

Mikhail A. VOROTYNTSEV

Principal Publications

(without patents, textbooks for students and abstracts in conference proceedings)

254. Electrochemical synthesis of polypyrrole in powder form

O. I. Istakova, D. V. Konev, A. T. Glazkov, T. O. Medvedeva, E. V. Zolotukhina, M. A. Vorotyntsev
J. Solid State Electrochem., DOI: 10.1007/s10008-018-4129-2

253. Новый подход в теории ограниченных в пространстве нелокальных диэлектрических сред
М.А. Воротынцев, А. А. Рубашкин, А. Е. Антипов

Электрохимия, 2018, т. 54, № 10, S1-S8 DOI: 10.1134/S0424857018130650

Novel approach to the theory of spatially confined nonlocal dielectric media.

M.A. Vorotyntsev, A.A. Rubashkin, A.E. Antipov.

Russ. J. Electrochem., 2018, vol. 54, in press

252. Palladium Nanoparticles–Polypyrrole Composite as Effective Catalyst for Fluoroalkylation of Alkenes

T. V. Gryaznova, M. N. Khrizanforov, K. V. Kholin, M. A. Vorotyntsev, K. V. Gor'kov, N. V. Talagaeva, M. V. Dmitrieva, E. V. Zolotukhina, Y. H. Budnikova
Catalysis Letters, 2018, vol. 148, 3119–3125 DOI: 10.1007/s10562-018-2524-z

251. Броматная реакция на вращающемся дисковом электроде: новый метод получения приближенных аналитических решений при стационарном режиме

М. А. Воротынцева, А. Е. Антипов, М. М. Петров, Р. Г. Пичугов, Е. И. Борисевич, Е. М. Антипов, С. М. Алдошин
Докл. АН, 2018, Т. 483, №1, 256–260 DOI:

Bromate Reaction on a Rotating Disc Electrode: A New Method of Obtaining Approximate Analytical Solutions for Stationary Regime

M. A. Vorotyntsev, A. E. Antipov, M. M. Petrov, R. D. Pichugov, E. I. Borisevich, E. M. Antipov, S. M. Aldoshin
Doklady Chemistry, 2018, vol. 483, Part 1, 256–260 DOI: 10.1134/S0012500818110058

250. Novel procedure towards approximate analytical description of bromate-anion reduction at rotating disk electrode under steady-state transport conditions

M. A. Vorotyntsev, A. E. Antipov

Electrochim. Acta, 2018, vol. 289, 272-282 DOI: 10.1016/j.electacta.2018.09.018

249. Электроактивный композит Pd-полипиррол и его катализические свойства в реакции цианирования стирилбромидов
О.М. Никитин, Т.В. Магдесиева, О.В.Полякова, П.К.Сазонов, К.В. Горьков, Е.В. Золотухина, М.А. Воротынцев

Электрохимия, 2018, Т. 54, № 7, 698-702 DOI: 10.1134/S042485701807006X

Electroactive Component of Pd-Polypyrrole Composite and its Catalytic Properties in Cyanation Reaction of Styryl Bromates

O. M. Nikitin, T. V. Magdesieva, O. V. Polyakova, P. K. Sazonov, K. V. Gor'kov, E. V. Zolotukhina, M. A. Vorotyntsev
Russ. J. Electrochem., 2018, vol. 54, 608-611 DOI: 10.1134/S1023193518070066

248. Pd-Polypyrrole Nanocomposite in Environmentally Friendly Synthesis of Vinylnitriles Using K4 Fe(CN)6

T. V. Magdesieva, O. M. Nikitin, O. V. Polyakova, P. K. Sazonov, E. V. Zolotukhina, K. V. Gor'kov, A. V. Samarov, M. A. Vorotyntsev
Chem. Select, 2018, vol. 3 (16), 4237-4243 DOI: 10.1002/slct.201800657 1

247. Electrocatalytic properties of manganese and cobalt polyporphine films toward oxygen reduction reaction

D. V. Konev, O. I. Istakova, B. Dembinska, M. Skunik-Nuckowska, C. H. Devillers, O. Heintz, P. J. Kulesza, M. A. Vorotyntsev
J. Electroanal. Chem., 2018, vol. 816, 83-91 DOI: 10.1016/j.jelechem.2018.03.042

246. A novel hydrogen-bromate flow battery for air deficient environment: proof-of-concept study

A. D. Modestov, D. V. Konev, O. V. Tripachev, A. E. Antipov, Y. V. Tolmachev, M. A. Vorotyntsev
Energy Technology, 2018, vol. 6, 242-245 DOI: 10.1002/ente.201700447

245. Bromate electroreduction from acidic solution at rotating disc electrode. Theoretical study of the steady-state convective-diffusion transport for excess of bromate ions compared to protons

M. A. Vorotyntsev, A. E. Antipov

Electrochimica Acta, 2018, vol. 261, 113-126 DOI: 10.1016/j.electacta.2017.12.062

244. Максимальная плотность тока при восстановлении бромат-аниона на ВДЭ: асимптотическое поведение при больших толщинах диффузионного слоя

А. Е. Антипов, М. А. Воротынцев

Электрохимия, 2018, т. 52, № 2, 214-223 DOI: 10.7868/S0424857018020056

Maximum Current Density in the Reduction of the Bromate Anion on a Rotating Disk Electrode: Asymptotic Behavior at Large Thicknesses of the Diffusion Layer

A. E. Antipov, M. A. Vorotyntsev

Russ. J. Electrochem., 2018, vol. 54, № 2, 186-194 DOI: 10.1134/S1023193518020039

243. Surprising dependence of the current density of bromate electroreduction on the microelectrode radius as manifestation of the autocatalytic redox-cycle (EC") reaction mechanism

D. V. Konev, A. E. Antipov, M. M. Petrov, M. A. Shamraeva, M. A. Vorotyntsev

Electrochim. Comm., 2018, vol. 86, 76-79 DOI: org/10.1016/j.elecom.2017.11.006

242. Восстановление бромат-аниона на ВДЭ в стационарных условиях при избытке протонов: численное решение уравнений конвективной диффузии при одинаковых коэффициентах диффузии компонентов

А. Е. Антипов, М. А. Воротынцев

Электрохимия, 2018, т. 54, № 1, 73-81 DOI: 10.7868/S0424857018010085 исправлен

Bromate Anion Reduction at Rotating Disk Electrode in Steady State under Excess of Protons: Numerical Solution of the Convective Diffusion Equations at Equal Diffusion Coefficients of Components

A. E. Antipov, M. A. Vorotyntsev

Russ. J. Electrochem., 2018, vol. 54, № 1, 62-69 DOI: 10.1134/S1023193518010020

241. Bromate electroreduction from sulfuric acid solution at rotating disk electrode: experimental study

A. D. Modestov, D. V. Konev, A. E. Antipov, M. M. Petrov, R. D. Pichugov, M. A. Vorotyntsev

Electrochim. Acta, 2018, vol. 259, 655-663 DOI: [10.1016/j.electacta.2017.10.199](https://doi.org/10.1016/j.electacta.2017.10.199)

240. Bromate electroreduction from acidic solution at spherical microelectrode under steady-state conditions: theory for the redox-mediator autocatalytic (EC") mechanism

M. A. Vorotyntsev, A. E. Antipov

Electrochim. Acta, 2017, vol. 258, 544-553 DOI: 10.1016/j.electacta.2017.11.097

239. Bromate anion reduction: novel autocatalytic (EC") mechanism of electrochemical processes. Its implication for redox flow batteries of high energy and power densities

M. A. Vorotyntsev, A. E. Antipov, D. V. Konev

Pure Applied Chemistry, 2017, vol. 89, № 10, 1429–1448 DOI: 10.1515/pac-2017-0306

238. Pd-PPy nanocomposite on the surface of carbon nanotubes: synthesis and catalytic activity

K. V. Gor'kov, N. V. Talagaeva, J.-C. Hierso, I. S. Bezverkhyy, P. A. Pisareva, M. A. Vorotyntsev, E. Zolotukhina
Surface Innov., 2017, vol. 5, 121-129 dx.doi.org/10.1680/jsuin.17.00016

237. Обобщенная модель Нернста для конвективно-диффузионного транспорта. Численное решение для электровосстановления бромат-аниона на неактивном ВДЭ в стационарных условиях

А. Е. Антипов, М. А. Воротынцев

Электрохимия, 2017, т. 53, № 10, 1239-1247 DOI: 10.7868/S0424857017100048

Generalized Nernst Layer Model for Convective-Diffusion Transport. Numerical Solution for Bromide Ion Electroreduction on Inactive Rotating Disk Electrode under Steady State Conditions

A. E. Antipov, M. A. Vorotyntsev

Russ. J. Electrochem., 2017, vol. 53, № 10, 1100-1108 DOI: 10.1134/S1023193517100020

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A. E. Antipov, M. A. Vorotyntsev

Russ. J. Electrochem., 2017, vol. 53, № 12, 1362-1362 DOI: 10.1134/S1023193517130018

236. Влияние работ В. Г. Левича на развитие современной электрохимии

Й. Ульstrup, М. А. Воротынцев, А. Д. Давыдов, Б. М. Графов

Электрохимия, 2017, т. 53, № 9, 1003-1007 DOI: 10.7868/S0424857017090018

The Importance of V. G. Levich's Research in the Development of Modern Electrochemistry

J. Ulstrup, M. A. Vorotyntsev, A. D. Davydov, B. M. Grafov

Russ. J. Electrochem., 2017, vol. 53, № 9, 893-896 DOI: 10.1134/S1023193517090154

235. Медиаторное восстановление бромат-аниона на врачающемся дисковом электроде в стационарных условиях при больших плотностях тока

М. А. Воротынцев, А. Е. Антипов

Электрохимия, 2017, т. 53, № 9, 1032-1045 DOI: 10.7868/S0424857017090043

Mediator Reduction of Bromate Anion at Rotating Disk Electrode under Steady-state Conditions for High Current Densities

M. A. Vorotyntsev, A. E. Antipov

Russ. J. Electrochem., 2017, vol. 53, № 9, 919–931 DOI: 10.1134/S1023193517090178

