

Mikhail Vagin

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Thermoelectric Properties of Solution-Processed n-Doped Ladder-Type Conducting Polymers. <i>Advanced Materials</i> , 2016, 28, 10764-10771.	11.1	245
2	Complementary Logic Circuits Based on High-Performance n-Type Organic Electrochemical Transistors. <i>Advanced Materials</i> , 2018, 30, 1704916.	11.1	206
3	Cholesterol Self-Powered Biosensor. <i>Analytical Chemistry</i> , 2014, 86, 9540-9547.	3.2	149
4	Relationship between Lactate Concentrations in Active Muscle Sweat and Whole Blood. <i>Bulletin of Experimental Biology and Medicine</i> , 2010, 150, 83-85.	0.3	130
5	An ultrasensitive molecularly-imprinted human cardiac troponin sensor. <i>Biosensors and Bioelectronics</i> , 2013, 50, 492-498.	5.3	113
6	Oxygen-induced doping on reduced PEDOT. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4404-4412.	5.2	97
7	Creatinine and urea biosensors based on a novel ammonium ion-selective copper-polyaniline nano-composite. <i>Biosensors and Bioelectronics</i> , 2016, 77, 505-511.	5.3	94
8	Electrocatalytic Currents from Single Enzyme Molecules. <i>Journal of the American Chemical Society</i> , 2016, 138, 2504-2507.	6.6	92
9	Conjugated Polyelectrolyte Blends for Electrochromic and Electrochemical Transistor Devices. <i>Chemistry of Materials</i> , 2015, 27, 6385-6393.	3.2	83
10	MoS ₂ @NiO Composite Nanostructures: An Advanced Nonprecious Catalyst for Hydrogen Evolution Reaction in Alkaline Media. <i>Advanced Functional Materials</i> , 2019, 29, 1807562.	7.8	83
11	Sol-Gel Immobilization of Lactate Oxidase from Organic Solvent: Toward the Advanced Lactate Biosensor. <i>Analytical Chemistry</i> , 2010, 82, 1601-1604.	3.2	72
12	Electrocatalytic Production of Hydrogen Peroxide with Poly(3,4-ethylenedioxythiophene) Electrodes. <i>Advanced Sustainable Systems</i> , 2019, 3, 1800110.	2.7	69
13	Can Hybrid Na-Air Batteries Outperform Nonaqueous Na ₂ O Batteries?. <i>Advanced Science</i> , 2020, 7, 1902866.	5.6	68
14	Advanced Electrocatalysts for Hydrogen Evolution Reaction Based on Core-Shell MoS ₂ /TiO ₂ Nanostructures in Acidic and Alkaline Media. <i>ACS Applied Energy Materials</i> , 2019, 2, 2053-2062.	2.5	67
15	Bulk electronic transport impacts on electron transfer at conducting polymer electrode-electrolyte interfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 11899-11904.	3.3	61
16	Transition metal ion-substituted polyoxometalates entrapped in polypyrrole as an electrochemical sensor for hydrogen peroxide. <i>Analyst</i> , 2012, 137, 624-630.	1.7	50
17	Decorating vertically aligned MoS ₂ nanoflakes with silver nanoparticles for inducing a bifunctional electrocatalyst towards oxygen evolution and oxygen reduction reaction. <i>Nano Energy</i> , 2021, 81, 105664.	8.2	46
18	Poly(3,4-ethylenedioxythiophene)-tosylate (PEDOT-Tos) electrodes in thermogalvanic cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19619-19625.	5.2	44

