Valerio Beni

List of Publications by Year
in descending order

68	2,844	186265 28	175258 52
papers	citations	h-index	g-index

70	70	70	4288
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Zinc Oxide Nanostructure-Modified Textile and Its Application to Biosensing, Photocatalysis, and as Antibacterial Material. Langmuir, 2015, 31, 10913-10921.	3.5	229
2	Lateral-flow technology: From visual to instrumental. TrAC - Trends in Analytical Chemistry, 2016, 79, 297-305.	11.4	202
3	Label-free impedimetric biosensor for Salmonella Typhimurium detection based on poly [pyrrole-co-3-carboxyl-pyrrole] copolymer supported aptamer. Biosensors and Bioelectronics, 2016, 80, 194-200.	10.1	195
4	Cholesterol Self-Powered Biosensor. Analytical Chemistry, 2014, 86, 9540-9547.	6.5	149
5	Diazonium-based impedimetric aptasensor for the rapid label-free detection of Salmonella typhimurium in food sample. Biosensors and Bioelectronics, 2016, 80, 566-573.	10.1	129
6	Application of 2D Non-Graphene Materials and 2D Oxide Nanostructures for Biosensing Technology. Sensors, 2016, 16, 223.	3.8	128
7	Electrochemical bacterial detection using poly(3-aminophenylboronic acid)-based imprinted polymer. Biosensors and Bioelectronics, 2017, 93, 87-93.	10.1	117
8	Synthesis of Novel CuO Nanosheets and Their Non-Enzymatic Glucose Sensing Applications. Sensors, 2013, 13, 7926-7938.	3.8	104
9	Creatinine and urea biosensors based on a novel ammonium ion-selective copper-polyaniline nano-composite. Biosensors and Bioelectronics, 2016, 77, 505-511.	10.1	94
10	Voltammetric characterisation of silicon-based microelectrode arrays and their application to mercury-free stripping voltammetry of copper ions. Talanta, 2007, 71, 1022-1030.	5.5	90
11	Continuous sensing of hydrogen peroxide and glucose via quenching of the UV and visible luminescence of ZnO nanoparticles. Mikrochimica Acta, 2015, 182, 1819-1826.	5.0	82
12	Stripping voltammetry at micro-interface arrays: A review. Analytica Chimica Acta, 2013, 769, 10-21.	5.4	73
13	Selective voltammetric detection of dopamine in the presence of ascorbateElectronic supplementary information (ESI) available: experimental details, cell compositions, methodology. See http://www.rsc.org/suppdata/cc/b3/b316493d/. Chemical Communications, 2004, , 732.	4.1	69
14	Cyclic and pulse voltammetric study of dopamine at the interface between two immiscible electrolyte solutions. Biosensors and Bioelectronics, 2005, 20, 2097-2103.	10.1	63
15	Development of a portable electroanalytical system for the stripping voltammetry of metals: Determination of copper in acetic acid soil extracts. Analytica Chimica Acta, 2005, 552, 190-200.	5.4	59
16	The ethylene glycol template assisted hydrothermal synthesis of Co3O4 nanowires; structural characterization and their application as glucose non-enzymatic sensor. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 194, 94-100.	3.5	57
17	An integrated dual functional recognition/amplification bio-label for the one-step impedimetric detection of Micro-RNA-21. Biosensors and Bioelectronics, 2017, 92, 154-161.	10.1	52
18	A practical non-enzymatic urea sensor based on NiCo₂O₄ nanoneedles. RSC Advances, 2019, 9, 14443-14451.	3.6	50

