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**EDUCATION**

**PhD:** 1986, Electrochemistry, Moscow State University, Moscow, Russia

**BS/MS Integrated Program:** 1982, Chemistry, Moscow State University, Moscow, Russia

**RESEARCH EXPERIENCE**

<b>November 2008 – present</b>	<b>Research Chemist</b> Naval Research Laboratory, Washington DC
<b>December 2014 – December 2016</b>	<b>Part-time Program Officer</b> Office of Naval Research (ONR), Arlington VA
<b>January 2006 – November 2008</b>	<b>Senior Scientist /Contractor</b> Nova Research Inc / Naval Research Laboratory, Washington DC
<b>December, 2002 – December, 2005</b>	<b>Research Associate</b> Department of Chemical Engineering, Virginia Commonwealth University, Richmond, VA
<b>July, 2004 – May, 2005</b>	<b>Consultant (part-time)</b> Honda Research Institute, Columbus, OH
<b>December, 2001 – December, 2002</b>	<b>Research Associate</b> Department of Chemistry, Virginia Commonwealth University, Richmond, VA
<b>March, 1991- December, 2001</b>	<b>Research Scientist, Senior Scientist</b> Department of Chemistry, Moscow State University, Moscow, Russia
<b>March, 1988 – March, 1991</b>	<b>Junior Scientist</b> A.N.Frumkin Institute of Electrochemistry, Academy of Sciences, Moscow, Russia
<b>January, 1986- March, 1988</b>	<b>Junior Scientist</b> Institute for New Chemical Problems, Academy of Science, Chernogolovka, Moscow region, Russia

**PROFESSIONAL AWARDS AND RECOGNITION**

- Letter appreciation from Captain M. C. Bruington for the outstanding support to the Office of Naval Intelligence's Undersea Sensors Division. June 28, 2016.

- NRL Review award for co-authoring the article “Understanding and Preventing Lithium Ion Battery Fires” that appeared in the 2015 NRL Review. January 2017
- 2014 Chemistry Division Award for the article “CO<sub>2</sub> electroreduction to Hydrocarbons on Carbon-Supported Cu nanoparticles”
- George Soros International Foundation Award for the Achievements in the development of theory of electrical double layer at the electrode/solution interface (Moscow, Russia, 1996)
- Award of International Publishing House “Science” for the best cycle of scientific papers (Moscow, Russia, 1995)
- Award for the best presentation at the Conference on Theoretical Electrochemistry (Dnepropetrovsk, Ukraine, 1984)

### Additional professional activities

- Grant proposal Reviewer for DOE and ARPA-E Fuel Cell programs (2007 – present)
- Peer Reviewer for DOE Annual Merit Hydrogen program (2006 – present)
- Member of a Federal Consensus Board for a final proposal selection for DOE Vehicle Technology program (May 2014)
- Reviewer for the Journal of the Electrochemical Society, Langmuir, International Journal of Hydrogen Energy, Solid State Electrochemistry, etc.
- Member of the Electrochemical Society ( 2002 - present)
- Member of the American Chemical Society (2005 - 2011)