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19	Electrochemical investigations of cytochrome P450. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2011, 1814, 94-101.	1.1	42
20	Spontaneous and facilitated micelles formation at liquid liquid interface: towards amperometric detection of redox inactive proteins. <i>Electrochemistry Communications</i> , 2003, 5, 329-333.	2.3	40
21	Electroactive biomimetic collagen-silver nanowire composite scaffolds. <i>Nanoscale</i> , 2016, 8, 14146-14155.	2.8	40
22	Electroactivity of redox-inactive proteins at liquid liquid interface. <i>Journal of Electroanalytical Chemistry</i> , 2005, 584, 110-116.	1.9	36
23	Total phenol analysis of weakly supported water using a laccase-based microband biosensor. <i>Analytica Chimica Acta</i> , 2016, 907, 45-53.	2.6	35
24	Scalable Asymmetric Supercapacitors Based on Hybrid Organic/Biopolymer Electrodes. <i>Advanced Sustainable Systems</i> , 2017, 1, 1700054.	2.7	35
25	Organic heterojunction photocathodes for optimized photoelectrochemical hydrogen peroxide production. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24709-24716.	5.2	35
26	Activation of laccase bioelectrocatalysis of O ₂ reduction to H ₂ O by carbon nanoparticles. <i>Journal of Electroanalytical Chemistry</i> , 2012, 667, 11-18.	1.9	34
27	A 1.76V hybrid Zn-O ₂ biofuel cell with a fungal laccase-carbon cloth biocathode. <i>Electrochimica Acta</i> , 2012, 62, 218-226.	2.6	33
28	Molecular Oxygen Activation at a Conducting Polymer: Electrochemical Oxygen Reduction Reaction at PEDOT Revisited, a Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13263-13272.	1.5	32
29	Corrosion protection of steel by electropolymerized lignins. <i>Electrochemistry Communications</i> , 2006, 8, 60-64.	2.3	31
30	Modulating molecular aggregation by facile heteroatom substitution of diketopyrrolopyrrole based small molecules for efficient organic solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 24349-24357.	5.2	31
31	Redox Switching of Polyoxometalate-Methylene Blue-Based Layer-by-Layer Films. <i>Langmuir</i> , 2012, 28, 5480-5488.	1.6	29
32	Label-Free Detection of DNA Hybridization at a Liquid Liquid Interface. <i>Analytical Chemistry</i> , 2008, 80, 1336-1340.	3.2	28
33	Negatively Doped Conducting Polymers for Oxygen Reduction Reaction. <i>Advanced Energy Materials</i> , 2021, 11, 2002664.	10.2	28
34	An efficient bifunctional electrocatalyst based on a nickel iron layered double hydroxide functionalized Co ₃ O ₄ core shell structure in alkaline media. <i>Catalysis Science and Technology</i> , 2019, 9, 2879-2887.	2.1	27
35	Surfactant bilayers for the direct electrochemical detection of affinity interactions. <i>Bioelectrochemistry</i> , 2002, 56, 91-93.	2.4	25
36	Pure Nanoscale Morphology Effect Enhancing the Energy Storage Characteristics of Processable Hierarchical Polypyrrole. <i>Langmuir</i> , 2015, 31, 11904-11913.	1.6	24

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37	Epitaxial Graphene Sensors Combined with 3D-Printed Microfluidic Chip for Heavy Metals Detection. <i>Sensors</i> , 2019, 19, 2393.	2.1	24
38	Electrochemical hydrogen production on a metal-free polymer. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3387-3398.	2.5	24
39	Fast switching polymeric electrochromics with facile processed water dispersed nanoparticles. <i>Nano Energy</i> , 2018, 47, 123-129.	8.2	23
40	Electrochemical transducers based on surfactant bilayers for the direct detection of affinity interactions. <i>Biosensors and Bioelectronics</i> , 2003, 18, 1031-1037.	5.3	22
41	Redox, surface and electrocatalytic properties of layer-by-layer films based upon Fe(III)-substituted crown polyoxometalate [P8W48O184Fe16(OH)28(H2O)4]20-. <i>Electrochimica Acta</i> , 2014, 134, 450-458.	2.6	22
42	Enhancement of Nitrite and Nitrate Electrocatalytic Reduction through the Employment of Self-Assembled Layers of Nickel- and Copper-Substituted Crown-Type Heteropolyanions. <i>Langmuir</i> , 2015, 31, 2584-2592.	1.6	22
43	Thermodynamics of Ion Transfer Across the Liquid Liquid Interface at a Solid Electrode Shielded with a Thin Layer of Organic Solvent. <i>Journal of Physical Chemistry B</i> , 2004, 108, 11591-11595.	1.2	21
44	Water-processable polypyrrole microparticle modules for direct fabrication of hierarchical structured electrochemical interfaces. <i>Electrochimica Acta</i> , 2016, 190, 495-503.	2.6	21
45	Ion-Selective Electrocatalysis on Conducting Polymer Electrodes: Improving the Performance of Redox Flow Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2007009.	7.8	21
46	Interruption of Electrical Conductivity of Titanium Dental Implants Suggests a Path Towards Elimination Of Corrosion. <i>PLoS ONE</i> , 2015, 10, e0140393.	1.1	21
47	Direct detection of ammonium ion by means of oxygen electrocatalysis at a copper-polyaniline composite on a screen-printed electrode. <i>Mikrochimica Acta</i> , 2016, 183, 1981-1987.	2.5	20
48	Nitrate and Nitrite Electrocatalytic Reduction at Layer-by-Layer Films Composed of Dawson-type Heteropolyanions Mono-substituted with Transitional Metal Ions and Silver Nanoparticles. <i>Electrochimica Acta</i> , 2015, 184, 323-330.	2.6	18
49	Monitoring of epitaxial graphene anodization. <i>Electrochimica Acta</i> , 2017, 238, 91-98.	2.6	18
50	Lead (Pb) interfacing with epitaxial graphene. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 17105-17116.	1.3	18
51	Conducting Polymer Electrocatalysts for Proton-Coupled Electron Transfer Reactions: Toward Organic Fuel Cells with Forest Fuels. <i>Advanced Sustainable Systems</i> , 2018, 2, 1800021.	2.7	18
52	Organic electrochemical transistors from supramolecular complexes of conjugated polyelectrolyte PEDOTS. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2987-2993.	2.7	18
53	Protein extracting electrodes: Insights in the mechanism. <i>Journal of Electroanalytical Chemistry</i> , 2008, 623, 68-74.	1.9	17
54	Twinning Lignosulfonate with a Conducting Polymer via Counter-Ion Exchange for Large-Scale Electrical Storage. <i>Advanced Sustainable Systems</i> , 2019, 3, 1900039.	2.7	17