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19	Flexible Printed Organic Electrochemical Transistors for the Detection of Uric Acid in Artificial Wound Exudate. Advanced Materials Interfaces, 2020, 7, 2001218.	3.7	50
20	Printed Electrochemical Instruments for Biosensors. ECS Journal of Solid State Science and Technology, 2015, 4, S3001-S3005.	1.8	46
21	Design and testing of a packaged microfluidic cell for the multiplexed electrochemical detection of cancer markers. Electrophoresis, 2009, 30, 3398-3405.	2.4	45
22	Label free urea biosensor based on organic electrochemical transistors. Flexible and Printed Electronics, 2018, 3, 024001.	2.7	43
23	Nanomaterial application in bio/sensors for the detection of infectious diseases. Talanta, 2021, 230, 122026.	5.5	43
24	Investigation into the voltammetric behaviour and detection of selenium(IV) at metal electrodes in diverse electrolyte media. Analytica Chimica Acta, 2011, 699, 127-133.	5.4	36
25	Detection of Breast Cancer 1 (BRCA1) Gene Using an Electrochemical DNA Biosensor Based on Immobilized ZnO Nanowires. Open Journal of Applied Biosensor, 2014, 03, 9-17.	1.6	34
26	Microelectrode Arrays and Microfabricated Devices in Electrochemical Stripping Analysis. Current Analytical Chemistry, 2008, 4, 229-241.	1.2	33
27	Development of a gold nano-particle-based fluorescent molecular beacon for detection of cystic fibrosis associated mutation. Biosensors and Bioelectronics, 2010, 26, 307-313.	10.1	32
28	Voltammetry of chromium(VI) at the liquid|liquid interface. Electrochemistry Communications, 2005, 7, 976-982.	4.7	29
29	Voltammetric behaviour at gold electrodes immersed in the BCR sequential extraction scheme media. Analytica Chimica Acta, 2004, 502, 195-206.	5.4	28
30	Structurally responsive oligonucleotide-based single-probe lateral-flow test for detection of miRNA-21 mimics. Analytical and Bioanalytical Chemistry, 2016, 408, 1475-1485.	3.7	25
31	Melting temperature of surface-tethered DNA. Analytical Biochemistry, 2010, 406, 34-40.	2.4	21
32	Direct detection of ammonium ion by means of oxygen electrocatalysis at a copper-polyaniline composite on a screen-printed electrode. Mikrochimica Acta, 2016, 183, 1981-1987.	5.0	20
33	An Electrochemical Dopamine Sensor Based on the ZnO/CuO Nanohybrid Structures. Journal of Nanoscience and Nanotechnology, 2014, 14, 6646-6652.	0.9	19
34	Modulating the Faradic Operation of All-Printed Organic Electrochemical Transistors by Facile in Situ Modification of the Gate Electrode. ACS Omega, 2019, 4, 5374-5381.	3.5	19
35	A Bacterial Photosynthetic Enzymatic Unit Modulating Organic Transistors with Light. Advanced Electronic Materials, 2020, 6, 1900888.	5.1	19
36	Fully screen printed stretchable electrochromic displays. Flexible and Printed Electronics, 2021, 6, 045014.	2.7	19

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37	Methylene blue as an electrochemical indicator for DF508 cystic fibrosis mutation detection. Analytical and Bioanalytical Chemistry, 2010, 396, 1423-1432.	3.7	18
38	Biofunctionalization of Polyoxometalates with DNA Primers, Their Use in the Polymerase Chain Reaction (PCR) and Electrochemical Detection of PCR Products. Chemistry - A European Journal, 2015, 21, 17721-17727.	3.3	18
39	Large-area printed organic electronic ion pumps. Flexible and Printed Electronics, 2019, 4, 022001.	2.7	17
40	Low temperature chemical sintering of inkjet-printed Zn nanoparticles for highly conductive flexible electronic components. Npj Flexible Electronics, 2021, 5, .	10.7	17
41	Unsubstituted phenothiazine as a superior water-insoluble mediator for oxidases. Biosensors and Bioelectronics, 2014, 53, 275-282.	10.1	16
42	Labelless electrochemical melting curve analysis for rapid mutation detection. Analytical Methods, 2010, 2, 1461.	2.7	15
43	High Performance Organic Electrochemical Transistors and Logic Circuits Manufactured via a Combination of Screen and Aerosol Jet Printing Techniques. Advanced Materials Technologies, 2022, 7, .	5.8	15
44	Effect of humic acid on the underpotential deposition-stripping voltammetry of copper in acetic acid soil extract solutions at mercaptoacetic acid-modified gold electrodes. Analytica Chimica Acta, 2004, 511, 137-143.	5.4	14
45	Electrochemical melting-curve analysis. Electrochemistry Communications, 2010, 12, 1030-1033.	4.7	14
46	Modified primers for rapid and direct electrochemical analysis of coeliac disease associated HLA alleles. Biosensors and Bioelectronics, 2015, 73, 64-70.	10.1	14
47	Gold nanoparticle fluorescent molecular beacon for low-resolution DQ2 gene HLA typing. Analytical and Bioanalytical Chemistry, 2012, 402, 1001-1009.	3.7	13
48	Controlled Znâ€Mediated Grafting of Thin Layers of Bipodal Diazonium Salt on Gold and Carbon Substrates. Chemistry - A European Journal, 2015, 21, 671-681.	3.3	13
49	Bioinspired design of a polymer-based biohybrid sensor interface. Sensors and Actuators B: Chemical, 2017, 251, 674-682.	7.8	13
50	Cystic fibrosis: a label-free detection approach based on thermally modulated electrochemical impedance spectroscopy. Analytical and Bioanalytical Chemistry, 2010, 396, 2565-2574.	3.7	12
51	Monitoring DNA Hybridization with Organic Electrochemical Transistors Functionalized with Polydopamine. Macromolecular Materials and Engineering, 2022, 307, .	3.6	12
52	Facile Electrochemical Hydrogenation and Chlorination of Glassy Carbon to Produce Highly Reactive and Uniform Surfaces for Stable Anchoring of Thiolated Molecules. Chemistry - A European Journal, 2014, 20, 7646-7654.	3.3	11
53	Doping Polypyrrole Films with 4-N-Pentylphenylboronic Acid to Enhance Affinity towards Bacteria and Dopamine. PLoS ONE, 2016, 11, e0166548.	2.5	11
54	Solar Heatâ€Enhanced Energy Conversion in Devices Based on Photosynthetic Membranes and PEDOT:PSSâ€Nanocellulose Electrodes. Advanced Sustainable Systems, 2020, 4, 1900100.	5.3	11

