Adriano Ambrosi

List of Publications by Year
in descending order

137 papers	14,555 citations	23544 58 h-index	18633 119 g-index
149 all docs	149 docs citations	149 times ranked	18791 citing authors

#	Article	IF	Citations
1	Graphene for electrochemical sensing and biosensing. TrAC - Trends in Analytical Chemistry, 2010, 29, 954-965.	5.8	1,041
2	Electrochemistry of Graphene and Related Materials. Chemical Reviews, 2014, 114, 7150-7188.	23.0	968
3	3D-printing technologies for electrochemical applications. Chemical Society Reviews, 2016, 45, 2740-2755.	18.7	775
4	Electrochemistry of Nanostructured Layered Transition-Metal Dichalcogenides. Chemical Reviews, 2015, 115, 11941-11966.	23.0	719
5	2H â†’ 1T phase transition and hydrogen evolution activity of MoS₂, MoSe₂, WS₂ and WSe₂ strongly depends on the MX₂ composition. Chemical Communications, 2015, 51, 8450-8453.	2.2	565
6	Layered transition metal dichalcogenides for electrochemical energy generation and storage. Journal of Materials Chemistry A, 2014, 2, 8981-8987.	5.2	552
7	Graphene and its electrochemistry â€“ an update. Chemical Society Reviews, 2016, 45, 2458-2493.	18.7	366
8	Graphenes prepared by Staudenmaier, Hofmann and Hummers methods with consequent thermal exfoliation exhibit very different electrochemical properties. Nanoscale, 2012, 4, 3515.	2.8	363
9	Double-Codified Gold Nanolabels for Enhanced Immunoanalysis. Analytical Chemistry, 2007, 79, 5232-5240.	3.2	354
10	Enhanced Gold Nanoparticle Based ELISA for a Breast Cancer Biomarker. Analytical Chemistry, 2010, 82, 1151-1156.	3.2	345
11	â€œMetalâ€Freeâ€•Catalytic Oxygen Reduction Reaction on Heteroatomâ€Doped Graphene is Caused by Trace Metal Impurities. Angewandte Chemie - International Edition, 2013, 52, 13818-13821.	7.2	331
12	Electrochemistry at Chemically Modified Graphenes. Chemistry - A European Journal, 2011, 17, 10763-10770.	1.7	288
13	Electrochemistry of Transition Metal Dichalcogenides: Strong Dependence on the Metal-to-Chalcogen Composition and Exfoliation Method. ACS Nano, 2014, 8, 12185-12198.	7.3	288
14	Lithium Intercalation Compound Dramatically Influences the Electrochemical Properties of Exfoliated MoS₂. Small, 2015, 11, 605-612.	5.2	250
15	Electrochemically Exfoliated Graphene and Graphene Oxide for Energy Storage and Electrochemistry Applications. Chemistry - A European Journal, 2016, 22, 153-159.	1.7	235
16	Layered Platinum Dichalcogenides (PtS₂, PtSe₂, and PtTe₂) Electrocatalysis: Monotonic Dependence on the Chalcogen Size. Advanced Functional Materials, 2016, 26, 4306-4318.	7.8	228
17	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. Angewandte Chemie - International Edition, 2017, 56, 10443-10445.	7.2	228
18	Electrocatalysis of layered Group 5 metallic transition metal dichalcogenides (MX₂, M =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	5.2	218

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19	Noble metal (Pd, Ru, Rh, Pt, Au, Ag) doped graphene hybrids for electrocatalysis. Nanoscale, 2012, 4, 5002.	2.8	214
20	Chemically reduced graphene contains inherent metallic impurities present in parent natural and synthetic graphite. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12899-12904.	3.3	195
21	Lithium Aluminum Hydride as Reducing Agent for Chemically Reduced Graphene Oxides. Chemistry of Materials, 2012, 24, 2292-2298.	3.2	187
22	Catalytic and Charge Transfer Properties of Transition Metal Dichalcogenides Arising from Electrochemical Pretreatment. ACS Nano, 2015, 9, 5164-5179.	7.3	184
