Vladimir M Mirsky

List of Publications by Citations

116 papers	3,613 citations	28 h-index	58 g-index
119 ext. papers	3,849 ext. citations	6 avg, IF	5.41 L-index

#	Paper	IF	Citations
116	Conducting polymers in chemical sensors and arrays. *Analytica Chimica Acta*, **2008**, 614, 1-26	6.6	701
115	Capacitive monitoring of protein immobilization and antigen-antibody reactions on monomolecular alkylthiol films on gold electrodes. *Biosensors and Bioelectronics*, **1997**, 12, 977-89	11.8	244
114	Electropolymerized Molecularly Imprinted Polymers as Receptor Layers in Capacitive Chemical Sensors. *Analytical Chemistry*, **1999**, 71, 4609-4613	7.8	236
113	Combinatorial and high-throughput development of sensing materials: the first 10 years. *Chemical Reviews*, **2008**, 108, 770-813	68.1	211
112	Bimetallic Layers Increase Sensitivity of Affinity Sensors Based on Surface Plasmon Resonance. *Sensors*, **2002**, 2, 62-70	3.8	176
111	Hydrogen sensor based on a graphene palladium nanocomposite. *Electrochimica Acta*, **2011**, 56, 3707-3712	4.7	145
110	Impedometric herbicide chemosensors based on molecularly imprinted polymers. *Analytica Chimica Acta*, **2001**, 435, 157-162	6.6	118
109	New electroanalytical applications of self-assembled monolayers. *TrAC - Trends in Analytical Chemistry*, **2002**, 21, 439-450	14.6	103
108	A spreader-bar approach to molecular architecture: formation of stable artificial chemoreceptors. *Angewandte Chemie - International Edition*, **1999**, 38, 1108-10	16.4	93
107	Electrocatalytically active nanocomposite from palladium nanoparticles and polyaniline: Oxidation of hydrazine. *Sensors and Actuators B: Chemical*, **2010**, 150, 271-278	8.5	79
106	Chemiresistors based on conducting polymers: a review on measurement techniques. *Analytica Chimica Acta*, **2011**, 687, 105-13	6.6	70
105	Investigation of contact and bulk resistance of conducting polymers by simultaneous two- and four-point technique. *Sensors and Actuators B: Chemical*, **2003**, 94, 352-357	8.5	65
104	Optimization of capacitive affinity sensors: drift suppression and signal amplification. *Analytica Chimica Acta*, **1999**, 392, 77-84	6.6	60
103	Soluble neuropilin-2, a nerve repellent receptor, is increased in rheumatoid arthritis synovium and aggravates sympathetic fiber repulsion and arthritis. *Arthritis and Rheumatism*, **2009**, 60, 2892-901		52
102	Capacitive detection in ultrathin chemosensors prepared by molecularly imprinted grafting photopolymerization. *Analytical Chemistry*, **2007**, 79, 3220-5	7.8	52
101	A simple strategy for preparation of sensor arrays: molecularly structured monolayers as recognition elements. *Chemical Communications*, **2003**, 432-3	5.8	45
100	Capacitive Approach To Determine Phospholipase A(2) Activity toward Artificial and Natural Substrates. *Analytical Chemistry*, **1998**, 70, 3674-8	7.8	45