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55	Electrochemical properties of polymeric nanopatterned electrodes. Electrochemistry Communications, 2007, 9, 1833-1839.	4.7	10
56	Lowâ€“medium resolution HLA-DQ2/DQ8 typing for coeliac disease predisposition analysis by colorimetric assay. Analytical and Bioanalytical Chemistry, 2012, 403, 807-819.	3.7	10
57	Medium-high resolution electrochemical genotyping of HLA-DQ2/DQ8 for detection of predisposition to coeliac disease. Analytical and Bioanalytical Chemistry, 2014, 406, 2757-2769.	3.7	10
58	Electrochemical molecular beacon DNA biosensor for the detection and discrimination of the DF508 cystic fibrosis mutation. Journal of Electroanalytical Chemistry, 2011, 662, 322-327.	3.8	8
59	Single-Use Printed Biosensor for L-Lactate and Its Application in Bioprocess Monitoring. Processes, 2020, 8, 321.	2.8	8
60	Amperometric detection of Francisella tularensis genomic sequence on Zn-mediated diazonium modified substrates. Electrochemistry Communications, 2015, 53, 6-10.	4.7	7
61	Fully Automated Microsystem for Unmediated Electrochemical Characterization, Visualization and Monitoring of Bacteria on Solid Media; E. coli K-12: A Case Study. Biosensors, 2019, 9, 131.	4.7	7
62	Study of the Effects of Nonlinear Potential Sweeps on Voltammetry. Electroanalysis, 2009, 21, 68-76.	2.9	6
63	DNA biosensor based on hybridization refractory mutation system approach for single mismatch detection. Analytical Biochemistry, 2015, 474, 66-68.	2.4	6
64	Bleedâ€toâ€read disposable microsystems for the genetic and serological analysis of celiac disease markers with amperometric detection. Electrophoresis, 2015, 36, 1920-1926.	2.4	4
65	Surface functionalisation of carbon for low cost fabrication of highly stable electrochemical DNA sensors. Biosensors and Bioelectronics, 2015, 71, 25-29.	10.1	4
66	Use of Nanocellulose to Produce Water-Based Conductive Inks with Ag NPs for Printed Electronics. International Journal of Molecular Sciences, 2022, 23, 2946.	4.1	4
67	Study of the combination of the deposition/stripping of sacrificial metal nano-structures and alkanethiol as a route for genosensor surface preparation. Electrochemistry Communications, 2011, 13, 325-327.	4.7	1
68	Functionalized Deoxynucleotides and DNA Primers for Electrochemical Diagnostics of Disease Predispostions. ECS Transactions, 2017, 77, 1873-1883.	0.5	0