234. Electrochemistry of electroactive materials: WEEM-2015 and EEM-2016
M. A. Vorotyntsev
Electrochim. Acta, 2017, vol. 246, 1259-1260 DOI: 10.1016/j.electacta.2017.07.145
233. Bromate electroreduction from acidic solution at rotating disk electrode. Theory of steady-state convective-diffusion transport
M. A. Vorotyntsev, A. E. Antipov
Electrochim. Acta, 2017, vol. 246, 1217-1229 DOI: 10.1016/j.electacta.2017.06.158
232. 67-е Ежегодное совещание Международного Электрохимического Общества, 21-26 августа 2016 г., Гаага, Нидерланды
Ю. В. Плесков, М. А. Воротынцев, А. Д. Давыдов
Электрохимия, 2017, т. 53, № 4, 487-488 DOI: 10.7868/S0424857017040077
231. Electrostatic contribution to the ion solvation energy: cavity effects
M. A. Vorotyntsev, A. A. Rubashkin
Phys. Chem. Liquids, 2017, vol. 55, Issue 2, 141-152 DOI: 10.1080/00319104.2016.1183002
230. Синтез и электрокаталитические свойства нанокомпозита палладий-полипиррол в реакции окисления формальдегида
К. В. Горьков, Е. В. Золотухина, Э. Р. Мустафина, М. А. Воротынцев
Электрохимия, 2017, т. 53, № 1, 56-65
- Synthesis and electrocatalytic properties of palladium-polypyrrole nanocomposite in formaldehyde oxidation reaction
V. K. Gor'kov, E. V. Zolotukhina, E. R. Mustafina, M. A. Vorotyntsev
Russ. J. Electrochem., 2017, vol. 53, № 1, 49-57 doi.org/10.1134/S1023193517010074
229. 1D model of steady-state discharge process in hydrogen-bromate flow battery
M. A. Vorotyntsev, A. E. Antipov, Yu. V. Tolmachev
Electrochim. Acta, 2016, vol. 222, 1555-1561 DOI: 10.1016/j.electacta.2016.11.138
228. Получение полипорфина кобальта электрохимическим методом
О. И. Истакова, Д. В. Конев, Ш. Х. Девильер, М. А. Воротынцев, А. С. Зюбин, Е. М. Антипов, С. М. Алдошин
Доклады РАН: физ. химия, 2016, т. 471, № 2, 183–186 DOI: 10.7868/S0869565216320153
- Electrochemical Synthesis of Cobalt Polyporphine Films
O. I. Istakova, D. V. Konev, C. H. Devillers, M. A. Vorotyntsev, A. S. Zyubin, E. M. Antipov, S. M. Aldoshin,
Doklady Physical Chemistry, 2016, vol. 471, Part 1, 181–184 DOI: 10.1134/S0012501616110038
227. Обобщение модели слоя Нернста для учета различных коэффициентов диффузии компонентов системы при восстановлении бромата при стационарном одномерном режиме. Лимитирование тока транспортом протонов
А. Е. Антипов, М. А. Воротынцев, Ю. В. Толмачев, Е. М. Антипов, С. М. Алдошин
Доклады РАН: физ. химия, 2016, vol. 471, 312-316 DOI: 10.7868/S0869565216330161
- Generalization of the Nernst Layer Model to Take into Account the Difference in Diffusivity between the Components of the System in Bromate Reduction in Steady-State One-Dimensional Mode: Current Limiting by Proton Transport
A. E. Antipov, M. A. Vorotyntsev, Yu. V. Tolmachev, E. M. Antipov, S. M. Aldoshin
Doklady Physical Chemistry, 2016, vol. 471, 185-189 DOI: 10.1134/S001250161611004X
226. Специальный выпуск журнала “Электрохимия”, посвященный 10-му международному Фрумкинскому симпозиуму по электрохимии, Москва, 20–23 октября 2015 г. Введение
А. Ю. Цивадзе, В. Н. Андреев, М. А. Воротынцев
Электрохимия, 2016, т. 52, № 12, 1227-1228 DOI: 10.7868/S0424857016120136
225. Электрополимеризация 5,15 ди(*n* метоксифенил)порфина магния
Д. В. Конев, К. В. Лизгина, О. И. Истакова, В. Е. Баулин, И. П. Калашникова, Ш. Х. Девильер, М. А. Воротынцев
Электрохимия, 2016, т. 52, № 12, 1289-1297 DOI: 10.7868/S0424857016120070
- Electropolymerization of magnesium 5,15-di(*n*-methoxyphenyl)porphin
D. V. Konev, K. V. Lizgina, O. I. Istakova, V. E. Baulin, I. P. Kalashnikova, C. H. Devillers, M. A. Vorotyntsev
Russ. J. Electrochem., 2016, vol. 52, № 12, 1150-1158 DOI: 10.1134/S1023193516120077
224. Generalized Nernst Layer Model: application to bromate anion electroreduction. Theory for stationary 1D regime for proton transport limitations
M. A. Vorotyntsev, A. E. Antipov
ChemElectroChem, 2016, vol. 3, Issue 12, 2227-2242 DOI: 10.1002/celc.201600422
223. Electrochemical route to Co(II) polyporphine
O. I. Istakova, D. V. Konev, A. S. Zyubin, C. H. Devillers, M. A. Vorotyntsev
J. Solid State Electrochem., 2016, vol. 20, 3189–3197 DOI: 10.1007/s10008-016-3397-y-

222. Reduction of bromate anion via autocatalytic redox-mediation by Br₂/Br⁻ redox couple. Theory for stationary 1D regime. Effect of different Nernst layer thicknesses for reactants
M. A. Vorotyntsev, A. E. Antipov
J. Electroanal. Chem., 2016, vol. 779, 146-155 DOI: 10.1016/j.jelechem.2016.06.004
221. Bromate electroreduction via autocatalytic redox mediation: EC" mechanism. Theory for stationary 1D regime. Current limitation by proton transport
M. A. Vorotyntsev, A. E. Antipov
Electrochim. Acta, 2016, vol 210, 950-962 DOI: 10.1016/j.electacta.2016.06.010
220. Efficient synthesis of a new electroactive polymer of Co(II) porphine by *in-situ* replacement of Mg(II) inside Mg(II) polyporphine film.
S. D. Rolle, D. V. Konev, C. H. Devillers, K. V. Lizgina, D. Lucas, C. Stern, F. Herbst, O. Heintz, M. A. Vorotyntsev
Electrochim. Acta, 2016, vol. 204, 276-286 <http://dx.doi.org/10.1016/j.electacta.2016.03.039>
219. Электрокаталитическая активность наноструктурированного композита палладий-полипиррол в реакции окисления формальдегида
К. В. Горьков, Е. В. Золотухина, Э. Р. Мустафина, М. А. Воротынцев, Е. М. Антипов, С. М. Алдошин
Доклады РАН: физ. химия, 2016, т. 467, 54-57 DOI: 10.7868/S0869565216070161
- Electrocatalytic activity of nanostructured palladium-polypyrrole composite in formaldehyde oxidation reaction
K. V. Gor'kov, E. V. Zolotukhina, E. R. Mustafina, M. A. Vorotyntsev, E. M. Antipov, S. M. Aldoshin
Doklady Physical Chemistry, 2016, vol. 467, 37-40 DOI: 10.1134/S0012501616030027
218. Электровосстановление бромат-аниона на неактивном ВДЭ в стационарных условиях. Численное исследование процессов ионного транспорта и реакции конпропорционирования
А. Е. Антипов, М. А. Воротынцев
Электрохимия, 2016, т. 52, № 10, 1039-1047 DOI: 10.7868/S0424857016100030
- Bromate anion electroreduction on inactive RDE under steady-state conditions. Numerical study of ion transport processes and comproportionation reaction
A. E. Antipov, M. A. Vorotyntsev
Russ. J. Electrochem., 2016, vol. 52, № 10, 925-932 DOI: 10.1134/S1023193516100037
217. Получение пленок полипорфина кобальта и его каталитические свойства в реакции электровосстановления кислорода
Д. В. Конев, К. В. Лизгина, Д. Х. Хайруллина, М. А. Шамраева, Ш. Девильер, М. А. Воротынцев
Электрохимия, 2016, т. 52, № 8, 869-879 DOI: 10.7868/S0424857016060062
- Synthesis of cobalt polyporphine films and their electrocatalytic properties in oxygen electroreduction reaction
D. V. Konev, K. V. Lizgina, D. K. Khairullina, M. A. Shamraeva, C. H. Devillers, M. A. Vorotyntsev
Russ. J. Electrochem., 2016, vol. 52, No. 8, 778–787 DOI: 10.1134/S1023193516060069
216. Electrochromic properties of Prussian Blue-polypyrrole composite films in dependence on parameters of synthetic procedure
N.V. Talagaeva, E.V. Zolotukhina, P. A. Pisareva, M.A. Vorotyntsev
J. Solid State Electrochem., 2016, vol. 20, № 5, 1235-1240 DOI: 10.1007/s10008-015-3116-0
215. Электровосстановление бромат-аниона в кислых растворах на неактивном ВДЭ в стационарных условиях. Численное моделирование процесса в условиях избытка бромат-аниона по сравнению с протонами.
М. А. Воротынцев, А. Е. Антипов, Ю. В. Толмачев, Е. М. Антипов, С. М. Алдошин
Доклады РАН: физ. химия, 2016, т. 468, № 1, 37-43 DOI: 10.7868/S0869565216130107
- Bromate anion electroreduction in acidic solutions on inactive RDE under steady-state conditions. Numerical modeling of the process under conditions of bromate-anion excess compared to protons
M. A. Vorotyntsev, A. E. Antipov, Yu. V. Tolmachev, E. M. Antipov, S. M. Aldoshin
Doklady Chemistry, 2016, vol. 468, № 1, 141-147 DOI: 10.1134/S0012500816050025
214. Novel electrochromic films based on Prussian Blue and polypyrrole
N.V. Talagaeva, E.V. Zolotukhina, P.A. Pisareva, M.A. Vorotyntsev
Mendeleev Commun., 2016, vol. 26, 119-120 DOI 10.1016/j.mencom.2016.03.011
213. Electrostatic Contribution to the Ion Solvation Energy: Overscreening Effect in the Nonlocal Dielectric Response of the Polar Medium
A. A. Rubashkin, M. A. Vorotyntsev
Current Phys. Chem., 2016, vol. 6, 120-129 DOI: [10.2174/187794680666160120221258](https://doi.org/10.2174/187794680666160120221258)
(<http://www.eurekaselect.com/138593/article>)
212. Применение метода двойных катодно-анодных импульсов потенциала (тока) для создания композитных покрытий берлинская лазурь-полипиррол на оптически прозрачных электродах

Н. В. Талагаева, П. А. Писарева, А. К. Гребенко, М. А. Воротынцев, Е. В. Золотухина
Электрохимия, 2016, т. 52, № 1, 54-61

The method of double cathodic-anodic potential (current) pulses for synthesis of composite coatings Prussian blue–polypyrrole on optically transparent electrodes

