Evgeny Katz

List of Publications by Year in descending order

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227 papers	10,393 citations	28274 55 h-index	45317 90 g-index
343 all docs	343 docs citations	343 times ranked	5365 citing authors

#	Article	IF	Citations
1	Reconfigurable Implication and Inhibition Boolean logic gates based on NAD⁺â€dependent enzymes: Application to signalâ€controlled biofuel cells and molecule release. Electrochemical Science Advances, 2022, 2, e2100008.	2.8	1
2	Electrochemical contributions: Christian Friedrich SchÃ¶nbein (1799â€“1868). Electrochemical Science Advances, 2022, 2, e2160007.	2.8	0
3	Electrochemical contributions: Friedrich Wilhelm Georg Kohlrausch (1840â€“1910). Electrochemical Science Advances, 2022, 2, e2160008.	2.8	1
4	Circular Permutated PQQâ€Glucose Dehydrogenase as an Ultrasensitive Electrochemical Biosensor. Angewandte Chemie - International Edition, 2022, 61, .	13.8	14
5	Iron(<scp>iii</scp>)-cross-linked alginate hydrogels: a critical review. Materials Advances, 2022, 3, 1849-1873.	5.4	48
6	A magneto-controlled biocatalytic cascade with a fluorescent output. Organic and Biomolecular Chemistry, 2022, 20, 1869-1873.	2.8	1
7	Electrochemically produced local pH changes stimulating (bio)molecule release from pH-switchable electrode-immobilized avidinâ€“biotin systems. Physical Chemistry Chemical Physics, 2022, 24, 6410-6414.	2.8	7
8	Highly Porous Gold Electrodes â€“ Preparation and Characterization. ChemElectroChem, 2022, 9, .	3.4	4
9	A universal nanostructured bioanalytical platform for NAD+-dependent enzymes based on the fluorescent output reading with a smartphone. Talanta, 2022, 243, 123325.	5.5	6
10	Electrochemically switchable and tunable luciferase bioluminescence. Bioelectrochemistry, 2022, 146, 108109.	4.6	0
11	â€œSmartâ€•alginate hydrogels in biosensing, bioactuation and biocomputing: State-of-the-art and perspectives. Sensors and Actuators Reports, 2022, 4, 100095.	4.4	20
12	Nanostructured Interface Loaded with Chimeric Enzymes for Fluorimetric Quantification of Cyclosporine A and FK506. Analytical Chemistry, 2022, 94, 7303-7310.	6.5	4
13	Electrochemical contributions: Julius Tafel (1862â€“1918). Electrochemical Science Advances, 2022, 2, .	2.8	0
14	Electrochemical contributions: Adolph Wilhelm Hermann Kolbe (1818â€“1884). Electrochemical Science Advances, 2022, 2, .	2.8	2
15	Electrochemical contributions: Rudolf BrdiÄka (1906â€“1970). Electrochemical Science Advances, 2022, 2, .	2.8	0
16	Electrochemical contributions: William Nicholson (1753â€“1815). Electrochemical Science Advances, 2021, 1, e2160003.	2.8	2
17	Controlling Porosity of Calcium Alginate Hydrogels by Interpenetrating Polyvinyl Alcoholâ€“Diboronate Polymer Network. ACS Applied Polymer Materials, 2021, 3, 1499-1507.	4.4	22
18	Magneto-Controlled Enzyme Activity with Locally Produced pH Changes. Journal of Physical Chemistry Letters, 2021, 12, 2523-2527.	4.6	6

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19	Self-powered molecule release systems activated with chemical signals processed through reconfigurable Implication or Inhibition Boolean logic gates. Bioelectrochemistry, 2021, 138, 107735.	4.6	9
20	Electrochemical contributions: Sir Humphry Davy (1778â€“1829). Electrochemical Science Advances, 2021, 1, e2160004.	2.8	0
21	IEEE Sensors Journalâ€™s School-Age Years (2004â€“2011). IEEE Sensors Journal, 2021, 21, 12358-12359.	4.7	0
