**Списък на научните трудове на Евелина Павлова Славчева**

общ брой – 105

**от тях през последните 5 години – 24 (в червено)**

1. G. Borisov, V. Bachvarov, H. Penchev, R. Rashkov, **E. Slavcheva**, Multi-metallic electrodeposited catalysts applicable for oxygen evolution reaction in AEM water electrolysis, *Materials Letters* **286** (2021) 129248, <https://doi.org/10.1016/j.matlet.2020.129248>
2. И. Радев, В. Обретенов, **Е. Славчева**, Електрохимични методи за съхранение на възобновяема енергия – I. Електролиза на вода, стр. 9-50, в „Съхранение и преобразуване на възобновяема енергия“ 2020, съставил**. Е. Славчева**, Поредица критични анализи „Нисковъглеродна енергия за транспорта и бита“, Издателство на БАН „Марин Дринов“, ISBN 978-619-245-087-8
3. M.A. Deyab, T. Stankulov, **E. Slavcheva**, A.E. Awadallah, S.M. ElSaeed, E.G. Zaki, Design and synthesis of FeMoO4/CuO for electrochemical energy storage system, *Journal of Molecular Liquids* **314** (2020) 113693, <https://doi.org/10.1016/j.molliq.2020.113693>
4. G. Borisov, N. Borisov, E. Petkucheva, **E. Slavcheva**, Mathematical modeling and experimental validation of advanced alkaline water electrolyser U/J performance, *Bulgarian Chemical Communications* **52** (2020) 84-87,Q4, DOI: 10.34049/bcc.52.1.5137
5. G. Borisov, T. Dimitrov, D. Paskalev, **E. Slavcheva**, Low-cost AEM water electrolysis with flat stainless steel electrodes, (2020) *Bulgarian Chemical Communications* **52** (2020) 86-89, Q4, DOI: 10.34049/bcc.52.1.5137
6. G. Borisov, H. Penchev, K. Maksimova-Dimitrova, F. Ublekov, E. Lefterova, V. Sinigersky, **E. Slavcheva**, Alkaline water electrolysis facilitated via non-precious monometallic catalysts combined with highly KOH doped polybenzimidazole membrane, *Materials Letters* **240** (2019) 144-146, <https://doi.org/10.1016/j.matlet.2018.12.141>
7. К. Хаджииванов, **Е. Славчева**, Д. Владикова, Д. Панайотов, Българската научна общност в борбата с климатичните промени, списание „Наука“, №2 (2019) 29
8. A.S. Pushkarev, I.V. Pushkareva, S.P. Du Preez, N.A. Ivanova, S.A. Grigoriev, E.P. Slavcheva, D.G. Bessarabov, V.N. Fateev, A.Sh. Aliyev, Iridium catalyst supported on conductive titanium oxide for polymer electrolyte membrane electrolysis, Chemical problems 17 (2019) 9-14, ISSN 2221-8688
9. H. Penchev, G. Borisov, E. Petkucheva, I. Radev, **E. Slavcheva**, Highly KOH doped para-polybenzimidazole anion exchange membrane and its performance in Pt/TinO2n−1 catalyzed water electrolysis cell, *Materials Letters* **221** (2018) 128-130,

<https://doi.org/10.1016/j.matlet.2018.03.094>

1. E. Petkucheva, G. Borisov, E. Lefterova, J. Heiss, U. Schnakenberg, **E. Slavcheva**, Gold supported magnetron sputtered Ir thin films as OER catalysts for cost-efficient water electrolysis, *International Journal of Hydrogen Energy* **43** (2018) 16905-16912

[https://doi.org/10.1016/j.ijhydene.2018.01.188](https://doi.org/10.1016/j.ijhydene.2018.01.188" \t "_blank" \o "Persistent link using digital object identifier)

1. I. Boshnakova, E. Lefterova, **E. Slavcheva**, Investigation of montmorillonite as carrier for OER, *International Journal of Hydrogen Energy* **43**(2018) 16897-16904,

