

Osamu Niwa

List of Publications by Year in descending order

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Characterization of Platinum Nanoparticle-Embedded Carbon Film Electrode and Its Detection of Hydrogen Peroxide. <i>Analytical Chemistry</i> , 2003, 75, 2080-2085.	3.2	304
2	Small-volume voltammetric detection of 4-aminophenol with interdigitated array electrodes and its application to electrochemical enzyme immunoassay. <i>Analytical Chemistry</i> , 1993, 65, 1559-1563.	3.2	293
3	Electrochemical behavior of reversible redox species at interdigitated array electrodes with different geometries: consideration of redox cycling and collection efficiency. <i>Analytical Chemistry</i> , 1990, 62, 447-452.	3.2	263
4	An Amperometric Detector Formed of Highly Dispersed Ni Nanoparticles Embedded in a Graphite-like Carbon Film Electrode for Sugar Determination. <i>Analytical Chemistry</i> , 2003, 75, 5191-5196.	3.2	195
5	Electrochemical Performance of Angstrom Level Flat Sputtered Carbon Film Consisting of sp ² and sp ³ Mixed Bonds. <i>Journal of the American Chemical Society</i> , 2006, 128, 7144-7145.	6.6	170
6	A Nanocarbon Film Electrode as a Platform for Exploring DNA Methylation. <i>Journal of the American Chemical Society</i> , 2008, 130, 3716-3717.	6.6	163
7	On-Chip Enzyme Immunoassay of a Cardiac Marker Using a Microfluidic Device Combined with a Portable Surface Plasmon Resonance System. <i>Analytical Chemistry</i> , 2006, 78, 5525-5531.	3.2	156
8	Detection of Electrochemical Enzymatic Reactions by Surface Plasmon Resonance Measurement. <i>Analytical Chemistry</i> , 2001, 73, 1595-1598.	3.2	119
9	Voltammetric measurements of reversible and quasi-reversible redox species using carbon film based interdigitated array microelectrodes. <i>Analytical Chemistry</i> , 1994, 66, 285-289.	3.2	100
10	Interdigitated array microelectrodes as electrochemical sensors. <i>Electrochimica Acta</i> , 1997, 42, 3177-3183.	2.6	99
11	Fiber-optic conical microsensors for surface plasmon resonance using chemically etched single-mode fiber. <i>Analytica Chimica Acta</i> , 2004, 523, 165-170.	2.6	96
12	Structure and Electrochemical Properties of Carbon Films Prepared by a Electron Cyclotron Resonance Sputtering Method. <i>Analytical Chemistry</i> , 2007, 79, 98-105.	3.2	93
13	Electrochemical DNA Methylation Detection for Enzymatically Digested CpG Oligonucleotides. <i>Analytical Chemistry</i> , 2011, 83, 7595-7599.	3.2	89
14	Concentration of Extracellular l-Glutamate Released from Cultured Nerve Cells Measured with a Small-Volume Online Sensor. <i>Analytical Chemistry</i> , 1996, 68, 1865-1870.	3.2	88
15	Development of Electrogenenerated Chemiluminescence-Based Enzyme Linked Immunosorbent Assay for Sub-pM Detection. <i>Analytical Chemistry</i> , 2010, 82, 1692-1697.	3.2	86
16	Au Nanoparticle-Embedded Carbon Films for Electrochemical As ³⁺ Detection with High Sensitivity and Stability. <i>Analytical Chemistry</i> , 2016, 88, 2944-2951.	3.2	86
17	Accurate and reproducible detection of proteins in water using an extended-gate type organic transistor biosensor. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	85
18	Electroanalysis with interdigitated array microelectrodes. <i>Electroanalysis</i> , 1995, 7, 606-613.	1.5	81

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19	Characterization and electrochemical properties of highly dispersed copper oxide/hydroxide nanoparticles in graphite-like carbon films prepared by RF sputtering method. <i>Electrochemistry Communications</i> , 2002, 4, 468-471.	2.3	80
20	Nanohybrid Carbon Film for Electrochemical Detection of SNPs without Hybridization or Labeling. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 6681-6684.	7.2	79
21	Determination of DNA Methylation Using Electrochemiluminescence with Surface Accumulable Coreactant. <i>Analytical Chemistry</i> , 2012, 84, 1799-1803.	3.2	79
22	Pd _x Co _y Nanoparticle/Carbon Nanofiber Composites with Enhanced Electrocatalytic Properties. <i>ACS Catalysis</i> , 2014, 4, 1825-1829.	5.5	78
23	Microfluidic device integrated with pre-reactor and dual enzyme-modified microelectrodes for monitoring in vivo glucose and lactate. <i>Sensors and Actuators B: Chemical</i> , 2002, 87, 296-303.	4.0	77
24	A surface plasmon resonance immunosensor for detecting a dioxin precursor using a gold binding polypeptide. <i>Talanta</i> , 2003, 60, 733-745.	2.9	77
