Richard L Mccreery

List of Publications by Year
in descending order

254	22,319	9428 76	11608 140
papers	citations	h-index	g-index

261	261	261	18722
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Advanced Carbon Electrode Materials for Molecular Electrochemistry. Chemical Reviews, 2008, 108, 2646-2687.	23.0	2,327
2	Raman spectroscopy of carbon materials: structural basis of observed spectra. Chemistry of Materials, 1990, 2, 557-563.	3.2	1,450
3	Control of Electron Transfer Kinetics at Glassy Carbon Electrodes by Specific Surface Modification. Analytical Chemistry, 1996, 68, 3958-3965.	3.2	678
4	Molecular Electronic Junctions. Chemistry of Materials, 2004, 16, 4477-4496.	3.2	523
5	Potential oxidative pathways of brain catecholamines. Journal of Medicinal Chemistry, 1976, 19, 37-40.	2.9	410
6	Raman Spectroscopy of Normal and Diseased Human Breast Tissues. Analytical Chemistry, 1995, 67, 777-783.	3.2	374
7	Progress with Molecular Electronic Junctions: Meeting Experimental Challenges in Design and Fabrication. Advanced Materials, 2009, 21, 4303-4322.	11.1	344
8	Mono- and Multilayer Formation by Diazonium Reduction on Carbon Surfaces Monitored with Atomic Force Microscopy â€œScratchingâ€• Analytical Chemistry, 2003, 75, 3837-3844.	3.2	337
9	Electron Transfer Kinetics at Modified Carbon Electrode Surfaces: The Role of Specific Surface Sites. Analytical Chemistry, 1995, 67, 3115-3122.	3.2	325
10	Reactions of Organic Monolayers on Carbon Surfaces Observed with Unenhanced Raman Spectroscopy. Journal of the American Chemical Society, 1995, 117, 11254-11259.	6.6	323
11	Photoresist-Derived Carbon for Microelectromechanical Systems and Electrochemical Applications. Journal of the Electrochemical Society, 2000, 147, 277.	1.3	297
12	Activation of highly ordered pyrolytic graphite for heterogeneous electron transfer: relationship between electrochemical performance and carbon microstructure. Journal of the American Chemical Society, 1989, 111, 1217-1223.	6.6	289
13	Anomalously Slow Electron Transfer at Ordered Graphite Electrodes: Influence of Electronic Factors and Reactive Sites. The Journal of Physical Chemistry, 1994, 98, 5314-5319.	2.9	246
14	Effects of redox system structure on electron-transfer kinetics at ordered graphite and glassy carbon electrodes. Analytical Chemistry, 1992, 64, 2518-2524.	3.2	244
15	Corrosion Protection of Untreated AAâ€2024â€T3 in Chloride Solution by a Chromate Conversion Coating Monitored with Raman Spectroscopy. Journal of the Electrochemical Society, 1998, 145, 2258-2264.	1.3	239
16	Control of Catechol and Hydroquinone Electron-Transfer Kinetics on Native and Modified Glassy Carbon Electrodes. Analytical Chemistry, 1999, 71, 4594-4602.	3.2	231
17	Electroanalytical Performance of Carbon Films with Near-Atomic Flatness. Analytical Chemistry, 2001, 73, 893-900.	3.2	230
18	Covalent Bonding of Organic Molecules to Cu and Al Alloy 2024 T3 Surfaces via Diazonium Ion Reduction. Journal of the Electrochemical Society, 2004, 151, B252.	1.3	227

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19	Effects of chromate and chromate conversion coatings on corrosion of aluminum alloy 2024-T3. Surface and Coatings Technology, 2001, 140, 51-57.	2.2	222
20	In situ laser activation of glassy carbon electrodes. Analytical Chemistry, 1986, 58, 2745-2750.	3.2	218
21	Self-catalysis by Catechols and Quinones during Heterogeneous Electron Transfer at Carbon Electrodes. Journal of the American Chemical Society, 2000, 122, 6759-6764.	6.6	214
