

Gerd-Uwe Flechsig

List of Publications by Year in descending order

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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	Chemical Sensing Based on Catalytic Nanomotors: Motion-Based Detection of Trace Silver. <i>Journal of the American Chemical Society</i> , 2009, 131, 12082-12083.	6.6	264
2	Functionalized Micromachines for Selective and Rapid Isolation of Nucleic Acid Targets from Complex Samples. <i>Nano Letters</i> , 2011, 11, 2083-2087.	4.5	216
3	Photocatalytic decomposition of pharmaceutical ibuprofen pollutions in water over titania catalyst. <i>Applied Catalysis B: Environmental</i> , 2013, 129, 589-598.	10.8	148
4	Thermal Modulation of Nanomotor Movement. <i>Small</i> , 2009, 5, 1569-1574.	5.2	105
5	Amidyl Radical Directed Remote Allylation of Unactivated sp^3 C-H Bonds by Organic Photoredox Catalysis. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1774-1778.	7.2	94
6	Electrochemically-triggered motion of catalytic nanomotors. <i>Chemical Communications</i> , 2009, , 4509.	2.2	86
7	Electrochemical analysis of nucleic acids at boron-doped diamond electrodes. <i>Analyst, The</i> , 2002, 127, 329-332.	1.7	82
8	Electrically Heated Bismuth-Film Electrode for Voltammetric Stripping Measurements of Trace Metals. <i>Electroanalysis</i> , 2002, 14, 192.	1.5	79
9	Adsorptive Stripping Voltammetric Detection of Daunomycin at a Bismuth Bulk Electrode. <i>Electroanalysis</i> , 2005, 17, 440-444.	1.5	79
10	Stripping Analysis of Nucleic Acids at a Heated Carbon Paste Electrode. <i>Analytical Chemistry</i> , 2000, 72, 3752-3756.	3.2	77
11	Deposition and stripping at heated microelectrodes. Arsenic(V) at a gold electrode. <i>Electrochimica Acta</i> , 1998, 43, 3451-3458.	2.6	74
12	Electrochemical Detection of DNA Hybridization by Means of Osmium Tetroxide Complexes and Protective Oligonucleotides. <i>Analytical Chemistry</i> , 2007, 79, 2125-2130.	3.2	69
13	The influence of the textural properties of ZnO nanoparticles on adsorption and photocatalytic remediation of water from pharmaceuticals. <i>Catalysis Today</i> , 2015, 241, 47-54.	2.2	63
14	Principles and Analytical Applications of Heated Electrodes. <i>Mikrochimica Acta</i> , 2006, 154, 175-189.	2.5	62
15	DNA Hybridization Detection at Heated Electrodes. <i>Langmuir</i> , 2005, 21, 7848-7853.	1.6	60
16	Redox cycling amplified electrochemical detection of DNA hybridization: Application to pathogen <i>E. coli</i> bacterial RNA. <i>Analytica Chimica Acta</i> , 2011, 689, 29-33.	2.6	59
17	Label-free DNA Hybridization Based on Coupling of a Heated Carbon Paste Electrode with Magnetic Separations. <i>Electroanalysis</i> , 2004, 16, 928-931.	1.5	47
18	Temperature pulse voltammetry: hot layer electrodes made by LTCC technology. <i>Electrochemistry Communications</i> , 1999, 1, 383-388.	2.3	46