<https://doi.org/10.1016/j.ijhydene.2018.01.012>

1. Y. Hubenova, E. Hubenova, **E. Slavcheva**, M. Mitov, The glyoxylate pathway contributes to enhanced extracellular electron transfer in yeast-based biofuel cell, *Bioelectrochemistry* **116** (2017) 10-16, <https://doi.org/10.1016/j.bioelechem.2017.03.003>
2. I. Boshnakova, E. Lefterova, **E. Slavcheva**, Montmorillonite as a catalytic support in water electrolysis, *Bulgarian Chemical Communication* **49 C** (2017) 241-246, http://www.bcc.bas.bg/BCC\_Volumes/Volume\_49\_Special\_C\_2017/BCC28\_49-C-2017\_Boshnakova\_p241.pdf
3. G. Borisov, S. Avramov, E. Petkucheva, E. Lefterova, **E. Slavcheva**, W. Lehnert, Effect of sintering temperature on performance and durability of HT-PEFC cathodes, *Bulgarian Chemical Communications* **49****C** (2017) 179-185,

http://www.bcc.bas.bg/bcc\_volumes/Volume\_49\_Special\_C\_2017/BCC20\_49-C-2017\_Borisov\_p179.pdf

1. I. Pushkareva, A. Pushkarev, S. Grigoriev, E. Lyutikova, S. Akelkina, M. Osina, **E. Slavcheva**, V. Fateev, Electrochemical conversion of aqueous ethanol solution in an electrolyzer with a solid polymer electrolyte, *Russian Journal of Applied Chemistry* **89** (2016) 2109-2111, https://link.springer.com/article/10.1134/S1070427216120260
2. A. Stoyanova, M. Islam, G. Borisov, T. Bredow, E. Lefterova, **E. Slavcheva**, Effect of Partial Replacement of Pt-Based Catalysts with Fe- and Co-For Oxygen Evolution Reaction in PEM Water Electrolysis: A Combined Theoretical and Experimental Study, *Journal of Progressive Research in Chemistry* **3** (2016) 158-165; ISSN 2454-3136
3. S.G. Avramov, E. Lefterova, H. Penchev, V. Sinigersky, **E. Slavcheva**, Comparative study on the proton conductivity of perfluorosulfonic and polybenzimidazole based polymer electrolyte membranes, *Bulgarian Chemical Communications* **48 B** (2016) 43-50, http://www.bcc.bas.bg/bcc\_volumes/Volume\_48\_Special\_B\_2016/BCC-48-B-2016-43-50-Avramov.pdf
4. K. Maksimova-Dimitrova, E. Lefterova, S. Atanasova-ladimirova, **E. Slavcheva**, Influence of metal loading on morphology and performance of oxide supported cobalt electrocatalysts, *Bulgarian Chemical Communications* **48 B** (2016) 85-90, http://bcc.bas.bg/BCC\_Volumes/Volume\_48\_Special\_B\_2016/BCC-48-B-2016-85-90-Maksimova.pdf
5. E. Petkucheva, E.Lefterova, J. Heiss, U. Schnakenbergb, **E. Slavcheva**, Influence of the gold sub-layer on the catalytic properties of magnetron sputtered Pt and Ir thin films, *Bulgarian Chemical Communications* **48 A** (2016) 38-43,

http://www.bcc.bas.bg/bcc\_volumes/Volume\_48\_Special\_A\_2016/BCC-48-2016-SpecialA-38-43-EP.pdf

1. J. Lazar, C. Schnelting, **E. Slavcheva**, U. Schnakenberg, Hampering of the Stability of Gold Electrodes by Ferri/Ferrocyanide Redox Couple Electrolytes during Electrochemical Impedance Spectroscopy, *Analytical Chemistry* **88** (2016) 682–687,