25	Anisotropic conductivity of polypyrrole-polyvinylchloride conducting polymer alloy film prepared on patterned electrode. <i>Synthetic Metals</i> , 1987, 18, 677-682.	2.1	73
26	Selective nitrate detection by an enzymatic sensor based on an extended-gate type organic field-effect transistor. <i>Biosensors and Bioelectronics</i> , 2016, 81, 87-91.	5.3	73
27	Microfluidic Device for Airborne BTEX Detection. <i>Analytical Chemistry</i> , 2001, 73, 4688-4693.	3.2	72
28	Pd-Ni Alloy Nanoparticle/Carbon Nanofiber Composites: Preparation, Structure, and Superior Electrocatalytic Properties for Sugar Analysis. <i>Analytical Chemistry</i> , 2014, 86, 5898-5905.	3.2	72
29	Highly sensitive and selective voltammetric detection of dopamine with vertically separated interdigitated array electrodes. <i>Electroanalysis</i> , 1991, 3, 163-168.	1.5	69
30	Small-Volume On-Line Sensor for Continuous Measurement of ¹³ C-Aminobutyric Acid. <i>Analytical Chemistry</i> , 1998, 70, 89-93.	3.2	64
31	Development of a mass-producible on-chip plasmonic nanohole array biosensor. <i>Nanoscale</i> , 2011, 3, 5067.	2.8	63
32	Efficient Direct Electron Transfer with Enzyme on a Nanostructured Carbon Film Fabricated with a Maskless Top-Down UV/Ozone Process. <i>Journal of the American Chemical Society</i> , 2011, 133, 4840-4846.	6.6	63
33	On-Line Electrochemical Sensor for Selective Continuous Measurement of Acetylcholine in Cultured Brain Tissue. <i>Analytical Chemistry</i> , 1998, 70, 1126-1132.	3.2	62
34	ONO-2506 inhibits spike-wave discharges in a genetic animal model without affecting traditional convulsive tests via gliotransmission regulation. <i>British Journal of Pharmacology</i> , 2013, 168, 1088-1100.	2.7	61
35	Controllable electrode activities of nano-carbon films while maintaining surface flatness by electrochemical pretreatment. <i>Carbon</i> , 2008, 46, 1918-1926.	5.4	58
36	Subfemtomole Detection of Catecholamine with Interdigitated Array Carbon Microelectrodes in HPLC. <i>Analytical Chemistry</i> , 1994, 66, 3500-3502.	3.2	56

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37	Electroanalytical Chemistry with Carbon Film Electrodes and Micro and Nano-Structured Carbon Film-Based Electrodes. <i>Bulletin of the Chemical Society of Japan</i> , 2005, 78, 555-571.	2.0	55
38	Structure and Electrochemical Performance of Nitrogen-Doped Carbon Film Formed by Electron Cyclotron Resonance Sputtering. <i>Analytical Chemistry</i> , 2013, 85, 9845-9851.	3.2	54
39	Electrochemical Enzyme Immunoassay of a Peptide Hormone at Picomolar Levels. <i>Analytical Chemistry</i> , 2005, 77, 4235-4240.	3.2	53
40	A Label-Free Immunosensor for IgG Based on an Extended-Gate Type Organic Field Effect Transistor. <i>Materials</i> , 2014, 7, 6843-6852.	1.3	53
41	Highly selective electrochemical detection of dopamine using interdigitated array electrodes modified with nafion/polyester ionomer layered film. <i>Electroanalysis</i> , 1994, 6, 237-243.	1.5	52
42	Fabrication and Characterization of a Nanometer-Sized Optical Fiber Electrode Based on Selective Chemical Etching for Scanning Electrochemical/Optical Microscopy. <i>Analytical Chemistry</i> , 2006, 78, 1904-1912.	3.2	52
43	Continuous monitoring of L-glutamate released from cultured nerve cells by an online sensor coupled with micro-capillary sampling. <i>Biosensors and Bioelectronics</i> , 1997, 12, 311-319.	5.3	51
44	Structure and electrochemical characterization of carbon films formed by unbalanced magnetron (UBM) sputtering method. <i>Diamond and Related Materials</i> , 2014, 49, 25-32.	1.8	50
45	Miniaturized one-chip electrochemical sensing device integrated with a dialysis membrane and double thin-layer flow channels for measuring blood samples. <i>Biosensors and Bioelectronics</i> , 2006, 21, 1649-1653.	5.3	49
46	Direct electrochemical detection of DNA methylation for retinoblastoma and CpG fragments using a nanocarbon film. <i>Analytical Biochemistry</i> , 2010, 405, 59-66.	1.1	49
47	Electrochemical Surface Plasmon Resonance Measurement Based on Gold Nanohole Array Fabricated by Nanoimprinting Technique. <i>Analytical Chemistry</i> , 2012, 84, 3187-3191.	3.2	49
48	Improved detection limit for catecholamines using liquid chromatography-electrochemistry with a carbon interdigitated array microelectrode. <i>Biomedical Applications</i> , 1995, 670, 21-28.	1.7	48
49	Fabrication of electrochemically stable fluorinated nano-carbon film compared with other fluorinated carbon materials. <i>Carbon</i> , 2009, 47, 1943-1952.	5.4	48
