E. Jothinathan, O. Van der Biest, In: "*Lanthanum: Compounds, Production and Applications*" (R.J. Moore, Ed.), Chapter 1, pp. 1-108, ISBN: 978-1-61728-111-2 (Hardcover) & ISBN: 978-1-61728-333-8 (e-book), Nova Science Publishers, Inc., Ser.: Chemistry Research and Applications, New York (2011).
- C4. "Heterogeneous Catalysis" (in Greek), S. Bebelis and S. Ladas, pp. 1-168, University of Patras Editions, Patras, Greece (1998)
- C5. "Electrochemistry" (in Greek), S. Bebelis, pp. 1-208, 2<sup>nd</sup> Edition, Hellenic Open University Editions, Patras, Greece (2008).

## D. ARTICLES IN PROCEEDINGS OF INTERNATIONAL CONFERENCES

- D1. "The Use of SOFC as Chemical Reactor: Non-Faradaic Catalysis", S. Bebelis, Ch. Karavasilis, H. Karasali, P. Tsiakaras, I.V. Yentekakis, C.G. Vayenas, *Proceedings of the 2<sup>nd</sup> International Conference on Solid Oxide Fuel Cells* (F. Grosz, P. Zegers, S.C. Singhal and O. Yamamoto, Eds.) Athens, Greece, pp. 179-183, Official Publications of the EEC, Luxembourg (1991)
- D2. "The Use of SOFC for Chemical Cogeneration and for Electrochemical Promotion (NEMCA)", S. Bebelis, I.V. Yentekakis, S. Neophytides, P. Tsiakaras, H. Karasali, C.G. Vayenas, *Proceedings of the 3<sup>rd</sup> International Symposium on Solid Oxide Fuel Cells*, (S.C. Singhal and H. Iwahara, Eds.) Proceedings Volume **93-4**, pp. 926 - 937, The Electrochemical Society Inc., Pennington, NJ (1993)
- D3. "Non-Faradaic Electrochemical Modification of Catalytic Activity in Solid Electrolyte Cells", C.G. Vayenas, S. Bebelis, I.V. Yentekakis, S. Neophytides, Ch. Karavasilis, Jiang Yi, *Proceedings of 14<sup>th</sup> Risø International Symposium on Materials Science* ("High Temperature Electrochemical Behaviour of Fast Ionic and Mixed Conductors"), (F.W. Poulsen, J.J. Bentzen, T. Jacobsen, E. Skou and M.J.L. Østergaard, Eds.), pp. 175-191, Risø National Lab., Roskilde, Denmark (1993)
- D4. "Kinetic and Electrokinetic Behaviour of the Ni-YSZ-Cermet Electrode in the Methane Steam Reforming Reaction: Effect of the Presence of H<sub>2</sub>S in the Gas Phase", S. Bebelis, S. Neophytides, C.G. Vayenas, *Proceedings of the 1<sup>st</sup> European SOFC Forum* (U. Bossel, Ed.), **V.1**, pp.197-206, Lucern, Switzerland (1994).
- D5. "Non-Faradaic Electrochemical Modification of Catalytic Activity" C. G. Vayenas, S. Bebelis, I. V. Yentekakis, S. Neophytides, Y. Jiang, *Proceedings of the 2<sup>nd</sup> International Symposium on Ionic and Mixed Conducting Ceramics* (T.A. Ramanarayanan, W.L. Worrell and H.L. Tuller, Eds.), Vol **94-12**, pp 230-237, The Electrochemical Society Inc., Pennington, NJ (1994).

- D6. "Catalysis, Electrocatalysis and Electrochemical Promotion of the Steam Reforming of Methane over Ni Film and Ni-YSZ cermet Anodes", I.V. Yentekakis, Y. Jiang, S. Neophytides, S. Bebelis, C.G. Vayenas, *Proceedings of the 2<sup>nd</sup> European SOFC Forum* (B. Thorstensen, Ed.), Vol. 1, pp. 131-141, Oslo, Norway (1996).
- D7. "Non-Faradaic Electrochemical Modification of Catalytic Activity of Metal Films Deposited on Solid Electrolytes", I.V. Yentekakis, S. Bebelis, S. Neophytides, C.G. Vayenas, *Proceedings of the Symposium on Thin Solid Ionic Devices and Materials* (J.B. Bates, Ed.), Vol. 95-22, pp. 87-101, The Electrochemical Society Inc, Pennington, NJ (1996).
- D8. "The Role of Solid Electrolyte Support on the NEMCA Behavior of Ethylene Oxidation on Pt", M. Makri, A. Buekenhoudt, J. Luyten, S. Brosda, C. Pliangos, S. Bebelis, C.G. Vayenas, in: *Proceedings of the 5<sup>th</sup> European Symposium on Electrochemical Engineering* (A. A. Wragg, Ed.), *Institution of Chemical Engineers Symposium Series* (145), Exeter, U.K. (1999), pp. 269-280
- D9. "Electrochemical characterization of perovskite-based SOFC cathodes", S. Bebelis, N. Kotsionopoulos, A. Mai, F. Tietz, *Proceedings of the 7<sup>th</sup> European Symposium on Electrochemical Engineering* ("Multiple faces of Electrochemical Engineering"), pp. 219-224, Toulouse, France (2005)
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