https://pubs.acs.org/doi/abs/10.1021/acs.analchem.5b02367

1. G. Borisov, A. Stoyanova, E. Lefterova, S. Vasilev, **E. Slavcheva**, Ebonex-Supported PtM Anode Catalysts for PEM Water Electrolysis, *Journal of Progressive Research in Chemistry* **3** (2015) 97-108
2. **E. Slavcheva,** G. Borisov, E. Lefterova, E. Petkucheva, I. Boshnakova, Ebonex supported iridium as anode catalyst for PEM water electrolysis, *International Journal of Hydrogen Energy* **40** (2015) 11356-11361, <https://doi.org/10.1016/j.ijhydene.2015.03.005>
3. E. Petkucheva, E. Lefterova, J. Heiss, U. Schnakenberg, **E. Slavcheva**, Magnetron Sputtered Multilayered (Ti-Au-Pt) Catalysts for Hydrogen Energy Systems, *Nanoscience & Nanotechnology* **15**, eds. E. Balabanova, E. Mileva, Sofia, 2015, pp. 32-36, ISSN: 1313-8995
4. K. Maksimova, E. Lefterova, **E. Slavcheva**, Nanostructured Nickel and Cobalt Supported on Magnelli-Phase Titania - Preparation, Properties and Catalytic Efficiency Toward Alkaline Water Electrolysis, *Nanoscience & Nanotechnology* **15**, eds. E. Balabanova, E. Mileva, Sofia, 2015, pp. 40-43, ISSN: 1313-8995
5. **E. Slavcheva**, G. Ganske, U. Schnakenberg, Sputtered Pd as hydrogen storage for a chip integrated micro energy system, *The Scientific World Journal* (2014), Article ID 146126, 7 pages, http://dx.doi.org/ 10.1155/2014/146126
6. **E. Slavcheva**, Appeal to Hydrogen Energy Centers in Balkan and Danube Region Countries, *International Journal of Hydrogen Energy* **39** (2014) 1192-1193
7. **E. Slavcheva**, G. Borisov, E. Lefterova, E. Petkucheva, Ebonex Supported Iridium as Anode Catalyst for PEM Water Electrolysis, 20th Wourld Hydrogen Energy Conference, Gwangju, Korea, June 15-20, 2014
8. I. Radev, G. Topalov, G. Ganske, E. Lefterova, G. Tsotridis, U. Schnakenberg, **E. Slavcheva**, Catalytic activity of co-sputtered PtIr thin films toward oxygen reduction, *Bulgarian Chemical Communications* **45** (179-185) 2013
9. G. Borisov, A. Stoyanova, E. Lefterova, **Е. Slavcheva**, A novel non-carbon gas diffusion layer for PEM water electrolysis anodes, *Bulgarian Chemical Communications* **45** (186-190) 2013
10. A. Stoyanova, G. Borisov, E. Lefterova, **Е. Slavcheva**, MEA with carbon free Pt-Fe catalysts and gas diffusion layers for application in PEM water electrolysis, *Bulgarian Chemical Communications* **45** (191-195) 2013
11. G. Borisov, E. Lefterova, A. Stoyanova, **E. Slavcheva**, P. Angelov, S. Vassilev, Optimization the synthesis conditions using sol-gel method of catalysts materials for PEM water splitting, *Journal of the University of Chemical Technology and Metallurgy* **48** (2013) 162-167
12. I. Radev, G. Topalov, E. Lefterova, G. Ganske, U. Schnakenberg, G. Tsotridis, **E. Slavcheva**, Optimization of platinum/iridium ratio in thin sputtered films for PEMFC cathodes, *International Journal of Hydrogen Energy* **37** (2012) 7730-7735
13. A. Stoyanova, G. Borisov, E. Lefterova, **E. Slavcheva**, Oxygen evolution on Ebonex-supported Pt-based binary compounds in PEM water electrolysis, *International Journal of Hydrogen Ener*gy **37** (2012) 16515-16521
14. G. Topalov, G. Ganske, E. Lefterova, U. Schnakenberg, **E. Slavcheva,** Preparation and properties of thin Pt-Ir films deposited by dc magnetron co-sputtering, *International Journal of Hydrogen Energy* **36** (2011) 15437-15445
15. A. Stoyanova, **E. Slavcheva**, Effect of the molecular structure of some quinones on their corrosion inhibiting action**,** *Materials and Corrosion* **62** (2011) 872-877