22	Quantitative relationship between electron transfer rate and surface microstructure of laser-modified graphite electrodes. Analytical Chemistry, 1989, 61, 1637-1641.	3.2	211
23	Elucidation of the Mechanism of Dioxygen Reduction on Metal-Free Carbon Electrodes. Journal of the Electrochemical Society, 2000, 147, 3420.	1.3	197
24	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings Equilibrium Aspects of Cr[sup VI] Concentration. Journal of the Electrochemical Society, 2000, 147, 2556.	1.3	177
25	Characterization of human breast biopsy specimens with near-IR Raman spectroscopy. Analytical Chemistry, 1994, 66, 319-326.	3.2	169
26	Facile Preparation of Active Glassy Carbon Electrodes with Activated Carbon and Organic Solvents. Analytical Chemistry, 1999, 71, 3574-3580.	3.2	168
27	Chemistry of a Chromate Conversion Coating on Aluminum Alloy AA2024â€T3 Probed by Vibrational Spectroscopy. Journal of the Electrochemical Society, 1998, 145, 3083-3089.	1.3	166
28	Anthraquinonedisulfonate adsorption, electron-transfer kinetics, and capacitance on ordered graphite electrodes: the important role of surface defects. The Journal of Physical Chemistry, 1992, 96, 3124-3130.	2.9	164
29	Quantitative correlations of heterogeneous electron-transfer kinetics with surface properties of glassy carbon electrodes. Journal of the American Chemical Society, 1990, 112, 4617-4622.	6.6	163
30	Versatile, efficient Raman sampling with fiber optics. Analytical Chemistry, 1984, 56, 2199-2204.	3.2	157
31	Molecular Rectification and Conductance Switching in Carbon-Based Molecular Junctions by Structural Rearrangement Accompanying Electron Injection. Journal of the American Chemical Society, 2003, 125, 10748-10758.	6.6	157
32	Proton Transport Property in Supported Nafion Nanothin Films by Electrochemical Impedance Spectroscopy. Journal of the Electrochemical Society, 2014, 161, F1395-F1402.	1.3	157
33	Isotope and surface preparation effects on alkaline dioxygen reduction at carbon electrodes. Journal of Electroanalytical Chemistry, 1996, 410, 235-242.	1.9	156
34	Mechanism of electrochemical activation of carbon electrodes: role of graphite lattice defects. Langmuir, 1989, 5, 683-688.	1.6	149
35	Activationless charge transport across 4.5 to 22 nm in molecular electronic junctions. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5326-5330.	3.3	149
36	Charge transport in molecular electronic junctions: Compression of the molecular tunnel barrier in the strong coupling regime. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11498-11503.	3.3	142

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37	Spatially Resolved Raman Spectroscopy of Carbon Electrode Surfaces:Â Observations of Structural and Chemical Heterogeneity. Analytical Chemistry, 1997, 69, 4680-4687.	3.2	138
38	Electrochemical Modification of Boron-Doped Chemical Vapor Deposited Diamond Surfaces with Covalently Bonded Monolayers. Electrochemical and Solid-State Letters, 1999, 2, 288.	2.2	136
39	A critical perspective on molecular electronic junctions: there is plenty of room in the middle. Physical Chemistry Chemical Physics, 2013, 15, 1065-1081.	1.3	136
40	Electron Transfer Kinetics of Aquated Feâ€‰+â€‰3â€‰/â€‰â€‰+â€‰2, Euâ€‰+â€‰3â€‰/â€‰â€‰+â€‰2, and â€‰Vâ€‰â Catalysis by Surface Oxides. Journal of the Electrochemical Society, 1993, 140, 2593-2599.	1.3	135
41	Scanning Tunneling Microscopy of Ordered Graphite and Glassy Carbon Surfaces: Electronic Control of Quinone Adsorption. Langmuir, 1994, 10, 4307-4314.	1.6	131