22	Electrochemical contributions: JÃ¶ns Jacob Berzelius (Jacob Berzelius, 1779â€“1848). Electrochemical Science Advances, 2021, 1, e2160005.	2.8	0
23	Electrochemical contributions: Christian Johann Dietrich (later Theodor) Grotthuss (1785â€1822). Electrochemical Science Advances, 2021, 1, e2160006.	2.8	0
24	Switchable Biocatalytic Reactions Controlled by Interfacial pH Changes Produced by Orthogonal Biocatalytic Processes. ACS Applied Materials & Interfaces, 2021, 13, 33830-33839.	8.0	14
25	Biomolecule Release from Alginate Composite Hydrogels Triggered by Logically Processed Signals. ChemPhysChem, 2021, 22, 1967-1975.	2.1	6
26	Implication and Not-Implication Boolean Logic Gates Mimicked with Enzyme Reactions â€” General Approach and Application to Signal-Triggered Biomolecule Release Processes. , 2021, , 149-163.		0
27	Fuel Cells and Biofuel Cells: From Past to Perspectives. Israel Journal of Chemistry, 2021, 61, 68-84.	2.3	38
28	Photo-stimulated self-powered electrochemical system for DNA release. Sensors and Actuators Reports, 2021, 3, 100058.	4.4	2
29	Operando Local pH Mapping of Electrochemical and Bioelectrochemical Reactions Occurring at an Electrode Surface: Effect of the Buffer Concentration. ChemElectroChem, 2021, 8, 3923-3935.	3.4	13
30	Connecting Artificial Proteolytic and Electrochemical Signaling Systems with Caged Messenger Peptides. ACS Sensors, 2021, 6, 3596-3603.	7.8	8
31	â€œSmartâ€•Delivery of Monoclonal Antibodies from a Magnetic Responsive Microgel Nanocomposite. ACS Applied Bio Materials, 2021, 4, 8487-8497.	4.6	7
32	Microbial Lâ€•and Dâ€Lactate Selective Oxidoreductases as a Very Prospective but Still Uncommon Tool in Commercial Biosensors. ChemElectroChem, 2021, 8, 4725-4731.	3.4	8
33	Design of a methotrexate-controlled chemical dimerization system and its use in bio-electronic devices. Nature Communications, 2021, 12, 7137.	12.8	17
34	A Microelectronic Sensor Device Powered by a Small Implantable Biofuel Cell. ChemPhysChem, 2020, 21, 120-128.	2.1	44
35	Magneto-controlled enzyme reactions. Methods in Enzymology, 2020, 630, 1-24.	1.0	2
36	Molecular Release Associated with Interfacial pH Change Stimulated by a Small Electrical Potential Applied. ChemElectroChem, 2020, 7, 59-63.	3.4	14

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37	Biomolecular Release Stimulated by Electrochemical Signals at a Very Small Potential Applied. Electroanalysis, 2020, 32, 95-103.	2.9	8
38	Boolean Logic Networks Mimicked with Chimeric Enzymes Activated/Inhibited by Several Input Signals. ChemPhysChem, 2020, 21, 589-593.	2.1	10
39	Bioelectrocatalysis at carbon nanotubes. Methods in Enzymology, 2020, 630, 215-247.	1.0	13
40	Electrochemical control of the catalytic activity of immobilized enzymes. Chemical Communications, 2020, 56, 13800-13803.	4.1	11
41	Photobiofuel Cell with Sustainable Energy Generation Based on Micro/Nanostructured Electrode Materials. ACS Applied Energy Materials, 2020, 3, 9543-9549.	5.1	9
42	Biosensorsâ€"Recent Advances and Future Challenges. Sensors, 2020, 20, 6645.	3.8	34
43	Nanocomposite hydrogel films and coatings â€“ Features and applications. Applied Materials Today, 2020, 20, 100776.	4.3	37
44	Implication and Inhibition Boolean Logic Gates Mimicked with Enzyme Reactions. ChemPhysChem, 2020, 21, 2150-2154.	2.1	5