## PUBLICATIONS

### 1. Refereed Journal Articles

1. Giles, S.L.; Kastl, A.M.; Purdy, A.P.; Leff, A.C.; Baturina, O.A. Surface and structural dependent reactivity of titanium oxide nanostructures with 2-chloroethyl ethyl sulfide under relevant conditions. *ACS Appl. Mater. Interfaces*, **2022**, 14, 9655
2. Giles, S. L.; Sousa-Castillo, A.; Santiago, E.; M. A. Correa-Duarte, M.A.; Govorov, A.O; Baturina, O.A. Visible Light Driven Oxidation of Harmful Sulfide 2-Chloroethyl Ethyl Sulfide using SiO<sub>2</sub>-TiO<sub>2</sub> Composite Particles and Air. *Colloid Interface Sci. Comm*, **2021**, 41, 100362.
3. Baturina, O.A., Epshteyn, A., Leff, A.C.; Purdy, A., Brintlinger, T.; Simpkins, B.; Santiago, E.; Govorov, A.O. Photoelectrochemical Methanol Oxidation under Visible and UV excitation of TiO<sub>2</sub>-supported ZrN and TiN Nanoparticles. *J. Electrochem. Soc.*, **2021**, 168 (1), 016503.
4. W. Gordon, W.; Balboa, A.; Giles, S.; Epshteyn, A.; Avalos-Ovando, O.; Govorov, A.; McEntee, M.; Baturina, O. Visible Light-Induced Reactivity of Plasmonic Au Nanoparticles Incorporated into TiO<sub>2</sub> Matrix towards 2-Chloroethyl Ethyl Sulfide. *Crystals*, 2021, 11 (6), 659.
5. Purdy, A.; Baturina, O.; Simpkins, B.; Giles, S.; Brintlinger, T.; Wynne, J. Synthesis, plasmonic properties, and CWA simulant decontamination activity of first row early transition metal nitride powders and nanomaterials. A. Purdy, O. Baturina, B. Simpkins, S. Giles, T. Brintlinger, J. Wynne, *SN Appl. Sci.* **2020**, 2, 888.
6. Baturina, O.; Epshteyn, A.; Simpkins, B.; Bhattarai, N.; Brintlinger, T.; E. Santiago, E.; and Govorov, A. Comparing Photoelectrochemical Methanol Oxidation Mechanisms for Gold versus Titanium Nitride Nanoparticles Dispersed in TiO<sub>2</sub> Matrix. *J. Electrochem. Soc.* **2019**, 166, 485-H493
7. Simpkins, B.; Purdy, A.; Epshteyn, A.; Baturina, O. Photoelectrochemical Oxidation Enhanced by Nitride Plasmonics. *J. Phys. Chem. C* **2019**, 123, 13863-13868
8. M. Padilla, O. Baturina, J.P. Gordon, K. Artyushkova, P. Atanassov, A. Serov. “Selective CO<sub>2</sub> electroreduction to C<sub>2</sub>H<sub>4</sub> on porous Cu films synthesized by sacrificial support method”, *Journal of CO<sub>2</sub> Utilization*, 2017, **19**, 137
9. P.A. DeSario, J.J. Pietron; T.H. Brintlinger, M. McEntee, J.F. Parker, O. Baturina, R.M. Stroud, D.R. Rolison. “Oxidation-stable plasmonic copper nanoparticles in photocatalytic TiO<sub>2</sub> nanoarchitectures”, *Nanoscale*, 2017, 9, 11720
10. J.J. Pietron, A. Dunkelberger, T.H. Brintlinger, O.A. Baturina, R.M. Stroud, J.C. Owrutsky, D.R. Rolison. “Plasmonic Aerogels as a Three-Dimensional Nanoscale Platform for Solar Fuel Photocatalysis”, 2017, 33, 9444
11. O. Baturina, Q. Lu, F. Xu, A. Purdy, B. Dyatkin, X. Sang, R. Unocic, T. Brintlinger, Y. Gogotsi. “Effect of nanostructured support on Cu electrocatalytic activity towards CO<sub>2</sub> electroreduction to hydrocarbon fuels”, *Catalysis Today*, 2017, 88, 2
12. Y. Zhai, O. Baturina, D. Ramaker, E. Farquhar, J. St-Pierre, K. Swider-Lyons. “Bromomethane contamination in the cathode of proton exchange membrane fuel cell”, *Electrochim. Acta*, **2015**, **213**, 482
13. C. T. Love, O. A. Baturina and K. E. Swider-Lyons. Observation of Li dendrites at ambient temperature and below, *ECS Electrochem. Let.*, 2015, 4, A1.

