Alessandra Bonanni

List of Publications by Year
in descending order

88 papers	6,222 citations	94433 37 h-index	66911 78 g-index
97 all docs	97 docs citations	97 times ranked	8447 citing authors

#	Article	IF	Citations
1	Exploring graphene oxide intrinsic electroactivity to elucidate the non-covalent interactions with DNA oligonucleotides. Chemical Communications, 2022, 58, 2662-2665.	4.1	4
2	Rapid electrochemical detection of COVID-19 genomic sequence with dual-function graphene nanocolloids based biosensor. FlatChem, 2022, 32, 100336.	5.6	30
3	Electroactive nanocarbon materials as signaling tags for electrochemical PCR. Talanta, 2022, 245, 123479.	5.5	2
4	Fabrication of handmade paper sensor based on silver-cobalt doped copolymer-ionic liquid composite for monitoring of vitamin D3 level in real samples. Microchemical Journal, 2021, 161, 105789.	4.5	12
5	Effect of surface chemistry on bio-conjugation and bio-recognition abilities of 2D germanene materials. Nanoscale, 2021, 13, 1893-1903.	5.6	13
6	Functionalized Germanene-Based Nanomaterials for the Detection of Single Nucleotide Polymorphism. ACS Applied Nano Materials, 2021, 4, 5164-5175.	5.0	17
7	How 3D printing can boost advances in analytical and bioanalytical chemistry. Mikrochimica Acta, 2021, 188, 265.	5.0	21
8	Advances on the Use of Graphene as a Label for Electrochemical Biosensors. ChemElectroChem, 2020, 7, 4157-4157.	3.4	1
9	The potential of electrochemistry for the detection of coronavirus-induced infections. TrAC - Trends in Analytical Chemistry, 2020, 133, 116081.	11.4	42
10	Advances on the Use of Graphene as a Label for Electrochemical Biosensors. ChemElectroChem, 2020, 7, 4177-4185.	3.4	4
11	Electrochemical Polymerase Chain Reaction Using Electroactive Graphene Oxide Nanoparticles as Detection Labels. ACS Applied Nano Materials, 2020, 3, 5489-5498.	5.0	15
12	Electroactive Nanocarbon Can Simultaneously Work as Platform and Signal Generator for Labelâ€Free Immunosensing. ChemElectroChem, 2019, 6, 3615-3620.	3.4	10
13	Electroactive Nanocarbon as Novel Label for DNA Analysis. Proceedings (mdpi), 2019, 15, 34.	0.2	0
14	Unravelling the Aptamerâ€Analyte Interaction Dynamics through Fluorescence Quenching in Graphene Quantum Dots (GQDs) Based Homogeneous Assays. ChemPlusChem, 2019, 84, 420-426.	2.8	10
15	Allâ€inâ€One: Electroactive Nanocarbon as Simultaneous Platform and Label for Singleâ€Step Biosensing. Chemistry - A European Journal, 2018, 24, 6380-6385.	3.3	12
16	The Role of Surface Chemistry in Impedimetric Aptasensing. ChemElectroChem, 2018, 5, 3654-3659.	3.4	7
17	Investigation on the ability of heteroatom-doped graphene for biorecognition. Nanoscale, 2017, 9, 3530-3536.	5.6	8
18	Chemically Reduced Graphene Oxide for the Assessment of Food Quality: How the Electrochemical Platform Should Be Tailored to the Application. Chemistry - A European Journal, 2017, 23, 1930-1936.	3.3	7