N.V. Talagaeva, P.A. Pisareva, A. K. Grebenko, M.A. Vorotyntsev, E.V. Zolotukhina
Russ. J. Electrochem., 2016, vol.52, № 1, 46-52 doi:10.1134/S1023193516010110

211. Спектроэлектрохимическое определение редокс-эквивалента порфина магния в процессе его электроокисления
О. И. Истакова, Д. В. Конев, М. А. Воротынцев, Е. М. Антипов, С. М. Алдошин

Доклады РАН: физ. химия, 2016, т. 466, 180-183 DOI 10.7868/S086956521602016X

Spectroelectrochemical Determination of the Redox Equivalent of Magnesium Porphine in the Course of Its Electrooxidation
O. I. Istakova, D. V. Konev, M. A. Vorotyntsev, E. M. Antipov, S. M. Aldoshin

Doklady Physical Chemistry, 2016, vol. 466, part 1, 15-18 doi:10.1134/S001250161601005X

210. 65-Е Ежегодное совещание Международного Электрохимического Общества, 31 августа–5 сентября 2014 г., Лозанна, Швейцария

М. А. Воротынцев, О. Л. Грибкова, А. Д. Давыдов, А. А. Некрасов, Ю. В. Плесков, А. М. Скундин
Электрохимия, 2015, т. 51, 902-904 DOI: 10.7868/s042485701508006x

209. Нелокально-электростатическая теория ионной сольватации: комбинация эффекта переэкранирования в диэлектрическом отклике среды с размытым распределением заряда иона

А. А. Рубашкин, М. А. Воротынцев, Е. М. Антипов, С. М. Алдошин
Доклады РАН: физ. химия, 2015, т. 464, 56-60

Nonlocal Electrostatic Theory of Ion Solvation: a Combination of the Overscreening Effect in the Dielectric Response of the Medium with a Smeared Ion Charge Distribution

A. A. Rubashkin, M. A. Vorotyntsev, E. M. Antipov, S. M. Aldoshin
Doklady Physical Chemistry, 2015, vol. 464, 198-201 doi:10.1134/S0012501615090031

208. Stability of Prussian Blue-polypyrrole (PB/pPy) composite films synthesized via one-step redox-reaction procedure

N. V. Talagaeva, E. V. Zolotukhina, I. Bezverkhyy, D. V. Konev, Y. Lacroûte, E. Yu. Maksimova, S. L. Koryakin, M. A. Vorotyntsev

J. Solid State Electrochem., 2015, vol. 19, 2701-2709

207. In situ UV-visible spectroelectrochemistry in the course of oxidative monomer electrolysis as a tool to characterize the molecular structure of poly(Mg(II)porphine)

D. V. Konev, O. I. Istakova, O. A. Sereda, M. A. Shamraeva, C.H. Devillers, M. A. Vorotyntsev
Electrochim. Acta, 2015, vol. 179, 315-325 dx.doi.org/10.1016/j.electacta.2015.06.076

206. Electroreduction of halogen oxoanions via autocatalytic redox mediation by halide anions: novel EC" mechanism. Theory for stationary 1D regime

M. A. Vorotyntsev, D. V. Konev, Y. V. Tolmachev
Electrochim. Acta, 2015, vol. 173, 779-795 dx.doi.org/10.1016/j.electacta.2015.05.099

205. Silver/ion exchanger nanocomposites as low-temperature redox-catalysts for methanol oxidation

E. A. Sakardina, T. A. Kravchenko, E. V. Zolotukhina, M. A. Vorotyntsev
Electrochim. Acta, 2015, vol. 179, 364-371 dx.doi.org/10.1016/j.electacta.2015.03.227
authors.elsevier.com/sd/article/S0013468615008762 http://www.sciencedirect.com/science/article/pii/S0013468615008762

204. Energy cycle based on a high specific energy aqueous flow battery and its potential use for fully electric vehicles and for direct solar-to-chemical energy conversion

Y. V. Tolmachev, A. Pyatkovskiy, V. V. Ryzhov, D. V. Konev, M. A. Vorotyntsev
J. Solid State Electrochem., 2015, vol. 19, 2711-2722 dx.doi.org/10.1007/s10008-015-2805

203. Electropolymerization of non-substituted Mg(II) porphine: Effects of proton acceptor addition

D. V. Konev, C. H. Devillers, K. V. Lizgina, V. E. Baulin, M. A. Vorotyntsev
J. Electroanal. Chem., 2015, vol. 737, 235-242 dx.doi.org/10.1016/j.jelechem.2014.09.018

202. Топливные элементы с химически регенерируемыми редокс-катодами

Ю. В. Толмачев, М. А. Воротынцев
Электрохимия, 2014, т. 50, № 5, 451-461

Fuel Cells with Chemically Regenerative Redox Cathodes

Yu. V. Tolmachev, M. A. Vorotyntsev
Russ. J. Electrochem., 2014, vol.50, № 5, 403-411 dx.doi.org/10.1134/S1023193514020050

201. Electrochemistry of Electroactive Materials

A. R. Hillman, P. Pickup, R. Seeber, M. Skompska, M. A. Vorotyntsev
Electrochim. Acta, 2014, vol. 122, 1-2 dx.doi.org/10.1016/j.electacta.2014.01.001

200. One-stage periodical anodic-cathodic double pulse deposition of nanocomposite materials. Application to Prussian Blue/polypyrrole film coated electrodes

E. V. Zolotukhina, I. S. Bezverkhyy, M. A. Vorotyntsev
Electrochim. Acta, 2014, vol. 122, 247-258 dx.doi.org/10.1016/j.electacta.2013.10.182

199. Synthesis of new electroactive polymers by ion-exchange replacement of Mg(II) by 2 H⁺ or Zn(II) cations inside Mg(II) polyporphine film, with their subsequent electrochemical transformation to condensed-structure materials

D. V. Konev, C. H. Devillers, K. V. Lizgina, T. S. Zyubina, A. S. Zyubin, L. A. Valkova, M. A. Vorotyntsev
Electrochim. Acta, 2014, vol. 122, 3-10 dx.doi.org/10.1016/j.electacta.2013.10.004

198. Palladium Nanoparticles – Polypyrrole Composite as an Efficient Catalyst for Cyanation of Aryl Halides

T. V. Magdesieva, O. M. Nikitin, E. V. Zolotukhina, M. A. Vorotyntsev
Electrochim. Acta, 2014, vol. 122, 289-295 dx.doi.org/10.1016/j.electacta.2013.09.157

197. Новый метод периодических двойных катодно-анодных импульсов для единовременного осаждения композитных пленок неорганический компонент - электроактивный полимер из смешанного раствора их прекурсоров

Е.В. Золотухина, М.А. Воротынцев, Д.В. Конев, Е.М. Антипов, А.Е. Антипов, Ю.А. Добровольский, Н.А. Трофименко, А.А. Ованесян, К.В. Лизгина, И.А. Ермаков, О.И. Истакова, В.В.Кокарева
Альтернативная энергетика и экология, 2013, № 13, 16-22

196. Влияние протон-акцепторных добавок на процесс электрополимеризации незамещенного порфина магния

Д. В. Конев, М. А. Воротынцев, Ю.А. Добровольский, Ш. Девильер, Ю.М. Вольфкович, А.Ю. Рычагов, В.Е. Баулин, И.П. Калашникова, К.В. Лизгина, О.И. Истакова, В.В. Кокарева, А.Е. Антипов
Альтернативная энергетика и экология, 2013, № 15, 37-45

195. Atomic force microscopy study of conducting polymer films near electrode's edge or grown on microband electrode

M. A. Vorotyntsev, D. V. Konev, U. Lange, Yu. V. Tolmachev, M. Skompska
Electrochim. Acta, 2013, vol. 110, 452-458 dx.doi.org/10.1016/j.electacta.2013.03.160

194. Получение Новых Полипорфинов Посредством Замены Центрального Иона в Полипорфине Магния

Д. В. Конев, М. А. Воротынцев, Ш. Девильер, Т. С. Зюбина, А. С. Зюбин, К. В. Лизгина, А. Г. Волков
Электрохимия, 2013, т. 49, № 8, 840-846

Synthesis of new polyphosphines by replacing central ion in magnesium polyphosphine

D. V. Konev, M. A. Vorotyntsev, C. H. Devillers, T. S. Zyubina, A. S. Zyubin, K. V. Lizgina, A. G. Volkov
Russ. J. Electrochem., 2013, vol. 49, № 8, 753-758

193. Одноэтапный метод синтеза гибридных композиционных наноматериалов палладий-полипиррол-углерод (Pd/PPy/C)

Е. В. Золотухина, М. А. Воротынцев, В. А. Зиновьева, И. С. Безверхий, Д. В. Конев, Е. М. Антипов, С. М. Алдошин
Доклады АН: физ. химия, 2013, т. 449, № 4, 1-4

One Step and One Pot Method for Synthesis of Hybrid Composite Palladium–Polypyrrole–Carbon (Pd/PPy/C) Nanomaterials

E. V. Zolotukhina, M. A. Vorotyntsev, V. A. Zinovyeva, I. S. Bezverkhyy, D. V. Konev, E. M. Antipov, S. M. Aldoshin
Doklady Physical Chemistry, 2013, vol. 449, Part 2, 63–65

192. Li-ion diffusion in $\text{Li}_x\text{Nb}_9\text{PO}_{25}$

O. A. Drozhzhin, M. A. Vorotyntsev, S. R. Maduar, N. R. Khasanova, A. M. Abakumov, E. V. Antipov
Electrochim. Acta, 2013, vol. 89, 262–269

191. Перспективные Электродные Материалы для Суперконденсаторов

А.Ю. Рычагов, Ю.М. Вольфович, М.А. Воротынцев, Л.Д. Квачева, Д.В. Конев, Н.В. Крестинин, Ю.Г. Кряжев, В.Л. Кузнецов, Ю.А. Кукушкина, В.В. Соколов, В.М. Мухин, С.П. Червононбродов
Электрохим. энергетика, 2012, т. 12, № 4, 167-180

Prospective Electrode Materials for Supercapacitors

A.Yu.Rychagov, Yu.M.Volkovich, M. A. Vorotyntsev, L.D.Kvacheva, D.V.Konev, N.V.Krestinin, Yu.G.Kryazhev, V.L.Kuznetsov, Yu.A.Kukushkina, V.M.Mukhin, V.V.Sokolov, S.P.Chernobrodov
Russ. J. Electrochem. Energetics, 2012, vol. 12, № 4, 167-180

190. Palladium – Polypyrrole Nanoparticles – Catalyzed Sonogashira Coupling

T. V. Magdesieva, O. M. Nikitin, E. V. Zolotukhina, V. A. Zinovyeva, M. A. Vorotyntsev
Mendeleev Commun., 2012, vol. 22, 305-306

189. Композитные материалы на основе наночастиц берлинской лазури и полипиррола для создания высокостабильного сенсора на пероксид водорода

Е. В. Золотухина, М. А. Воротынцев, И. Безверхий, А. В. Борисова, А. А. Калякин, Ю. А. Золотов

Доклады АН: физ. химия, 2012, т. 444, 176-179

Composite Materials Based on Polypyrrole and Prussian Blue Nanoparticles Designed for Highly Stable Hydrogen Peroxide Sensor
E. V. Zolotukhina, M. A. Vorotyntsev, I. Bezverkhyy, A. V. Borisova, A. A. Karyakin, Yu. A. Zolotov
Doklady Physical Chemistry, 2012, vol. 444, Part 1, 75–78.