42	Comment on Electrochemical Kinetics at Ordered Graphite Electrodes. Analytical Chemistry, 2012, 84, 2602-2605.	3.2	129
43	â€˜Softâ€™ Au, Pt and Cu contacts for molecular junctions through surface-diffusion-mediated deposition. Nature Nanotechnology, 2010, 5, 612-617.	15.6	128
44	Modified Carbon Surfaces as â€œOrganic Electrodesâ€•That Exhibit Conductance Switching. Analytical Chemistry, 2003, 75, 296-305.	3.2	126
45	Covalently Bonded Organic Monolayers on a Carbon Substrate:Â A New Paradigm for Molecular Electronics. Nano Letters, 2001, 1, 491-494.	4.5	123
46	Spatially Resolved Raman Spectroelectrochemistry of Solid-State Polythiophene/Viologen Memory Devices. Journal of the American Chemical Society, 2012, 134, 14869-14876.	6.6	118
47	Redox Flow Batteries: How to Determine Electrochemical Kinetic Parameters. ACS Nano, 2020, 14, 2575-2584.	7.3	118
48	Fiber optic probe for remote Raman spectrometry. Analytical Chemistry, 1983, 55, 146-148.	3.2	110
49	Reduction of Fluorescence Interference in Raman Spectroscopy via Analyte Adsorption on Graphitic Carbon. Analytical Chemistry, 1994, 66, 4159-4165.	3.2	108
50	In situ Raman monitoring of electrochemical graphite intercalation and lattice damage in mild aqueous acids. Analytical Chemistry, 1992, 64, 1528-1533.	3.2	105
51	Raman Spectroscopic Determination of the Structure and Orientation of Organic Monolayers Chemisorbed on Carbon Electrode Surfaces. Analytical Chemistry, 1997, 69, 2091-2097.	3.2	105
52	A Galvanic Corrosion Approach to Investigating Chromate Effects on Aluminum Alloy 2024-T3. Journal of the Electrochemical Society, 2002, 149, B179.	1.3	105
53	In Situ Raman Spectroelectrochemistry of Electron Transfer between Glassy Carbon and a Chemisorbed Nitroazobenzene Monolayer. Journal of the American Chemical Society, 2002, 124, 10894-10902.	6.6	101
54	All-Carbon Molecular Tunnel Junctions. Journal of the American Chemical Society, 2011, 133, 19168-19177.	6.6	101

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55	Scanning tunneling microscopy of carbon surfaces: relationships between electrode kinetics, capacitance, and morphology for glassy carbon electrodes. Analytical Chemistry, 1993, 65, 937-944.	3.2	100
56	Surface Chemistry and Electron-Transfer Kinetics of Hydrogen-Modified Glassy Carbon Electrodes. Analytical Chemistry, 1999, 71, 1553-1560.	3.2	99
57	Electronic Conductance Behavior of Carbon-Based Molecular Junctions with Conjugated Structures. Journal of Physical Chemistry B, 2002, 106, 10355-10362.	1.2	99
58	In Situ Raman Spectroscopy of Bias-Induced Structural Changes in Nitroazobenzene Molecular Electronic Junctions. Journal of the American Chemical Society, 2004, 126, 16621-16631.	6.6	98
59	A Mechanism for Conductance Switching in Carbon-Based Molecular Electronic Junctions. Electrochemical and Solid-State Letters, 2002, 5, E43.	2.2	95
60	Determination of the Structure and Orientation of Organic Molecules Tethered to Flat Graphitic Carbon by ATR-FT-IR and Raman Spectroscopy. Analytical Chemistry, 2006, 78, 3104-3112.	3.2	95
61	Laser activation of carbon electrodes. Relationship between laser-induced surface effects and electron transfer activation. Analytical Chemistry, 1988, 60, 1725-1730.	3.2	94
62	In Situ Raman Microscopy of Chromate Effects on Corrosion Pits in Aluminum Alloy. Journal of the Electrochemical Society, 1999, 146, 4076-4081.	1.3	93
63	Effects of Surface Monolayers on the Electron-Transfer Kinetics and Adsorption of Methyl Viologen and Phenothiazine Derivatives on Glassy Carbon Electrodes. Analytical Chemistry, 1999, 71, 4081-4087.	3.2	92