23	Helical 3Dâ€Printed Metal Electrodes as Customâ€Shaped 3D Platform for Electrochemical Devices. Advanced Functional Materials, 2016, 26, 698-703.	7.8	168
24	Metallic Impurities in Graphenes Prepared from Graphite Can Dramatically Influence Their Properties. Angewandte Chemie - International Edition, 2012, 51, 500-503.	7.2	164
25	Exfoliation of layered materials using electrochemistry. Chemical Society Reviews, 2018, 47, 7213-7224.	18.7	140
26	The CVD graphene transfer procedure introduces metallic impurities which alter the graphene electrochemical properties. Nanoscale, 2014, 6, 472-476.	2.8	138
27	Pristine Basalâ€•and Edgeâ€Planeâ€Oriented Molybdenite MoS₂ Exhibiting Highly Anisotropic Properties. Chemistry - A European Journal, 2015, 21, 7170-7178.	1.7	133
28	The application of conducting polymer nanoparticle electrodes to the sensing of ascorbic acid. Analytica Chimica Acta, 2008, 609, 37-43.	2.6	130
29	Transition metal dichalcogenides (MoS2, MoSe2, WS2 and WSe2) exfoliation technique has strong influence upon their capacitance. Electrochemistry Communications, 2015, 56, 24-28.	2.3	129
30	Graphene oxide reduction by standard industrial reducing agent: thiourea dioxide. Journal of Materials Chemistry, 2012, 22, 11054.	6.7	125
31	Impurities in graphenes and carbon nanotubes and their influence on the redox properties. Chemical Science, 2012, 3, 3347.	3.7	123
32	Metallic 1Tâ€WS₂ for Selective Impedimetric Vapor Sensing. Advanced Functional Materials, 2015, 25, 5611-5616.	7.8	122
33	Platelet Graphite Nanofibers for Electrochemical Sensing and Biosensing: The Influence of Graphene Sheet Orientation. Chemistry - an Asian Journal, 2010, 5, 266-271.	1.7	120
34	Electrochemical analysis with nanoparticle-based biosystems. TrAC - Trends in Analytical Chemistry, 2008, 27, 568-584.	5.8	104
35	Graphene and carbon quantum dots electrochemistry. Electrochemistry Communications, 2015, 52, 75-79.	2.3	103
36	Electrochemical Biosensor with Enhanced Antifouling Capability for COVID-19 Nucleic Acid Detection in Complex Biological Media. Analytical Chemistry, 2021, 93, 5963-5971.	3.2	102

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37	Precise Tuning of Surface Composition and Electronâ€Transfer Properties of Graphene Oxide Films through Electroreduction. Chemistry - A European Journal, 2013, 19, 4748-4753.	1.7	101
38	Molybdenum disulfide (MoS₂) nanoflakes as inherently electroactive labels for DNA hybridization detection. Nanoscale, 2014, 6, 11971-11975.	2.8	98
39	Selfâ€Contained Polymer/Metal 3D Printed Electrochemical Platform for Tailored Water Splitting. Advanced Functional Materials, 2018, 28, 1700655.	7.8	98
40	Exfoliation of Layered Topological Insulators Bi₂Se₃ and Bi₂Te₃ <i>via</i> Electrochemistry. ACS Nano, 2016, 10, 11442-11448.	7.3	97
41	Graphene materials preparation methods have dramatic influence upon their capacitance. Electrochemistry Communications, 2012, 14, 5-8.	2.3	96
42	Unusual Inherent Electrochemistry of Graphene Oxides Prepared Using Permanganate Oxidants. Chemistry - A European Journal, 2013, 19, 12673-12683.	1.7	86
43	Thiofluorographeneâ€"Hydrophilic Graphene Derivative with Semiconducting and Genosensing Properties. Advanced Materials, 2015, 27, 2305-2310.	11.1	84
44	Stacked graphene nanofibers for electrochemical oxidation of DNA bases. Physical Chemistry Chemical Physics, 2010, 12, 8943.	1.3	81
45	Thermally reduced graphenes exhibiting a close relationship to amorphous carbon. Nanoscale, 2012, 4, 4972.	2.8	80