16. P. Paunivic, D. Gogovska, O. Popovski, A. Stoyanova, **E. Slavcheva**, E. Lefterova, P. Iliev, A. Dimitrov, S. Hadzi Jordanov, Preparation and characterisation of Co-Ru/TiO2/MWCNTs electrocatalysts in PEM hydrogen electrolyser, *International Journal of Hydrogen Energy* **36** (2011) 9405-9414
17. P. Paunovic, O. Popovski, D. Gogovska, E. Lefterova, **E. Slavcheva**, A. Dimitrov, Electrocatalytic activity of hypo-hyper-d-electrocatalysts (Me/TiO2/MWCNTs) based on Co-Ru in alkaline hydrogen electrolyser, *Macedonian Journal of Chemistry and Chemical Engineering* **39** (2011) 55-65
18. **E. Slavcheva**, Magnetron sputtered iridium oxide as anode catalyst for PEM hydrogen generation, *Macedonian Journal of Chemistry and Chemical Engineering* **39** (2011) 45-54
19. E. Lefterova, A. Stoyanova, G. Borisov, **E. Slavcheva**, Physical characterization of Pt-M binary electrocatalysts for water splitting, *Bulgarian Chemical Communications* **43** (2011) 138-142
20. P. Paunović, D. Gogovska, O. Popovski, I. Radev, E. Lefterova, **E. Slavcheva**, A. Dimitrov, S. Hadži Jordanov, Non-Platinum electrode materials for hydrogen evolution: effect of catalyst support and metallic phase, *Bulgarian Chemical Communications* **43** (2011) 74-80
21. G. Ganske, **E. Slavcheva**, A. van Ooyen, W. Mokwa, U. Schnakenberg, Sputtered platinum-iridium layers as electrode material for functional electrostimulation, *Thin Solid Films* **519** (2011) 3965-3970
22. A. Stoyanova, G. Borisov, E. Lefterova, D. Radev, V. Tumbalev, **E. Slavcheva**, Study of Pt- Mn containing catalyst of Ebonex (TinO2n-1) support for PEM water electrolysis, Nanomaterials, Substrates and Composites, *Proc. Nanoscience & Nanotechnology* **11**, Eds. E. Balabanova and I. Dragieva, “BPS” Ltd., Sofia, Bulgaria, 2011, pp.48-52
23. G. Borisov, A. Stoyanova, **E. Slavcheva** and E. Lefterova, Binary catalysts for PEM water electrolysis, *Comptes rendus de l'Académie bulgare des Sciences* **65** (2012) 919-926
24. **E. Slavcheva**, G. Topalov, G. Ganske, I. Radev, E. Lefterova and U. Schnakenberg, Influence of sputtering pressure on surface structure and oxygen reduction reaction catalytic activity of thin platinum films, *Electrochimica Acta* **55** (2010) 8992-8997
25. O. Ozturk, O. K. Ozdemir, I. Ulusoy, A. S. Ahsen, **E. Slavcheva**, Effect of Ti sublayer on the ORR catalytic efficiency of dc magnetron sputtered thin Pt films, *International Journal of Hydrogen Energy* **35** (2010) 4466-4473
26. **E. Slavcheva**, Iridium oxide as electrode material for biostimulation and electrocatalysis, Nanoscience & Nanotechnology **10**, eds. E. Balabanova and I. Dragieva, Heron Press, Sofia, 2010, pp. 45-50
27. E. Lefterova, A. Stoyanova, G. Topalov, D. Radev, **E. Slavcheva**, Ebonex (TinO2n-x) and TiO2/carbon as catalyst support materials for PEM water splitting – comparative investigation, *Nanoscience & Nanotechnology* **10**, eds. E. Balabanova and I. Dragieva, Heron Press, Sofia, 2010, pp. 105-108
28. A. Stoyanova, E. Lefterova, V. Nikolova, P. Iliev, I. Dragieva, **Е. Slavcheva**, Water splitting in PEM electrolysis with Ebonex supported catalysts, *Bulgarian Chemical Communications* **42** (2010) 167–173
29. I. Radev, G. Topalov, **E. Slavcheva**, E. Lefterova, G. Tsotridis, U. Schnakenberg, Experimental validation of the “EasyTest Cell” operational principle for autonomous MEA characterization, *International Journal of Hydrogen Energy* **35** (2010) 2428-2435