50	Carbon Film-Based Interdigitated Array Microelectrode Used in Capillary Electrophoresis with Electrochemical Detection. <i>Analytical Chemistry</i> , 2000, 72, 1315-1321.	3.2	47
51	Determination of acetylcholine and choline with platinum-black ultramicroarray electrodes using liquid chromatography with a post-column enzyme reactor. <i>Analytica Chimica Acta</i> , 1996, 318, 167-173.	2.6	46
52	Subnanoliter Volume Wall-Jet Cells Combined with Interdigitated Microarray Electrode and Enzyme Modified Planar Microelectrode. <i>Analytical Chemistry</i> , 2000, 72, 949-955.	3.2	46
53	Time differential surface plasmon resonance measurements applied for electrochemical analysis. <i>Electroanalysis</i> , 1997, 9, 1239-1241.	1.5	45
54	On-Chip Synthesis of RNA Aptamer Microarrays for Multiplexed Protein Biosensing with SPR Imaging Measurements. <i>Langmuir</i> , 2012, 28, 8281-8285.	1.6	45

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55	Polypyrrole-based conducting polymer alloy films: physical properties and film morphology. <i>Macromolecules</i> , 1987, 20, 749-753.	2.2	44
56	Electrochemically amplified detection for lipopolysaccharide using ferrocenylboronic acid. <i>Biosensors and Bioelectronics</i> , 2007, 22, 1527-1531.	5.3	44
57	Surface Modification of GC and HOPG with Diazonium, Amine, Azide, and Olefin Derivatives. <i>Langmuir</i> , 2011, 27, 170-178.	1.6	44
58	Carbon Film-Based Interdigitated Ring Array Electrodes as Detectors in Radial Flow Cells. <i>Analytical Chemistry</i> , 1996, 68, 355-359.	3.2	42
59	Evidence for laser action driven by electrochemiluminescence. <i>Nature</i> , 1998, 394, 659-661.	13.7	41
60	Analysis of electrochemical processes using surface plasmon resonance. <i>Sensors and Actuators B: Chemical</i> , 1998, 50, 145-148.	4.0	40
61	Fabrication and electrochemical properties of an interdigitated array electrode in a microfabricated wall-jet cell. <i>Sensors and Actuators B: Chemical</i> , 2000, 71, 82-89.	4.0	40
62	Separate Detection of BTX Mixture Gas by a Microfluidic Device Using a Function of Nanosized Pores of Mesoporous Silica Adsorbent. <i>Analytical Chemistry</i> , 2002, 74, 5257-5262.	3.2	40
63	Application of an Absorption-Based Surface Plasmon Resonance Principle to the Development of SPR Ammonium Ion and Enzyme Sensors. <i>Analytical Chemistry</i> , 2002, 74, 6106-6110.	3.2	39
64	DNA Methylation Analysis Triggered by Bulge Specific Immuno-Recognition. <i>Analytical Chemistry</i> , 2012, 84, 7533-7538.	3.2	38
65	NADH and glutamate on-line sensors using Os-gel-HRP/GC electrodes modified with NADH oxidase and glutamate dehydrogenase. <i>Biosensors and Bioelectronics</i> , 1999, 14, 631-638.	5.3	36
66	Real-time multisite observation of glutamate release in rat hippocampal slices. <i>Neuroscience Letters</i> , 2001, 304, 112-116.	1.0	36
67	Air-Cooled Cold Trap Channel Integrated in a Microfluidic Device for Monitoring Airborne BTEX with an Improved Detection Limit. <i>Analytical Chemistry</i> , 2002, 74, 1712-1717.	3.2	34
68	Imaging of electrochemical enzyme sensor on gold electrode using surface plasmon resonance. <i>Biosensors and Bioelectronics</i> , 2002, 17, 783-788.	5.3	34
69	Extremely intense Raman signals from single-walled carbon nanotubes suspended between Si nanopillars. <i>Chemical Physics Letters</i> , 2004, 386, 153-157.	1.2	34
70	On-Chip Sequence-Specific Immunochemical Epigenomic Analysis Utilizing Outward-Turned Cytosine in a DNA Bulge with Handheld Surface Plasmon Resonance Equipment. <i>Analytical Chemistry</i> , 2015, 87, 11581-11586.	3.2	34
71	PHOTOINDUCED ION PERMEATION THROUGH TERNARY COMPOSITE MEMBRANE COMPOSED OF POLYMER/LIQUID CRYSTAL/AZOBENZENE-BRIDGED CROWN ETHER. <i>Chemistry Letters</i> , 1983, 12, 1327-1330.	0.7	33
72	Mechanical Properties of Flexible Polypyrrole-Based Conducting Polymer Alloy Films. <i>Polymer Journal</i> , 1987, 19, 1293-1301.	1.3	33

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73	Selective detection of l-glutamate using a microfluidic device integrated with an enzyme-modified pre-reactor and an electrochemical detector. <i>Biosensors and Bioelectronics</i> , 2003, 18, 1249-1255.	5.3	33
74	Continuous measurement of histamine from rat basophilic leukemia cells (RBL-2H3) with an on-line sensor using histamine oxidase. <i>Sensors and Actuators B: Chemical</i> , 2000, 67, 43-51.	4.0	32
75	Formation of Supramolecular Nanobelt Arrays Consisting of Cobalt(II) β -Picket-Fence-Porphyrin on Au Surfaces. <i>Langmuir</i> , 2007, 23, 809-816.	1.6	32
