

Jan Halámk

List of Publications by Year in descending order

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Version: 2024-02-01

47
papers

2,181
citations

218677

26
h-index

223800

46
g-index

73
all docs

73
docs citations

73
times ranked

1418
citing authors

#	ARTICLE	IF	CITATIONS
1	From "cyborg" lobsters to a pacemaker powered by implantable biofuel cells. <i>Energy and Environmental Science</i> , 2013, 6, 81-86.	30.8	283
2	Living battery " biofuel cells operating in vivo in clams. <i>Energy and Environmental Science</i> , 2012, 5, 8891.	30.8	225
3	Biofuel Cell Operating in Vivo in Rat. <i>Electroanalysis</i> , 2013, 25, 1579-1584.	2.9	125
4	Network Analysis of Biochemical Logic for Noise Reduction and Stability: A System of Three Coupled Enzymatic AND Gates. <i>Journal of Physical Chemistry B</i> , 2009, 113, 5301-5310.	2.6	105
5	Multianalyte Digital Enzyme Biosensors with Built-in Boolean Logic. <i>Analytical Chemistry</i> , 2012, 84, 5463-5469.	6.5	102
6	Multiplexing of injury codes for the parallel operation of enzyme logic gates. <i>Analyst, The</i> , 2010, 135, 2249.	3.5	96
7	Multi-enzyme logic network architectures for assessing injuries: digital processing of biomarkers. <i>Molecular BioSystems</i> , 2010, 6, 2554.	2.9	80
8	Electrochemically stimulated release of lysozyme from an alginate matrix cross-linked with iron cations. <i>Journal of Materials Chemistry</i> , 2012, 22, 19523.	6.7	63
9	Bio-logic analysis of injury biomarker patterns in human serum samples. <i>Talanta</i> , 2011, 83, 955-959.	5.5	59
10	Forensic Identification of Gender from Fingerprints. <i>Analytical Chemistry</i> , 2015, 87, 11531-11536.	6.5	58
11	Self-powered biomolecular keypad lock security system based on a biofuel cell. <i>Chemical Communications</i> , 2010, 46, 2405.	4.1	57
12	Enzymatic AND Logic Gates Operated Under Conditions Characteristic of Biomedical Applications. <i>Journal of Physical Chemistry B</i> , 2010, 114, 12166-12174.	2.6	55
13	Realization and Properties of Biochemical-Computing Biocatalytic XOR Gate Based on Signal Change. <i>Journal of Physical Chemistry B</i> , 2010, 114, 13601-13608.	2.6	52
14	Analysis of biomarkers characteristic of porcine liver injury" from biomolecular logic gates to an animal model. <i>Analyst, The</i> , 2012, 137, 1768.	3.5	52
15	Enzyme-Based Logic Analysis of Biomarkers at Physiological Concentrations: AND Gate with Double-Sigmoid "Filter" Response. <i>Journal of Physical Chemistry B</i> , 2012, 116, 4457-4464.	2.6	48
16	Biomolecular Filters for Improved Separation of Output Signals in Enzyme Logic Systems Applied to Biomedical Analysis. <i>Analytical Chemistry</i> , 2011, 83, 8383-8386.	6.5	47
17	New Horizons for Ninhydrin: Colorimetric Determination of Gender from Fingerprints. <i>Analytical Chemistry</i> , 2016, 88, 2413-2420.	6.5	47
18	Biochemical Filter with Sigmoidal Response: Increasing the Complexity of Biomolecular Logic. <i>Journal of Physical Chemistry B</i> , 2010, 114, 14103-14109.	2.6	46