30. P. Paunović, I. Radev, A. Dimitrov, O. Popovski, E. Lefterova**, E. Slavcheva**, S. Hadži Jordanov, [New nano-structured and interactive supported composite electrocatalysts for hydrogen evolution with partially replaced platinum loading](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V3F-4VP5XBF-2&_user=747279&_coverDate=04%2F30%2F2009&_alid=1296405918&_rdoc=9&_fmt=high&_orig=search&_cdi=5729&_sort=r&_docanchor=&view=c&_ct=31&_acct=C000041858&_version=1&_urlVersion=0&_userid=747279&md5=6b8ecbcbe9ab20b78d952b3677de6a97), *International Journal of Hydrogen En*ergy **34** (2009) 2866-2873
31. G. Ganske, G. Topalov, **E. Slavcheva**, W. Mokwa, U. Schnakenberg, Sputtered platinum-iridium as catalyst for hydrogen fuel cells, *Proc. TRANSDUCERS'09*, June 21-25, 2009, Denver, CO, USA (2009)
32. P. Paunović, A. Dimitrov, O. Popovski, **E. Slavcheva**, A. Grozdanov, E. Lefterova, D. Petruševski, S. Hadži Jordanov, Effect of Activation/Purification of Multiwalled Carbon Nanotubes (MWCNTs) on Activity of Non-platinum Based Hypo-Hyper d-Electrocatalysts for Hydrogen Evolution, *Material Research* Bulletin **44** (2009) 1816-1821
33. **E. Slavcheva**, G. Ganske, G. Topalov, W. Mokwa, U. Schnakenberg, Effect of sputtering parameters on surface morphology and catalytic efficiency of thin platinum films, *Applied Surface Science* **255** (2009) 6479-6486
34. G. Ganske, G. Topalov, **E. Slavcheva**, U. Schnakenberg, Electrocatalytic effect of the iridium concentration in co-sputtered Pt-Ir layers, Micromechanics Europe, 2009, September 20-22, Toulouse, France
35. I. Radev, **E. Slavcheva**, E. Budevski, U. Schnakenberg, Simulations and study of electrochemical hydrogen energy conversion in EasyTest Cell”, *Electrochimica Acta* **54** (2009) 1269-1276; [doi:10.1016/j.electacta.2008.09.006](http://dx.doi.org/10.1016/j.electacta.2008.09.006)
36. G. Ganske, **E. Slavcheva**, W. Mokwa, U. Schnakenberg, Sputtered platinum, iridium and platin-iridium layers for stimulation of neural cells, MME 2008,19th MicroMechanicnics in Europe Workshop, Sept. 28-30, 2008, Aachen, Germany
37. M. Labou, **E. Slavcheva**, U. Schnakenberg, S. Neophytides, Performance of laboratory PEM hydrogen generator with sputtered iridium oxide anode, *Journal of Power Sources* **185** (2008) 1073-1078
38. I. Radev, G. Georgiev, V. Sinigersky, **E. Slavcheva**, Proton conductivity measurements of PEM performed in EasyTest Cell*, International Journal of Hydrogen Energy* **33** (2008) 4849-4855
39. G. Ganske, **E. Slavcheva**, G. Topalov, U. Schnakenberg, Optimized sputtered platinum cathode for a on chip micro PEM fuel cell, *Proc. of Eurosensors XXII*, Dresden, Germany, September 7-10, pp. 391-394 (2008), ISBN: 978-3-00-025217-4
40. E. Budevski, I. Radev, **E. Slavcheva**, Easy unit for hydrogen electrochemical energy conversion, *Journal of the University of Chemical Technology and Me*tallurgy **43** (2008) 11-18; ISSN 1311-7629
41. E. Budevski, I. Radev, **E. Slavcheva**, Autonomous test units for mini membrane electrode assemblies, in in “Mini-Micro Fuel Cells Fundamental and Applications”, *NATO Science for Peace and Security Series C: Environmental Security*, Eds. S. Kakac, A. Pramuanjaroenkij, L. Vasilev, Springer, 2008, pp. 103-116, ISBN 978-1-4020-8294-8