76	An Organic Field-effect Transistor with an Extended-gate Electrode Capable of Detecting Human Immunoglobulin A. <i>Analytical Sciences</i> , 2015, 31, 725-728.	0.8	32
77	Stripping voltammetry of reversible redox species by self-induced redox cycling. <i>Analytical Chemistry</i> , 1992, 64, 3206-3208.	3.2	31
78	A polyion complex sensor array for markerless and noninvasive identification of differentiated mesenchymal stem cells from human adipose tissue. <i>Chemical Science</i> , 2015, 6, 5831-5836.	3.7	31
79	Nickel content dependence of electrochemical behavior of carbohydrates on a titanium-nickel alloy electrode and its application to a liquid chromatography detector. <i>Journal of Chromatography A</i> , 1999, 837, 17-24.	1.8	30
80	Real-time electrochemical imaging using an individually addressable multi-channel electrode. <i>Biosensors and Bioelectronics</i> , 2000, 15, 523-529.	5.3	30
81	Co-Sputtered Thin Film Consisting of Platinum Nanoparticles Embedded in Graphite-Like Carbon and Its High Electrocatalytic Properties for Electroanalysis. <i>Chemistry of Materials</i> , 2002, 14, 4796-4799.	3.2	30
82	Real-Time Monitoring of Histamine Released from Rat Basophilic Leukemia (RBL-2H3) Cells with a Histamine Microsensor Using Recombinant Histamine Oxidase. <i>Analytical Biochemistry</i> , 2002, 304, 236-243.	1.1	30
83	Improved detection limit for an electrochemical I^3 -aminobutyric acid sensor based on stable NADPH detection using an electron cyclotron resonance sputtered carbon film electrode. <i>Sensors and Actuators B: Chemical</i> , 2008, 129, 442-449.	4.0	30
84	Electrochemical Determination of Oxidative Damaged DNA with High Sensitivity and Stability Using a Nanocarbon Film. <i>Analytical Sciences</i> , 2011, 27, 703.	0.8	30
85	Label-Free Detection of Human Glycoprotein (CgA) Using an Extended-Gated Organic Transistor-Based Immunosensor. <i>Sensors</i> , 2016, 16, 2033.	2.1	29
86	Artificial Modification of an Enzyme for Construction of Cross-Reactive Polyion Complexes To Fingerprint Signatures of Proteins and Mammalian Cells. <i>Analytical Chemistry</i> , 2016, 88, 9079-9086.	3.2	29
87	Microfluidic platforms for DNA methylation analysis. <i>Lab on A Chip</i> , 2016, 16, 3631-3644.	3.1	29
88	Limiting Current Enhancement by Self-Induced Redox Cycling on a Micro-Macro Twin Electrode. <i>Journal of the Electrochemical Society</i> , 1991, 138, 3549-3553.	1.3	28
89	Microfabricated On-Line Sensor for Continuous Monitoring of L-Glutamate.. <i>Analytical Sciences</i> , 1998, 14, 947-953.	0.8	28
90	Design of Biomolecular Interface for Detecting Carbohydrate and Lectin Weak Interactions. <i>Langmuir</i> , 2012, 28, 1846-1851.	1.6	28

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91	Polymerâ€polypyrrole alloy films as semitransparent organic conductors. Applied Physics Letters, 1985, 46, 444-446.	1.5	27
92	Portable automatic BTX measurement system with microfluidic device using mesoporous silicate adsorbent with nano-sized pores. Sensors and Actuators B: Chemical, 2003, 95, 282-286.	4.0	27
93	Biocompatible glucose sensor prepared by modifying protein and vinylferrocene monomer composite membrane. Biosensors and Bioelectronics, 2004, 20, 518-523.	5.3	27
94	Synthesis of phosphorylcholineâ€oligoethylene glycolâ€alkane thiols and their suppressive effect on non-specific adsorption of proteins. Tetrahedron Letters, 2009, 50, 4092-4095.	0.7	27
95	Electrochemical Oxidation of Alkylphenols on ECR-Sputtered Carbon Film Electrodes with Flat Sub-nanometer Surfaces. Journal of the Electrochemical Society, 2002, 149, E479.	1.3	26
96	Simultaneous Electrochemical Analysis of Hydrophilic and Lipophilic Antioxidants in Bicontinuous Microemulsion. Analytical Chemistry, 2015, 87, 1489-1493.	3.2	26
97	Electrical properties of poly(vinyl chloride)-polypyrrole conductive polymer alloy films. Die Makromolekulare Chemie Rapid Communications, 1985, 6, 375-379.	1.1	25
98	Surface Modification of Silicon Oxide with Trialkoxysilanes toward Close-Packed Monolayer Formation. Langmuir, 2013, 29, 6361-6368.	1.6	25
99	Electrochemistry in bicontinuous microemulsions based on control of dynamic solution structures on electrode surfaces. Current Opinion in Colloid and Interface Science, 2016, 25, 13-26.	3.4	25
100	Cytochrome P450 Modified Polycrystalline Indium Tin Oxide Film as a Drug Metabolizing Electrochemical Biosensor with a Simple Configuration. Analytical Chemistry, 2013, 85, 9996-9999.	3.2	24