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19	Doped Graphene for DNA Analysis: the Electrochemical Signal is Strongly Influenced by the Kind of Dopant and the Nucleobase Structure. Scientific Reports, 2016, 6, 33046.	3.3	25
20	Graphene and its electrochemistry â€“ an update. Chemical Society Reviews, 2016, 45, 2458-2493.	38.1	366
21	Improving the Analytical Performance of Graphene Oxide towards the Assessment of Polyphenols. Chemistry - A European Journal, 2016, 22, 3830-3834.	3.3	25
22	Doped and undoped graphene platforms: the influence of structural properties on the detection of polyphenols. Scientific Reports, 2016, 6, 20673.	3.3	12
23	Strong dependence of fluorescence quenching on the transition metal in layered transition metal dichalcogenide nanoflakes for nucleic acid detection. Analyst, The, 2016, 141, 4654-4658.	3.5	25
24	Carboxylic Carbon Quantum Dots as a Fluorescent Sensing Platform for DNA Detection. ACS Applied Materials & Interfaces, 2016, 8, 1951-1957.	8.0	261
25	Chemically Modified Graphene: The Influence of Structural Properties on the Assessment of Antioxidant Capacity. Chemistry - A European Journal, 2015, 21, 11793-11798.	3.3	13
26	Transitional Metal/Chalcogen Dependant Interactions of Hairpin DNA with Transition Metal Dichalcogenides, MX₂. ChemPhysChem, 2015, 16, 2304-2306.	2.1	14
27	DNA polymorphism sensitive impedimetric detection on gold-nanoislands modified electrodes. Talanta, 2015, 136, 95-101.	5.5	7
28	The dopant type and amount governs the electrochemical performance of graphene platforms for the antioxidant activity quantification. Nanoscale, 2015, 7, 9040-9045.	5.6	19
29	Mycotoxin Aptasensing Amplification by using Inherently Electroactive Grapheneâ€Oxide Nanoplatelet Labels. ChemElectroChem, 2015, 2, 743-747.	3.4	36
30	Exfoliated transition metal dichalcogenides (MoS2, MoSe2, WS2, WSe2): An electrochemical impedance spectroscopic investigation. Electrochemistry Communications, 2015, 50, 39-42.	4.7	62
31	Oxidation Debris in Graphene Oxide Is Responsible for Its Inherent Electroactivity. ACS Nano, 2014, 8, 4197-4204.	14.6	77
32	Molybdenum disulfide (MoS₂) nanoflakes as inherently electroactive labels for DNA hybridization detection. Nanoscale, 2014, 6, 11971-11975.	5.6	98
33	CVD graphene based immunosensor. RSC Advances, 2014, 4, 23952-23956.	3.6	14
34	Electrochemically reduced graphene nanoribbons: Interference from inherent electrochemistry of the material in DPV studies. Electrochemistry Communications, 2014, 46, 137-139.	4.7	8
35	Guest Editorial: Electrochemistry of Graphene. Electroanalysis, 2014, 26, 4-4.	2.9	0
36	Electrochemistry of Graphene and Related Materials. Chemical Reviews, 2014, 114, 7150-7188.	47.7	968