64	Characterization of Carbon/Nitroazobenzene/Titanium Molecular Electronic Junctions with Photoelectron and Raman Spectroscopy. Analytical Chemistry, 2004, 76, 1089-1097.	3.2	92
65	Raman spectroscopic analysis of the speciation of dilute chromate solutions. Corrosion Science, 2001, 43, 1557-1572.	3.0	91
66	Performance of Pyrolyzed Photoresist Carbon Films in a Microchip Capillary Electrophoresis Device with Sinusoidal Voltammetric Detection. Analytical Chemistry, 2003, 75, 4265-4271.	3.2	91
67	Adsorption of catechols on fractured glassy carbon electrode surfaces. Analytical Chemistry, 1992, 64, 444-448.	3.2	90
68	Structure and Function of Ferricyanide in the Formation of Chromate Conversion Coatings on Aluminum Aircraft Alloy. Journal of the Electrochemical Society, 1999, 146, 3696-3701.	1.3	90
69	Evaluation of a diode laser/charge coupled device spectrometer for near-infrared Raman spectroscopy. Analytical Chemistry, 1989, 61, 2647-2651.	3.2	89
70	Near-Infrared Raman Spectroscopy with a 783-nm Diode Laser and CCD Array Detector. Applied Spectroscopy, 1989, 43, 372-375.	1.2	88
71	Kinetics of chlorpromazine cation radical decomposition in aqueous buffers. Journal of the American Chemical Society, 1978, 100, 962-967.	6.6	86
72	Control of reactivity at carbon electrode surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1994, 93, 211-219.	2.3	86

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73	Conducting Polymer Memory Devices Based on Dynamic Doping. Journal of the American Chemical Society, 2008, 130, 11073-11081.	6.6	85
74	Electronic Characteristics and Charge Transport Mechanisms for Large Area Aromatic Molecular Junctions. Journal of Physical Chemistry C, 2010, 114, 15806-15815.	1.5	83
75	Solid-State Electrochemistry in Molecule/TiO[sub 2] Molecular Heterojunctions as the Basis of the TiO[sub 2] â€œMemristorâ€• Journal of the Electrochemical Society, 2009, 156, P29.	1.3	79
76	Remote, Long-Pathlength Cell for High-Sensitivity Raman Spectroscopy. Applied Spectroscopy, 1987, 41, 126-130.	1.2	78
77	Electron transport and redox reactions in carbon-based molecular electronic junctions. Physical Chemistry Chemical Physics, 2006, 8, 2572.	1.3	74
78	Morphology and Electrochemical Effects of Defects on Highly Oriented Pyrolytic Graphite. Journal of the Electrochemical Society, 1991, 138, 2412-2418.	1.3	73
79	Nanoscale platinum(0) clusters in glassy carbon: synthesis, characterization, and uncommon catalytic activity. Journal of the American Chemical Society, 1992, 114, 769-771.	6.6	73
80	Feature articls. Doped glassy carbon: a new material for electrocatalysis. Journal of Materials Chemistry, 1992, 2, 771.	6.7	72
81	Direct Observation of Large Quantum Interference Effect in Anthraquinone Solid-State Junctions. Journal of the American Chemical Society, 2013, 135, 10218-10221.	6.6	72
82	Formation of Chromate Conversion Coatings on Al-Cu-Mg Intermetallic Compounds and Alloys. Journal of the Electrochemical Society, 2000, 147, 4494.	1.3	70
83	Control of Electronic Symmetry and Rectification through Energy Level Variations in Bilayer Molecular Junctions. Journal of the American Chemical Society, 2016, 138, 12287-12296.	6.6	70
84	In situ cleaning and activation of solid electrode surfaces by pulsed laser light. Analytical Chemistry, 1984, 56, 2256-2257.	3.2	69
85	Simplified Calibration of Instrument Response Function for Raman Spectrometers Based on Luminescent Intensity Standards. Applied Spectroscopy, 1997, 51, 108-116.	1.2	68