101	Human cytochrome P450 3A4 and a carbon nanofiber modified film electrode as a platform for the simple evaluation of drug metabolism and inhibition reactions. Analyst, The, 2013, 138, 6463.	1.7	23
102	Photoresponsive Permeation Characteristics of a Ternary Composite Membrane of Polymer/Artificial Lipid/Azobenzene Derivative. Polymer Journal, 1984, 16, 461-470.	1.3	23
103	Improvement in signal reliability when measuring l-glutamate released from cultured cells using multi-channel microfabricated sensors. Analytica Chimica Acta, 2001, 441, 165-174.	2.6	22
104	Differential measurement with a microfluidic device for the highly selective continuous measurement of histamine released from rat basophilic leukemia cells (RBL-2H3). Lab on A Chip, 2002, 2, 34.	3.1	22
105	12-Mercaptododecyl β -maltoside-modified gold nanoparticles: specific ligands for concanavalin A having long flexible hydrocarbon chains. Analytical and Bioanalytical Chemistry, 2008, 391, 2527-2532.	1.9	22
106	One-Step Detection of Galectins on Hybrid Monolayer Surface with Protruding Lactoside. Analytical Chemistry, 2010, 82, 1175-1178.	3.2	22
107	Patterning of Conductive Polypyrrole in Polymer Film. Japanese Journal of Applied Physics, 1985, 24, L79-L81.	0.8	21
108	Selective Electrochemical Response of Dopamine against 3,4-Dihydroxyphenylacetic Acid at Bare Indiumâ€Tin Oxide Electrode. Chemistry Letters, 2005, 34, 1120-1121.	0.7	21

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109	High benzene selectivity of mesoporous silicate for BTX gas sensing microfluidic devices. <i>Analytical and Bioanalytical Chemistry</i> , 2005, 382, 804-809.	1.9	21
110	Enzymatically amplified electrochemical detection for lipopolysaccharide using ferrocene-attached polymyxin B and its analogue. <i>Biosensors and Bioelectronics</i> , 2011, 26, 2080-2084.	5.3	21
111	Design and Fabrication of Biosensing Interface for Waveguide-Mode Sensor. <i>Langmuir</i> , 2013, 29, 13111-13120.	1.6	21
112	Electrochemical assessment of local cytosine methylation in genomic DNA on a nanocarbon film electrode fabricated by unbalanced magnetron sputtering. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 816-822.	4.0	21
113	Miniaturized thin-layer radial flow cell with interdigitated ring-shaped microarray electrode used as amperometric detector for capillary electrophoresis. <i>Journal of Chromatography A</i> , 2000, 891, 149-156.	1.8	20
114	Enzyme immunoassay of insulin at picomolar levels based on the coulometric determination of hydrogen peroxide. <i>Sensors and Actuators B: Chemical</i> , 2008, 135, 304-308.	4.0	20
115	Real-time detection of GABA-induced synaptic glutamate release in cultured rat cortex. <i>NeuroReport</i> , 1997, 8, 1353-1357.	0.6	19
116	Continuous Measurement of Glutamate and Hydrogen Peroxide Using a Microfabricated Biosensor for Studying the Neurotoxicity of Tributyltin. <i>Analytical Sciences</i> , 2003, 19, 1581-1585.	0.8	19
117	Surface electrochemical enzyme immunoassay for the highly sensitive measurement of B-type natriuretic peptide. <i>Sensors and Actuators B: Chemical</i> , 2005, 108, 603-607.	4.0	19
118	Electrochemical Surface Plasmon Resonance Measurement in a Microliter Volume Flow Cell for Evaluating the Affinity and Catalytic Activity of Biomolecules. <i>Analytical Chemistry</i> , 2007, 79, 9572-9576.	3.2	19
119	Carbon-based Electrode Materials for DNA Electroanalysis. <i>Analytical Sciences</i> , 2013, 29, 385-392.	0.8	19
120	On-line flow sensor for measuring acetylcholine combined with microdialysis sampling probe. <i>Electroanalysis</i> , 1997, 9, 912-916.	1.5	18
121	Preparation of refractive index matching polymer film alternative to oil for use in a portable surface-plasmon resonance phenomenon-based chemical sensor method. <i>Analytical and Bioanalytical Chemistry</i> , 2002, 373, 222-226.	1.9	18
122	Evaluation of Electrokinetic Parameters for All DNA Bases with Sputter Deposited Nanocarbon Film Electrode. <i>Analytical Chemistry</i> , 2012, 84, 10607-10613.	3.2	18
123	Improved Direct Electrochemistry for Proteins Adsorbed on a UV/Ozone-Treated Carbon Nanofiber Electrode. <i>Analytical Sciences</i> , 2013, 29, 611-618.	0.8	18
124	Detection of Reversible Redox Species by Substitutional Stripping Voltammetry. <i>Analytical Chemistry</i> , 1994, 66, 1224-1230.	3.2	17
125	Discriminative Detection of Volatile Sulfur Compound Mixtures with a Plasma-Polymerized Film-Based Sensor Array Installed in a Humidity-Control System. <i>Analytical Chemistry</i> , 2005, 77, 4228-4234.	3.2	17