1. Y. Zhai, O. Baturina, D. Ramaker, E. Farquhar, J. St-Pierre, K. Swider-Lyons. Chlorobenzene poisoning and recovery of platinum-based cathodes in proton exchange membrane fuel cells”, J. Phys. Chem. C., 2015, 119, 20328
2. O.A. Baturina, Qin Lu, M.A Padilla, L. Xin, W. Li, A. Serov, K. Artyushkova, P. Atanasov, F. Xu, A. Epshteyn, T. Brintlinger, M. Schuette, G.E. Collins, CO<sub>2</sub> electroreduction to hydrocarbons on carbon-supported Cu nanoparticles. ACS Catalysis, 2014, 4, 3682
3. O.A. Baturina, A. Epshteyn, P.A. Northrup, K.E. Swider-Lyons. The influence of cell voltage on the performance of a PEM fuel cell in the presence of HCl in air. J. Electrochem. Soc, 2014, 161, F365-F372.
4. Z. Wang, L. Xin, X. Zhao, Z. Zhang, O.A. Baturina, W. Li . Carbon supported Ag nanoparticles with different particle size as cathode catalysts for anion exchange membrane direct glycerol fuel cells, Renewable Energy, 2014, 62, 556-558.
5. O.A. Baturina, B.D. Gould, P. A. Northrup, K. E. Swider-Lyons. The influence of oxygen on electrochemical adsorption of SO<sub>2</sub> on carbon-supported platinum nanoparticles, Catalysis Today, 2013, 205, 106-110.
6. O.A. Baturina, B.D. Gould, A. Korovina, Y. Garsany, R. Stroman, P.A. Northrup. Products of SO<sub>2</sub> adsorption on fuel cell electrocatalysts by combination of sulfur K-edge XANES and electrochemistry, Langmuir, 2011, 27, 14930-14939.
7. O.A. Baturina, A. Epshteyn, P.A. Northrup, K.E. Swider-Lyons. Insights into PEMFC performance degradation from HCl in air. J. Electrochem. Soc., 2011, 158(10), B1198-B1205.
8. Baturina, O., Tufekci E., Guney-Altay O., Khan, S.M., Wnek, G.E., Lindauer, S.J. Development of sustained fluoride delivery system. Angle Orthod., 2010, 80(6), 1129
9. Garsany, Y., Baturina, O.A., Swider-Lyons, K.E., Kocha, S.S. 2010. Experimental methods for quantifying the activity of platinum electrocatalysts for the oxygen reduction reaction. Anal Chem., 2010, 82, 6321.
10. Gould, B.D., Bender, G., Bethune, K., Dorn, S., Baturina, O.A., Rocheleau, R., Swider-Lyons, K.E. 2010. Operational performance recovery of SO<sub>2</sub>-contaminated proton exchange membrane fuel cells. J. Electrochem. Soc., 2010, 157 (11), B1569-B1577.
11. Baturina, O.A., Gould, B.D., Garsany, Y., Swider-Lyons K.E. Insights on the SO<sub>2</sub> poisoning of Pt<sub>3</sub>Co/VC and Pt/VC fuel cell catalysts. Electrochim. Acta, 2010, 55, 6676-6686.
12. O.A. Baturina and K.E. Swider-Lyons. Effect of SO<sub>2</sub> on the performance of the cathode of a PEM fuel cell at 0.5-0.7V. J. Electrochem. Soc., 2009, 156 (12), B1423-B1430
13. Y. Garsany, B.D. Gould, O.A. Baturina, K.E. Swider-Lyons. Comparison of the sulfur poisoning of PBI and Nafion PEMFC cathodes. Electrochem. Solid-State Let., 2009, 12(9), B138-B140