86	Voltammetry in brain tissue: Quantitative studies of drug interactions. Brain Research, 1974, 73, 23-33.	1.1	67
87	Intensity Calibration and Sensitivity Comparisons for CCD/Raman Spectrometers. Applied Spectroscopy, 1993, 47, 1965-1974.	1.2	67
88	Repetitive in situ renewal and activation of carbon and platinum electrodes: application to pulse voltammetry. Analytical Chemistry, 1987, 59, 1615-1620.	3.2	64
89	Electron transfer kinetics of Fe(CN)63â^'4â^' on laser-activated and CNâ^'-modified Pt electrodes. Journal of Electroanalytical Chemistry, 1992, 326, 1-12.	1.9	64
90	Bilayer Molecular Electronics: All-Carbon Electronic Junctions Containing Molecular Bilayers Made with â€œClickâ€•Chemistry. Journal of the American Chemical Society, 2013, 135, 12972-12975.	6.6	63

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91	Inhibition of Corrosion-Related Reduction Processes via Chromium Monolayer Formation. Journal of the Electrochemical Society, 2002, 149, B379.	1.3	62
92	Optical Interference Effects in the Design of Substrates for Surface-Enhanced Raman Spectroscopy. Applied Spectroscopy, 2009, 63, 133-140.	1.2	61
93	Robust All-Carbon Molecular Junctions on Flexible or Semi-Transparent Substrates Using â€œProcess-Friendlyâ€•Fabrication. ACS Nano, 2016, 10, 8918-8928.	7.3	61
94	Control of Rectification in Molecular Junctions: Contact Effects and Molecular Signature. Journal of the American Chemical Society, 2017, 139, 11913-11922.	6.6	61
95	Strong Effects of Molecular Structure on Electron Transport in Carbon/Molecule/Copper Electronic Junctions. Journal of Physical Chemistry B, 2005, 109, 11163-11172.	1.2	60
96	Doped glassy carbon materials (DGC): low-temperature synthesis, structure, and catalytic behavior. Journal of the American Chemical Society, 1990, 112, 4954-4956.	6.6	59
97	Near-Infrared Raman Spectroscopy of Liquids and Solids with a Fiber-Optic Sampler, Diode Laser, and CCD Detector. Applied Spectroscopy, 1990, 44, 1229-1231.	1.2	58
98	Raman Spectroscopy of Monolayers Formed from Chromate Corrosion Inhibitor on Copper Surfaces. Journal of the Electrochemical Society, 2003, 150, B367.	1.3	57
99	Observation of kinetic heterogeneity on highly ordered pyrolytic graphite using electrogenerated chemiluminescence. Analytical Chemistry, 1989, 61, 2763-2766.	3.2	56
100	Robust Bipolar Light Emission and Charge Transport in Symmetric Molecular Junctions. Journal of the American Chemical Society, 2017, 139, 7436-7439.	6.6	55
101	Voltammetry in brain tissue: The fate of injected 6-hydroxydopamine. Brain Research, 1974, 73, 15-21.	1.1	54
102	Ultraflat Carbon Film Electrodes Prepared by Electron Beam Evaporation. Analytical Chemistry, 2004, 76, 2544-2552.	3.2	54
103	Side-chain effects on phenothiazine cation radical reactions. Journal of Medicinal Chemistry, 1981, 24, 1342-1347.	2.9	52
104	Microsecond spectroelectrochemistry by external reflection from cylindrical microelectrodes. Analytical Chemistry, 1982, 54, 2356-2361.	3.2	52
105	Normal and resonance Raman spectroelectrochemistry with fiber optic light collection. Analytical Chemistry, 1986, 58, 2486-2492.	3.2	52
106	Diagnosis of adsorption on solid electrodes with semiintegral voltammetry. Analytical Chemistry, 1988, 60, 605-608.	3.2	52
107	Hadamard Transform Raman Microscopy of Laser-Modified Graphite Electrodes. Applied Spectroscopy, 1990, 44, 1270-1275.	1.2	52
108	Observation of electrochemical concentration profiles by absorption spectroelectrochemistry. Analytical Chemistry, 1979, 51, 2253-2257.	3.2	51