99	Separated analysis of bulk and contact resistance of conducting polymers: Comparison of simultaneous two- and four-point measurements with impedance measurements. *Journal of Electroanalytical Chemistry*, **2008**, 622, 246-251	4.1	41
98	Equipment for combinatorial electrochemical polymerization and high-throughput investigation of electrical properties of the synthesized polymers. *Measurement Science and Technology*, **2004**, 15, 49-54	2	41
97	Double-wavelength technique for surface plasmon resonance measurements: basic concept and applications for single sensors and two-dimensional sensor arrays. *Analytical Chemistry*, **2005**, 77, 2393-9	7.8	40
96	Individual Detection and Electrochemically Assisted Identification of Adsorbed Nanoparticles by Using Surface Plasmon Microscopy. *Angewandte Chemie - International Edition*, **2016**, 55, 7247-51	16.4	39
95	Multiparameter High Throughput Characterization of Combinatorial Chemical Microarrays of Chemosensitive Polymers. *Macromolecular Rapid Communications*, **2004**, 25, 253-258	4.8	37
94	Size-controlled electrochemical synthesis of metal nanoparticles on monomolecular templates. *Angewandte Chemie - International Edition*, **2005**, 44, 6775-8	16.4	37
93	Self-referencing SPR-biosensors based on penetration difference of evanescent waves. *Biosensors and Bioelectronics*, **2011**, 28, 263-9	11.8	33
92	Nanometer-thick SPR sensor for gaseous HCl. *Sensors and Actuators B: Chemical*, **2005**, 106, 369-372	8.5	32
91	Electropolymerized Multilayer Conducting Polymers with Response to Gaseous Hydrogen Chloride. *Macromolecular Rapid Communications*, **2005**, 26, 1099-1103	4.8	31
90	High-throughput analysis of bulk and contact conductance of polymer layers on electrodes. *Measurement Science and Technology*, **2005**, 16, 95-99	2	31
89	Conductometric transducing in electrocatalytical sensors: Detection of ascorbic acid. *Electrochemistry Communications*, **2006**, 8, 643-646	5.1	28
88	A novel ultraviolet assay for testing side reactions of carbodiimides. *Analytical Biochemistry*, **2002**, 305, 135-8	3.1	28
87	Self-assembled monolayers as selective filters for chemical sensors. *Nanotechnology*, **2002**, 13, 175-178	3.4	26
86	Electrical Control of Alkanethiols Self-Assembly on a Gold Surface as an Approach for Preparation of Microelectrode Arrays. *Mikrochimica Acta*, **1999**, 131, 29-34	5.8	25
85	Surface plasmon resonance biosensor for enrofloxacin based on deoxyribonucleic acid. *Analytica Chimica Acta*, **2007**, 589, 1-5	6.6	24
84	Optical ozone-sensing properties of poly(2-chloroaniline), poly(N-methylaniline) and polyaniline films. *Sensors and Actuators B: Chemical*, **2005**, 108, 528-534	8.5	24
83	Capacitive Detection of Surfactant Adsorption on Hydrophobized Gold Electrodes. *Langmuir*, **1996**, 12, 6059-6064	4	24
82	Computer assisted detection and quantification of single adsorbing nanoparticles by differential surface plasmon microscopy. *Mikrochimica Acta*, **2016**, 183, 101-109	5.8	23