126	One-chip biosensor for simultaneous disease marker/calibration substance measurement in human urine by electrochemical surface plasmon resonance method. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1536-1542.	5.3	17

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127	Effect of the sp ² /sp ³ Ratio in a Hybrid Nanocarbon Thin Film Electrode for Anodic Stripping Voltammetry Fabricated by Unbalanced Magnetron Sputtering Equipment. <i>Analytical Sciences</i> , 2015, 31, 635-641.	0.8	16
128	Site-specific immunochemical methylation assessment from genome DNA utilizing a conformational difference between looped-out target and stacked-in nontarget methylcytosines. <i>Biosensors and Bioelectronics</i> , 2015, 70, 366-371.	5.3	16
129	Polythiophene/polyvinylchloride conducting polymer alloy films and their redox properties. <i>Synthetic Metals</i> , 1987, 20, 235-243.	2.1	15
130	Selective Electrochemical Detection Using a Split Disk Array Electrode in a Thin-Layer Radial Flow System. <i>Analytical Chemistry</i> , 1996, 68, 3797-3800.	3.2	15
131	Heavy Phosphate Adsorption on Amorphous ITO Film Electrodes: Nano-Barrier Effect for Highly Selective Exclusion of Anionic Species. <i>Langmuir</i> , 2007, 23, 8400-8405.	1.6	15
132	Suppression of Non-specific Adsorption Using Densified Tri(ethylene glycol) alkanethiols: Monolayer Characteristics Evaluated by Electrochemical Measurements. <i>Analytical Sciences</i> , 2010, 26, 33-37.	0.8	15
133	Fluorinated Nanocarbon Film Electrode Capable of Signal Amplification for Lipopolysaccharide Detection. <i>Electrochimica Acta</i> , 2016, 197, 152-158.	2.6	15
134	Highly sensitive small volume voltammetry of reversible redox species with an IDA electrochemical cell and its application to selective detection of catecholamine. <i>Sensors and Actuators B: Chemical</i> , 1993, 14, 558-560.	4.0	14
135	Simultaneous determination of glucose and ascorbic acid by using gold electrode modified with ferrocenylundecanethiol monolayer. <i>Sensors and Actuators B: Chemical</i> , 2005, 108, 617-621.	4.0	14
136	Newly Developed Chemical Probes and Nano-Devices for Cellular Analysis. <i>Analytical Sciences</i> , 2008, 24, 55-66.	0.8	14
137	Characterization of a microfluidic device fabricated using a photosensitive sheet. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 432-438.	1.5	13
138	Co-sputter deposited nickel-copper bimetallic nanoalloy embedded carbon films for electrocatalytic biomarker detection. <i>Nanoscale</i> , 2016, 8, 12887-12891.	2.8	13
139	Direct Analysis of Lipophilic Antioxidants of Olive Oils Using Bicontinuous Microemulsions. <i>Analytical Chemistry</i> , 2016, 88, 1202-1209.	3.2	13
140	Electrochemical oxidation of vacuum-deposited carbazole: Preparation and film properties. <i>Synthetic Metals</i> , 1990, 35, 253-261.	2.1	12
141	Fabrication and Photoelectrochemical Properties of Interdigitated Array Microelectrodes Consisting of Optically Transparent and Nontransparent Band Electrodes. <i>Journal of the Electrochemical Society</i> , 1995, 142, L146-L149.	1.3	12
142	Hydrogen bonding interaction between aminopurinethiol-monolayers and oligonucleotides by QCM and XPS measurements. <i>Sensors and Actuators B: Chemical</i> , 2007, 121, 214-218.	4.0	12
143	Simultaneous On-chip Surface Plasmon Resonance Measurement of Disease Marker Protein and Small Metabolite Combined with Immuno- and Enzymatic Reactions. <i>Chemistry Letters</i> , 2008, 37, 698-699.	0.7	12
144	Poly(L-lysine) Modified Nanocarbon Film Electrodes for LPS Detection. <i>Electroanalysis</i> , 2014, 26, 618-624.	1.5	12

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145	On-Chip Evaluation of DNA Methylation with Electrochemical Combined Bisulfite Restriction Analysis Utilizing a Carbon Film Containing a Nanocrystalline Structure. <i>Analytical Chemistry</i> , 2017, 89, 5976-5982.	3.2	12
146	Hybrid Carbon Film Electrodes for Electroanalysis. <i>Analytical Sciences</i> , 2021, 37, 37-47.	0.8	12
147	Determination of Hydrogen Peroxide Based on the Charge Accumulation and Electrochemical Reduction at an Osmium Complex/Peroxidase-coated Electrode. <i>Chemistry Letters</i> , 2007, 36, 1148-1149.	0.7	11
148	Structure and Electroanalytical Application of Nitrogen-doped Carbon Thin Film Electrode with Lower Nitrogen Concentration. <i>Analytical Sciences</i> , 2015, 31, 651-656.	0.8	11
149	Highly sensitive detection of catecholamine with interdigitated array microelectrodes in HPLC. <i>Sensors and Actuators B: Chemical</i> , 1993, 13, 336-339.	4.0	10