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55	Morphology effects on electrocatalysis of anodic water splitting on nickel (II) oxide. <i>Microporous and Mesoporous Materials</i> , 2022, 333, 111734.	2.2	17
56	Unsubstituted phenothiazine as a superior water-insoluble mediator for oxidases. <i>Biosensors and Bioelectronics</i> , 2014, 53, 275-282.	5.3	16
57	Synthesis of new lanthanide naphthalocyanine complexes based on 6,7-bis(phenoxy)-2,3-naphthalodinitrile and their spectral and electrochemical investigation. <i>Russian Chemical Bulletin</i> , 2008, 57, 1912-1919.	0.4	15
58	Electrocatalysis by crown-type polyoxometalates multi-substituted by transition metal ions; Comparative study. <i>Electrochimica Acta</i> , 2015, 176, 1248-1255.	2.6	15
59	Evaluation of the Electrochemically Active Surface Area of Microelectrodes by Capacitive and Faradaic Currents. <i>ChemElectroChem</i> , 2019, 6, 4411-4417.	1.7	15
60	Colloid electrochemistry of conducting polymer: towards potential-induced in-situ drug release. <i>Electrochimica Acta</i> , 2017, 228, 407-412.	2.6	14
61	Doped Conjugated Polymer Enclosing a Redox Polymer: Wiring Polyquinones with Poly(3,4-ethylenedioxythiophene). <i>Advanced Energy and Sustainability Research</i> , 2020, 1, 2000027.	2.8	14
62	Electrochemical Deposition of Copper on Epitaxial Graphene. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1405.	1.3	14
63	Arrays of Screen-Printed Graphite Microband Electrodes as a Versatile Electroanalysis Platform. <i>ChemElectroChem</i> , 2014, 1, 755-762.	1.7	12
64	Towards eco-friendly redox flow batteries with all bio-sourced cell components. <i>Journal of Energy Storage</i> , 2022, 50, 104352.	3.9	12
65	Self-Assembled Amphiphilic Bilayers of Surfactant Brij-52 on Gold Electrodes. <i>Electroanalysis</i> , 1999, 11, 1094-1097.	1.5	11
66	Understanding Graphene Response to Neutral and Charged Lead Species: Theory and Experiment. <i>Materials</i> , 2018, 11, 2059.	1.3	11
67	Solar Heat-Enhanced Energy Conversion in Devices Based on Photosynthetic Membranes and PEDOT:PSS-Nanocellulose Electrodes. <i>Advanced Sustainable Systems</i> , 2020, 4, 1900100.	2.7	11
68	The effect of crosslinking on ion transport in nanocellulose-based membranes. <i>Carbohydrate Polymers</i> , 2022, 278, 118938.	5.1	11
69	Ion Transport Across Liquid Liquid Interfacial Boundaries Monitored at Generator-Collector Electrodes. <i>Electroanalysis</i> , 2010, 22, 2889-2896.	1.5	10
70	Coupled triple phase boundary processes: Liquid-liquid generator-collector electrodes. <i>Electrochemistry Communications</i> , 2010, 12, 455-458.	2.3	8
71	Correspondence on "Can Nanoimpacts Detect Single-Enzyme Activity? Theoretical Considerations and an Experimental Study of Catalase Impacts". <i>ACS Catalysis</i> , 2017, 7, 3591-3593.	5.5	8
72	Printable Heterostructured Bioelectronic Interfaces with Enhanced Electrode Reaction Kinetics by Intermicroparticle Network. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 33368-33376.	4.0	7