42. E. Budevski, I. Radev**, E. Slavcheva**, Performance characteristics and degradation studies using the EasyTest Cell, in “Mini-Micro Fuel Cells Fundamental and Applications”, *NATO Science for Peace and Security Series C: Environmental Security*, Eds. S. Kakac, A. Pramuanjaroenkij, L. Vasilev, Springer, 2008, pp. 133-152, ISBN 978-1-4020-8294-8
43. A. van Ooyen, **E. Slavcheva**, B. Wessling, U. Schnakenberg, Evaluation of SIROF Microelectrodes for Single Neuron Stimulation in Biohybrid Circuits, Proc. 14th International Conference on Solid-State Sensors, Actuators and Microsystems, *Transducers 2007*, Lyon, France, June 10-14 2007, pp. 1227-1230G.
44. G. Topalov, E. Lefterova, **E. Slavcheva**, Influence of the Supporting Material on the Catalytic Performance of Pt-V Nanopowders in PEM Water Electrolysis**,** *Proc. International Hydrogen Energy Congress and Exhibition IHEC* 2005, Istanbul, Turkey, 13-15 July 2007
45. I. Radev, **E. Slavcheva**, E. Budevski, New electrochemical approach for screening and optimization of MEAs for Electrochemical Hydrogen Energy Converters, *Proc. International Hydrogen Energy Congress and Exhibition* IHEC 2005, Istanbul, Turkey, 13-15 July 2007
46. **E. Slavcheva**, I. Radev, G. Topalov, E. Budevski, Sputtered electrocatalysts for PEM electrochemical energy converters, *Electrochimica Acta* **53** (2007) 362-368
47. I. Radev, **E. Slavcheva**, E. Budevski, Investigation of nanostructured platinum based membrane electrode assemblies in EasyTest cell, *International Journal of Hydrogen Energ*y **32** (2007) 872– 877
48. G. Topalov, I. Radev, D. Labou, **E. Slavcheva**, E. Lefterova, S. Neophytides, Synthesis and characterization of Pt-V-TiO2-Vulkan nanopowders for electrocatalytic applications in PEM water electrolysis, *Nanoscience & Nanotechnology* **7**, Eds. E. Balabanova, I. Dragieva, Heron Press, Sofia (2007) 200-204
49. **E. Slavcheva**, I. Radev, S. Bliznakov, G. Topalov, P. Andreev, E. Budevski, Sputtered iridium oxide films as electrocatalysts for water splitting via PEM electrolysis, *Electrochimica Acta* **52** (2007) 3889-3894
50. **E. Slavcheva**, I. Radev, V. Sinigersky, St. Shenkov, G. Topalov, E. Budevski, Characterisation of MEAs for electrochemical energy conversion using an EasyTest technique, *Chemical and Biochemical Engineering* Quarterly **21** (2007) 93-96
51. **E. Slavcheva**, U. Schnakenberg, W. Mokwa, Electrochemical Properties and Applications of Sputtered Iridium Oxide Thin Films, in “Passivations of Metals and Semiconductors, and Properties of Thin Oxide Layers”, P. Marcus and V, Maurice (Eds.), Elsevier, 2006, p.729
52. **E. Slavcheva**, U. Schnakenberg, W. Mokwa, Deposition of sputtered iridium oxide – Influence of oxygen flow in the reactor on the film properties, *Applied Surface Science* **253** (4), (2006) pp. 1964-1969
53. I. Radev, **E. Slavcheva**, S. Bliznakov, E. Budevski, Nanocomposite electrocatalysts and test cell for hydrogen generation in PEM electrolyser, *Nanoscience & Nano*technology **6**, Eds. E. Balabanova and I. Dragieva, Heron Press, Sofia (2006) 206-209
54. **E. Slavcheva**, I. Radev, E. Budevski, New Catalysts, Catalyst Carriers and Electrode Structures, ”New Trends in Gas Electrode Structures: The Solar Hydrogen Energy Conversion Cycles”, [CD-R] *Suppl. Bulg. J. Phys*. **32** (4), Heron Press, Sofia (2006)
55. G. Spanier, **E. Slavcheva**, W. Mokwa, HF-contact elements for testing and multi chip module applications, *Microsystem Technoology,* Springer Berlin/Heidelberg (2006) 1432-1858, ISSN: 0946-7076