150	Effect of the calcination temperature of self-ordered mesoporous silicate on its adsorption characteristics for aromatic hydrocarbons. <i>New Journal of Chemistry</i> , 2005, 29, 504.	1.4	10
151	Comparison of Enzymatic Recycling Electrodes for Measuring Aminophenol: Development of a Highly Sensitive Natriuretic Peptide Assay System. <i>Analytical Sciences</i> , 2008, 24, 577-582.	0.8	10
152	Electrochemical performance at sputter-deposited nanocarbon film with different surface nitrogen-containing groups. <i>Nanoscale</i> , 2019, 11, 10239-10246.	2.8	10
153	Synthesis and galectin-binding activities of mercaptododecyl glycosides containing a terminal β -galactosyl group. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 1265-1269.	1.0	9
154	An sp ² and sp ³ Hybrid Nanocrystalline Carbon Film Electrode for Anodic Stripping Voltammetry and Its Application for Electrochemical Immunoassay. <i>Analytical Sciences</i> , 2012, 28, 13-20.	0.8	9
155	Electrochemical enzyme biosensor for carnitine detection based on cathodic stripping voltammetry. <i>Sensors and Actuators B: Chemical</i> , 2020, 321, 128473.	4.0	9
156	Imaging of flow pattern in micro flow channel using surface plasmon resonance. <i>Measurement Science and Technology</i> , 2006, 17, 3184-3188.	1.4	8
157	Development of a Sputtered Nanocarbon Film Based Microdisk Array Electrode for the Highly Stable Detection of Serotonin. <i>Electroanalysis</i> , 2011, 23, 827-831.	1.5	8
158	The Use of an Enzyme-based Sensor Array to Fingerprint Proteomic Signatures of Sera from Different Mammalian Species. <i>Analytical Sciences</i> , 2016, 32, 237-240.	0.8	8
159	Amplified Zinc Signal at a Nanocarbon Film Electrode for Lipopolysaccharide Detection. <i>ACS Applied Nano Materials</i> , 2018, 1, 5425-5429.	2.4	8
160	Influence of Contact Force on Electrochemical Responses of Redox Species Flowing in Nitrocellulose Membrane at Micropyramid Array Electrode. <i>Analytical Sciences</i> , 2015, 31, 729-732.	0.8	7
161	Properties of modified surface for biosensing interface. <i>Journal of Colloid and Interface Science</i> , 2017, 497, 309-316.	5.0	7
162	The influence mechanism of the molecular structure on the peak current and peak potential in electrochemical detection of typical quinolone antibiotics. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 13873-13877.	1.3	7

#	ARTICLE	IF	CITATIONS
163	A Simple Method for Fabrication of Mesoporous Films Using a Rapid Heating Process. <i>Chemistry Letters</i> , 2005, 34, 328-329.	0.7	6
164	Fabrication of High Performance Polymeric Microfluidic Device by a Simple Imprinting Method using a Photosensitive Sheet. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L64-L67.	0.8	6
165	Surface Accumulable Coreactant for Bright Electrogenenerated Chemiluminescence at Trace Level Concentrations. <i>Chemistry Letters</i> , 2009, 38, 804-805.	0.7	6
166	Chromatographic Determination of Sugar Probes Used for Gastrointestinal Permeability Test by Employing Nickel-Copper Nanoalloy Embedded in Carbon Film Electrodes. <i>Electroanalysis</i> , 2018, 30, 1407-1415.	1.5	6
167	Gas-phase Treatment Methods for Chemical Termination of Sputtered Nanocarbon Film Electrodes to Suppress Surface Fouling by Proteins. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2019, 32, 523-528.	0.1	6
168	Monolithic Au Nanoscale Films with Tunable Nanoporosity Prepared via Dynamic Soft Templating for Electrocatalytic Oxidation of Methanol. <i>ACS Applied Nano Materials</i> , 2020, 3, 7750-7760.	2.4	6
169	Selective Au Electrodeposition on Au Nanoparticles Embedded in Carbon Film Electrode for Se(IV) Detection. <i>Sensors and Materials</i> , 2019, 31, 1135.	0.3	6
170	Nanocarbon film electrodes for electro-analysis and electrochemical sensors. <i>Current Opinion in Electrochemistry</i> , 2022, 35, 101045.	2.5	6
171	Direct detection of uncaged glutamate and the laser photostimulation of cultured rat cortex. <i>NeuroReport</i> , 1998, 9, 599-603.	0.6	5
172	New Advances in Nanomedicine: Diagnosis and Preventive Medicine. <i>Medical Clinics of North America</i> , 2007, 91, 871-879.	1.1	5
173	Local Imaging of an Electrochemical Active/Inactive Region on a Conductive Carbon Surface by Using Scanning Electrochemical Microscopy. <i>Analytical Sciences</i> , 2009, 25, 645-651.	0.8	5
174	Stand-Alone Semi-Solid-State Electrochemical Systems Based on Bicontinuous Microemulsion Gel Films. <i>Analytical Chemistry</i> , 2020, 92, 14031-14037.	3.2	5