14. Y. Garsany, O.A. Baturina, K.E. Swider-Lyons. Oxygen reduction reaction kinetics on SO<sub>2</sub>-contaminated Pt<sub>3</sub>Co and Pt/Vulcan Carbon electrocatalysts. J. Electrochem. Soc., 2009, 156(7), B848-B855
15. B.D. Gould, O.A. Baturina, K.E. Swider-Lyons. Deactivation of Pt/VC proton exchange membrane cathodes by SO<sub>2</sub>, H<sub>2</sub>S and COS. J. Power Sources, 2009, 188, 89-95
16. O.A. Baturina, Y. Garsany, T.J. Zega, R.M. Stroud, T.L. Schull, K.E. Swider-Lyons .Oxygen Reduction Reaction on Platinum/Tantalum Oxide Electrocatalysts for PEM Fuel Cells. J. Electrochem. Soc., 2008, 155, B1314 -B1321
17. D.S. Gatewood, T.L. Schull, O.A. Baturina, J.E. Peitron, Y. Garsany, K.E. Swider-Lyons, D.E. Ramaker. Characterization of Ligand Effect on Water Activation in Triaryl Phosphine Stabilized Pt Nanoparticle Catalysts by X-Ray Absorption Spectroscopy. J. Phys Chem C, 2008, 112 (13), 4961-4970.
18. J.J. Peitron, Y. Garsany, O.A. Baturina, K.E. Swider-Lyons, R.M. Stroud, D.E. Ramaker T.L. Schull. Electrochemical observation of ligand effect on oxygen reduction at ligand-stabilized Pt nanoparticle electrocatalysts. Electrochem. Solid-state Let., 2008, 11(8), B161-B165.
19. Y. Garsany, O.A. Baturina, K.E. Swider-Lyons. Impact of Sulfur Dioxide on Oxygen Reduction Reaction at Pt/Vulcan Carbon Catalysts. J. Electrochem. Soc., 2007, 154, B670
20. O. A. Baturina, S. R. Aubuchon, and K. J. Wynne. Thermal stability in air of Pt/C catalysts and PEM fuel cell catalyst layers. Chemistry of Materials, 2006, 18, 1498
21. O.A. Baturina, G.E. Wnek. Characterization of Membrane-Electrode Assemblies obtained by Electrostatic Processing. Electrochem. Solid-State Letters, 2005, 8(6), A267.
22. B.B. Damaskin, O.A. Baturina, V.A. Safonov., N.V. Safonov. Effect of potential on coadsorption of two organic substances in the Frumkin model at a maximum possible number of solutions for the relevant set of isotherms. Rus.J. Electrochem. 2003, 39(6), 685
23. B.B. Damaskin, V.A. Safonov, O.A. Baturina, N.V. Safonov. Coadsorption of Two Organic Substances within the Framework of two mixed Frumkin Isotherms. J. Electroanal. Chem., 2003 (550-551), 3.
24. B.B. Damaskin, O.A. Baturina. Simulating unstable states during coumarin adsorption on a mercury electrode. Rus. J. Electrochem. 2002, 38(10), 1141.
25. E.V. Stenina, O.A. Baturina, L.N. Sviridova, B.B. Damaskin. Adsorption of complexes of cations of alkali metals with a macrocyclic ligand (Kryptofix (R) 222) on a mercury electrode. Rus.J. Electrochem. (Engl.), 2002, 38(6), 602.
26. B.B. Damaskin, O.A. Baturina. Effect of Differences in the Orientation of Adsorbed Molecules and in the Magnitudes of Limiting Capacitances of the Inner Part on the Regularities of Coadsorption of Two Organic Substances. Rus.J. Electrochem. (Engl.), 2002, 38(5), 478