81	Noise reduction by multiple referencing in surface plasmon resonance imaging. *Review of Scientific Instruments*, **2008**, 79, 023110	1.7	23
80	Detection and Quantification of Single Engineered Nanoparticles in Complex Samples Using Template Matching in Wide-Field Surface Plasmon Microscopy. *Analytical Chemistry*, **2016**, 88, 10206-10214	7.8	23
79	Self-referencing SPR-sensor based on integral measurements of light intensity reflected by arbitrarily distributed sensing and referencing spots. *Sensors and Actuators B: Chemical*, **2015**, 207, 740-747	8.5	22
78	Chemosensitive properties of poly-4,4?-dialkoxy-2,2?-bipyrroles. *Journal of Solid State Electrochemistry*, **2006**, 10, 185-191	2.6	22
77	Enhancement of the detection power of surface plasmon resonance measurements by optimization of the reflection angle. *Analytical Chemistry*, **2007**, 79, 4233-6	7.8	21
76	Analytical applications of electrodes modified by gold nanoparticles: dopamine detection. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 2407-12	1.3	19
75	Covalent immobilization of oligonucleotides on electrodes. *Colloids and Surfaces B: Biointerfaces*, **2003**, 32, 157-162	6	18
74	The in situ structural characterization of the influenza A virus matrix M1 protein within a virion. *Protein and Peptide Letters*, **2009**, 16, 1407-13	1.9	17
73	A minimal binding domain of the low density lipoprotein receptor family. *Biological Chemistry*, **1998** , 379, 1053-62	4.5	16
72	Plasmonic detection and visualization of directed adsorption of charged single nanoparticles to patterned surfaces. *Mikrochimica Acta*, **2016**, 183, 2837-2845	5.8	15
71	Integrated electrochemical transistor as a fast recoverable gas sensor. *Analytica Chimica Acta*, **2011** , 687, 7-11	6.6	15
70	SPR investigation of mercury reduction and oxidation on thin gold electrodes. *Journal of Electroanalytical Chemistry*, **2007**, 605, 73-76	4.1	15
69	Influence of synthetic conditions on the structure and electrical properties of nanofibrous polyanilines and their nanofibrous carbonized forms. *Synthetic Metals*, **2016**, 214, 35-44	3.6	14
68	Terahertz split-ring metamaterials as transducers for chemical sensors based on conducting polymers: a feasibility study with sensing of acidic and basic gases using polyaniline chemosensitive layer. *Mikrochimica Acta*, **2014**, 181, 1857-1862	5.8	14
67	Electroanalytical applications of nanocomposites from conducting polymers and metallic nanoparticles prepared by layer-by-layer deposition. *Pure and Applied Chemistry*, **2010**, 83, 345-358	2.1	14
66	Voltammetric and conductometric behavior of nanocomposites of polyaniline and gold nanoparticles prepared by layer-by-layer technique. *Journal of Solid State Electrochemistry*, **2010**, 14, 1261-1268	2.6	14
65	Polyaniline doped with poly(acrylamidomethylpropanesulphonic acid): electrochemical behaviour and conductive properties in neutral solutions. *Chemical Papers*, **2013**, 67,	1.9	13
64	Chemosensitive nanocomposite for conductometric detection of hydrazine and NADH. *Electrochimica Acta*, **2011**, 56, 3679-3684	6.7	12

63	Virtual sensor array consisting of a single sensor element with variable affinity: An application for analysis of fish freshness. *Sensors and Actuators B: Chemical*, **2017**, 241, 652-657	8.5	11
62	Monomolecular films of phthalocyanines: formation, characterization, and expelling by alkanethiols. *Langmuir*, **2007**, 23, 4373-7	4	11
61	Electrostatic Potentials of Bilayer Lipid Membranes: Basic Principles and Analytical Applications. *Springer Series on Chemical Sensors and Biosensors*, **2004**, 255-291	2	11
60	The Role of Anion Adsorption in the Effect of Electrode Potential on Surface Plasmon Resonance Response. *ChemPhysChem*, **2017**, 18, 1552-1560	3.2	10
59	Morphology of Electropolymerized Poly(N-Methylaniline) Films. *Mikrochimica Acta*, **2003**, 143, 147-153	5.8	10
58	Spreader-bar-Technik in der Molekülarchitektur: Bildung von künstlichen Rezeptoren. *Angewandte Chemie*, **1999**, 111, 1179-1181	3.6	10
57	Ionic Referencing in Surface Plasmon Microscopy: Visualization of the Difference in Surface Properties of Patterned Monomolecular Layers. *Analytical Chemistry*, **2017**, 89, 3873-3878	7.8	9
56	Electrochemical tuning of capacitive response of graphene oxide. *Physical Chemistry Chemical Physics*, **2018**, 20, 22698-22709	3.6	9
55	Electrocatalytic activity of DNA on electrodes as an indication of hybridisation. *Bioelectrochemistry*, **2006**, 68, 1-6	5.6	9
54	Affinity sensors in non-equilibrium conditions: highly selective chemosensing by means of low selective chemosensors. *Sensors*, **2001**, 1, 13-17	3.8	9
53	Detection of antibiotics in food: extraction of fluoroquinolones by DNA. *Analytical and Bioanalytical Chemistry*, **2007**, 388, 253-8	4.4	7
52	Resistive gas sensors based on the composites of nanostructured carbonized polyaniline and Nafion. *Journal of Solid State Electrochemistry*, **2016**, 20, 3061-3069	2.6	7
51	Combinatorial Electropolymerization: Concept, Equipment, and Applications **2003**, 431-446		7
50	Amino-substituted Tröger's base: electrochemical polymerization and characterization of the polymer film. *Electrochimica Acta*, **2017**, 224, 439-445	6.7	6
49	Electrically controlled variation of receptor affinity. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 7283-7	4.4	6
48	Electrically controlled Michael addition: Addressing of covalent immobilization of biological receptors. *Biosensors and Bioelectronics*, **2018**, 121, 72-79	11.8	6
47	Binding of protein nanoparticles to immobilized receptors. *Sensors and Actuators B: Chemical*, **2015**, 208, 616-621	8.5	6
46	Automated Layer-by-Layer Deposition of Polyelectrolytes in Flow Mode. *Macromolecular Materials and Engineering*, **2009**, 294, 441-444	3.9	6