175	Supporting effects of a N-doped carbon film electrode on an electrodeposited Ni@Ni(OH) ₂ core-shell nanocatalyst in accelerating electrocatalytic oxidation of oligosaccharides. <i>RSC Advances</i> , 2021, 11, 13311-13315.	1.7	5
176	The Structure and Bonding State for Fullerene-Like Carbon Nitride Films with High Hardness Formed by Electron Cyclotron Resonance Plasma Sputtering. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 125602.	0.8	5
177	Near-Infrared Raman Spectra of Azo Dye Produced by a Nitrogen-Dioxide-Gas-Selective Coloration Reaction in a Porous Glass Chip. <i>Applied Spectroscopy</i> , 2001, 55, 1151-1154.	1.2	4
178	Increased electrode activity during geosmin oxidation provided by Pt nanoparticle-embedded nanocarbon film. <i>Nanoscale</i> , 2019, 11, 8845-8854.	2.8	4
179	Bifunctional Tri(ethylene glycol) Alkanethiol Monolayer Modified Gold Electrode for On-Chip Electrochemical Immunoassay of pg Level Leptin. <i>Analytical Sciences</i> , 2011, 27, 465-469.	0.8	3
180	Indoor allergen assessment quantified by a thin-layer electrochemical cell and magnetic beads. <i>Biosensors and Bioelectronics</i> , 2013, 48, 43-48.	5.3	3

#	ARTICLE	IF	CITATIONS
181	Preface“JES Focus Issue on Biosensors and Micro-Nano Fabricated Electromechanical Systems. Journal of the Electrochemical Society, 2017, 164, Y5-Y5.	1.3	3
182	Development of a highly sensitive Prussian-blue-based enzymatic biosensor for l-carnitine employing the thiol/disulfide exchange reaction. Analytical Sciences, 2022, 38, 963-968.	0.8	3
183	Porous gold nanomesh films electrodeposited in toluene-based dynamic soft template. Electrochimica Acta, 2022, 426, 140761.	2.6	2
184	Vertically Oriented Metallic Heterodimer Array Semiembedded in Flat Conductive Carbon Film for Electrochemical Application. ACS Nano, 2022, 16, 10589-10599.	7.3	2
185	Electrochemical analysis of ferrocene in bicontinuous microemulsions using β -cyclodextrin modified monolayer graphene electrodes. Journal of Electroanalytical Chemistry, 2022, 920, 116575.	1.9	2
186	Semi-transparent anisotropically conducting polymer alloy film prepared on patterned electrode.. Kobunshi Ronbunshu, 1987, 44, 225-233.	0.2	1
187	Measurement of DNA Amount on Gold Plate Based on the Oxidation Current of Guanine. Bunseki Kagaku, 2006, 55, 975-978.	0.1	1
188	Highly Sensitive Electrochemical Detection of Heavy Metal Ions Using Carbon Film-based Electrodes. Bunseki Kagaku, 2021, 70, 101-109.	0.1	1
189	Electrochemical Surface Plasmon Resonance Measurement. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2000, 51, 558-562.	0.1	0
190	Measurements of Enzyme Film Thickness and Enzymatic Reaction by Surface Plasmon Resonance. IEEJ Transactions on Sensors and Micromachines, 2003, 123, 130-131.	0.0	0
191	2P276 Specific interactions between the carbohydrate on gold nanoparticles and lectins(40. Membrane) Tj ETQq1 1 0.784314 rgBT /Ov S364.	0.0	0
192	Thick-matrix-free interface for highly effective protein detection and sufficient signal enhancement. Composite Interfaces, 2014, 21, 631-638.	1.3	0
193	Nanocarbon Film Electrodes Can Expand the Possibility of Electroanalysis. Bunseki Kagaku, 2018, 67, 635-645.	0.1	0
194	Visible internal-reflection spectroscopy by polymer channel optical waveguide.. IEEJ Transactions on Fundamentals and Materials, 2001, 121, 654-659.	0.2	0
195	Near-Field Fiber-Optic Chemical Microsensors. IEEJ Transactions on Sensors and Micromachines, 2003, 123, 132-133.	0.0	0
196	Development of Small Size Detector for Environmental Monitoring of VOC. IEEJ Transactions on Sensors and Micromachines, 2003, 123, 134-135.	0.0	0
197	Activities of Daily Living after Surgical Treatment for Osteoporotic Vertebral Fracture with or without Diffuse Idiopathic Skeletal Hyperostosis: A Retrospective Single-Institutional Study. Asian Spine Journal, 2020, 14, 847-856.	0.8	0
198	Structure and Electrochemical Properties of Nitrogen Containing Nanocarbon Films and Their Electroanalytical Application. Bunseki Kagaku, 2021, 70, 511-520.	0.1	0

#	ARTICLE	IF	CITATIONS
199	Quantitative Evaluation of DNA Probe Density by Electrochemical Surface Plasmon Resonance Measurement. <i>Sensors and Materials</i> , 2022, 34, 927.	0.3	0
200	Response to: Risk Factors Affecting Cage Retropulsion into the Spinal Canal Following Posterior Lumbar Interbody Fusion: Association with Diffuse Idiopathic Skeletal Hyperostosis. <i>Asian Spine Journal</i> , 2022, 16, 309-310.	0.8	0