27. *B.B.Damaskin, O.A.Baturina*. Some Anomalies in Coadsorption of Two Organic Substances due to Differences in Molecular Interaction of Species Undergoing Coadsorption. *Rus.J.Electrochem. (Engl.)*, 2001, 37(12), 1292
28. *F.M.Rudakov, V.A.Safonov, O.A.Baturina., B.B.Damaskin*. Assessment of the Accuracy of Estimating Adsorption Parameters of Organic Substances from Differential Capacitance Curves: Monte-Carlo simulation of the Random-Error Effect in Capacitance Measurements. *Rus.J.Electrochem. (Engl.)*, 2001, 37(10), 1096
29. *B.B.Damaskin, O.A.Baturina, E.V.Stenina, L.N.Sviridova*. Coadsorption of ions and organic molecules. *Electrochim. Acta*, 2001, 46, 3091
30. *E.V.Stenina, O.A.Baturina, L.N.Sviridova, B.B.Damaskin*. Coadsorption of Halide Anions and 1-Adamantanol Molecules on a Mercury Electrode. *Rus.J.Electrochem. (Engl.)*, 2001, 37(9), 931
31. *B.B.Damaskin, O.A.Baturina*. Simulating Coadsorption of Surface Active Anions and Organic Molecules Capable of Forming Two-Dimensional Condensed Layers on the Electrode. *Rus.J.Electrochem. (Engl.)*, 2001, 37(2), 121
32. *B.B.Damaskin, O.A.Baturina*. Simulation of Coadsorption of Inorganic Ions and Organic Molecules on Electrodes. *Rus.J.Electrochem. (Engl.)*, 2001, 37(1), 73
33. *B.B.Damaskin, O.A.Baturina, V.A.Safonov*. Adsorption Parameters in the Alekseev-Popov-Kolotyrkin Model Complemented by the Frumkin Isotherm. *Rus.J.Electrochem. (Engl.)*, 2000, 36(11), 1167
34. *B.B.Damaskin, O.A.Baturina, V.A.Safonov, A. Janes*. Adsorption Parameters of n-Hexanol on Single Crystal Faces of Bismuth: A Regression Analysis of the Differential Capacitance Data and Comparing the Capacitance and Chronocoulometry Measurements. *Rus.J.Electrochem. (Engl.)*, 2000, 36(6), 673.
35. *M.J.Sottomayor, V.Coelho, A.P.Ferreira, F.Silva, O.A.Baturina, V.A.Safonov, B.B.Damaskin*. Parameters of n-hexanol adsorption on Au(111). Comparison between differential capacity and chronocoulometry results. *Electrochim. Acta* 1999, 45, 775.
36. *Stenina EV; Sviridova LN; Baturina OA; Damaskin BB*. Adsorption parameters and their dependence on temperature during a two-dimensional condensation of adamantanol-1 at a mercury electrode. *Rus.J.Electrochem. (Engl.)*, 1999, 35(12), 1313.
37. *B.B.Damaskin, O.A.Baturina*. Co-Adsorption of Two Components on an Electrode as Described by the Alekseev-Popov-Kolotyrkin Model Coupled with a Set of Frumkin Isotherms. *Rus.J.Electrochem. (Engl.)*, 1999, 35(11), 1186.
38. *B.B.Damaskin, O.A.Baturina*. Co-Adsorption of Anions and Low-Adsorbing Cations within the Alekseev-Popov-Kolotyrkin Model. *Rus.J.Electrochem. (Engl.)*, 1999, 35(11), 1182.