45	Nanozyme-Triggered DNA Release from Alginate Films. ACS Applied Bio Materials, 2020, 3, 3741-3750.	4.6	10
46	Control of Allosteric Protein Electrochemical Switches with Biomolecular and Electronic Signals. Journal of Physical Chemistry Letters, 2020, 11, 5549-5554.	4.6	14
47	Electrochemically Generated Interfacial pH Change: Application to Signalâ€Triggered Molecule Release. ChemElectroChem, 2020, 7, 3386-3403.	3.4	16
48	Boolean Logic Networks Mimicked with Chimeric Enzymes Activated/Inhibited by Several Input Signals. ChemPhysChem, 2020, 21, 578-578.	2.1	0
49	Enzyme-Based Biosensors: Tackling Electron Transfer Issues. Sensors, 2020, 20, 3517.	3.8	88
50	Control of allosteric electrochemical protein switch using magnetic signals. Chemical Communications, 2020, 56, 9206-9209.	4.1	7
51	Magnetic Nanoparticles. Magnetochemistry, 2020, 6, 6.	2.4	25
52	Electrochemical Signalâ€triggered Release of Biomolecules Functionalized with Hisâ€tag Units. Electroanalysis, 2019, 31, 2274-2282.	2.9	7
53	Notâ€XOR (NXOR) Logic Gate Realized with Enzymeâ€Catalyzed Reactions: Optical and Electrochemical Signal Transduction. ChemPhysChem, 2019, 20, 2082-2092.	2.1	4
54	Electrochemically stimulated molecule release associated with interfacial pH changes. Chemical Communications, 2019, 55, 7856-7859.	4.1	20

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55	Towards Nanomaterials for Cancer Theranostics: A System of DNA-Modified Magnetic Nanoparticles for Detection and Suppression of RNA Marker in Cancer Cells. Magnetochemistry, 2019, 5, 24.	2.4	24
56	8. Signal-activated biomolecular release from alginate-modified electrodes. , 2019, , 143-166.		0
57	Synthesis, Properties and Applications of Magnetic Nanoparticles and Nanowiresâ€"A Brief Introduction. Magnetochemistry, 2019, 5, 61.	2.4	82
58	DNA Release from a Modified Electrode Triggered by a Bioelectrocatalytic Process. ACS Applied Materials & Interfaces, 2019, 11, 47625-47634.	8.0	7
59	Bioelectrocatalytic Electrodes Modified with PQQâ€Glucose Dehydrogenaseâ€Calmodulin Chimera Switchable by Peptide Signals: Pathway to Generic Bioelectronic Systems Controlled by Biomolecular Inputs. ChemElectroChem, 2019, 6, 638-645.	3.4	17
60	Boolean Logic Gates Realized with Enzymeâ€catalyzed Reactions â€“ Unusual Look at Usual Chemical Reactions. ChemPhysChem, 2019, 20, 9-22.	2.1	47
61	Modified Electrodes and Electrochemical Systems Switchable by Light Signals. Electroanalysis, 2018, 30, 759-797.	2.9	17
62	Nanoreactors based on DNAzyme-functionalized magnetic nanoparticles activated by magnetic field. Nanoscale, 2018, 10, 1356-1365.	5.6	24
63	Biomolecular Release from Alginateâ€modified Electrode Triggered by Chemical Inputs Processed through a Biocatalytic Cascade â€“ Integration of Biomolecular Computing and Actuation. Electroanalysis, 2018, 30, 426-435.	2.9	27
64	Nanoâ€species Release System Activated by Enzymeâ€based XOR Logic Gate. Electroanalysis, 2018, 30, 1281-1286.	2.9	11
65	Biofuel cells â€“ Activation of micro- and macro-electronic devices. Bioelectrochemistry, 2018, 119, 33-42.	4.6	100
66	Magnetic field remotely controlled selective biocatalysis. Nature Catalysis, 2018, 1, 73-81.	34.4	84
67	Magnetoâ€Controlled Biocatalytic Cascades with Logically Processed Input Signals â€“ Substrate Channeling versus Free Diffusion. ChemPhysChem, 2018, 19, 3035-3043.	2.1	18
68	Enzyme-Based Logic Systems: Composition, Operation, Interfacing, and Applications. , 2018, , 265-305.		0