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109	Redox-Driven Conductance Switching via Filament Formation and Dissolution in Carbon/Molecule/TiO2/Ag Molecular Electronic Junctions. Langmuir, 2006, 22, 10689-10696.	1.6	51
110	Calibration of Raman Spectrometer Instrument Response Function with Luminescence Standards: An Update. Applied Spectroscopy, 1998, 52, 1614-1618.	1.2	50
111	Musical molecules: the molecular junction as an active component in audio distortion circuits. Journal of Physics Condensed Matter, 2016, 28, 094011.	0.7	50
112	Submicrosecond spectroelectrochemistry applied to chlorpromazine cation radical charge transfer reactions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1985, 182, 61-72.	0.3	49
113	Anodic oxidation of 1,4-dimethoxy aromatic compounds. A facile route to functionalized quinone bisketals. Journal of Organic Chemistry, 1980, 45, 369-378.	1.7	48
114	Microstructural and morphological changes induced in glassy carbon electrodes by laser irradiation. Journal of Electroanalytical Chemistry, 1992, 324, 229-242.	1.9	48
115	Microfabrication and Integration of Diazonium-Based Aromatic Molecular Junctions. ACS Applied Materials & Interfaces, 2010, 2, 3693-3701.	4.0	48
116	Effect of structure on phenothiazine cation radical reactions in aqueous buffers. Journal of Medicinal Chemistry, 1979, 22, 1447-1453.	2.9	46
117	Resonance Raman Observation of Surface Carbonyl Groups on Carbon Electrodes Following Dinitrophenylhydrazine Derivatization. Analytical Chemistry, 1995, 67, 967-975.	3.2	46
118	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings on Al Alloys: Kinetics of Release. Journal of the Electrochemical Society, 2003, 150, B83.	1.3	46
119	Reactions of chlorpromazine cation radical with physiologically occurring nucleophiles. Journal of Medicinal Chemistry, 1978, 21, 948-952.	2.9	45
120	Characterization of the surface carbonyl and hydroxyl coverage on glassy carbon electrodes using Raman spectroscopy. Journal of Electroanalytical Chemistry, 1999, 469, 150-158.	1.9	45
121	Surface-enhanced Raman spectroscopy of carbon electrode surfaces following silver electrodeposition. Analytical Chemistry, 1991, 63, 1289-1295.	3.2	44
122	Quantitative Surface Raman Spectroscopy of Physisorbed Monolayers on Glassy Carbon. Langmuir, 1995, 11, 4041-4047.	1.6	44
123	Noninvasive Identification of Materials inside USP Vials with Raman Spectroscopy and a Raman Spectral Library. Journal of Pharmaceutical Sciences, 1998, 87, 1-8.	1.6	44
124	Direct Optical Determination of Interfacial Transport Barriers in Molecular Tunnel Junctions. Journal of the American Chemical Society, 2013, 135, 9584-9587.	6.6	44
125	Fast heterogeneous electron transfer rates for glassy carbon electrodes without polishing or activation procedures. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 263, 163-169.	0.3	43
126	Analytical Challenges in Molecular Electronics. Analytical Chemistry, 2006, 78, 3490-3497.	3.2	43

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127	Carbon/molecule/metal molecular electronic junctions: the importance of â€œcontactsâ€• Faraday Discussions, 2006, 131, 33-43.	1.6	42
128	Electronic characteristics of fluorene/TiO2 molecular heterojunctions. Journal of Chemical Physics, 2007, 126, 024704.	1.2	42
129	Laser microfabrication and activation of graphite and glassy carbon electrodes. Analytical Chemistry, 1990, 62, 1339-1344.	3.2	41
130	Carbon/Molecule/Metal and Carbon/Molecule/Metal Oxide Molecular Electronic Junctions. Chemistry of Materials, 2005, 17, 4939-4948.	3.2	41