39. *B.B.Damaskin, O.A.Baturina, V.V.Emets, L.N.Vykhodtseva, V.E.Kazarinov*. Adsorption of Tetrabutylammonium Cations on Negatively Charged Surfaces on the Hg, Ga, In-Ga and Tl-Ga Electrodes. *Rus.J.Electrochem. (Engl.)*, 1999, 35(5), 509.
40. *B.B.Damaskin, O.A.Baturina*. Manifestations of the Esin-Markov Effect in the Grahame-Parsons and the Alekseev-Popov-Kolotyrkin Models. *Rus.J.Electrochem. (Engl.)*, 1999, 35(4), 475.
41. *Dz.I.Dzhaparidze, Sh.S.Dzhaparidze, I.A.Gurgenidze, B.B.Damaskin, O.A.Baturina*. Adsorption of 2-Thiouracil on Mercury from Ethylene Glycol and Ethanol solutions. *Rus.J.Electrochem. (Engl.)*, 1999, 35(2), 172.
42. *B.B.Damaskin, O.A.Baturina, V.V.Emets, S.Yu.Vasil'ev, V.E.Kazarinov*. Adsorption Behavior of n-Butanol Molecules on Negatively Charged Surfaces of Electrodes of Mercury, Gallium, and Alloys In-Ga and Tl-Ga. *Rus.J.Electrochem. (Engl.)*, 1999, 35(1), 1.
43. *E.V.Stenina, L.N.Sviridova, O.A.Baturina, B.B.Damaskin*. Regression Analysis Technique for Estimating the Temperature Dependence of Parameters that Characterize Reversible Adsorption of Organic Compounds on the Electrode/Solution Interface. *Rus.J.Electrochem. (Engl.)*, 1998, 34(12), 1308.
44. *B.B.Damaskin, E.V.Stenina, O.A.Baturina, L.N.Sviridova*. Selecting a Model of the Diffuse Layer when Describing Electroreduction of Anions in the Framework of Slow-Discharge Theory. *Rus.J.Electrochem. (Engl.)*, 1998, 34(10), 972
45. *L.S.Kanevski, O.A.Baturina, T.L.Kulova*. Effect of Macrocyclic Compounds on the Electrode Processes in the Lithium-Thionyl Chloride Cells. *Rus.J.Electrochem. (Engl.)*, 1998, 34(7), 612
46. *B.B.Damaskin, O.A.Baturina*. Extending the Alekseev-Popov-Kolotyrkin Model to Simultaneous Specific Adsorption of Two Different Ions on the Electrode. *Rus.J.Electrochem. (Engl.)*, 1998, 34(6), 542.
47. *B.B.Damaskin, O.A.Baturina*. Specific Coadsorption of Two Ions from Mixed Solutions of Constant Ionic Strength in the Framework of the Grahame-Parsons Model. *Rus.J.Electrochem. (Engl.)*, 1998, 34(4), 366.
48. *B.B.Damaskin, O.A.Baturina*. Specific Coadsorption of Cations and Anions from Binary Electrolytes in the Framework of the Grahame-Parsons Model. *Rus.J.Electrochem. (Engl.)*, 1998, 34(4), 403.
49. *B.B.Damaskin, O.A.Baturina*. Modeling Specific Adsorption of Discharging Cations. *Rus.J.Electrochem. (Engl.)*, 1998, 34(2), 186.
50. *B.B.Damaskin, O.A.Baturina, B.M.Grafov*. Simulation of Electrochemical Impedance Spectra of Amalgam Electrodes in Contact with Mixed Electrolyte Solutions Containing Electroactive Cations. *Rus.J.Electrochem. (Engl.)*, 1998, 34(1), 87.
51. *E.V.Stenina, O.A.Baturina, L.N.Sviridova*. The Temperature Dependence of the Electroreduction Rate of the Persulfate Anion in the Presence of a Condensed Layer of 1-Hydroxyadamantane. *Rus.J.Electrochem. (Engl.)*, 1997, 33(10), 1120.