46	Templated Electrochemical Fabrication of Hollow Molybdenum Sulfide Microstructures and Nanostructures with Catalytic Properties for Hydrogen Production. ACS Catalysis, 2016, 6, 3985-3993.	5.5	80
47	Regulatory Peptides Are Susceptible to Oxidation by Metallic Impurities within Carbon Nanotubes. Chemistry - A European Journal, 2010, 16, 1786-1792.	1.7	79
48	Oxidation Debris in Graphene Oxide Is Responsible for Its Inherent Electroactivity. ACS Nano, 2014, 8, 4197-4204.	7.3	77
49	Electrochemistry of folded graphene edges. Nanoscale, 2011, 3, 2256.	2.8	74
50	Nanographite Impurities Dominate Electrochemistry of Carbon Nanotubes. Chemistry - A European Journal, 2010, 16, 10946-10949.	1.7	73
51	Precise Tuning of the Charge Transfer Kinetics and Catalytic Properties of MoS₂ Materials via Electrochemical Methods. Chemistry - A European Journal, 2014, 20, 17426-17432.	1.7	73
52	3D Printed Electrodes for Detection of Nitroaromatic Explosives and Nerve Agents. Analytical Chemistry, 2017, 89, 8995-9001.	3.2	73
53	Nucleic Acid Functionalized Graphene for Biosensing. Chemistry - A European Journal, 2012, 18, 1668-1673.	1.7	72
54	On Oxygenâ€Containing Groups in Chemically Modified Graphenes. Chemistry - A European Journal, 2012, 18, 4541-4548.	1.7	69

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55	3Dâ€printed Metal Electrodes for Heavy Metals Detection by Anodic Stripping Voltammetry. Electroanalysis, 2017, 29, 2444-2453.	1.5	67
56	Electron transfer properties of chemically reduced graphene materials with different oxygen contents. Journal of Materials Chemistry A, 2014, 2, 10668-10675.	5.2	64
57	Direct electrochemistry of copper oxide nanoparticles in alkaline media. Electrochemistry Communications, 2013, 28, 51-53.	2.3	61
58	Multimaterial 3D-Printed Water Electrolyzer with Earth-Abundant Electrodeposited Catalysts. ACS Sustainable Chemistry and Engineering, 2018, 6, 16968-16975.	3.2	61
59	Nitroaromatic explosives detection using electrochemically exfoliated graphene. Scientific Reports, 2016, 6, 33276.	1.6	59
60	3D-printed metal electrodes for electrochemical detection of phenols. Applied Materials Today, 2017, 9, 212-219.	2.3	59
61	Electrochemical determination of pharmaceuticals in spiked water samples. Journal of Hazardous Materials, 2005, 122, 219-225.	6.5	56
62	Functional Nanosheet Synthons by Covalent Modification of Transition-Metal Dichalcogenides. Chemistry of Materials, 2017, 29, 2066-2073.	3.2	56
63	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. Angewandte Chemie, 2017, 129, 10579-10581.	1.6	56
64	Impedimetric immunoglobulin G immunosensor based on chemically modified graphenes. Nanoscale, 2012, 4, 921-925.	2.8	54
65	Self-propelled nanojets via template electrodeposition. Nanoscale, 2013, 5, 1319-1324.	2.8	54
66	Layered rhenium sulfide on free-standing three-dimensional electrodes is highly catalytic for the hydrogen evolution reaction: Experimental and theoretical study. Electrochemistry Communications, 2016, 63, 39-43.	2.3	54
67	Introducing dichlorocarbene in graphene. Chemical Communications, 2012, 48, 5376.	2.2	51
68	Electrochemistry at CVD Grown Multilayer Graphene Transferred onto Flexible Substrates. Journal of Physical Chemistry C, 2013, 117, 2053-2058.	1.5	51
69	Enhancement of electrochemical and catalytic properties of MoS2 through ball-milling. Electrochemistry Communications, 2015, 54, 36-40.	2.3	51