69	Enzymeâ€Based Logic Gates and Networks with Output Signals Analyzed by Various Methods. ChemPhysChem, 2017, 18, 1688-1713.	2.1	45
70	Electrochemically Stimulated Insulin Release from a Modified Grapheneâ€functionalized Carbon Fiber Electrode. Electroanalysis, 2017, 29, 1543-1553.	2.9	11
71	Enzyme-based logic gates and circuitsâ€"analytical applications and interfacing with electronics. Analytical and Bioanalytical Chemistry, 2017, 409, 81-94.	3.7	54
72	Molecular Logic: From Single Logic Gates to Sophisticated Logic Circuits, from Fundamental Science to Practical Applications. ChemPhysChem, 2017, 18, 1665-1666.	2.1	10

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73	Coupling of Biomolecular Logic Gates with Electronic Transducers: From Single Enzyme Logic Gates to Sense/Act/Treat Chips. Electroanalysis, 2017, 29, 1840-1849.	2.9	21
74	DNA Release from Fe³⁺â€Crossâ€Linked Alginate Films Triggered by Logically Processed Biomolecular Signals: Integration of Biomolecular Computing and Actuation. ChemPhysChem, 2017, 18, 1811-1821.	2.1	37
75	A Biofuel Cell Based on Biocatalytic Reactions of Lactate on Both Anode and Cathode Electrodes â€“ Extracting Electrical Power from Human Sweat. Electroanalysis, 2017, 29, 1602-1611.	2.9	31
76	Glucoseâ€Triggered Insulin Release from Fe³⁺â€Crossâ€linked Alginate Hydrogel: Experimental Study and Theoretical Modeling. ChemPhysChem, 2017, 18, 1541-1551.	2.1	22
77	A Biofuel Cell Based on Biocatalytic Reactions of Glucose on Both Anode and Cathode Electrodes. Electroanalysis, 2017, 29, 950-954.	2.9	25
78	An enzyme-based reversible Controlled NOT (CNOT) logic gate operating on a semiconductor transducer. Applied Materials Today, 2017, 9, 266-270.	4.3	16
79	Magnetic Field-Activated Sensing of mRNA in Living Cells. Journal of the American Chemical Society, 2017, 139, 12117-12120.	13.7	44
80	Ca²⁺-Switchable Glucose Dehydrogenase Associated with Electrochemical/Electronic Interfaces: Applications to Signal-Controlled Power Production and Biomolecular Release. Journal of Physical Chemistry B, 2017, 121, 11465-11471.	2.6	19
81	DNA Computing Systems Activated by Electrochemicallyâ€triggered DNA Release from a Polymerâ€brushâ€modified Electrode Array. Electroanalysis, 2017, 29, 398-408.	2.9	22
82	Utilization of a fluidic infrastructure for the realization of enzyme-based Boolean logic operations. International Journal of Parallel, Emergent and Distributed Systems, 2017, 32, 139-156.	1.0	8
83	An Enzymeâ€based 1:2 Demultiplexer Interfaced with an Electrochemical Actuator. ChemPhysChem, 2017, 18, 1721-1725.	2.1	6
84	Enzyme-Based Reversible Logic Gates Operated in Flow Cells. Emergence, Complexity and Computation, 2017, , 29-59.	0.3	12
85	Electrochemicallyâ€controlled DNA Release under Physiological Conditions from a Monolayerâ€modified Electrode. Electroanalysis, 2017, 29, 324-329.	2.9	17
86	Integration of Biomolecular Sensing, Logic Processing of the Signals and Actuation. Proceedings (mdpi), 2017, 1, 710.	0.2	0
87	Experimental Realization of a Highâ€Quality Biochemical XOR Gate. ChemPhysChem, 2017, 18, 2908-2915.	2.1	10
88	Enzyme-Based Logic Systems: Composition, Operation, Interfacing, and Applications. , 2017, , 1-41.		0
89	Design of Flow Systems for Improved Networking and Reduced Noise in Biomolecular Signal Processing in Biocomputing and Biosensing Applications. Sensors, 2016, 16, 1042.	3.8	5