131	Redox-Gated Three-Terminal Organic Memory Devices: Effect of Composition and Environment on Performance. ACS Applied Materials & Interfaces, 2013, 5, 11052-11058.	4.0	41
132	High-resolution spatially resolved visible absorption spectrometry of the electrochemical diffusion layer. Analytical Chemistry, 1986, 58, 2771-2777.	3.2	40
133	Fiber-Optic Sampling Combined with an Imaging Spectrograph for Routine Raman Spectroscopy. Applied Spectroscopy, 1992, 46, 262-265.	1.2	39
134	Absorption spectroelectrochemistry with microelectrodes. Analytical Chemistry, 1981, 53, 997-1001.	3.2	38
135	Redox driven conductance changes for resistive memory. Applied Physics A: Materials Science and Processing, 2011, 102, 841-850.	1.1	38
136	Structure Controlled Long-Range Sequential Tunneling in Carbon-Based Molecular Junctions. ACS Nano, 2017, 11, 3542-3552.	7.3	38
137	Derivatization of Optically Transparent Materials with Diazonium Reagents for Spectroscopy of Buried Interfaces. Analytical Chemistry, 2009, 81, 6972-6980.	3.2	36
138	Efficient hydrodynamic modulation voltammetry with a microcylinder electrode. Analytical Chemistry, 1986, 58, 1778-1782.	3.2	34
139	Covalent Bonding of Alkene and Alkyne Reagents to Graphitic Carbon Surfaces. Langmuir, 2005, 21, 11105-11112.	1.6	34
140	Importance of Oxides in Carbon/Molecule/Metal Molecular Junctions with Titanium and Copper Top Contacts. Journal of the Electrochemical Society, 2005, 152, E176.	1.3	34
141	Internal Photoemission in Molecular Junctions: Parameters for Interfacial Barrier Determinations. Journal of the American Chemical Society, 2015, 137, 1296-1304.	6.6	34
142	Intracyclization rates of 6-hydroxydopamine and 6-aminodopamine analogs under physiological conditions. Journal of Medicinal Chemistry, 1976, 19, 178-180.	2.9	33
143	Optical monitoring of electrogenerated species via specular reflection at glancing incidence. Analytical Chemistry, 1979, 51, 749-752.	3.2	33
144	Surface enhanced Raman examination of carbon electrodes: effects of laser activation and electrochemical pretreatment. Langmuir, 1991, 7, 2370-2375.	1.6	33

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145	Preparation of nanoscale platinum(0) clusters in glassy carbon and their catalytic activity. Chemistry of Materials, 1993, 5, 1727-1738.	3.2	33
146	Ultravioletâ€"Visible Spectroelectrochemistry of Chemisorbed Molecular Layers on Optically Transparent Carbon Electrodes. Applied Spectroscopy, 2007, 61, 1246-1253.	1.2	33
147	Diffusion layer imaging: spatial resolution of electrochemical concentration profiles. Analytical Chemistry, 1985, 57, 1763-1765.	3.2	32
148	Towards Integrated Molecular Electronic Devices: Characterization of Molecular Layer Integrity During Fabrication Processes. Advanced Functional Materials, 2011, 21, 2273-2281.	7.8	32
149	Performance Comparisons of Conventional and Line-Focused Surface Raman Spectrometers. Applied Spectroscopy, 2001, 55, 767-773.	1.2	31
150	Molecular electronics using diazonium-derived adlayers on carbon with Cu top contacts: critical analysis of metal oxides and filaments. Journal of Physics Condensed Matter, 2008, 20, 374117.	0.7	31
151	Analytical Chemistry in Molecular Electronics. Annual Review of Analytical Chemistry, 2011, 4, 173-195.	2.8	31
152	Orbital Control of Photocurrents in Large Area All-Carbon Molecular Junctions. Journal of the American Chemical Society, 2018, 140, 1900-1909.	6.6	31
