Gerd-Uwe Flechsig

List of Publications by Year
in descending order

77 papers	2,644 citations	186209 28 h-index	189801 50 g-index

84 all docs	84 docs citations	84 times ranked	2573 citing authors

#	Article	IF	Citations
1	Detection of the level of DNA cross-linking with cisplatin by electrochemical quartz crystal microbalance. Journal of Electroanalytical Chemistry, 2020, 862, 113992.	1.9	6
2	Deuterium Isotope Effects Upon the Redoxâ€switching of the Viscosity of DNA Layers Observed by Electrochemical Quartz Crystal Microâ€balance. Electroanalysis, 2019, 31, 2074-2080.	1.5	3
3	Voltammetric H/D Isotope Effects on Redoxâ€Active Small Molecules Conjugated with DNA Selfâ€Assembled Monolayers. ChemElectroChem, 2019, 6, 4781-4788.	1.7	3
4	Rapid and accurate automatic temperature calibration of disposable screen-printed heated gold electrodes. Journal of Electroanalytical Chemistry, 2019, 851, 113414.	1.9	0
5	Amidyl Radical Directed Remote Allylation of Unactivated sp 3 Câ^'H Bonds by Organic Photoredox Catalysis. Angewandte Chemie, 2019, 131, 1788-1792.	1.6	17
6	Amidyl Radical Directed Remote Allylation of Unactivated sp³ Câ^'H Bonds by Organic Photoredox Catalysis. Angewandte Chemie - International Edition, 2019, 58, 1774-1778.	7.2	94
7	Thermoelectrochemistry of Paracetamol â€“ Studied at Directly Heated Microâ€wire and Rotating Disk Electrodes. Electroanalysis, 2018, 30, 1479-1486.	1.5	2
8	New electrode materials and devices for thermoelectrochemical studies and applications. Current Opinion in Electrochemistry, 2018, 10, 54-60.	2.5	7
9	Voltammetric Detection of Thrombin by Labeling with Osmium Tetroxide Bipyridine and Binding with Aptamers on a Gold Electrode. Electroanalysis, 2018, 30, 398-401.	1.5	5
10	Redoxâ€Induced Switching of the Viscoelasticity of DNA Layers Observed by using Electrochemical Quartz Crystal Microbalance on the Millisecond Timescale. ChemElectroChem, 2018, 5, 418-424.	1.7	4
11	Amplified detection of single base mismatches with the competing-strand assay reveals complex kinetic and thermodynamic behavior of strand displacement at the electrode surface. Electrochimica Acta, 2018, 285, 272-283.	2.6	5
12	The Osmium Tetroxide Bipyridineâ€labeled DNA Probe: Hairpin Conformations and Characterization of Redoxâ€label Behavior. Electroanalysis, 2017, 29, 51-59.	1.5	5
13	Sequence Detection of Unlabeled DNA Using the Sandwich Assay: Strand-Displacement, Hybridization Efficiency, and Probe- Conformation Considerations for the Tethered Surface. Electrochimica Acta, 2016, 220, 581-586.	2.6	2
14	Solar UV-treatment of water samples for stripping-voltammetric determination of trace heavy metals in Awash river, Ethiopia. Heliyon, 2016, 2, e00091.	1.4	5
15	Nanostructured heated gold electrodes for DNA hybridization detection using enzyme labels. Sensors and Actuators B: Chemical, 2016, 233, 502-509.	4.0	5
16	Synthesis and Properties of 5,7â€Dihydropyrido[3,2â€b:5,6â€bâ€²]diindoles. European Journal of Organic Chemistry, 2015, 2015, 1007-1019.	1.2	22
17	Sequence and Temperature Influence on Kinetics of DNA Strand Displacement at Gold Electrode Surfaces. ACS Applied Materials & Interfaces, 2015, 7, 19948-19959.	4.0	16
18	The influence of the textural properties of ZnO nanoparticles on adsorption and photocatalytic remediation of water from pharmaceuticals. Catalysis Today, 2015, 241, 47-54.	2.2	63