90	Electrochemically Triggered DNA Release from a Mixedâ€brush Polymerâ€modified Electrode. Electroanalysis, 2016, 28, 2613-2625.	2.9	14

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91	Bioelectronic Interface Connecting Reversible Logic Gates Based on Enzyme and DNA Reactions. ChemPhysChem, 2016, 17, 2247-2255.	2.1	35
92	Controlled Logic Gatesâ€"Switch Gate and Fredkin Gate Based on Enzymeâ€Biocatalyzed Reactions Realized in Flow Cells. ChemPhysChem, 2016, 17, 1046-1053.	2.1	35
93	Diffusion of Oligonucleotides from within Ironâ€Crossâ€Linked, Polyelectrolyteâ€Modified Alginate Beads: A Model System for Drug Release. ChemPhysChem, 2016, 17, 926-926.	2.1	1
94	An Enzymeâ€Based Halfâ€Adder and Halfâ€Subtractor with a Modular Design. ChemPhysChem, 2016, 17, 2210-2217.	2.1	25
95	Magnetoâ€switchable Electrodes and Electrochemical Systems. Electroanalysis, 2016, 28, 904-919.	2.9	19
96	Modified Electrodes and Electrochemical Systems Switchable by Temperature Changes. Electroanalysis, 2016, 28, 1916-1929.	2.9	30
97	Biofuel Cell Based on Carbon Fiber Electrodes Functionalized with Graphene Nanosheets. ECS Journal of Solid State Science and Technology, 2016, 5, M3037-M3040.	1.8	23
98	DNA Release from a Bioelectronic Interface Stimulated by a DNA Signal â€“ Amplification of DNA Signals. Electroanalysis, 2016, 28, 2692-2696.	2.9	10
99	Diffusion of Oligonucleotides from within Ironâ€Crossâ€Linked, Polyelectrolyteâ€Modified Alginate Beads: A Model System for Drug Release. ChemPhysChem, 2016, 17, 976-984.	2.1	15
100	Grapheneâ€Functionalized 3Dâ€Carbon Fiber Electrodes â€“ Preparation and Electrochemical Characterization. Electroanalysis, 2016, 28, 1943-1946.	2.9	18
101	Notes on stochastic (bio)-logic gates: computing with allosteric cooperativity. Scientific Reports, 2015, 5, 9415.	3.3	20
102	Switchable Bioelectrocatalysis Controlled by pH Changes. Electroanalysis, 2015, 27, 2063-2073.	2.9	27
103	Electrochemically Stimulated DNA Release from a Polymerâ€Brush Modified Electrode. Electroanalysis, 2015, 27, 2171-2179.	2.9	11
104	Switchable electrodes and biofuel cells logically controlled by chemical and biochemical signals. , 2015, , 215-238.		7
105	Implantable Biofuel Cells Operating In Vivoâ€"Potential Power Sources for Bioelectronic Devices. Bioelectronic Medicine, 2015, 2, 1-12.	2.3	42
106	Can bio-inspired information processing steps be realized as synthetic biochemical processes?. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 219-228.	1.8	11
107	Enzyme-based logic systems interfaced with signal-responsive materials and electrodes. Chemical Communications, 2015, 51, 3493-3500.	4.1	60
108	Biocomputing â€" tools, aims, perspectives. Current Opinion in Biotechnology, 2015, 34, 202-208.	6.6	85

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109	A bioelectronic system for insulin release triggered by ketone body mimicking diabetic ketoacidosis in vitro. Chemical Communications, 2015, 51, 7618-7621.	4.1	21
110	Substance Release Triggered by Biomolecular Signals in Bioelectronic Systems. Journal of Physical Chemistry Letters, 2015, 6, 1340-1347.	4.6	74
111	Reversible Logic Gates Based on Enzymeâ€Biocatalyzed Reactions and Realized in Flow Cells: A Modular Approach. ChemPhysChem, 2015, 16, 1405-1415.	2.1	49