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37	Rational Design of Carboxyl Groups Perpendicularly Attached to a Graphene Sheet: A Platform for Enhanced Biosensing Applications. Chemistry - A European Journal, 2014, 20, 217-222.	3.3	43
38	Inherently electroactive graphene oxide nanoplatelets as labels for specific protein-target recognition. Nanoscale, 2013, 5, 7844.	5.6	29
39	An insight into the hybridization mechanism of hairpin DNA physically immobilized on chemically modified graphenes. Analyst, The, 2013, 138, 467-471.	3.5	11
40	Graphene platforms for the detection of caffeine in real samples. Analytica Chimica Acta, 2013, 804, 92-97.	5.4	46
41	High-resolution impedance spectroscopy for graphene characterization. Electrochemistry Communications, 2013, 26, 52-54.	4.7	29
42	Soldering DNA to graphene via 0, 1 and 2-point contacts: Electrochemical impedance spectroscopic investigation. Electrochemistry Communications, 2013, 28, 83-86.	4.7	5
43	Biorecognition on Graphene: Physical, Covalent, and Affinity Immobilization Methods Exhibiting Dramatic Differences. Chemistry - an Asian Journal, 2013, 8, 198-203.	3.3	31
44	Thrombin aptasensing with inherently electroactive graphene oxide nanoplatelets as labels. Nanoscale, 2013, 5, 4758.	5.6	55
45	Large-scale quantification of CVD graphene surface coverage. Nanoscale, 2013, 5, 2379.	5.6	47
46	Gold Nanospacers Greatly Enhance the Capacitance of Electrochemically Reduced Graphene. ChemPlusChem, 2012, 77, 71-73.	2.8	24
47	Graphene for impedimetric biosensing. TrAC - Trends in Analytical Chemistry, 2012, 37, 12-21.	11.4	140
48	Oxidation of DNA bases is influenced by their position in the DNA strand. Electrochemistry Communications, 2012, 22, 207-210.	4.7	13
49	Inherently Electroactive Graphene Oxide Nanoplatelets As Labels for Single Nucleotide Polymorphism Detection. ACS Nano, 2012, 6, 8546-8551.	14.6	113
50	DNA Sensors Employing Nanomaterials for Diagnostic Applications. Springer Series on Chemical Sensors and Biosensors, 2012, , 189-216.	0.5	1
51	Nanoporous carbon as a sensing platform for DNA detection: The use of impedance spectroscopy for hairpin-DNA based assay. RSC Advances, 2012, 2, 1021-1024.	3.6	14
52	Electroactivity of graphene oxide on different substrates. RSC Advances, 2012, 2, 10575.	3.6	4
53	Impedimetric immunoglobulin G immunosensor based on chemically modified graphenes. Nanoscale, 2012, 4, 921-925.	5.6	54
54	Detection of DNA hybridization on chemically modified graphene platforms. Analyst, The, 2012, 137, 580-583.	3.5	54

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55	Impedimetric thrombin aptasensor based on chemically modified graphenes. Nanoscale, 2012, 4, 143-147.	5.6	69
56	Inherent Electrochemistry and Activation of Chemically Modified Graphenes for Electrochemical Applications. Chemistry - an Asian Journal, 2012, 7, 759-770.	3.3	37
57	On Oxygenâ€Containing Groups in Chemically Modified Graphenes. Chemistry - A European Journal, 2012, 18, 4541-4548.	3.3	69
58	Inside Cover: On Oxygen-Containing Groups in Chemically Modified Graphenes (Chem. Eur. J. 15/2012). Chemistry - A European Journal, 2012, 18, 4438-4438.	3.3	0
59	Lithium Aluminum Hydride as Reducing Agent for Chemically Reduced Graphene Oxides. Chemistry of Materials, 2012, 24, 2292-2298.	6.7	187
60	Surfactants used for dispersion of graphenes exhibit strong influence on electrochemical impedance spectroscopic response. Electrochemistry Communications, 2012, 16, 19-21.	4.7	16
61	Nucleic Acid Functionalized Graphene for Biosensing. Chemistry - A European Journal, 2012, 18, 1668-1673.	3.3	72
62	Influence of gold nanoparticle size (2â€"50 nm) upon its electrochemical behavior: an electrochemical impedance spectroscopic and voltammetric study. Physical Chemistry Chemical Physics, 2011, 13, 4980.	2.8	67
63	Chemically-modified graphenes for oxidation of DNA bases: analytical parameters. Analyst, The, 2011, 136, 4738.	3.5	38
64	Graphene Platform for Hairpin-DNA-Based Impedimetric Genosensing. ACS Nano, 2011, 5, 2356-2361.	14.6	289
65	Electrochemistry of folded graphene edges. Nanoscale, 2011, 3, 2256.	5.6	74
66	Electrochemistry at Chemically Modified Graphenes. Chemistry - A European Journal, 2011, 17, 10763-10770.	3.3	288
67	Use of nanomaterials for impedimetric DNA sensors: A review. Analytica Chimica Acta, 2010, 678, 7-17.	5.4	163
68	DNA hybridization detection by electrochemical impedance spectroscopy using interdigitated gold nanoelectrodes. Mikrochimica Acta, 2010, 170, 275-281.	5.0	55
69	Graphene for electrochemical sensing and biosensing. TrAC - Trends in Analytical Chemistry, 2010, 29, 954-965.	11.4	1,041
70	Impedimetric genosensing of DNA polymorphism correlated to cystic fibrosis: A comparison among different protocols and electrode surfaces. Biosensors and Bioelectronics, 2010, 26, 1245-1251.	10.1	26
71	Rapid, Sensitive, and Label-Free Impedimetric Detection of a Single-Nucleotide Polymorphism Correlated to Kidney Disease. Analytical Chemistry, 2010, 82, 3772-3779.	6.5	22
72	Impedimetric detection of influenza A (H1N1) DNA sequence using carbon nanotubes platform and gold nanoparticles amplification. Analyst, The, 2010, 135, 1765.	3.5	49