153	Assembling Molecular Electronic Junctions One Molecule at a Time. Nano Letters, 2011, 11, 4725-4729.	4.5	30
154	The merger of electrochemistry and molecular electronics. Chemical Record, 2012, 12, 149-163.	2.9	30
155	Solid-State Protein Junctions: Cross-Laboratory Study Shows Preservation of Mechanism at Varying Electronic Coupling. IScience, 2020, 23, 101099.	1.9	30
156	Light Emission as a Probe of Energy Losses in Molecular Junctions. Journal of the American Chemical Society, 2016, 138, 722-725.	6.6	29
157	Internal Electric Field Modulation in Molecular Electronic Devices by Atmosphere and Mobile Ions. Journal of the American Chemical Society, 2018, 140, 7239-7247.	6.6	29
158	Glancing incidence external reflection spectroelectrochemistry with a continuum source. Analytical Chemistry, 1980, 52, 1885-1889.	3.2	28
159	Spectroelectrochemical observation of diffusion profiles by the parallel absorption method. Analytical Chemistry, 1981, 53, 202-206.	3.2	28
160	High-sensitivity spectroelectrochemistry based on electrochemical modulation of an absorbing analyte. Analytical Chemistry, 1985, 57, 752-758.	3.2	27
161	Molecular Signature and Activationless Transport in Cobaltâ€Terpyridineâ€Based Molecular Junctions. Advanced Electronic Materials, 2020, 6, 1901416.	2.6	27
162	Electron transport in all-carbon molecular electronic devices. Faraday Discussions, 2014, 172, 9-25.	1.6	26

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163	Characterization of Growth Patterns of Nanoscale Organic Films on Carbon Electrodes by Surface Enhanced Raman Spectroscopy. Analytical Chemistry, 2017, 89, 6463-6471.	3.2	26
164	Carbon-Based Molecular Electronic Junctions. Electrochemical Society Interface, 2004, 13, 46-51.	0.3	26
165	Diffractive spectroelectrochemistry. Use of diffracted light for monitoring electrogenerated chromophores. Journal of the American Chemical Society, 1981, 103, 2524-2529.	6.6	25
166	Polarized Raman Spectroscopy of Metallophthalocyanine Monolayers on Carbon Surfaces. Langmuir, 1995, 11, 4036-4040.	1.6	25
167	Observation of concentration profiles at cylindrical microelectrodes by a combination of spatially resolved absorption spectroscopy and the Abel inversion. Analytical Chemistry, 1989, 61, 2347-2352.	3.2	24
168	Solid State Spectroelectrochemistry of Redox Reactions in Polypyrrole/Oxide Molecular Heterojunctions. Analytical Chemistry, 2012, 84, 2459-2465.	3.2	24
169	Electrochemical studies of the interactions of riboflavine and of its reduction products with metal ions in dimethyl sulfoxide. Inorganic Chemistry, 1972, 11, 779-782.	1.9	23
170	Spectroelectrochemical examination of charge transfer between chlorpromazine cation radical and catecholamines. Analytical Chemistry, 1983, 55, 308-312.	3.2	23
171	Detection of Silicone in Lymph Node Biopsy Specimens by Near-Infrared Raman Spectroscopy. Applied Spectroscopy, 1993, 47, 387-390.	1.2	23
172	Laserâ€Induced Transient Currents on Glassy Carbon Electrodes: Double Layer and Ion Adsorption Effects. Journal of the Electrochemical Society, 1993, 140, 1360-1365.	1.3	23
173	Multichannel Fourier Transform Raman Spectroscopy: Combining the Advantages of CCDs with Interferometry. Applied Spectroscopy, 1996, 50, 1209-1214.	1.2	23
174	Bottom-up, Robust Graphene Ribbon Electronics in All-Carbon Molecular Junctions. ACS Applied Materials & Interfaces, 2018, 10, 6090-6095.	4.0	23
175	Hybrid Graphene Ribbon/Carbon Electrodes for Highâ€Performance Energy Storage. Advanced Energy Materials, 2018, 8, 1802439.	10.2	23
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