112	Biomolecular Computing Realized in Parallel Flow Systems: Enzyme-Based Double Feynman Logic Gate. Parallel Processing Letters, 2015, 25, 1540001.	0.6	11
113	Bridging the Two Worlds: A Universal Interface between Enzymatic and DNA Computing Systems. Angewandte Chemie - International Edition, 2015, 54, 6562-6566.	13.8	106
114	Implantable biofuel cells operating in vivo: Providing sustainable power for bioelectronic devices: From biofuel cells to cyborgs. , 2015, , .		11
115	Wireless Information Transmission System Powered by an Abiotic Biofuel Cell Implanted in an Orange. Electroanalysis, 2015, 27, 276-280.	2.9	20
116	A wireless transmission system powered by an enzyme biofuel cell implanted in an orange. Bioelectrochemistry, 2015, 106, 28-33.	4.6	82
117	Pacemaker Activated by an Abiotic Biofuel Cell Operated in Human Serum Solution. Electroanalysis, 2014, 26, 2445-2457.	2.9	53
118	Biocomputing, Biosensing and Bioactuation Based on Enzyme Biocatalyzed Reactions. Biocatalysis, 2014, 1, .	2.3	8
119	Biochemical flip-flop memory systems: essential additions to autonomous biocomputing and biosensing systems. International Journal of General Systems, 2014, 43, 722-739.	2.5	9
120	Starchâ€Powered Biofuel Cell Activated by Logically Processed Biomolecular Signals. ChemElectroChem, 2014, 1, 1822-1827.	3.4	16
121	A model system for targeted drug release triggered by biomolecular signals logically processed through enzyme logic networks. Analyst, The, 2014, 139, 982.	3.5	52
122	Enzymatic filter for improved separation of output signals in enzyme logic systems towards â€˜sense and treatâ€™ medicine. Biomaterials Science, 2014, 2, 184-191.	5.4	32
123	Majority and Minority Gates Realized in Enzyme-Biocatalyzed Systems Integrated with Logic Networks and Interfaced with Bioelectronic Systems. Journal of Physical Chemistry B, 2014, 118, 6775-6784.	2.6	49
124	Kinetic Model for a Threshold Filter in an Enzymatic System for Bioanalytical and Biocomputing Applications. Journal of Physical Chemistry B, 2014, 118, 12435-12443.	2.6	24
125	Activation of a Biocatalytic Electrode by Removing Glucose Oxidase from the Surfaceâ€"Application to Signal Triggered Drug Release. ACS Applied Materials & Interfaces, 2014, 6, 13349-13354.	8.0	37
126	A biocatalytic cascade with several output signalsâ€"towards biosensors with different levels of confidence. Analytical and Bioanalytical Chemistry, 2014, 406, 3365-3370.	3.7	22

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127	Model system for targeted drug release triggered by immune-specific signals. Analytical and Bioanalytical Chemistry, 2014, 406, 4825-4829.	3.7	22
128	Self-powered electrochemical memristor based on a biofuel cell â€“ towards memristors integrated with biocomputing systems. Chemical Communications, 2014, 50, 4816.	4.1	37
129	Enzyme-based logic gates switchable between OR, NXOR and NAND Boolean operations realized in a flow system. Chemical Communications, 2014, 50, 12043-12046.	4.1	22
130	An enzyme-based reversible CNOT logic gate realized in a flow system. Analyst, The, 2014, 139, 1839.	3.5	45
131	Antibacterial Drug Release Electrochemically Stimulated by the Presence of Bacterial Cells â€“ Theranostic Approach. Electroanalysis, 2014, 26, 2552-2557.	2.9	29
132	A bioinspired associative memory system based on enzymatic cascades. Chemical Communications, 2013, 49, 6962.	4.1	30