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19	A biochemical logic approach to biomarker-activated drug release. <i>Journal of Materials Chemistry</i> , 2012, 22, 19709.	6.7	46
20	Enzymatic AND Logic Gate with Sigmoid Response Induced by Photochemically Controlled Oxidation of the Output. <i>Journal of Physical Chemistry B</i> , 2013, 117, 7559-7568.	2.6	46
21	Networked Enzymatic Logic Gates with Filtering: New Theoretical Modeling Expressions and Their Experimental Application. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14928-14939.	2.6	45
22	Modularity of Biochemical Filtering for Inducing Sigmoid Response in Both Inputs in an Enzymatic AND Gate. <i>Journal of Physical Chemistry B</i> , 2013, 117, 9857-9865.	2.6	39
23	Artificial Muscle Reversibly Controlled by Enzyme Reactions. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 839-843.	4.6	38
24	Realization and Properties of Biochemical-Computing Biocatalytic XOR Gate Based on Enzyme Inhibition by a Substrate. <i>Journal of Physical Chemistry B</i> , 2011, 115, 9838-9845.	2.6	34
25	Coomassie Brilliant Blue G-250 Dye: An Application for Forensic Fingerprint Analysis. <i>Analytical Chemistry</i> , 2017, 89, 4314-4319.	6.5	30
26	Forensic determination of blood sample age using a bioaffinity-based assay. <i>Analyst, The</i> , 2015, 140, 1411-1415.	3.5	29
27	Biocatalytic analysis of biomarkers for forensic identification of ethnicity between Caucasian and African American groups. <i>Analyst, The</i> , 2013, 138, 6251.	3.5	28
28	Enzyme-based NAND gate for rapid electrochemical screening of traumatic brain injury in serum. <i>Analytica Chimica Acta</i> , 2011, 703, 94-100.	5.4	25
29	Biocatalytic analysis of biomarkers for forensic identification of gender. <i>Analyst, The</i> , 2014, 139, 559-563.	3.5	22
30	Steganography and encrypting based on immunochemical systems. <i>Biotechnology and Bioengineering</i> , 2011, 108, 1100-1107.	3.3	21
31	Ages at a Crime Scene: Simultaneous Estimation of the Time since Deposition and Age of Its Originator. <i>Analytical Chemistry</i> , 2016, 88, 6479-6484.	6.5	21
32	Noninvasive Concept for Optical Ethanol Sensing on the Skin Surface with Camera-Based Quantification. <i>Analytical Chemistry</i> , 2019, 91, 15860-15865.	6.5	18
33	Fingerprint Analysis: Moving Toward Multiattribute Determination via Individual Markers. <i>Analytical Chemistry</i> , 2018, 90, 980-987.	6.5	16
34	Recent Advances in Noninvasive Biosensors for Forensics, Biometrics, and Cybersecurity. <i>Sensors</i> , 2020, 20, 5974.	3.8	13
35	Step toward Roadside Sensing: Noninvasive Detection of a THC Metabolite from the Sweat Content of Fingerprints. <i>ACS Sensors</i> , 2019, 4, 3318-3324.	7.8	12
36	Metabolite Biometrics for the Differentiation of Individuals. <i>Analytical Chemistry</i> , 2018, 90, 5322-5328.	6.5	11

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37	Promises and Challenges in Continuous Tracking Utilizing Amino Acids in Skin Secretions for Active Multi-Factor Biometric Authentication for Cybersecurity. <i>ChemPhysChem</i> , 2017, 18, 1714-1720.	2.1	7
38	Fluorescence of 1,2-Indanedione with Amino Acids Present in the Fingerprint Residue: Application in Gender Determination. <i>Journal of Forensic Sciences</i> , 2019, 64, 1495-1499.	1.6	7
39	Bioaffinity-based assay for the sensitive detection and discrimination of sweat aimed at forensic applications. <i>Talanta</i> , 2017, 170, 210-214.	5.5	6
40	Symmetric-Key Encryption Based on Bioaffinity Interactions. <i>ACS Synthetic Biology</i> , 2019, 8, 1655-1662.	3.8	5
41	Determination of Time since Deposition of Fingerprints via Colorimetric Assays. <i>ACS Omega</i> , 2021, 6, 12898-12903.	3.5	4
42	Optimization of Enzymatic Logic Gates and Networks for Noise Reduction and Stability. , 2009, , .		3
43	Permeability of Human Tooth Surfaces Studied In Vitro by Electrochemical Impedance Spectroscopy. <i>Electroanalysis</i> , 2012, 24, 1033-1038.	2.9	2
44	New age of quick and onsite bioassays for forensics: where are we now?. <i>Bioanalysis</i> , 2014, 6, 429-431.	1.5	2
45	Enzyme Logic Systems: Biomedical and Forensic Biosensor Applications. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2017, , 345-381.	0.5	2
46	Biocomputing approach in forensic analysis. <i>International Journal of Parallel, Emergent and Distributed Systems</i> , 2017, 32, 17-29.	1.0	1
47	Non-traditional encryption methods: Moving toward electrochemical cryptography. <i>Electrochemical Science Advances</i> , 0, , .	2.8	0