45	Gas sensing properties of electrically conductive Cu(I) compounds at elevated temperatures. *Sensors and Actuators B: Chemical*, **2009**, 142, 446-450	8.5	6
44	Electrochemistry and catalytic behavior of immobilized binuclear complexes of copper(II) and nickel(II) with Robson type ligand. *Journal of Solid State Electrochemistry*, **2007**, 11, 981-992	2.6	6
43	Electrostatic assay of phospholipase A activity: an application of the second harmonic method of monitoring membrane boundary potentials. *Journal of Proteomics*, **1990**, 21, 277-84		6
42	Einzelnachweis und elektrochemisch unterstützte Identifizierung adsorbierter Nanopartikel mit Oberflächenplasmonen-Mikroskopie. *Angewandte Chemie*, **2016**, 128, 7363-7367	3.6	6
41	Self-assembled monolayers from symmetrical di-thiols: Preparation, characterization and application for the assembly of electrochemically active films. *Applied Surface Science*, **2020**, 513, 145827	6.7	5
40	Electroanalytical measurements without electrolytes: conducting polymers as probes for redox titration in non-conductive organic media. *Analytica Chimica Acta*, **2012**, 744, 29-32	6.6	5
39	Polythiophene films on gold electrodes: a comparison of bulk and contact resistances in aqueous and organic media. *Journal of Solid State Electrochemistry*, **2011**, 15, 2377-2382	2.6	5
38	Toward Ultrasensitive Surface Plasmon Resonance Sensors. *Springer Series on Chemical Sensors and Biosensors*, **2018**, 409-448	2	4
37	Quantitative turbidity assay for lipolytic enzymes in microtiter plates. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 8539-47	4.4	4
36	Molecularly Imprinted Polymers as Artificial Receptors **2010**, 391-437		4
35	Chemosensitive properties of electrically conductive Cu(I) compounds at room temperature. *Sensors and Actuators B: Chemical*, **2008**, 134, 839-842	8.5	4
34	Effect of the lipid hydrolysis products on the phospholipase A2 action towards lipid monolayer. *Chemistry and Physics of Lipids*, **1994**, 70, 75-81	3.7	4
33	Introduction to Combinatorial Methods for Chemical and Biological Sensors **2009**, 3-24		4
32	Wide-Field Surface Plasmon Resonance Microscopy for In-Situ Characterization of Nanoparticle Suspensions **2018**, 61-105		3
31	Anomalous adsorptive properties of HIV protease: indication of two-dimensional crystallization?. *Colloids and Surfaces B: Biointerfaces*, **2008**, 64, 145-9	6	3
30	Chapter 12 Chemical sensors for mercury vapour. *Comprehensive Analytical Chemistry*, **2007**, 235-251	1.9	3
29	Detection of DNA hybridization with surface plasmon resonance biosensor: comparison of immobilization of oligonucleotides by ssDNA and dsDNA **2001**, 4414, 23		3
28	Real time tracking of the early stage of electrochemical nucleation. *Electrochimica Acta*, **2021**, 382, 138278	6.7	3