133	Implanted biofuel cells operating in vivo â€“ methods, applications and perspectives â€“ feature article. Energy and Environmental Science, 2013, 6, 2791.	30.8	197
134	Networked Enzymatic Logic Gates with Filtering: New Theoretical Modeling Expressions and Their Experimental Application. Journal of Physical Chemistry B, 2013, 117, 14928-14939.	2.6	45
135	Biocatalytic analysis of biomarkers for forensic identification of ethnicity between Caucasian and African American groups. Analyst, The, 2013, 138, 6251.	3.5	28
136	Biomolecular release triggered by glucose input â€“ bioelectronic coupling of sensing and actuating systems. Chemical Communications, 2013, 49, 4755.	4.1	34
137	Engineering Luminescent Molecules with Sensing and Logic Capabilities. , 2013, , 79-98.		6
138	Electrode interfaces switchable by physical and chemical signals for biosensing, biofuel, and biocomputing applications. Analytical and Bioanalytical Chemistry, 2013, 405, 3659-3672.	3.7	61
139	A pacemaker powered by an implantable biofuel cell operating under conditions mimicking the human blood circulatory system â€“ battery not included. Physical Chemistry Chemical Physics, 2013, 15, 6278.	2.8	142
140	Biofuel Cell Operating in Vivo in Rat. Electroanalysis, 2013, 25, 1579-1584.	2.9	125
141	From â€œcyborgâ€•lobsters to a pacemaker powered by implantable biofuel cells. Energy and Environmental Science, 2013, 6, 81-86.	30.8	283
142	Enzymatic AND Logic Gate with Sigmoid Response Induced by Photochemically Controlled Oxidation of the Output. Journal of Physical Chemistry B, 2013, 117, 7559-7568.	2.6	46
143	Modularity of Biochemical Filtering for Inducing Sigmoid Response in Both Inputs in an Enzymatic AND Gate. Journal of Physical Chemistry B, 2013, 117, 9857-9865.	2.6	39
144	Biomolecular AND Logic Gate Based on Immobilized Enzymes with Precise Spatial Separation Controlled by Scanning Electrochemical Microscopy. Journal of Physical Chemistry B, 2013, 117, 16058-16065.	2.6	15

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145	Living battery â€“ biofuel cells operating in vivo in clams. Energy and Environmental Science, 2012, 5, 8891.	30.8	225
146	Electronic interfaces switchable by logically processed multiple biochemical and physiological signals. Journal of Materials Chemistry, 2012, 22, 8171.	6.7	57
147	Electrochemically stimulated release of lysozyme from an alginate matrix cross-linked with iron cations. Journal of Materials Chemistry, 2012, 22, 19523.	6.7	63
148	Analysis of biomarkers characteristic of porcine liver injuryâ€"from biomolecular logic gates to an animal model. Analyst, The, 2012, 137, 1768.	3.5	52
149	Enzyme-Based Logic Analysis of Biomarkers at Physiological Concentrations: AND Gate with Double-Sigmoid â€œFilterâ€•Response. Journal of Physical Chemistry B, 2012, 116, 4457-4464.	2.6	48
150	Multianalyte Digital Enzyme Biosensors with Built-in Boolean Logic. Analytical Chemistry, 2012, 84, 5463-5469.	6.5	102
151	Enzyme-Based Logic: OR Gate with Double-Sigmoid Filter Response. Journal of Physical Chemistry B, 2012, 116, 9683-9689.	2.6	53
152	A biochemical logic approach to biomarker-activated drug release. Journal of Materials Chemistry, 2012, 22, 19709.	6.7	46
153	Electrochemically Controlled Drug-Mimicking Protein Release from Iron-Alginate Thin-Films Associated with an Electrode. ACS Applied Materials & Interfaces, 2012, 4, 466-475.	8.0	124