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19	Photocatalytic properties of Zr-doped titania in the degradation of the pharmaceutical ibuprofen. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 274, 108-116.	2.0	42
20	Palladium catalyzed synthesis and physical properties of indolo[2,3-b]quinoxalines. Organic and Biomolecular Chemistry, 2014, 12, 6151-6166.	1.5	37
21	Solar UV-Assisted Pretreatment of River Water Samples for the Voltammetric Monitoring of Nickel and Cobalt Ultratraces. Advances in Chemistry, 2014, 2014, 1-7.	1.1	2
22	Hybridization detection of enzyme-labeled DNA at electrically heated electrodes. Analytical and Bioanalytical Chemistry, 2013, 405, 3907-3911.	1.9	18
23	ToF-secondary ion mass-spectrometric study of copper deposition and stripping on directly heated screen-printed gold electrodes. Journal of Solid State Electrochemistry, 2013, 17, 1563-1570.	1.2	3
24	Hybridization Detection of Osmium Tetroxide Bipyridineâ€Labeled DNA and RNA on Heated Gold Wire Electrodes. Electroanalysis, 2013, 25, 373-379.	1.5	7
25	Photocatalytic decomposition of pharmaceutical ibuprofen pollutions in water over titania catalyst. Applied Catalysis B: Environmental, 2013, 129, 589-598.	10.8	148
26	PCB based DNA detection chip. , 2012, , .		2
27	Electrochemical detection of 0.6% genetically modified maize MON810 in real flour samples. Electrochemistry Communications, 2012, 22, 137-140.	2.3	18
28	Solar UV-assisted sample preparation of river water for ultra-trace determination of uranium by adsorptive stripping voltammetry. Mikrochimica Acta, 2012, 179, 99-104.	2.5	11
29	Electrically Heated Electrodes: Practical Aspects and New Developments. Electroanalysis, 2012, 24, 23-31.	1.5	20
30	Redox cycling amplified electrochemical detection of DNA hybridization: Application to pathogen E. coli bacterial RNA. Analytica Chimica Acta, 2011, 689, 29-33.	2.6	59
31	Functionalized Micromachines for Selective and Rapid Isolation of Nucleic Acid Targets from Complex Samples. Nano Letters, 2011, 11, 2083-2087.	4.5	216
32	Solar UV Photooxidation as Pretreatment for Stripping Voltammetric Trace Metal Analysis in River Water. International Journal of Electrochemistry, 2011, 2011, 1-7.	2.4	6
33	Temperature Control in Electrochemical DNA Sensing. Current Physical Chemistry, 2011, 1, 292-298.	0.1	5
34	Temperature Control in Electrochemical DNA Sensing. Current Physical Chemistry, 2011, 1, 292-298.	0.1	1
35	Removal of hazardous pharmaceutical from water by photocatalytic treatment. Open Chemistry, 2010, 8, 1288-1297.	1.0	16
36	Sequence-specific electrochemical detection of nucleic acids in real samples. Bioanalytical Reviews, 2010, 2, 103-114.	0.1	3

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37	Directly Heated Bismuth Film Electrodes Based on Gold Microwires. Electroanalysis, 2010, 22, 1483-1488.	1.5	16
38	Amplified potentiometric transduction of DNA hybridization using ion-loaded liposomes. Analyst, The, 2010, 135, 1618.	1.7	36
39	Electrochemical Detection of Asymmetric PCR Products by Labeling with Osmium Tetroxide. Electroanalysis, 2009, 21, 826-830.	1.5	8
40	Electrochemical Detection of DNA Melting Curves by Means of Heated Biosensors. Electroanalysis, 2009, 21, 1119-1123.	1.5	31
41	Templateâ€Free Galvanic Nanostructuring of Gold Electrodes for Sensitive Electrochemical Biosensors. Electroanalysis, 2009, 21, 2153-2159.	1.5	5
42	Kinetics of the labeling reactions of thymine, cytosine and uracil with osmium tetroxide bipyridine. Mikrochimica Acta, 2009, 166, 197-201.	2.5	19
43	Thermal Modulation of Nanomotor Movement. Small, 2009, 5, 1569-1574.	5.2	105
44	Electrochemical product detection of an asymmetric convective polymerase chain reaction. Biosensors and Bioelectronics, 2009, 25, 400-405.	5.3	20
45	Numerically optimized shape of directly heated electrodes for minimal temperature gradients. Sensors and Actuators B: Chemical, 2009, 137, 363-369.	4.0	7
46	Electrochemical detection of modified maize gene sequences by multiplexed labeling with osmium tetroxide bipyridine. Electrochemistry Communications, 2009, 11, 1487-1491.	2.3	21
47	Thermally stable improved first-generation glucose biosensors based on Nafion/glucose-oxidase modified heated electrodes. Electrochemistry Communications, 2009, 11, 1819-1822.	2.3	29
48	Thermally induced electrode protection against biofouling. Talanta, 2009, 77, 1757-1760.	2.9	14
49	High-Temperature Potentiometry: Modulated Response of Ion-Selective Electrodes During Heat Pulses. Analytical Chemistry, 2009, 81, 10290-10294.	3.2	18
50	Electrochemically-triggered motion of catalytic nanomotors. Chemical Communications, 2009, , 4509.	2.2	86
51	Chemical Sensing Based on Catalytic Nanomotors: Motion-Based Detection of Trace Silver. Journal of the American Chemical Society, 2009, 131, 12082-12083.	6.6	264
52	Electrochemical competitive hybridization assay for DNA detection using osmium tetroxide-labelled signalling strands. Analyst, The, 2009, 134, 899.	1.7	19
53	Direct electrochemistry of horseradish peroxidase immobilized in a chitosanâ€“[C4mim][BF4] film: Determination of electrode kinetic parameters. Bioelectrochemistry, 2008, 74, 183-187.	2.4	25
54	Cathodic adsorptive stripping voltammetric detection of tRNA by labelling with osmium tetroxide. Electrochemistry Communications, 2008, 10, 1614-1616.	2.3	13