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19	Electrochemistry of nicotinamide adenine dinucleotide (reduced) at heated platinum electrodes. <i>Analytica Chimica Acta</i> , 2005, 554, 74-78.	2.6	45
20	Hot-wire stripping potentiometric measurements of trace mercury. <i>Analytica Chimica Acta</i> , 1999, 396, 33-37.	2.6	42
21	Photocatalytic properties of Zr-doped titania in the degradation of the pharmaceutical ibuprofen. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2014, 274, 108-116.	2.0	42
22	Anodic Stripping Voltammetry with a Heated Mercury Film on a Screen-Printed Carbon Electrode. <i>Electroanalysis</i> , 2001, 13, 34-36.	1.5	41
23	Palladium catalyzed synthesis and physical properties of indolo[2,3-b]quinoxalines. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 6151-6166.	1.5	37
24	Amplified potentiometric transduction of DNA hybridization using ion-loaded liposomes. <i>Analyst, The</i> , 2010, 135, 1618.	1.7	36
25	Comparison of DNA Hybridization at Rotating and Heated Gold Disk Electrodes. <i>Electroanalysis</i> , 2007, 19, 1356-1361.	1.5	32
26	Electrochemical Detection of DNA Melting Curves by Means of Heated Biosensors. <i>Electroanalysis</i> , 2009, 21, 1119-1123.	1.5	31
27	Electrochemical detection of osmium tetroxide-labeled PCR-products by means of protective strands. <i>Talanta</i> , 2007, 74, 393-397.	2.9	29
28	Thermally stable improved first-generation glucose biosensors based on Nafion/glucose-oxidase modified heated electrodes. <i>Electrochemistry Communications</i> , 2009, 11, 1819-1822.	2.3	29
29	Self-assembled monolayers on bismuth electrodes. <i>Electrochemistry Communications</i> , 2006, 8, 932-936.	2.3	28
30	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). <i>Electroanalysis</i> , 2001, 13, 786-788.	1.5	27
31	Ex situ atomic force microscopy of bismuth film deposition at carbon paste electrodes. <i>Electrochemistry Communications</i> , 2005, 7, 1091-1097.	2.3	27
32	A Compact and Versatile Instrument for Radio Frequency Heating in Nonisothermal Electrochemical Studies. <i>Electroanalysis</i> , 2007, 19, 535-540.	1.5	25
33	Direct electrochemistry of horseradish peroxidase immobilized in a chitosan/[C4mim][BF4] film: Determination of electrode kinetic parameters. <i>Bioelectrochemistry</i> , 2008, 74, 183-187.	2.4	25
34	Hot-wire amperometric monitoring of flowing streams. <i>Talanta</i> , 2000, 50, 1205-1210.	2.9	23
35	Synthesis and Properties of 5,7-Dihydropyrido[3,2-b:5,6-b']diindoles. <i>European Journal of Organic Chemistry</i> , 2015, 2015, 1007-1019.	1.2	22
36	Electrochemical detection of modified maize gene sequences by multiplexed labeling with osmium tetroxide bipyridine. <i>Electrochemistry Communications</i> , 2009, 11, 1487-1491.	2.3	21

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37	Electrochemical product detection of an asymmetric convective polymerase chain reaction. <i>Biosensors and Bioelectronics</i> , 2009, 25, 400-405.	5.3	20
38	Electrically Heated Electrodes: Practical Aspects and New Developments. <i>Electroanalysis</i> , 2012, 24, 23-31.	1.5	20
39	Temperature pulse modulated amperometry at compact electrochemical sensors. <i>Electrochemistry Communications</i> , 2007, 9, 2346-2352.	2.3	19
40	Kinetics of the labeling reactions of thymine, cytosine and uracil with osmium tetroxide bipyridine. <i>Mikrochimica Acta</i> , 2009, 166, 197-201.	2.5	19
41	Electrochemical competitive hybridization assay for DNA detection using osmium tetroxide-labelled signalling strands. <i>Analyst</i> , The, 2009, 134, 899.	1.7	19
42	High-Temperature Potentiometry: Modulated Response of Ion-Selective Electrodes During Heat Pulses. <i>Analytical Chemistry</i> , 2009, 81, 10290-10294.	3.2	18
43	Electrochemical detection of 0.6% genetically modified maize MON810 in real flour samples. <i>Electrochemistry Communications</i> , 2012, 22, 137-140.	2.3	18
44	Hybridization detection of enzyme-labeled DNA at electrically heated electrodes. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 3907-3911.	1.9	18
45	Amidyl Radical Directed Remote Allylation of Unactivated sp ³ C-H Bonds by Organic Photoredox Catalysis. <i>Angewandte Chemie</i> , 2019, 131, 1788-1792.	1.6	17
46	Removal of hazardous pharmaceutical from water by photocatalytic treatment. <i>Open Chemistry</i> , 2010, 8, 1288-1297.	1.0	16
47	Directly Heated Bismuth Film Electrodes Based on Gold Microwires. <i>Electroanalysis</i> , 2010, 22, 1483-1488.	1.5	16
48	Sequence and Temperature Influence on Kinetics of DNA Strand Displacement at Gold Electrode Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 19948-19959.	4.0	16
49	Thermally induced electrode protection against biofouling. <i>Talanta</i> , 2009, 77, 1757-1760.	2.9	14
50	Cathodic adsorptive stripping voltammetric detection of tRNA by labelling with osmium tetroxide. <i>Electrochemistry Communications</i> , 2008, 10, 1614-1616.	2.3	13
51	Solar UV-assisted sample preparation of river water for ultra-trace determination of uranium by adsorptive stripping voltammetry. <i>Mikrochimica Acta</i> , 2012, 179, 99-104.	2.5	11
52	Electrically Heated Cylindrical Microelectrodes Comparison of Temperature Profiles Obtained by IR Photography and Digital Simulation. <i>Journal of the Electrochemical Society</i> , 2000, 147, 3768.	1.3	8
53	Electrochemical DNA hybridization detection using the fluorescence quenching label dabcyt. <i>Electrochemistry Communications</i> , 2005, 7, 1059-1065.	2.3	8
54	Electrochemical Detection of Asymmetric PCR Products by Labeling with Osmium Tetroxide. <i>Electroanalysis</i> , 2009, 21, 826-830.	1.5	8