154	Biocatalytic Enzyme Networks Designed for Binary-Logic Control of Smart Electroactive Nanobiointerfaces. Topics in Catalysis, 2012, 55, 1201-1216.	2.8	13
155	Molecular AND logic gate based on bacterial anaerobic respiration. Chemical Communications, 2012, 48, 10174.	4.1	36
156	Permeability of Human Tooth Surfaces Studied In Vitro by Electrochemical Impedance Spectroscopy. Electroanalysis, 2012, 24, 1033-1038.	2.9	2
157	A Selfâ€Powered â€œSenseâ€Actâ€Treatâ€•System that is Based on a Biofuel Cell and Controlled by Boolean Logic. Angewandte Chemie - International Edition, 2012, 51, 2686-2689.	13.8	139
158	Implanted Biofuel Cell Operating in a Living Snail. Journal of the American Chemical Society, 2012, 134, 5040-5043.	13.7	437
159	Realization and Properties of Biochemical-Computing Biocatalytic XOR Gate Based on Enzyme Inhibition by a Substrate. Journal of Physical Chemistry B, 2011, 115, 9838-9845.	2.6	34
160	High-fidelity determination of security threats via a Boolean biocatalytic cascade. Chemical Communications, 2011, 47, 3087.	4.1	46
161	Towards biochemical filters with a sigmoidal response to pH changes: buffered biocatalytic signal transduction. Physical Chemistry Chemical Physics, 2011, 13, 4507.	2.8	36
162	Biomolecular Filters for Improved Separation of Output Signals in Enzyme Logic Systems Applied to Biomedical Analysis. Analytical Chemistry, 2011, 83, 8383-8386.	6.5	47

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163	Enzyme-based NAND gate for rapid electrochemical screening of traumatic brain injury in serum. Analytica Chimica Acta, 2011, 703, 94-100.	5.4	25
164	Bio-logic analysis of injury biomarker patterns in human serum samples. Talanta, 2011, 83, 955-959.	5.5	59
165	Responsive Interface Switchable by Logically Processed Physiological Signals: Toward â€œSmartâ€• Actuators for Signal Amplification and Drug Delivery. ACS Applied Materials & Interfaces, 2011, 3, 1620-1623.	8.0	87
166	Materials with Built-in Logic. Journal of Computational and Theoretical Nanoscience, 2011, 8, 356-364.	0.4	30
167	Bioelectronic Devices Controlled by Biocomputing Systems. Israel Journal of Chemistry, 2011, 51, 132-140.	2.3	13
168	Digital Biosensors with Builtâ€in Logic for Biomedical Applications. Israel Journal of Chemistry, 2011, 51, 141-150.	2.3	69
169	Processing electrochemical signals at both sides of interface: electronic vs. chemical signal processing. Journal of Solid State Electrochemistry, 2011, 15, 1471-1480.	2.5	4
170	Bicomponent Microneedle Array Biosensor for Minimallyâ€Invasive Glutamate Monitoring. Electroanalysis, 2011, 23, 2302-2309.	2.9	99
171	Bioelectronic system for the control and readout of enzyme logic gates. Sensors and Actuators B: Chemical, 2011, 155, 206-213.	7.8	19
172	Editorial Tenth Anniversary Issue. IEEE Sensors Journal, 2011, 11, 3053-3054.	4.7	0
173	Digital biosensors with built-in logic for biomedical applicationsâ€”biosensors based on a biocomputing concept. Analytical and Bioanalytical Chemistry, 2010, 398, 1591-1603.	3.7	158
174	Modified Electrodes with Switchable Selectivity for Cationic and Anionic Redox Species. Electroanalysis, 2010, 22, 35-40.	2.9	57
175	Biofuel Cells with Switchable Power Output. Electroanalysis, 2010, 22, 744-756.	2.9	53
176	Electrochemical Nanotransistor from Mixedâ€Polymer Brushes. Advanced Materials, 2010, 22, 1863-1866.	21.0	45
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