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55	Electrochemical detection of osmium tetroxide-labeled PCR-products by means of protective strands. Talanta, 2007, 74, 393-397.	2.9	29
56	Electrochemical Detection of DNA Hybridization by Means of Osmium Tetroxide Complexes and Protective Oligonucleotides. Analytical Chemistry, 2007, 79, 2125-2130.	3.2	69
57	A Compact and Versatile Instrument for Radio Frequency Heating in Nonisothermal Electrochemical Studies. Electroanalysis, 2007, 19, 535-540.	1.5	25
58	Comparison of DNA Hybridization at Rotating and Heated Gold Disk Electrodes. Electroanalysis, 2007, 19, 1356-1361.	1.5	32
59	Temperature pulse modulated amperometry at compact electrochemical sensors. Electrochemistry Communications, 2007, 9, 2346-2352.	2.3	19
60	Self-assembled monolayers on bismuth electrodes. Electrochemistry Communications, 2006, 8, 932-936.	2.3	28
61	Principles and Analytical Applications of Heated Electrodes. Mikrochimica Acta, 2006, 154, 175-189.	2.5	62
62	Electrochemical DNA hybridization detection using the fluorescence quenching label dabcyl. Electrochemistry Communications, 2005, 7, 1059-1065.	2.3	8
63	Electrochemistry of nicotinamide adenine dinucleotide (reduced) at heated platinum electrodes. Analytica Chimica Acta, 2005, 554, 74-78.	2.6	45
64	Adsorptive Stripping Voltammetric Detection of Daunomycin at a Bismuth Bulk Electrode. Electroanalysis, 2005, 17, 440-444.	1.5	79
65	Ex situ atomic force microscopy of bismuth film deposition at carbon paste electrodes. Electrochemistry Communications, 2005, 7, 1091-1097.	2.3	27
66	DNA Hybridization Detection at Heated Electrodes. Langmuir, 2005, 21, 7848-7853.	1.6	60
67	Label-free DNA Hybridization Based on Coupling of a Heated Carbon Paste Electrode with Magnetic Separations. Electroanalysis, 2004, 16, 928-931.	1.5	47
68	Electrochemical analysis of nucleic acids at boron-doped diamond electrodes. Analyst, The, 2002, 127, 329-332.	1.7	82
69	Electrically Heated Bismuth-Film Electrode for Voltammetric Stripping Measurements of Trace Metals. Electroanalysis, 2002, 14, 192.	1.5	79
70	Anodic Stripping Voltammetry with a Heated Mercury Film on a Screen-Printed Carbon Electrode. Electroanalysis, 2001, 13, 34-36.	1.5	41
71	Investigation of Deposition and Stripping Phenomena at the Heated Gold Wire Electrode in Comparison to the Rotating Disk Electrode: Copper(II), Mercury(II), and Arsenic(III). Electroanalysis, 2001, 13, 786-788.	1.5	27
72	Hot-wire amperometric monitoring of flowing streams. Talanta, 2000, 50, 1205-1210.	2.9	23

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73	Electrically Heated Cylindrical Microelectrodes Comparison of Temperature Profiles Obtained by IR Photography and Digital Simulation. Journal of the Electrochemical Society, 2000, 147, 3768.	1.3	8
74	Stripping Analysis of Nucleic Acids at a Heated Carbon Paste Electrode. Analytical Chemistry, 2000, 72, 3752-3756.	3.2	77
75	Temperature pulse voltammetry: hot layer electrodes made by LTCC technology. Electrochemistry Communications, 1999, 1, 383-388.	2.3	46
76	Hot-wire stripping potentiometric measurements of trace mercury. Analytica Chimica Acta, 1999, 396, 33-37.	2.6	42
77	Deposition and stripping at heated microelectrodes. Arsenic(V) at a gold electrode. Electrochimica Acta, 1998, 43, 3451-3458.	2.6	74