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55	Numerically optimized shape of directly heated electrodes for minimal temperature gradients. <i>Sensors and Actuators B: Chemical</i> , 2009, 137, 363-369.	4.0	7
56	Hybridization Detection of Osmium Tetroxide Bipyridine-Labelled DNA and RNA on Heated Gold Wire Electrodes. <i>Electroanalysis</i> , 2013, 25, 373-379.	1.5	7
57	New electrode materials and devices for thermoelectrochemical studies and applications. <i>Current Opinion in Electrochemistry</i> , 2018, 10, 54-60.	2.5	7
58	Solar UV Photooxidation as Pretreatment for Stripping Voltammetric Trace Metal Analysis in River Water. <i>International Journal of Electrochemistry</i> , 2011, 2011, 1-7.	2.4	6
59	Detection of the level of DNA cross-linking with cisplatin by electrochemical quartz crystal microbalance. <i>Journal of Electroanalytical Chemistry</i> , 2020, 862, 113992.	1.9	6
60	Template-Free Galvanic Nanostructuring of Gold Electrodes for Sensitive Electrochemical Biosensors. <i>Electroanalysis</i> , 2009, 21, 2153-2159.	1.5	5
61	Solar UV-treatment of water samples for stripping-voltammetric determination of trace heavy metals in Awash river, Ethiopia. <i>Heliyon</i> , 2016, 2, e00091.	1.4	5
62	Nanostructured heated gold electrodes for DNA hybridization detection using enzyme labels. <i>Sensors and Actuators B: Chemical</i> , 2016, 233, 502-509.	4.0	5
63	The Osmium Tetroxide Bipyridine-Labelled DNA Probe: Hairpin Conformations and Characterization of Redox-Label Behavior. <i>Electroanalysis</i> , 2017, 29, 51-59.	1.5	5
64	Voltammetric Detection of Thrombin by Labeling with Osmium Tetroxide Bipyridine and Binding with Aptamers on a Gold Electrode. <i>Electroanalysis</i> , 2018, 30, 398-401.	1.5	5
65	Amplified detection of single base mismatches with the competing-strand assay reveals complex kinetic and thermodynamic behavior of strand displacement at the electrode surface. <i>Electrochimica Acta</i> , 2018, 285, 272-283.	2.6	5
66	Temperature Control in Electrochemical DNA Sensing. <i>Current Physical Chemistry</i> , 2011, 1, 292-298.	0.1	5
67	Redox-Induced Switching of the Viscoelasticity of DNA Layers Observed by using Electrochemical Quartz Crystal Microbalance on the Millisecond Timescale. <i>ChemElectroChem</i> , 2018, 5, 418-424.	1.7	4
68	Sequence-specific electrochemical detection of nucleic acids in real samples. <i>Bioanalytical Reviews</i> , 2010, 2, 103-114.	0.1	3
69	ToF-secondary ion mass-spectrometric study of copper deposition and stripping on directly heated screen-printed gold electrodes. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 1563-1570.	1.2	3
70	Deuterium Isotope Effects Upon the Redox-Switching of the Viscosity of DNA Layers Observed by Electrochemical Quartz Crystal Microbalance. <i>Electroanalysis</i> , 2019, 31, 2074-2080.	1.5	3
71	Voltammetric H/D Isotope Effects on Redox-Active Small Molecules Conjugated with DNA Self-Assembled Monolayers. <i>ChemElectroChem</i> , 2019, 6, 4781-4788.	1.7	3
72	PCB based DNA detection chip. , 2012, , .		2

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73	Sequence Detection of Unlabeled DNA Using the Sandwich Assay: Strand-Displacement, Hybridization Efficiency, and Probe- Conformation Considerations for the Tethered Surface. <i>Electrochimica Acta</i> , 2016, 220, 581-586.	2.6	2
74	Thermoelectrochemistry of Paracetamol " Studied at Directly Heated Micro"wire and Rotating Disk Electrodes. <i>Electroanalysis</i> , 2018, 30, 1479-1486.	1.5	2
75	Solar UV-Assisted Pretreatment of River Water Samples for the Voltammetric Monitoring of Nickel and Cobalt Ultratraces. <i>Advances in Chemistry</i> , 2014, 2014, 1-7.	1.1	2
76	Temperature Control in Electrochemical DNA Sensing. <i>Current Physical Chemistry</i> , 2011, 1, 292-298.	0.1	1
77	Rapid and accurate automatic temperature calibration of disposable screen-printed heated gold electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2019, 851, 113414.	1.9	0