70	Graphene based nanomaterials as electrochemical detectors in Lab-on-a-chip devices. Electrochemistry Communications, 2011, 13, 517-519.	2.3	50
71	3Dâ€printed Electrodes for Sensing of Biologically Active Molecules. Electroanalysis, 2018, 30, 1319-1326.	1.5	50
72	Optimizing the ratio of horseradish peroxidase and glucose oxidase on a bienzyme electrode: Comparison of a theoretical and experimental approach. Sensors and Actuators B: Chemical, 2007, 122, 395-402.	4.0	48

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73	Large-scale quantification of CVD graphene surface coverage. Nanoscale, 2013, 5, 2379.	2.8	47
74	Fluorographites (CF_{<i>x</i>})_{<i>n</i>} Exhibit Improved Heterogeneous Electronâ€Transfer Rates with Increasing Level of Fluorination: Towards the Sensing of Biomolecules. Chemistry - A European Journal, 2014, 20, 6665-6671.	1.7	46
75	Capacitance of pâ€•and nâ€Doped Graphenes is Dominated by Structural Defects Regardless of the Dopant Type. ChemSusChem, 2014, 7, 1102-1106.	3.6	45
76	Graphene Oxides Exhibit Limited Cathodic Potential Window Due to Their Inherent Electroactivity. Journal of Physical Chemistry C, 2011, 115, 17647-17650.	1.5	43
77	Electrochemical Exfoliation of MoS₂ Crystal for Hydrogen Electrogeneration. Chemistry - A European Journal, 2018, 24, 18551-18555.	1.7	42
78	Amorphous Carbon Impurities Play an Active Role in Redox Processes of Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 25281-25284.	1.5	40
79	Electrocatalytic effect of ZnO nanoparticles on reduction of nitroaromatic compounds. Catalysis Science and Technology, 2013, 3, 123-127.	2.1	40
80	Selfâ€Propelled 3Dâ€Printed â€œAircraft Carrierâ€• of Lightâ€Powered Smart Micromachines for Largeâ€Volume Nitroaromatic Explosives Removal. Advanced Functional Materials, 2019, 29, 1903872.	7.8	40
81	Chemical Preparation of Graphene Materials Results in Extensive Unintentional Doping with Heteroatoms and Metals. Chemistry - A European Journal, 2014, 20, 15760-15767.	1.7	39
82	Chemically-modified graphenes for oxidation of DNA bases: analytical parameters. Analyst, The, 2011, 136, 4738.	1.7	38
83	Inherent Electrochemistry and Activation of Chemically Modified Graphenes for Electrochemical Applications. Chemistry - an Asian Journal, 2012, 7, 759-770.	1.7	37
84	3D-printing for electrolytic processes and electrochemical flow systems. Journal of Materials Chemistry A, 2020, 8, 21902-21929.	5.2	37
85	Additive manufacturing of electrochemical interfaces: Simultaneous detection of biomarkers. Applied Materials Today, 2018, 12, 43-50.	2.3	36
86	A limited anodic and cathodic potential window of MoS₂: limitations in electrochemical applications. Nanoscale, 2015, 7, 3126-3129.	2.8	35
87	3D-graphene for electrocatalysis of oxygen reduction reaction: Increasing number of layers increases the catalytic effect. Electrochemistry Communications, 2014, 46, 148-151.	2.3	34
88	The Structural Stability of Graphene Anticorrosion Coating Materials is Compromised at Low Potentials. Chemistry - A European Journal, 2015, 21, 7896-7901.	1.7	33
89	Rapid electrochemical detection of COVID-19 genomic sequence with dual-function graphene nanocolloids based biosensor. FlatChem, 2022, 32, 100336.	2.8	30
90	3D printing for aqueous and non-aqueous redox flow batteries. Current Opinion in Electrochemistry, 2020, 20, 28-35.	2.5	28

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91	Bioavailability of Metallic Impurities in Carbon Nanotubes Is Greatly Enhanced by Ultrasonication. Chemistry - A European Journal, 2012, 18, 11593-11596.	1.7	27