56. B. Wessling, K Hungar, **E. Slavcheva**, W. Mokwa, U. Schnakenberg, Sputtered Iridium Oxide as a Top Layer of Stimulating 3D Microelectrodes in Retina Implants, *Biomedical Engineering* **50** (2005) 842-843
57. K. Hungar, M. Görtz, **E. Slavcheva**, G. Spanier, C. Weidig, W. Mokwa, Production processes for a flexible retina implant, *Sensors and Actuators* *A: Physical* **123-124** (2005) 172-178
58. E. Budevski, I. Radev, **E. Slavcheva**, The EasyTest cell – An enhanced MEA investigation and optimization technique, Proc. *International Hydrogen Energy Congress and Exhibition IHEC* 2005, Istanbul, Turkey, 13-15 July 2005
59. **E. Slavcheva**, E. Lefterova, T. Petkova, V. Nikolova, P. Iliev, I. Dragiewa, Preparation and properties of NiMo supported on Ebonex® as electrocatalyst for OER in water splitting, in ***Nanoscience & Nanot*echnology 5, Eds. E. Balabanova and I. Dragieva, Heron Press, Sofia (2005)** 170-173
60. **E. Slavcheva**, W. Mokwa, and U. Schnakenberg, Electrodeposition and properties of NiW layers for MEMS applications, *Elecrochimica Acta* **50** (2005) 5573-5580
61. **E. Slavcheva**, V. Nikolova, T. Petkova, E. Lefterova, I. Dragieva, T. Vitanov, E. Budevski, Electrocatalytic activity of Pt and PtCo deposited on Ebonex by BH reduction, *Elecrochimica Acta* **50** (2005) 5444-5448
62. I. Radev, **E. Slavcheva**, S. Bliznakov, E. Budevski, Nanocomposite electrocatalysts and test cell for hydrogen generation in PEM electrolyser**,** in ***Nanoscience & Nanot*echnology 5, Eds. E. Balabanova and I. Dragieva, Heron Press, Sofia (2005) 206-209**
63. B. Wessling, K Hungar, **E. Slavcheva**, W. Mokwa, U. Schnakenberg,Sputtered Iridium Oxide as a Top Layer of Stimulating 3D Microelectrodes in Retina Implants, *Proc. of BMT 2005 (39th Annual Congress of the German Society for Biomedical Engineering)*, September, Nürnberg, Germany (2005) 14-17
64. **E. Slavcheva**, G. Petkova, P. Andreev, Inhibition of corrosion of AZ91 magnesium alloy in ethylene glycol solution in the presence of chloride anions, *Materials and Co*rrosion **56** (2005) 83-87
65. I. Radev, **E. Slavcheva**, E. Budevski, Test of materials for PEM fuel cell and electrolyzer using new EasyTest method and cell, *Proc. International workshop “Portable and emergency energy sources – from materials to systems*”, 16-22 September, 2005, Primorsko, Bulgaria http://www.bas.bg/cleps/poemes/workshops/Proceedings2/Proceedings/P7\_I.Radev.pdf
66. **E. Slavcheva**, T. Petkova, V. Nikolova, P. Iliev, S. Bliznakov, E. Lefterova, Y. Stoyanova, T. Vitanov, Effect of TiO2 interactive support on the activity of Pt-based electrocatalysts for water splitting, in ***Nanoscience & Nanotechnology* 4, eds. E. Balabanova and I. Dragieva, Heron Press, Sofia (2004)** 267-71; ISNB 954-580-160-3
67. **E. Slavcheva**, V. Nikolova, E. Lefterova, P. Iliev, G. Ivanova, I. Dragieva, Core/Shell electrocatalysts for water splitting by BH-reduction, in ***Nanoscience & Nanotechnology* 4, eds. E. Balabanova and I. Dragieva, Heron Press, Sofia (2004)** 262-266; ISNB 954-580-160-3
68. **E. Slavcheva**, R. Vitushinsky, W. Mokwa, and U. Schankenberg, Sputtered iridium oxide films as charge injection material for functional electrostimulation, *Journal of the Electrochemical Society* **151** (2004) E226-E237
69. **E. Slavcheva**, W. Mokwa, U. Schnakenberg, Characterisation of iridium oxide thin-films for functional electro stimulation, *Proc. 14th Micro-Mechanics Europe Wor*kshop, 2-4 Nov. 2003, Delft, The Netherlands, pp.159-162, ISNB 90-808266-1-8