188. Polypyrrole - Palladium Nanoparticles Composite as Efficient Catalyst for Suzuki-Miyaura Coupling
T. V. Magdesieva, O. M. Nikitin, O. A. Levitsky, V. A. Zinovyeva, I. Bezverkhyy, E. V. Zolotukhina, M. A. Vorotyntsev
J. Molec. Catal. A: Chemical, 2012, vol. 353-354, 50-57

187. Primary and Secondary Distributions after a Small-Amplitude Potential Step at Disk Electrode Coated with Conducting Film
M. A. Vorotyntsev, D. V. Konev
Electrochim. Acta, 2011, vol. 56, 9105–9112

186. György Inzelt - a tribute
F. Scholz, M. A. Vorotyntsev
J. Solid State Electrochem., 2011, vol. 15, 2277-2278

185. A New Strategy towards Electroactive Polymer-Inorganic Nanostructure Composites. Silver Nanoparticles inside Polypyrrole Matrix with Pendant Titanocene Dichloride Complexes
M. A. Vorotyntsev, M. Skompska, A. Rajchowska, J. Borysiuk, M. Donten
J. Electroanal. Chem., 2011, vol. 662, 105-115

184. Highly-Dispersed Palladium-Polypyrrole Nanocomposites: In-Water Synthesis and Application for Catalytic Arylation of Heteroaromatics by Direct C-H Bond Activation
V. A. Zinovyeva, M. A. Vorotyntsev, I. Bezverkhyy, D. Chaumont, J.-C. Hierso
Adv. Funct. Mater., 2011, vol. 21, 1064-1075

183. Electrochemistry of Electroactive Materials
P. J. Kulesza, M. Skompska, V. Tsakova, M. A. Vorotyntsev
Electrochim. Acta, 2011, vol. 56, 3417-3418

182. Electroactive Polymeric Material with Condensed Structure on the Basis of Magnesium(II) Polyporphine
M. A. Vorotyntsev, D. V. Konev, C. H. Devillers, I. Bezverkhyy, O. Heintz
Electrochim. Acta, 2011, vol. 56, 3436-3442

181. Mixed Solutions of Silver Cation and Chloride Anion in Acetonitrile: Voltammetric and EQCM Study
M. Skompska, M. A. Vorotyntsev, A. Rajchowska, O. V. Levin
Phys. Chem. Chem. Phys., 2010, vol. 12, 10525 - 10535

180. Magnesium(II) Polyporphine: The First Electron-Conducting Polymer with Directly Linked Unsubstituted Porphyrin Units Obtained by Electrooxidation at a Very Low Potential
M. A. Vorotyntsev, D. V. Konev, C. H. Devillers, I. Bezverkhyy, O. Heintz
Electrochim. Acta, 2010, vol. 55, 6703-6714

179. Diffusional Transport in Ionic Liquids: Stokes-Einstein Relation or “Sliding Sphere” Model? Ferrocene (Fc) in Imidazolium Liquids
M. A. Vorotyntsev, V. A. Zinovyeva, M. Picquet.
Electrochim. Acta, 2010, vol. 55, 5063-5070

178. Electropolymerization of Pyrrole in Acetonitrile as Affected by the Nature of Substitute and Deposition Potential
M. Graczyk-Zajac, S. Yu. Vassiliev, M. A. Vorotyntsev, G. A. Tsirlina
J. Solid State Electrochem., 2010, vol. 14, 2039-2048

177. Mechanisms of Electropolymerization and Redox Activity: Fundamental Aspects
M. A. Vorotyntsev, V. A. Zinovyeva, D. V. Konev.
In: Electropolymerization: Concepts, Materials and Applications, S. Cosnier and A. A. Karyakin, Eds., Wiley-VCH, Weinheim, chapter 2, 2010, pp. 27-50

176. Electrochemical and Spectral Properties of Ferrocene (Fc) in Ionic Liquid: 1-Butyl-3-Methylimidazolium Triflimide, [BMIM][NTf₂]. Concentration Effects
M. A. Vorotyntsev, V. A. Zinovyeva, D. V. Konev, M. Picquet, L. Gaillon, C. Rizzi
J. Phys. Chem. B, 2009, vol. 113, 1085-1099

175. Synthesis and Characterization of Palladium Nanoparticle/Polypyrrole Composites
S. V. Vasilyeva, M. A. Vorotyntsev, I. Bezverkhyy, R. Chassagnon, O. Heintz, E. Lesniewska
J. Phys. Chem. C, 2008, vol. 112, 19878-19885

174. Electrochemistry of Electroactive Materials

A. R. Hillman, P. J. Kulesza, M. A. Vorotyntsev
Electrochim. Acta, 2008, vol. 53, 3742-3743

173. Electrochemical Properties of Metallocene Hydroxo and Oxo Complexes of Ta(V): $[\text{Cp}^*(\text{CpR})\text{TaOHCl}]^+$ and $\text{Cp}^*(\text{CpR})\text{TaOCl}$, with R = H, SiMe₃ or (CH₂)₃NC₄H₄. Electrochemical Deposition of Conducting Polymer Film with Incorporated Tantalocene Complexes

M. Skompska, M. A. Vorotyntsev, J. Goux, P. Le Gendre, C. Moise
Electrochim. Acta, 2008, vol. 53, 3843-3852

172. Metallocene-Containing Conjugated Polymers

M. A. Vorotyntsev, S. V. Vasilyeva
Adv. Colloid Interface Sci., 2008, vol. 139, 99-151

171. Electrochemical and Spectral properties of Some Tantalocene Derivatives with One Pentamethylated Cyclopentadienyl Ligand: $\text{Cp}^*(\text{Cp-R})\text{TaCl}_2$, R = H, SiMe₃ or (CH₂)₃NC₄H₄

M. A. Vorotyntsev, M. Skompska, M. Graczyk, J. Heinze, J. Goux, P. Le Gendre, C. Moise
J. Solid State Electrochemistry, 2008, vol. 12, 421-435

170. Polypyrrole Films Functionalized with Pendant Titanocene Dichloride Complexes: Ellipsometric Study of the Electropolymerization Process

J. Correia, M. Graczyk, L. M. Abrantes, M. A. Vorotyntsev
Electrochim. Acta, 2007, vol. 53, 1195-1205

169. Effect of Interparticle Interactions on the Rate of Injection of Charge Carriers into Electroactive Polymer Films

V. V. Malev, O. V. Levin, M. A. Vorotyntsev
Russ. J. Electrochem., 2007, vol. 43, 1016-1025

168. Electrochemistry of Electroactive Materials

M. A. Vorotyntsev , F. Scholz
J. Solid State Electrochemistry, 2006, vol. 11, 1007-1007

167. Model Treatment of Double Layer Charging in Electroactive Polymer Films with Two Kinds of Charge Carriers.

V. V. Malev, O. V. Levin, M. A. Vorotyntsev
Electrochim. Acta, 2006, vol. 52, 133-151

166. Electrochemically Reduced Titanocene Dichloride as a Catalyst of Reductive Dehalogenation of Organic Halides

T. V. Magdesieva, M. Graczyk, A. Vallat, O. M. Nikitin, P. I. Demyanova, K. P. Butin, M. A. Vorotyntsev,
Electrochim. Acta, 2006, vol. 52, 1265-1280.

165. Electrosynthesis and Properties of Poly(3,4-ethylenedioxythiophene) Films Functionalized with Titanocene Dichloride Complex

M. Skompska, M. A. Vorotyntsev, M. Refczynska, J. Goux, E. Lesniewska, G. Boni, C. Moise
Electrochim. Acta, 2006, vol. 51, 2108-2119.

164. Reductive Electrocatalytic Dehalogenation of Nitrobenzyl Halogenides: Nitrophylic or Halophytic Attack?

T. V. Magdesieva, O. M. Nikitin, P. I. Demyanova, M. Graczyk, A. Vallat, M. A. Vorotyntsev, K. P. Butin
Russ. Chem. Bull., 2005, vol. 54, 201-210.

163. Application of Novel Refinement Method for Accurate Determination of Chemical Diffusion Coefficients in Electroactive Materials by Potential Step Techniques

M. D. Levi, R. Demadrille, A. Pron, M. A. Vorotyntsev, Y. Gofer, D. Aurbach
J. Electrochem. Soc., 2005, vol. 152, E61-E67.

162. Electrochemistry of Electroactive Materials

J. Heinze; M. A. Vorotyntsev,
Electrochim. Acta, 2005, vol. 50, 1449.

161. Mechanism of Redox Transformation of Titanocene Dichloride Centers Immobilized inside a Polypyrrole Matrix - EQCM and XPS Evidences

M. Skompska, M. A. Vorotyntsev, J. Goux, C. Moise, O. Heintz, Y. S. Cohen, M. D. Levi, Y. Gofer, G. Salitra, D. Aurbach
Electrochim. Acta, 2005, vol. 50, 1635-1641

160. The Role of Electrochemistry in the Sustained Development of Modern Societies

C. Brett, C. Comninellis, E. R. Gonzalez, O. Hammerich, P. Marcus, A. Tadjeddine, M. A. Vorotyntsev
Electrochim. Acta, 2004, vol. 49, n° 22-23.