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73	Impedimetric genosensors employing COOH-modified carbon nanotube screen-printed electrodes. Biosensors and Bioelectronics, 2009, 24, 2885-2891.	10.1	59
74	Electrochemical immunosensor for the diagnosis of celiac disease. Analytical Biochemistry, 2009, 388, 229-234.	2.4	42
75	Impedimetric detection of double-tagged PCR products using novel amplification procedures based on gold nanoparticles and Protein G. Analyst, The, 2009, 134, 602-608.	3.5	26
76	Dualâ€Genic Hybridization Sensor Employing Electrochemical Impedance Spectroscopy. Electroanalysis, 2008, 20, 941-948.	2.9	15
77	Signal amplification for impedimetric genosensing using gold-streptavidin nanoparticles. Electrochimica Acta, 2008, 53, 4022-4029.	5.2	63
78	Evaluation of the antioxidant and prooxidant properties of several commercial dry spices by different analytical methods. Food Chemistry, 2007, 102, 751-758.	8.2	37
79	Application of the avidinâ€"biotin interaction to immobilize DNA in the development of electrochemical impedance genosensors. Analytical and Bioanalytical Chemistry, 2007, 389, 851-861.	3.7	36
80	Genomagnetic assay based on label-free electrochemical detection using magneto-composite electrodes. Sensors and Actuators B: Chemical, 2006, 114, 591-598.	7.8	76
81	Impedimetric genosensors for the detection of DNA hybridization. Analytical and Bioanalytical Chemistry, 2006, 385, 1195-1201.	3.7	67
82	Derivative enzymaticâ€"spectrophotometric method for choline containing phospholipid determination in human serum, bile and amniotic fluid: recovery data by â€˜standard additionâ€™ method. Microchemical Journal, 2005, 79, 61-67.	4.5	1
83	Biosensors for determination of total and natural antioxidant capacity of red and white wines: comparison with other spectrophotometric and fluorimetric methods. Biosensors and Bioelectronics, 2004, 19, 641-651.	10.1	101
84	Biosensors for determination of total antioxidant capacity of phytotherapeutic integrators: comparison with other spectrophotometric, fluorimetric and voltammetric methods. Journal of Pharmaceutical and Biomedical Analysis, 2004, 35, 303-320.	2.8	22
85	Determination of choline containing phospholipids in serum, bile and amniotic fluids by the derivative enzymaticâ€"spectrophotometric method. Journal of Pharmaceutical and Biomedical Analysis, 2004, 35, 399-407.	2.8	7
86	Comparison of fluorimetric, voltammetric and biosensor methods for the determination of total antioxidant capacity of drug products containing acetylsalicylic acid. Journal of Pharmaceutical and Biomedical Analysis, 2004, 36, 91-99.	2.8	36
87	Determination of antioxidant properties of aromatic herbs, olives and fresh fruit using an enzymatic sensor. Analytical and Bioanalytical Chemistry, 2003, 375, 1011-1016.	3.7	53
88	Determination of the antioxidant capacity of samples of different types of tea, or of beverages based on tea or other herbal products, using a superoxide dismutase biosensor. Journal of Pharmaceutical and Biomedical Analysis, 2003, 32, 725-736.	2.8	51