70. **E. Slavcheva**, L. Ewe, U. Schnakenberg, W. Mokwa, Electrochemical study of different biocompatible materials as stimulating neural electrodes, in *Proc. 2nd European Conference on Medical and Biological Eng*ineering, Vienna, 04-08 Dec., 2002, EMBEC 3, pp.785-785
71. **E. Slavcheva**, G. Schmitt, Screening of new corrosion inhibitors via electrochemical noise analysis, *Materials and Corrosion* **53** (2002) 656-662
72. **E. Slavcheva**, S. Ernst, H. Baltruschat, Sensitivity of dynamic electrochemical sensor towards toluene in the presence of carbon monoxide, *Bulgarian Chemical Communications* **34** (2002) 103-111
73. S. Ernst, R. Herber, **E. Slavcheva**, I. Vogel, and H. Baltruschat, Continuous detection of volatile aromatic, unsaturated or halogenated hydrocarbons in air by adsorption on Pt-electrodes and subsequent oxidative desorption, *Elecroanalysis* **13** (2001) 1191-1197
74. G. Schmitt, **E. Slavcheva**, P. Palgemann, ECN-measurements at copper in artificial tap water – investigation of anion-effects, *Materials and Cor*rosion **52** (2001) 439-444
75. **E. Slavcheva**, P. Plagemann, G. Schmitt, Application of electrochemical noise analysis for detection of heterogeneity of metal surfaces, *Nanoscience & Nanotechn*ology **2**, eds. E. Balabanova and I. Dragieva, Heron Press, Sofia (2001) 41-43; ISBN 954-580-097-6
76. **E. Slavcheva**, B. Shone, A. Turnbull, Review of naphthenic acid corrosion in oil refining, *British Corrosion Journal* **34** (1999) 125-131
77. A. Turnbull, **E. Slavcheva**, B. Schone, Factors controlling naphthenic acid corrosion, *Corrosion NACE* **54** (1998) 922-930
78. E. Sokolova, S. Raicheva, **E. Slavcheva**, Inhibition efficiency of quinonoid structured compounds, *Bulgarian Chemical Communication*s **27** (1994) 276-383
79. **E. Slavcheva**, E. Sokolova, S. Raicheva, Corrosion inhibition of mild steel in neutral solutions by organic compounds with quinonoid structure, *British Corrosion Journal* **28** (1993) 125-129
80. **E. Slavcheva**, E. Sokolova, S. Raicheva, Temperature and concentration dependence of the activity of quinines of presumed inhibiting action, *Journal of Electroanalytical Chemistry* **360** (1993) 271-282
81. **E. Славчева**, С. Христова, Е. Соколова, С. Райчева, Влияние на някои органични съединения с хиноидна структура върху корозионно-електрохимичното поведение на нисковъглеродна стомана във воден разтвор на натриев хлорид Годивник на ВХТИ **31** (1991) 221-226
82. **E. Slavcheva**, E. Sokolova, S. Raicheva, On the effect of some quinones on mild steel’s corrosion behaviour in neutral aqueous solutions, *Proc. 7th European Symposium on Corrosion Inhibitors* (7SEIC) Ann. Univ. Ferrara, N.S. Sez. V, Suppl. No.9 (1990) 555-559
83. **E. Славчева**, |Потенциодинамично изследване на поведението на нисковъглеродна стомана в алкална среда в присъствие на парабензохинон и негови производни, *Химия и индустрия* **5-6** (1990) 56-57
84. S. Raicheva, E. Sokolova, **E. Slavcheva**, Corrosion inhibition of mild *steel and iron by p-benzoquinone in neutral media, Proc*. 9th European Congress on Corrosion, Oct. 1989, Utrecht, The Netherlands, paper CO-275
85. **E. Slavcheva**, E. Sokolova, S. Raicheva, Anodic behaviour of iron and mild steel in aqueous solutions of sodium sulphate – influence of some quinones, in *Proc. of the International Symposium „Electrochemical and Inhibitor Corrosion Control*“, Oct.1989, Varna, Bulgaria, paper 84