159. Reactions of Solute Species at an Electrode Modified with Titanocene Functionalized Polypyrrole Film: Ferrocene and Titanocene Dichloride

M. A. Vorotyntsev, M. Graczyk, A. Lisowska-Oleksiak, J. Goux, C. Moise
J. Solid State Electrochem., 2004, vol. 8, 818-827

158. Spectroelectrochemistry of Conducting Polymers
B. M. Grafov; A. V. Vannikov; M. A. Vorotyntsev
Russ. J. Electrochem., 2004, vol. 40, 227-228.
157. Spatially Limited Diffusion Coupled with Ohmic Potential Drop and/or Slow Interfacial Exchange: A New Method to Determine the Diffusion Time Constant and External Resistance from Potential Step (PITT) Experiments
M. A. Vorotyntsev, M. D. Levi, D. Aurbach
J. Electroanal. Chem., 2004, vol. 572, 299-307
156. Influence of Chloride Anion on Electrodeposition and Electroactivity of the Polymer Matrix in Polypyrrole, Poly(N-methylpyrrole) and Polypyrrole Derivative Functionalized by Titanocene Centers, in Dry Non-Aqueous Solutions
M. Skompska, M. A. Vorotyntsev
J. Solid State Electrochem., 2004, vol. 8, 360-368
155. Memory Effects in Functionalized Conducting Polymer Films: Titanocene Derivatized Polypyrrole in Contact with THF Solutions.
M. A. Vorotyntsev, M. Skompska, E. Pousson, J. Goux, C. Moise
J. Electroanal. Chem., 2003, vol. 552C, 307-317.
154. Studies of the Reduction of $(C_5Me_5)_2Mo_2O_5$ in Methanol - Water - Acetate Solutions by On-Line Electrochemical Flow Cell and Electrospray Mass Spectrometry.
J. Gun, A. D. Modestov, O. Lev, D. Saurenz, M. A. Vorotyntsev, R. Poli
Eur. J. Inorg. Chem., 2003, 482-492.
153. Charging Process in Percolating Systems.
M. A. Vorotyntsev, K. Aoki, J. Heinze
Russ. J. Electrochem., 2003, vol. 39, 182-191.
Elektrokhimika, 2003, vol. 39, 203-213.
152. Interpretation of PITT Experiments for Various Li-intercalation Electrodes.
M. D. Levi, D. Aurbach, M. A. Vorotyntsev
Condensed Matter Physics, 2002, vol. 5, 1-34.
151. Impedance of Thin Films with Two Mobile Charge Carriers. Interfacial Exchange of Both Species with Adjacent Media. Effect of Double Layer Charging.
M. A. Vorotyntsev
Electrochimica Acta, 2002, vol. 47, 2071-2079.
150. Electrochemical Double Layers
A. A. Kornyshev, E. Spohr, M. A. Vorotyntsev
In: Encyclopedia of Electrochemistry, vol. 1: Thermodynamics and Electrified Interfaces / E. Gileadi, M. I. Urbakh, Eds., Wiley-VCH, New York, 2002, chapter 2.1, pp. 33-132.
149. Redox Properties of Titanocene-Pyrrole Derivative and Its Electropolymerization.
M. A. Vorotyntsev, M. Casalta, E. Pousson, L. Roullier, G. Boni, C. Moise
Electrochimica Acta, 2001, vol. 46, 4017-4033.
148. .Electrochemistry of Electroactive Polymer Films
P. J. Kulesza, M. A. Vorotyntsev
Electrochimica Acta, 2001, vol. 46, 3939-3941.
147. Charging Process in Electron Conducting Polymers: Dimerization Model.
M. A. Vorotyntsev, J. Heinze
Electrochimica Acta, 2001, vol. 46, 3309-3324.
146. Time-Difference Impedance Spectroscopy of Growing Films Containing a Single Mobile Charge Carrier, with Application to Surface Films on Li Electrodes.
M. A. Vorotyntsev, M. D. Levi, A. Schechter, D. Aurbach
J. Phys. Chem. B, 2001, vol. 105, 188-194.
145. Electron and Proton Conducting Polymers: Recent Developments and Prospects
G. Inzelt, M. Pineri, J. W. Schultze, M. A. Vorotyntsev
Electrochim. Acta, 2000, vol. 45, 2403-2423.
144. Electrochemical Impedance Spectroscopy of Thin Films with Two Mobile Charge Carriers: Effect of the Interfacial Charging
M. A. Vorotyntsev, J. P. Badiali, G. Inzelt
J. Electroanal. Chem., 1999, vol. 472, 7-19.

143. Transport Across an Electroactive-Polymer Film in Contact with Media Allowing Both Ionic and Electronic Interfacial Exchange
M. A. Vorotyntsev, C. Deslouis, M. M. Musiani, B. Tribollet, K. Aoki
Electrochimica Acta, 1999, vol. 44, 2105-2115.
142. Charging Process in Polypyrrole Films: Effect of Ion Association
M. A. Vorotyntsev, E. Vieil, J. Heinze
J. Electroanal. Chem., 1998, vol. 450, 121-141.
141. Influence of Ionic Size on the Mechanism of Electrochemical Doping of Polypyrrole Films Studied by Cyclic Voltammetry
M. D. Levi, C. Lopez, E. Vieil, M. A. Vorotyntsev
Electrochimica Acta, 1997, vol. 42, 757-769.
140. Equilibrium Properties of the System: Electrode Modified by an Electroactive Polymer Film / Electrolyte Solution
V. V. Malev, A. A. Rubashkin, M. A. Vorotyntsev
Russian Electrochemistry, 1997, vol. 33, 872-882 (945-955 in Russian).
139. Electrokinetic Instability of Solution in a Plane-Parallel Electrochemical Cell
E. K. Zholkovskij, M. A. Vorotyntsev, E. Staude
J. Colloid and Interface Sci., 1996, vol. 181, 28-33.
138. Potential Distribution across the Electroactive-Polymer Film between the Metal and Solution as a Function of the Film Charging Level
M. A. Vorotyntsev, A. A. Rubashkin, J. P. Badiali
Electrochimica Acta, 1996, vol. 41, 2313-2320.
137. Ion Exchange between the Polypyrrole Film and the Lithium Perchlorate PC Solution
M. A. Vorotyntsev, E. Vieil, J. Heinze
Electrochimica Acta, 1996, vol. 41, 1913-1920.
136. Multi-Component Diffusion Approach to the Transport across the Electroactive-Polymer Films with Two Mobile Charge Carriers
M. A. Vorotyntsev, J. P. Badiali, E. Vieil
Electrochimica Acta, 1996, vol. 41, 1375-1381.
135. Charging-Discharging Process of Polypyrrole Films in Solutions of Tetraphenylborate Anions
M. A. Vorotyntsev, E. Vieil, J. Heinze
In: *New Promising Electrochemical Systems for Rechargeable Batteries*, V. Z. Barsukov and F. Beck, Eds., Kluwer Academic Publishers, Dordrecht, 1996, pp.333-346.
134. Ionic Exchange of a Conducting-Polymer Film with the Solution during the Cyclic-Voltammetry Process
M. A. Vorotyntsev, E. Vieil, J. Heinze
Russian Electrochemistry, Memorial A N. Frumkin issue, 1995, vol.31, 1027-1035 (1112-1121 in Russian)
133. Comparison of the AC Impedance of Conducting Polymer Films Studied as Electrode-Supported and Free-Standing Membranes
C. Deslouis, M. M. Musiani, B. Tribollet, M. A. Vorotyntsev,
J. Electrochem. Society, 1995, vol.142, 1902-1908.
132. The Membrane Properties of Electroactive Polymer Films
K. Doblhofer, M. A. Vorotyntsev
Electroactive Polymer Electrochemistry, Part 1: Fundamentals /M. E. G. Lyons, Ed., Plenum Publishing Corporation, New York, 1994, pp.375-442.
131. On Interpretation of Optical-Beam Deflection Data at Excess of a Background Electrolyte
M. A. Vorotyntsev, C. Lopez, E. Vieil
J. Electroanal. Chem., 1994, vol. 368, 155-163.
130. Short-Range Electron-Ion Interaction Effects in Charging the Electroactive Polymer Films
M. A. Vorotyntsev, J. P. Badiali
Electrochimica Acta, 1994, vol.39, 289-306.
129. Modelling the Impedance Properties of Electrodes Coated with Electroactive Polymer Films
M. A. Vorotyntsev, L. I. Daikhin, M. D. Levi
J. Electroanal. Chem., 1994, vol. 364, 37-49.
128. MONOGRAPH: Electrostatics of Media with the Spatial Dispersion
M. A. Vorotyntsev, A. A. Kornyshev
Nauka Publ., Moscow (in Russian), 1993, 240 pages.

127. Mechanism of Cathodic Reactions at the Electron-Conducting Polymer Films: Electroreduction of Chloranyl and Tetracyanoquinodimethane at the Poly-3-Methylthiophene Coated Glassy Carbon Electrode
M. D. Levi, N. M. Alpatova, E. V. Ovsyannikova, M. A. Vorotyntsev
J. Electroanal. Chem., 1993, vol. 351, 271-284.
126. Theory of Equilibrium and Kinetic Phenomena in Electron-Conducting Polymers
M. A. Vorotyntsev
Synthetic Metals, 1993, vol. 57, 4556-4564
125. Distribution of the Interfacial Potential Drop at Penetration of Ionic Components of the Solution into the Surface Layer of a Finite Thickness with a Fixed Spatial Charge
M. A. Vorotyntsev, Yu. A. Ermakov, V. S. Markin, A. A. Rubashkin
Russ. J. Electrochem., 1993, vol. 29, 513-525.
Elektrokhimiya, 1993, vol. 29, 596-610.
124. Fluctuative Properties of Turbulent Mass Transfer at a Large-Scale Electrode
M. A. Vorotyntsev, E. F. Skurygin
Proceedings of the 3rd International Workshop on Electrodiffusion Diagnostics of Flows, Dourdan, France, p.149-160, 1993
123. Isotherms of Electrochemical Doping and Cyclic Voltammograms of Electroactive Polymer Films
M. A. Vorotyntsev, L. I. Daikhin, M. D. Levi
J. Electroanal. Chem., 1992, vol. 332, 213-235.
122. On the Analytical Properties of the Static Dielectric Function of Water
A. A. Kornyshev, D. A. Kossakowski, M. A. Vorotyntsev
In: Condensed Matter Physics Aspects of Electrochemistry / M. P. Tosi, A. A. Kornyshev, Eds., World Scientific Publ., Singapore-New Jersey-London-Hong Kong, 1991, pp. 92-109.
121. Theory of Specific Ionic Adsorption at a Non-Transitional Metal Surface
M. A. Vorotyntsev
In: Condensed Matter Physics Aspects of Electrochemistry / M. P. Tosi, A. A. Kornyshev, Eds., World Scientific Publ., Singapore-New Jersey-London-Hong Kong, 1991, pp. 229-248.
120. Turbulent Mass Transfer in Electrochemical Systems. Turbulence for Electrochemistry. Electrochemistry for Turbulence.
M. A. Vorotyntsev
In: Condensed Matter Physics Aspects of Electrochemistry / M. P. Tosi, A. A. Kornyshev, Eds., World Scientific Publ., Singapore-New Jersey-London-Hong Kong, 1991, pp. 509-518.
119. Diffusion-Convection Impedance at Small Electrodes
C. Deslouis, B. Tribollet, M. A. Vorotyntsev
J. Electrochem. Society, 1991, vol. 138, 2651-2657.
118. Phenomenological Description of Dark Redox Reactions at Electrodes Coated with Conducting Polymer Films. Part II. Mechanism of Tetracyanoquinodimethane and Iodine Electroreduction at Polythiophene
M. D. Levi, M. A. Vorotyntsev, A. M. Skundin, V. E. Kazarinov
J. Electroanal. Chem., 1991, vol. 319, 243-261.
117. Electron-Conducting Polymers: Equilibrium Characteristics and Electrode Kinetics
M. A. Vorotyntsev, M. D. Levi
In: Advances in Science & Technology. Electrochemistry / Yu. M. Polukarov, Ed., VINITI, Moscow, 1991, vol. 34, 154-220 (in Russian).
116. Electron-Conducting Polymers: Electrochemical Doping and Equilibrium Potential Distribution across the Metal / Polymer / Solution Interface
M. D. Levi, M. A. Vorotyntsev, V. E. Kazarinov, A. N. Frumkin
Synthetic Metals, 1991, vol. 43, 2923-2925.
115. Electric Field of Fractal Objects
A. A. Kornyshev, M. A. Vorotyntsev
Physica A, 1991, vol. 171, 98-119.
114. Electric Double Layer Structure in a Surface-Inactive Electrolyte Solution: Effect of the Stern Layer and Spatial Correlations of Solvent Polarization
M. A. Vorotyntsev, P. V. Mityushev
Electrochimica Acta, 1991, vol. 36, 401-409.
113. Space-Time Fluctuations of a Passive Impurity Concentration within the Diffusion Boundary Layer in the Turbulent Flow of a Fluid