52. *O.A.Baturina, B.B.Damaskin, E.V.Stenina, L.N.Sviridova.* Regression Analysis of the Differential Capacitance Curves for Two-Dimensional Condensation of Organic Substances: the Determination of Adsorption Parameters for Borneol, Adamantanol-1 and 2-Oxaadamantane. *Rus.J.Electrochem.(Engl.)*, 1997, 33(10), 1164.
53. *B.B.Damaskin, O.A.Baturina.* Determining Adsorption Parameters of Normal and Branched Acids of the Aliphatic Series with the Aid of the Regression Analysis of the Differential Capacity Curves. *Rus.J.Electrochem.(Engl.)*, 1997, 33(10), 1057
54. *O.A.Baturina, B.B.Damaskin, B.M.Grafov.* Modeling the Impedance of a Metal Electrode during Adsorption of Discharging Metal Cations: Effect of the Resistance of the Charge-Transfer Stage. *Rus.J.Electrochem.(Engl.)*, 1997, 33(7), 686.
55. *B.M.Grafov, B.B.Damaskin, O.A.Baturina.* Electrochemical AC Circuits and Impedance Spectra for a Faradaic Process in Mixed Solutions of a Constant Ionic Strength. *Rus.J.Electrochem.(Engl.)*, 1997, 33(6), 592
56. *B.B.Damaskin, V.A.Safonov, O.A.Baturina.* Statistical Method of Determining Adsorption Parameters for Simple Organic Compounds from Nonequilibrium Differential Capacity Curves. *Rus.J.Electrochem.(Engl.)*, 1997, 33(2), 105
57. *B.B.Damaskin, V.A.Safonov, O.A.Baturina.* A new Method for Analyzing Differential Capacitance Equilibrium Curves at the Adsorption of Simple Organic Substances on Electrodes. *Rus.J.Electrochem.(Engl.)*, 1995, 31(8), 788.
58. *B.B.Damaskin, O.A.Baturina.* Extension of the Alekseev-Popov-Koloyrkin Model to Systems where Adsorption obeys the Frumkin Isotherm and is accompanied by Partial Charge Transfer: Frequency Dependence of the Inner-Layer Capacitance. *Rus.J.Electrochem.(Engl.)*, 1995, 31(2), 87.
59. *B.B.Damaskin, O.A.Baturina.* Extension of the Alekseev-Popov-Koloyrkin Model to Systems where Adsorption obeys the Frumkin Isotherm and is accompanied by Partial Charge Transfer: Analysis of the Equilibrium Capacitance of the Double Layer. *Rus.J.Electrochem.(Engl.)*, 1995, 31(2), 87.
60. *B.B.Damaskin, O.A.Baturina.* Adsorption with Charge-Transfer within the Framework of Grahame-Parsons Model: Linear Dependence of the Microscopic Charge Transfer Coefficient on the Electrode Charge. *Rus.J.Electrochem.(Engl.)*, 1994, 30(10), 1094.
61. *O.A.Baturina, B.B.Damaskin.* Consideration of the Partial Charge Transfer in the Grahame-Parsons Model and the Capacitance Dispersion under Specific Ionic Adsorption from a Mixed Two-Electrolyte Solution. *Rus.J.Electrochem.(Engl.)*, 1994, 30(7), 790.
62. *B.B.Damaskin, B.M.Grafov, O.A.Baturina.* Equivalent Electrical Circuit Parameters in the Real System  $\text{Hg}/[\text{H}_2\text{O}+0.1\text{mM NaBr}+0.1\cdot(1-\text{m})\text{M KF}]$ . *Rus.J.Electrochem.(Engl.)*, 1993, 29(8), 1135.
63. *B.B.Damaskin, B.M.Grafov, O.A.Baturina.* Impedance Spectra for Ideally Polarizable Electrodes in the  $\text{Hg}/[\text{H}_2\text{O}+\text{mCKBr}+(1-\text{m})\text{cKF}]$  Model System. *Sov. Electrochem. (Engl.)* 1992, 28(11), 1318.
64. *I.I.Korobov, N.G.Mozgina, O.A.Baturina.* Study of Phase Equilibria in  $\text{LaNi}_{5-x}\text{Mn}_x - \text{H}_2$  Systems where ( $x=0.5, 1$ ) by the Charging Curve Technique. *Koord. Khim.*, 1992, 18(5), 535.
65. *O.A.Baturina, L.S.Kanevsky, V.S.Bagotzky, V.V.Volod'ko, A.L.Karasev, A.A.Revina.* Influence of Macrocyclic Compounds on the Electrochemical Reduction of Thionyl-Chloride at Glassy Carbon Electrode. *J.Power Sources*, 1991, 36, 127
66. *O.A.Baturina, V.V.Volod'ko, L.S.Kanevskii, A.L.Karasev, A.A.Revina, V.S.Bagotskii.* Electrochemical and Spectroscopic Studies of the Interaction of Tetraphenylporphyrin Metal Complexes with Thionyl Chloride. *Sov. Electrochem. (Engl.)*, 1991, 27(7), 820.
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68. *B.B.Damaskin, O.A.Perchenko(Baturina), S.L.Dyatkina.* Model-Type Description of Perfluorobutyrate Ion Adsorption at the Mercury/Water Interface Binary and Mixed Solutions at Temperature between 5 and 60°C. *Sov. Electrochem (Engl.)*, 1987, 23(8), 1133.
69. *B.B.Damaskin, O.A.Perchenko(Baturina), S.L.Dyatkina.* Effect of Temperature on the Adsorption Behavior of Perfluorobutyrate Anions at the Mercury/Water Interface in Binary  $\text{C}_3\text{F}_7\text{COONa}$  solutions. *Sov. Electrochem (Engl.)*, 1987, 23(8), 993
70. *B.B.Damaskin, O.A.Perchenko(Baturina), S.L.Dyatkina.* Effect of Temperature on the Adsorption Behavior of Perfluorobutyrate Anions on Mercury in Aqueous Solutions of Constant Ionic Strength. *Sov. Electrochem (Engl.)*, 1987, 23(8), 988.
71. *B.B.Damaskin, O.A.Perchenko(Baturina), S.I.Karpov.* Description of Ionic Adsorption in Terms of the Model of Two Parallel Capacitors with Common Diffusion Layer and underlying Virial Adsorption Isotherm. *Sov. Electrochem (Engl.)*, 1986, 22(4), 405.
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#### **16. Patents**

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