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73	Polypyrrole entrapped 18-molybdodisulphate anion for the detection of hydrogen peroxide. <i>Electrochimica Acta</i> , 2018, 287, 78-86.	2.6	7
74	Product-to-intermediate relay achieving complete oxygen reduction reaction (cORR) with Prussian blue integrated nanoporous polymer cathode in fuel cells. <i>Nano Energy</i> , 2020, 78, 105125.	8.2	7
75	Investigating the role of polymer size on ionic conductivity in free-standing hyperbranched polyelectrolyte membranes. <i>Polymer</i> , 2021, 223, 123664.	1.8	7
76	Sulfonated Cellulose Membranes Improve the Stability of Aqueous Organic Redox Flow Batteries. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	5
77	Redox switching of polyoxometalate-doped polypyrrole films in ionic liquid media. <i>Electrochimica Acta</i> , 2018, 265, 254-258.	2.6	4
78	Oxygen reduction reaction at conducting polymer electrodes in a wider context: Insights from modelling concerning outer and inner sphere mechanisms. <i>Electrochemical Science Advances</i> , 2023, 3, .	1.2	4
79	Bidirectional Hydrogen Electrocatalysis on Epitaxial Graphene. <i>ACS Omega</i> , 2022, 7, 13221-13227.	1.6	4
80	Potentialâ€modulated Electrocapacitive Properties of Soft Microstructured Polypyrrole. <i>Electroanalysis</i> , 2017, 29, 203-207.	1.5	3
81	PEDOTâ€Cellulose Gas Diffusion Electrodes for Disposable Fuel Cells. <i>Advanced Sustainable Systems</i> , 2019, 3, 1900097.	2.7	3
82	Understanding of the Electrochemical Behavior of Lithium at Bilayer-Patched Epitaxial Graphene/4H-SiC. <i>Nanomaterials</i> , 2022, 12, 2229.	1.9	3
83	Bioelectrocatalysis on Anodized Epitaxial Graphene and Conventional Graphitic Interfaces. <i>ChemElectroChem</i> , 2019, 6, 3791-3796.	1.7	2
84	Anodization study of epitaxial graphene: insights on the oxygen evolution reaction of graphitic materials. <i>Nanotechnology</i> , 2019, 30, 285701.	1.3	2
85	Manipulation of epitaxial graphene towards novel properties and applications. <i>Materials Today: Proceedings</i> , 2020, 20, 37-45.	0.9	2
86	Manufacturing Poly(3,4â€Ethylenedioxythiophene) Electrocatalytic Sheets for Largeâ€Scale H ₂ O ₂ Production. <i>Advanced Sustainable Systems</i> , 0, , 2100316.	2.7	2
87	Drinking Water Analysis Using Electronic Tongues. , 2016, , 255-264.		1
88	Role of cobalt precursors in the synthesis of Co_3O_4 hierarchical nanostructures toward the development of cobaltâ€based functional electrocatalysts for bifunctional water splitting in alkaline and acidic media. <i>Journal of the Chinese Chemical Society</i> , 0, , .	0.8	1
89	Liquid Liquid Interface in Noncatalytic Biosensorics. <i>ECS Meeting Abstracts</i> , 2009, , .	0.0	0
90	Direct reagentless detection of the affinity binding of recombinant His-tagged firefly luciferase with a nickel-modified gold electrode. <i>Mendeleev Communications</i> , 2015, 25, 290-292.	0.6	0

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91	Functional Microparticles "LEGO" for Printable Bioelectronics Richard Newell. Procedia Technology, 2017, 27, 3.	1.1	0
92	Collision-based Electrochemistry for Investigation of Direct Electron Transfer of a Single Enzyme Molecule. Procedia Technology, 2017, 27, 238-239.	1.1	0
93	Hydrogen Evolution and Oxygen Reduction Reactions on Conducting Polymers. ECS Meeting Abstracts, 2020, MA2020-02, 3036-3036.	0.0	0