E. F. Skurygin, M. A. Vorotyntsev, S. A. Martemyanov
J. Electroanal. Chem., 1989, vol. 259, 285-293.

112. Phenomenological Description of Dark Redox Reactions at Electrodes Covered with Conducting Polymer Films. Part 1.
Mechanism and Kinetics of Ferrocene Oxidation at Polythiophene
V. E. Kazarinov, M. D. Levi, A. M. Skundin, M. A. Vorotyntsev
J. Electroanal. Chem., 1989, vol. 271, 193-211.

111. On the Frequency Characteristics of the Turbulent Diffusion Layer of a Microelectrode
E. F. Skurygin, S. A. Martemyanov, M. A. Vorotyntsev, B. M. Grafov
Soviet Electrochemistry, 1989, vol. 25, 772-774.

110. Current Density Pulsations within the Turbulent Diffusion Boundary Layer of a Constant Thickness
E. F. Skurygin, M. A. Vorotyntsev, S. A. Martemyanov
Soviet Electrochemistry, 1989, vol. 25, 668-673.

109. Pulsations of Impurity Concentration within the Diffusion Layer of a Liquid at the Turbulent Regime
E. F. Skurygin, M. A. Vorotyntsev, S. A. Martemyanov
Soviet Electrochemistry, 1989, vol. 25, 663-667.

108. Ionic Adsorption Isotherms at an Uniform Dielectric / Electrolyte Solution Interface
M. A. Vorotyntsev, S. N. Ivanov
Soviet Electrochemistry, 1989, vol. 25, 554-557.

107. Image Potential and the Interaction of an Ion with a Charged Group at the Dielectric - Electrolyte Solution Interface
M. A. Vorotyntsev, S. N. Ivanov
Soviet Electrochemistry, 1989, vol. 25, 550-554.

106. Electrostatic Interactions of Charged and Dipole Molecules at a Boundary of a Metal with a Dielectric
M. A. Vorotyntsev
Soviet J. Surface: Physics, Chemistry, Mechanics, 1989, No 2, 39-46.

105. Ionic Concentration Distribution within the Diffusion Layer at the Current Passing through an Incompletely Dissociated Electrolyte Solution
M. A. Vorotyntsev
Soviet Electrochemistry, 1988, vol. 24, 1239-1243.

104. Potential Drop at a Dielectric / Electrolyte Solution Interface
M. A. Vorotyntsev, S. N. Ivanov
Soviet Electrochemistry, 1988, vol. 24, 805-807.

103. Specific Ionic Adsorption from an Electrolyte Solution
M. A. Vorotyntsev
In: Advances in Science & Technology. Electrochemistry / Yu. M. Polukarov, Ed., VINITI, Moscow, 1988, vol. 26, 3-93 (in Russian).

102. Solvation and Interionic Interactions at the Metal-Electrolyte Solution Interface
M. A. Vorotyntsev
In: The Chemical Physics of Solvation. Part C: Solvation Phenomena in Specific Physical, Chemical and Biological Systems / R. R. Dogonadze, E. Kalman, A. A. Kornyshev, J. Ulstrup, Eds., Elsevier, Amsterdam, 1988, 401-432.

101. Solvent Effects in Charge Transfer Processes
A. M. Kuznetsov, J. Ulstrup, M. A. Vorotyntsev
In: The Chemical Physics of Solvation. Part C: Solvation Phenomena in Specific Physical, Chemical and Biological Systems / R. R. Dogonadze, E. Kalman, A. A. Kornyshev, J. Ulstrup, Eds., Elsevier, Amsterdam, 1988, 163-274.

100. Ultraviolet and Visible Light Absorption of Solute Molecules in Condensed Media
E. M. Itsikovich, J. Ulstrup, M. A. Vorotyntsev
In: The Chemical Physics of Solvation. Part B: Spectroscopy of Solvation / R. R. Dogonadze, E. Kalman, A. A. Kornyshev, J. Ulstrup, Eds., Elsevier, Amsterdam, 1987, 223-310.

99. Behavior of the Mixed Correlator of Pulsations of the Fluid Velocity and the Impurity Concentration at Large Values of the Time Variable within the Turbulent Regime of the Flow
E. F. Skurygin, M. A. Vorotyntsev
Soviet Electrochemistry, 1987, vol. 23, 1001-1002.

98. Interaction between Charges at a Dielectric / Electrolyte Solution Interface. Ions inside the Compact Layer
M. A. Vorotyntsev, S. N. Ivanov
Soviet Electrochemistry, 1987, vol. 23, 774-779.

97. Interaction between Charges at a Dielectric / Electrolyte Solution Interface. Ions in the Dielectric Medium
M. A. Vorotyntsev, S. N. Ivanov
Soviet Electrochemistry, 1987, vol. 23, 215-221.
96. Modern State of Double Layer Study of Solid Metals
M. A. Vorotyntsev
In: Modern Aspects of Electrochemistry / J. O' M. Bockris, B. E. Conway, R. E. White, Eds., Plenum Press, New-York, 1986, vol. 17, 131-222.
95. Statistical Mechanics of an Ionic Ensemble Adsorbed at the Metal - Dielectric Interface
M. A. Vorotyntsev, S. N. Ivanov
Sov. Phys. JETP, 1985, vol. 61, 1028-1032.
J. Experim. Theor. Phys. - Sov. Physics, 1985, vol. 88, 1729-1737.
94. Application of a New Theory for Interpretation of the Data for the Specific Adsorption of the Chloride Anion at the Mercury Electrode from Decinormal Mixed Electrolyte Solutions
A. V. Shcheglov, M. A. Vorotyntsev, B. B. Damaskin, R. V. Ivanova
Soviet Electrochemistry, 1985, vol.21, 1061-1063.
Elektrokhimiya, 1985, vol.21, 1126-1129.
93. Iodide Ion Adsorption at Bismuth from Aqueous Mixed-Electrolyte Solutions. Interpretation of Capacitance Data with the Use of a New Theory
M. A. Vorotyntsev
Soviet Electrochemistry, 1985, vol.21, 470-473.
Elektrokhimiya, 1985, vol.21, 513-516.
92. A New Approach to Determine the Parameters of Ionic Adsorption with the Use of the Experimental Capacitance Data
M. A. Vorotyntsev
Soviet Electrochemistry, 1985, vol.21, 323-325.
Elektrokhimiya, 1985, vol.21, 354-357.
91. Attraction Constant of the Ionic Adsorption Isotherm at an Uniform Metal-Electrolyte Solution Interface
M. A. Vorotyntsev
Soviet Electrochemistry, 1985, vol.21, 257-259.
Elektrokhimiya, 1985, vol.21, 278-281.
90. Temporal Correlation of Current Pulsations at One or Several Electrodes: a Technique to Study Hydrodynamic Fluctuation Characteristics of a Turbulent Flow
M. A. Vorotyntsev, S. A. Martemyanov, B. M. Grafov
J. Electroanal. Chem., 1984, vol. 179, 1-23.
89. Electric Double-Layer Structure in Surface-Inactive Electrolyte Solutions
M. A. Vorotyntsev
In: Advances in Science & Technology. Electrochemistry / Yu. M. Polukarov, Ed., VINITI, Moscow, 1984, vol. 21, 3-77 (in Russian).
88. Models to Describe Collective Properties of the Metal / Solvent Interface in Electric Double-Layer Theory
M. A. Vorotyntsev, A. A. Kornyshev
Soviet Electrochemistry, 1984, vol. 20, 1-45.
Elektrokhimiya, 1984, vol. 20, 3-47.
87. Field-Induced Interfacial Relaxation and Electrical Properties of the Compact Layer
A. A. Kornyshev, M. A. Vorotyntsev
J. Electroanal. Chem., 1984, vol. 167, 1-14.
86. Image Forces at the Metal/Electrolyte Solution Interface: Their Dependence on Electrode Charge and Electrolyte Concentration
M. A. Vorotyntsev, K. Holub
Soviet Electrochemistry, 1984, vol.20, 243-246
In Russian: Elektrokhimiya, 1984, vol.20, 256-259.
85. Electrostatic Interaction between Adsorbed Ions and Capacitance Characteristics of the Electric Double Layer at the Electrode-Electrolyte Solution Interface
M. A. Vorotyntsev, V. Yu. Izotov, A. A. Kornyshev
Soviet J. Surface: Physics, Chemistry, Mechanics, 1983, No.7, 97-110.
84. Ionic Adsorption Isotherms at an Uniform Metal-Electrolyte Solution Interface
M. A. Vorotyntsev, V. Yu. Izotov
Soviet Electrochemistry, 1983, vol.19, 831-833.