92	Impact electrochemistry of individual molybdenum nanoparticles. Electrochemistry Communications, 2015, 56, 16-19.	2.3	27
93	Structural characterization by confocal laser scanning microscopy and electrochemical study of multi-walled carbon nanotube tyrosinase matrix for phenol detection. Analyst, The, 2010, 135, 1918.	1.7	25
94	Redoxâ€Active Nickel in Carbon Nanotubes and Its Direct Determination. Chemistry - A European Journal, 2012, 18, 3338-3344.	1.7	25
95	Improving the Analytical Performance of Graphene Oxide towards the Assessment of Polyphenols. Chemistry - A European Journal, 2016, 22, 3830-3834.	1.7	25
96	Gold Nanospacers Greatly Enhance the Capacitance of Electrochemically Reduced Graphene. ChemPlusChem, 2012, 77, 71-73.	1.3	24
97	The Inherent Electrochemistry of Nickel/Nickelâ€Oxide Nanoparticles. Chemistry - an Asian Journal, 2012, 7, 702-706.	1.7	24
98	Covalent Functionalization of Exfoliated Arsenic with Chlorocarbene. Angewandte Chemie - International Edition, 2018, 57, 14837-14840.	7.2	23
99	Clean room-free rapid fabrication of roll-up self-powered catalytic microengines. Journal of Materials Chemistry A, 2014, 2, 1219-1223.	5.2	22
100	Electrochemically driven multi-material 3D-printing. Applied Materials Today, 2020, 18, 100530.	2.3	21
101	How 3D printing can boost advances in analytical and bioanalytical chemistry. Mikrochimica Acta, 2021, 188, 265.	2.5	21
102	Carbonaceous Impurities in Carbon Nanotubes are Responsible for Accelerated Electrochemistry of Cytochrome c. Analytical Chemistry, 2013, 85, 6195-6197.	3.2	20
103	The dopant type and amount governs the electrochemical performance of graphene platforms for the antioxidant activity quantification. Nanoscale, 2015, 7, 9040-9045.	2.8	19
104	Could Carbonaceous Impurities in Reduced Graphenes be Responsible for Some of Their Extraordinary Electrocatalytic Activities?. Chemistry - an Asian Journal, 2013, 8, 1200-1204.	1.7	18
105	Anti-MoS₂ Nanostructures: Tl₂S and Its Electrochemical and Electronic Properties. ACS Nano, 2016, 10, 112-123.	7.3	18
106	Magnetic and electrokinetic manipulations on a microchip device for beadâ€based immunosensing applications. Electrophoresis, 2011, 32, 861-869.	1.3	17
107	Functionalized Germanene-Based Nanomaterials for the Detection of Single Nucleotide Polymorphism. ACS Applied Nano Materials, 2021, 4, 5164-5175.	2.4	17
108	Electrochemical tuning of oxygen-containing groups on graphene oxides: towards control of the performance for the analysis of biomarkers. Physical Chemistry Chemical Physics, 2014, 16, 12178-12182.	1.3	16

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109	Stable and sensitive flow-through monitoring of phenol using a carbon nanotube based screen printed biosensor. Nanotechnology, 2010, 21, 245502.	1.3	15
110	Towards electrochemical purification of chemically reduced graphene oxide from redox accessible impurities. Physical Chemistry Chemical Physics, 2014, 16, 7058-7065.	1.3	14
111	CVD graphene based immunosensor. RSC Advances, 2014, 4, 23952-23956.	1.7	14
112	Magnetic control of electrochemical processes at electrode surface using iron-rich graphene materials with dual functionality. Nanoscale, 2014, 6, 7391-7396.	2.8	13
113	Carbonaceous impurities in carbon nanotubes are responsible for accelerated electrochemistry of acetaminophen. Electrochemistry Communications, 2013, 26, 71-73.	2.3	12
114	Direct Determination of Bioavailable Molybdenum in Carbon Nanotubes. Chemistry - A European Journal, 2011, 17, 1806-1810.	1.7	11