27	A review of optical methods for ultrasensitive detection and characterization of nanoparticles in liquid media with a focus on the wide field surface plasmon microscopy.. *Analytica Chimica Acta*, **2022**, 1204, 339633	6.6	3
26	Advanced wide-field surface plasmon microscopy of single adsorbing nanoparticles **2017**,		2
25	Wide-field surface plasmon microscopy of nano- and microparticles: features, benchmarking, limitations, and bioanalytical applications **2017**,		2
24	Conducting Polymers as Artificial Receptors in Chemical Sensors **2010**, 361-390		2
23	Poly-3-thienylboronic acid: a chemosensitive derivative of polythiophene. *Journal of Solid State Electrochemistry*, **2020**, 24, 3105-3111	2.6	2
22	Gold surface cleaning by etching polishing: Optimization of polycrystalline film topography and surface functionality for biosensing. *Surfaces and Interfaces*, **2021**, 22, 100818	4.1	2
21	Electrochemical sensors between the academic world and harsh reality: a few thoughts on the past, present, and future. *Journal of Solid State Electrochemistry*, **2020**, 24, 2147-2149	2.6	1
20	Quantitative Characterization of Affinity Properties of Immobilized Receptors **2010**, 1-15		1
19	Electrochemical and spectroscopic properties of poly-4,4?-dialkoxy-2,2?-bipyrroles. *Journal of Solid State Electrochemistry*, **2010**, 14, 1035-1044	2.6	1
18	Gr□ngesteuerte elektrochemische Synthese von Metallnanopartikeln auf molekularen Templaten. *Angewandte Chemie*, **2005**, 117, 6933-6936	3.6	1
17	Combinatorial Methods for Chemical and Biological Sensors: Outlook **2009**, 483-488		1
16	Electrocatalytic Sensor for Hydrogen Peroxide Based on Immobilized Benzoquinone. *Electroanalysis* , **2021**, 33, 2062-2070	3	1
15	Electrochemical reduction of thin graphene-oxide films in aqueous solutions □Restoration of conductivity. *Electrochimica Acta*, **2022**, 140046	6.7	0
14	Detection of Single Sub-Micrometer Objects of Biological or Technical Origin Using Wide Field Surface Plasmon Microscopy. *Proceedings (mdpi)*, **2017**, 1, 788	0.3	
13	Selectivity of Chemical Receptors **2010**, 17-65		
12	Development of New Sensing Materials Using Combinatorial and High-Throughput Experimentation **2009**, 151-166		
11	Combinatorial Development of Sensing Materials **2010**, 67-112		
10	Artificial Receptors Based on Spreader-Bar Systems **2010**, 319-332		

9	Quantitative Affinity Data on Selected Artificial Receptors **2010**, 439-460	
8	Procedure 15 Chemoresistor for determination of mercury vapor. *Comprehensive Analytical Chemistry*, **2007**, e105-e109	1.9
7	Application of Combinatorial Electropolymerization to the Development of Chemical Sensors. *Materials Research Society Symposia Proceedings*, **2003**, 804, 121	
6	Localised Electrochemical Desorption of Gold Alkanethiolate Monolayers by Means of Scanning Electrochemical Microscopy (SECM). *Mikrochimica Acta*, **1999**, 131, 1-1	5.8
5	Spreader-Bar Structures as Molecular Templates for Electrochemical Synthesis of Nanoparticles **2008**, 321-325	
4	Combinatorial Development of Chemosensitive Conductive Polymers **2009**, 315-330	
3	Electrical Control of the Receptor Affinity. *Engineering Proceedings*, **2021**, 6, 3	0.5
2	Self-Assembled Monolayers from Symmetrical Di-Thiols: Preparation, Characterization and Application for the Assembly of Electrochemically Active Films. *Engineering Proceedings*, **2021**, 6, 17	0.5
1	Electrocatalytical Chemical Sensor for Hydrogen Peroxide. *Engineering Proceedings*, **2021**, 6, 1	0.5