83. Capacitance of the Metal-Electrolyte Solution Interface. Effects of the Metal Electronic Density Penetration into the Solvent
M. A. Vorotyntsev, V. Yu. Izotov, A. A. Kornyshev, W. Schmickler
Soviet Electrochemistry, 1983, vol.19, №. 3, 295-303 (in Russian), 260-267 (in English)
82. Differential Capacitance of the Electric Double Layer in Dilute Solutions of Surface-Inactive Electrolytes and upon the Specific Adsorption of Ions. Nonlocal and Nonlinear Effects
M. A. Vorotyntsev, V. Yu. Izotov, A. A. Kornyshev
Soviet Electrochemistry, 1983, vol.19, 364-368.
In Russian: Elektrokhimiya, 1983, vol.19, 407-411.
81. Chemisorption Theory for Charged Species at Electrodes in the Model of an Energetically Homogeneous Surface
M. A. Vorotyntsev
J. Research Inst. Catalysis. Hokkaido Univ. , 1982, vol. 30, 167-177.
80. Nonlocal Electrostatic Approach to the Problem of a Double Layer at a Metal / Electrolyte Interface
A. A. Kornyshev, W. Schmickler, M. A. Vorotyntsev
Physical Review B, 1982, vol. 25, 5244-5256.
79. Non-Local Screening Effects in the Long-Range Interionic Interaction in a Polar Solvent
A. A. Kornyshev, M. A. Vorotyntsev, H. Nielsen, J. Ulstrup
J. Chem. Society Faraday Trans.II, 1982, vol.78, 217-241.
78. Non-Local Dielectric Response of the Electrode/Solvent Interface in the Double Layer Problem
A. A. Kornyshev, M. A. Vorotyntsev
Canad. J. Chem., 1981, vol.59, 2031-2042.
77. Conductivity and Space Charge Phenomena in Solid Electrolytes with One Mobile Charge Carrier Species
A. A. Kornyshev, M. A. Vorotyntsev
Electrochimica Acta, 1981, vol. 26, 303-323.
76. Capacitance Characteristics of a Polycrystalline Electrode in Contact with a Surface-Inactive Electrolyte Solution. Influence of the Size of Surface Crystal Faces
M. A. Vorotyntsev
J. Electroanal. Chem. , 1981, vol. 123, 379-387.
75. Analysis of the Capacitance of an Electrode Composed of Uniform Fragments Having Different Electrochemical Characteristics (Approximation of a Linear Screening within the Diffuse Layer)
M. A. Vorotyntsev
Soviet Electrochemistry, 1981, vol.17, 835-842.
Elektrokhimiya, 1981, vol.17, 1018-1027.
74. The Potential Distribution within the Electric Double Layer at a Contact of Two Plane Semi-Infinite Electrodes
M. A. Vorotyntsev
Soviet Electrochemistry, 1981, vol.17, 472-479.
Elektrokhimiya, 1981, vol.17, 576-584.
73. On Capacitance Characteristics of Polycrystalline Electrodes
M. A. Vorotyntsev
Soviet Electrochemistry, 1981, vol.17, 162-167.
Elektrokhimiya, 1981, vol.17, 197-204.
72. The Effect of Spatial Dispersion of the Dielectric Permittivity on the Capacitance of Thin Insulating Films: Non-Linear Dependence of the Inverse Capacitance on Film Thickness
A. A. Kornyshev, M. A. Vorotyntsev, J. Ulstrup
Thin Solid Films, 1981, vol. 75, 105-118.
71. On Mechanisms of the Charge Separation in a Photosynthetic Reaction Center
M. A. Vorotyntsev, E. M. Itsikovich
Biophysics, 1980, vol.25, 787-792.
70. Closed Equation of Turbulent Heat and Mass Transfer
M. A. Vorotyntsev, S. A. Martemyanov, B. M. Grafov
Sov. Physics JETP, 1980, vol. 52(5), 909-914
J. Experim. Theor. Phys. - Sov. Physics, 1980, vol. 79, 1797-1808.
69. Primary Photosynthetic Processes: the Problem of Rapid Irreversible Redistribution of Electronic Energy
M. A. Vorotyntsev, E. M. Itsikovich
J. Theor. Biology, 1980, vol. 86, 223-236.

68. Nonlocal Electrostatic Approach to the Double Layer and Adsorption at the Electrode / Electrolyte Interface
A. A. Kornyshev, M. A. Vorotyntsev
Surface Sci., 1980, vol. 101, 23-48.
67. Interaction between Adsorbed Ions. Effects of the Helmholtz Layer Properties
M. A. Vorotyntsev
Soviet Electrochemistry, 1980, vol.16, 1112-1119.
Elektrokhimiya, 1980, vol.16, 1350-1358.
66. On the Turbulent Heat and Mass Transport at a Plane Wall for Moderate and Low Values of the Prandtl-Schmidt Number
S. A. Martemyanov, M. A. Vorotyntsev, B. M. Grafov
Soviet Electrochemistry, 1980, vol.16, 919-923.
65. Correlation of the Current Densities in Different Point of the Electrode Surface. Correlation Relations between the Current Fluctuations of Different Electrodes
M. A. Vorotyntsev, S. A. Martemyanov, B. M. Grafov
Soviet Electrochemistry, 1980, vol.16, 915-918.
64. Mixed Correlators of the Hydrodynamic Velocity and the Diffusing Impurity Concentration Fluctuations at the Turbulent Flow of Fluids
M. A. Vorotyntsev, S. A. Martemyanov, B. M. Grafov
Soviet Electrochemistry, 1980, vol.16, 853-856.
63. The Turbulent Mass Transport within the Entrance Region near a Plane Electrode at High Values of the Prandtl-Schmidt Number
S. A. Martemyanov, M. A. Vorotyntsev, B. M. Grafov
Soviet Electrochemistry, 1980, vol.16, 856-860.
62. On the Development of the Diffusional Boundary Layer along an Electrode at the Turbulent Regime of the Flow
S. A. Martemyanov, M. A. Vorotyntsev, B. M. Grafov
Soviet Electrochemistry, 1980, vol.16, 710-713.
61. Mass Transport within the Turbulent Boundary Layer of a Fluid
S. A. Martemyanov, M. A. Vorotyntsev, B. M. Grafov
Proc. Moscow State Univ., Math. & Mech., 1980, 67-70.
60. Electrostatic Interaction on a Metal-Insulator Interface
M. A. Vorotyntsev, A. A. Kornyshev
Sov. Phys JETP, 1980, vol. 51, 509-514.
In Russian: J. Experim. Theor. Phys., 1980, vol. 78, 1008-1019
59. Possible Mechanisms of "Controlling" Ionic Interaction at the Electrode-Solution Interface
M. A. Vorotyntsev, A. A. Kornyshev, A. I. Rubinshtein
Soviet Electrochemistry, 1980, vol.16, 65-67.
In Russian: Elektrokhimiya, 1980, vol.16, 73-76
58. Convective Diffusion at the Closely Located Planar Electrodes
S. A. Martemyanov, M. A. Vorotyntsev, B. M. Grafov
Soviet Electrochemistry, 1979, vol.15, 1256-1259.
57. Recent Studies of the Electric Double-Layer Structure and the Mechanism of Electrode Processes
M. A. Vorotyntsev
In: Advances in Science & Technology. Electrochemistry / Yu. M. Polukarov, Ed., VINITI, Moscow, 1979, vol. 14, 57-119 (in Russian).
56. Physical Significance of an Effective Dielectric Constant That Depends on the Distance from the Electrode
M. A. Vorotyntsev, A. A. Kornyshev
Soviet Electrochemistry, 1979, vol.15, 560-564.
In Russian: Elektrokhimiya, 1979, vol.15, 660-664.
55. On the Double-Layer Effects in the Hydrogen-Ion Discharge
M. A. Vorotyntsev, V. S. Krylov, L. I. Krishtalik
Soviet Electrochemistry, 1979, vol.15, 636-638.
Elektrokhimiya, 1979, vol.15, 738-741.
54. Electric Interaction between the Solute Ions at the Electrode Surface. Effects of the Ion Field Penetration into the Electrode
M. A. Vorotyntsev, A. A. Kornyshev, A. I. Rubinshtein
Proc. Academy of Sciences of the USSR, 1979, vol.248, 1321-1324.
53. Functional Form of the Turbulent Diffusion Coefficient in the Layer next to the Electrode

S. A. Martem'yanov, M. A. Vorotyntsev, B. M. Grafov
Soviet Electrochemistry, 1979, vol.15, 790-795.

52. Derivation of a Nonlocal Mass Transfer Equation in the Turbulent Diffusion Layer
S. A. Martem'yanov, M. A. Vorotyntsev, B. M. Grafov
Soviet Electrochemistry, 1979, vol.15, 787-790.

51. On the Concentration Profile in the Laminar Flow at a Solid Wall with a Stepwise Change of the Boundary Condition
M. A. Vorotyntsev, B. M. Grafov, S. A. Martemyanov
Proc. Moscow State Univ., Math. & Mech., 1979, 88-92.

50. Model Nonlocal Electrostatics: 3. Cylindrical Interface
A. A. Kornyshev, M. A. Vorotyntsev
J. Phys. C: Solid State Physics, 1979, vol.12, 4939-4946.

49. Analysis of the Discreteness-of-Charge Effects within the Diffuse Layer for the Simplest Model of the Helmholtz Layer
M. A. Vorotyntsev, E. M. Itsikovich
Soviet Electrochemistry, 1979, vol.15, 114-117.
Elektrokhimiya, 1979, vol.15, 136-139.

48. Ionic Distribution in the Diffuse Part of the Double Layer. Discreteness-of-Charge Effects
M. A. Vorotyntsev
Soviet Electrochemistry, 1979, vol.15, 132-136.

47. Effects of the Intramolecular Vibrations in the Shape of Electronic Spectra
M. A. Vorotyntsev, E. M. Itsikovich
Optics and Spectroscopy, 1978, vol.45, 240-246.

46. Analytic Expression for the Potential Energy of a Test Charge in a Dielectric Bounded by Solid State Plasma
A. A. Kornyshev, A. I. Rubinshtein, M. A. Vorotyntsev
J. Phys. C: Solid State Physics, 1978, vol.11, L691-694.

45. Model Nonlocal Electrostatics: 2. Spherical Interface
M. A. Vorotyntsev
J. Phys. C: Solid State Physics, 1978, vol.11, 3323-3331.

44. Model Nonlocal Electrostatics: 1.
A. A. Kornyshev, A. I. Rubinshtein, M. A. Vorotyntsev
J. Phys. C: Solid State Physics, 1978, vol.11, 3307-3322.