115	Prolonged exposure of graphite oxide to soft X-ray irradiation during XPS measurements leads to alterations of the chemical composition. Analyst, The, 2013, 138, 7012.	1.7	11
116	Gold Nanoparticles: A Versatile Label for Affinity Electrochemical Biosensors. , 0, , 177-197.		9
117	Redox reaction of p-aminophenol at carbon nanotube electrodes is accelerated by carbonaceous impurities. Electrochemistry Communications, 2014, 38, 1-3.	2.3	9
118	Comparison Between Voltammetric and Spectrophotometric Methods for Drug Analysis. Current Analytical Chemistry, 2006, 2, 229-241.	0.6	8
119	Phenols as probes of chemical composition of graphene oxide. Physical Chemistry Chemical Physics, 2016, 18, 30515-30519.	1.3	7
120	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.	1.7	7
121	Detection of Amphipathic Viral Peptide on Screen-Printed Electrodes by Liposome Rupture Impact Voltammetry. Analytical Chemistry, 2017, 89, 11753-11757.	3.2	7
122	Carcinogenic Organic Residual Compounds Readsorbed on Thermally Reduced Graphene Materials are Released at Low Temperature. Chemistry - A European Journal, 2013, 19, 14446-14450.	1.7	6
123	Simultaneous Electrochemical Detection of Silver and Molybdenum Nanoparticles. ChemElectroChem, 2014, 1, 529-531.	1.7	5
124	Graphene: Thiofluorographeneâ€"Hydrophilic Graphene Derivative with Semiconducting and Genosensing Properties (Adv. Mater. 14/2015). Advanced Materials, 2015, 27, 2407-2407.	11.1	4
125	Covalent Functionalization of Exfoliated Arsenic with Chlorocarbene. Angewandte Chemie, 2018, 130, 15053-15056.	1.6	4
126	Electrochemical Immunosensing Using Micro and Nanoparticles. Methods in Molecular Biology, 2009, 504, 145-155.	0.4	4

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127	Characterization of Immunological Interactions at an Immunoelectrode by Scanning Electron Microscopy. Electroanalysis, 2007, 19, 244-252.	1.5	3
128	Molybdenum Disulfide: Lithium Intercalation Compound Dramatically Influences the Electrochemical Properties of Exfoliated MoS2 (Small 5/2015). Small, 2015, 11, 604-604.	5.2	3
129	Labeling Graphene Oxygen Groups with Europium. ChemPhysChem, 2015, 16, 331-334.	1.0	3
130	3D Printing: Helical 3D-Printed Metal Electrodes as Custom-Shaped 3D Platform for Electrochemical Devices (Adv. Funct. Mater. 5/2016). Advanced Functional Materials, 2016, 26, 803-803.	7.8	2
131	Smart Robots: Selfâ€Propelled 3Dâ€Printed â€œAircraft Carrierâ€•of Lightâ€Powered Smart Micromachines for Largeâ€Volume Nitroaromatic Explosives Removal (Adv. Funct. Mater. 39/2019). Advanced Functional Materials, 2019, 29, 1970267.	7.8	2
132	Electroactive nanocarbon materials as signaling tags for electrochemical PCR. Talanta, 2022, 245, 123479.	2.9	2
133	Precise Control of Diazirine Reduction to Tune the Mechanical Properties of Electrocuring Adhesives. ChemElectroChem, 2021, 8, 2715-2725.	1.7	1
134	Inside Cover: On Oxygen-Containing Groups in Chemically Modified Graphenes (Chem. Eur. J. 15/2012). Chemistry - A European Journal, 2012, 18, 4438-4438.	1.7	0
135	Titelbild: â€œMetal-Freeâ€•Catalytic Oxygen Reduction Reaction on Heteroatom-Doped Graphene is Caused by Trace Metal Impurities (Angew. Chem. 51/2013). Angewandte Chemie, 2013, 125, 13721-13721.	1.6	0
136	Electronics charges into the third dimension. Nature Electronics, 2020, 3, 189-190.	13.1	0
137	Nanomaterial based electrochemical transducing platforms for biomedical applications. IFMBE Proceedings, 2009, , 41-44.	0.2	0