43. Discreteness-of-Charge Effects in an Inhomogeneous Dielectrics
M. A. Vorotyntsev
Soviet Electrochemistry, 1978, vol.14, 783-786.
Elektrokhimiya, 1978, vol.14, 913-917.

42. Discreteness-of-Charge Effects and the Ionic Distribution near an Interface
M. A. Vorotyntsev
Soviet Electrochemistry, 1978, vol.14, 781-783.
Elektrokhimiya, 1978, vol.14, 911-913.

41. An Interpolation Formula for the Energy of a Charge near the Interface of Two Dielectrics with Nonlocal Properties
M. A. Vorotyntsev, A. A. Kornyshev, A. I. Rubinshtein
Soviet Electrochemistry, 1978, vol.14, 811-813.

40. Aspects of Conductivity and Space Charge Phenomena in Solid Electrolytes
A. A. Kornyshev, M. A. Vorotyntsev
Electrochim. Acta, 1978, vol. 23, 267-270.

39. An Unipolar Model of the Solid Electrolyte Conductivity
M. A. Vorotyntsev, Yu. Ya. Gurevich, A. A. Kornyshev
Soviet Electrochemistry, 1978, vol.14, 3-8.

38. Potential Energy of an Ion near the Electrode. Effects of the Ion Field Penetration into the Electrode
M. A. Vorotyntsev, A. A. Kornyshev, A. I. Rubinshtein
Soviet Electrochemistry, 1977, vol.13, 1767-1768.

37. Kinetics of Low-Temperature Reactions at a Weak Coupling between the Reagent and the Medium
M. A. Vorotyntsev, R. R. Dogonadze, M. G. Zaqaraia, A. M. Kuznetsov
Trans. Academy of Sciences of the USSR, Chemistry, 1977, 1424-1426.

36. Image Potential near a Dielectric / Plasma-Like Medium Interface
A. A. Kornyshev, A. I. Rubinshtein, M. A. Vorotyntsev
Physica Status Solidi (b), 1977, vol. 84, 125-132.
35. On the Ratio of the Ortho- and Para-Species at the Electrochemical Hydrogen Evolution
M. A. Vorotyntsev, G. M. Chonishvili
Soviet Electrochemistry, 1977, vol.13, 1088.
34. To the Theory of Voltammetric Characteristics of Electrochemical Cells with a Solid Electrolyte
M. A. Vorotyntsev, A. A. Kornyshev
Soviet Electrochemistry, 1977, vol.13, 550-553.
33. Direct Current Passage through a Cell with the Unipolar Ion Conductivity
M. A. Vorotyntsev, A. A. Kornyshev
Soviet Electrochemistry, 1977, vol.13, 547-550.
32. The Theory of Atomic-Molecular Transformations in a Condense Phase at Low Temperatures
R. R. Dogonadze, A. M. Kuznetsov, M. A. Vorotyntsev, M. G. Zaqaraia
J. Electroanal. Chem., 1977, vol. 75, 315-337.
31. Electric Current across the Metal-Solid Electrolyte Interface. 2. Low Amplitude Alternating Current
E. M. Itsikovich, A. A. Kornyshev, M. A. Vorotyntsev
Physica Status Solidi (a), 1977, vol.39, 573-582.
30. Electric Current across the Metal-Solid Electrolyte Interface. 1. Direct Current, Current-Voltage Characteristic
E. M. Itsikovich, A. A. Kornyshev, M. A. Vorotyntsev
Physica Status Solidi (a), 1977, vol.39, 229-238.
29. An Approach to the Conductivity and the Space Charge Distribution in a Solid Electrolyte
M. A. Vorotyntsev, A. A. Kornyshev
Proc. Academy of Sciences of the USSR, 1976, vol.230, 631-634.
28. Electrostatic Models in the Theory of Solutions
Yu. I. Kharkats, A. A. Kornyshev, M. A. Vorotyntsev
J. Chem. Society Faraday Trans. II, 1976, vol. 72, 361-371.
27. Theory of Highly Exothermic Electron-Transfer Processes
R. R. Dogonadze, A. M. Kuznetsov, M. A. Vorotyntsev
Z. Physik. Chemie Neue Folge, 1976, Bd. 100, 1-16.
26. Analysis of the Tunneling Factor for the Proton Transfer Process
M. A. Vorotyntsev, G. M. Chonishvili
Proc. Moscow State Univ., Physics, 1976, 98-102.
25. To the Theory of Atom-Molecular Transformations in a Condensed Medium at Low Temperatures
M. A. Vorotyntsev, R. R. Dogonadze, M. G. Zaqaraia, A. M. Kuznetsov
Proc. Academy of Sciences of the USSR, 1976, vol.226, 105-108.
24. Theory of Light Absorption by Ions in Solutions
R. R. Dogonadze, E. M. Itsikovich, A. M. Kuznetsov, M. A. Vorotyntsev
J. Phys. Chem., 1975, vol. 79, 2827-2834.
23. Analysis of the Tunneling Factor for the Reaction of Electrochemical Hydrogen Desorption
M. A. Vorotyntsev, G. M. Chonishvili
Proc. Academy of Sciences of the USSR, 1975, vol.225, 116-119.
22. To the Theory of Chemical Reactions at Low Temperatures
M. A. Vorotyntsev, R. R. Dogonadze, M. G. Zaqaraia, A. M. Kuznetsov
Proc. Academy of Sciences of the USSR, 1975, vol.223, 1168-1171.
21. Application of the Density Matrix Method in the Quantum Mechanical Calculation of the Bridge-Assisted Electron Transfer Probability in Polar Media
Yu. I. Kharkats, A. K. Madumarov, M. A. Vorotyntsev
J. Chem. Society Faraday Trans.II, 1974, vol.70, 1578-1590.
20. Kinetics of Electrochemical Processes. Quantum-Mechanical Theory. The Role of Interrelations of the Different Atom Motions in Reactions with Participation of Many-Atomic Systems
M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov
Soviet Electrochemistry, 1974, vol.10, 1023-1030.

19. Kinetics of Electrochemical Processes. Quantum-Mechanical Theory. The Transition Probability for Non-Adiabatic Reactions in a Harmonic Approximation ("Mixing" of Classical and Quantum Degrees of Freedom)
M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov
Soviet Electrochemistry, 1974, vol.10, 867-875.
18. Kinetics of Electrochemical Processes. Quantum-Mechanical Theory. The Transition Probability for Non-Adiabatic Reactions in a Harmonic Approximation (General Relations)
M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov
Soviet Electrochemistry, 1974, vol.10, 687-697.
17. To the Theory of Proton Transfer Processes in a Polar Medium
M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov
Proc. Academy of Sciences of the USSR, 1973, vol.209, 1135-1138.
16. To the Theory of Adiabatic and Non-Adiabatic Transitions. The Average Transition Probability
M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov
Proc. Moscow State Univ., Physics, 1973, vol.14, 352-356.
15. To the Theory of Adiabatic and Non-Adiabatic Transitions. The Transition Probability
M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov
Proc. Moscow State Univ., Physics, 1973, vol.14, 224-228.
14. On the Theory of Nonradiative Transitions in Polar Media. 2. Processes with "Mixing" of Quantum and Classical Degrees of Freedom
R. R. Dogonadze, A. M. Kuznetsov, M. A. Vorotyntsev
Physica Status Solidi (b), 1972, vol. 54, 425-433.
13. On the Theory of Nonradiative Transitions in Polar Media. 1. Processes without "Mixing" of Quantum and Classical Degrees of Freedom
R. R. Dogonadze, A. M. Kuznetsov, M. A. Vorotyntsev
Physica Status Solidi (b), 1972, vol. 54, 125-134.
12. Kinetics of Adiabatic and Non-Adiabatic Reactions at the Metal and Semiconductor Electrodes
R. R. Dogonadze, A. M. Kuznetsov, M. A. Vorotyntsev
Croatica Chimica Acta, 1972, vol. 44, 257-273.
11. Non-Adiabatic Transition Probabilities for a Set of Three Terms
M. A. Vorotyntsev, A. A. Granovsky, R. R. Dogonadze, A. M. Kuznetsov
Proc. Moscow State Univ., Physics, 1972, vol.13, 59-65.
10. Application of the Quasi-Classical Approximation to Analyze Certain Kinetic Problems in Polar Media
M. A. Vorotyntsev, V. M. Kats, A. M. Kuznetsov
Proc. Moscow State Univ., Physics, 1971, vol.12, 411-415.
9. Study of the Chemical Reaction Kinetics in Polar Medium for Non-Harmonic Molecular Potentials
M. A. Vorotyntsev, V. M. Kats, A. M. Kuznetsov
Soviet Electrochemistry, 1971, vol.7, 597.
8. Kinetics of Electrochemical Processes. Phenomenological Theory. General Qualitative Properties of Polarization Curves
R. R. Dogonadze, A. M. Kuznetsov, M. A. Vorotyntsev
Soviet Electrochemistry, 1971, vol.7, 306-312.
7. Quantum Theory of Kinetics in Electrochemical Processes
V. G. Levich, R. R. Dogonadze, M. A. Vorotyntsev, E. D. German, A. M. Kuznetsov, Yu. I. Kharkats
Soviet Electrochemistry, 1970, vol.6, 562-568 (549-555 in English).
6. Application of a Harmonic Approximation to Analyze Certain Kinetic Problems
M. A. Vorotyntsev, A. M. Kuznetsov
Proc. Moscow State Univ., Math. & Mech., 1970, vol.11, 146-154.
5. On the Theory of Adiabatic and Nonadiabatic Electrochemical Reactions
R. R. Dogonadze, A. M. Kuznetsov, M. A. Vorotyntsev
J. Electroanal. Chem., 1970, vol.25, A17-19.
4. Certain Properties of Polarization Curves
M. A. Vorotyntsev, A. M. Kuznetsov
Soviet Electrochemistry, 1970, vol.6, 261-265 (251-254 in English).
3. The Theory of Electrochemical Reactions of Several Electrons Transfer

M. A. Vorotyntsev, A. M. Kuznetsov

Soviet Electrochemistry, 1970, vol. 2, 208-213 (196-199 in English).

2. Probability of Charge Transfer in a Polar Medium with a Continuous Vibration Spectrum

M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov

Proc. Academy of Sciences of the USSR/DOKLADY AKADEMII NAUK SSSR, 1970, vol. 195, 1135-1138.

1. Nonadiabatic Transitions in Systems with Several Potential-Energy Curves

M. A. Vorotyntsev, R. R. Dogonadze, A. M. Kuznetsov

Soviet Physics - Solid State, 1970, vol. 12, 1605-1613 (1273-1280 in English).