

Richard L McCreery

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247
papers

19,328
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72
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132
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261
ext. papers

20,587
ext. citations

7.7
avg, IF

7.25
L-index

#	Paper	IF	Citations
247	Advanced carbon electrode materials for molecular electrochemistry. <i>Chemical Reviews</i> , 2008 , 108, 2646-2681	11.1	1984
246	Raman spectroscopy of carbon materials: structural basis of observed spectra. <i>Chemistry of Materials</i> , 1990 , 2, 557-563	9.6	1227
245	Control of Electron Transfer Kinetics at Glassy Carbon Electrodes by Specific Surface Modification. <i>Analytical Chemistry</i> , 1996 , 68, 3958-3965	7.8	605
244	2000 ,		537
243	Molecular Electronic Junctions. <i>Chemistry of Materials</i> , 2004 , 16, 4477-4496	9.6	495
242	Potential oxidative pathways of brain catecholamines. <i>Journal of Medicinal Chemistry</i> , 1976 , 19, 37-40	8.3	364
241	Progress with molecular electronic junctions: meeting experimental challenges in design and fabrication. <i>Advanced Materials</i> , 2009 , 21, 4303-22	24	321
240	Raman spectroscopy of normal and diseased human breast tissues. <i>Analytical Chemistry</i> , 1995 , 67, 777-83	8.8	318
239	Mono- and multilayer formation by diazonium reduction on carbon surfaces monitored with atomic force microscopy "scratching". <i>Analytical Chemistry</i> , 2003 , 75, 3837-44	7.8	316
238	Reactions of Organic Monolayers on Carbon Surfaces Observed with Unenhanced Raman Spectroscopy. <i>Journal of the American Chemical Society</i> , 1995 , 117, 11254-11259	16.4	304
237	Electron Transfer Kinetics at Modified Carbon Electrode Surfaces: The Role of Specific Surface Sites. <i>Analytical Chemistry</i> , 1995 , 67, 3115-3122	7.8	289
236	Photoresist-Derived Carbon for Microelectromechanical Systems and Electrochemical Applications. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 277	3.9	269
235	Activation of highly ordered pyrolytic graphite for heterogeneous electron transfer: relationship between electrochemical performance and carbon microstructure. <i>Journal of the American Chemical Society</i> , 1989 , 111, 1217-1223	16.4	251
234	Anomalously Slow Electron Transfer at Ordered Graphite Electrodes: Influence of Electronic Factors and Reactive Sites. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 5314-5319		228
233	Electroanalytical performance of carbon films with near-atomic flatness. <i>Analytical Chemistry</i> , 2001 , 73, 893-900	7.8	219
232	Corrosion Protection of Untreated AA-2024-T3 in Chloride Solution by a Chromate Conversion Coating Monitored with Raman Spectroscopy. <i>Journal of the Electrochemical Society</i> , 1998 , 145, 2258-2264	3.9	215
231	Effects of redox system structure on electron-transfer kinetics at ordered graphite and glassy carbon electrodes. <i>Analytical Chemistry</i> , 1992 , 64, 2518-2524	7.8	215

230	Covalent Bonding of Organic Molecules to Cu and Al Alloy 2024 T3 Surfaces via Diazonium Ion Reduction. <i>Journal of the Electrochemical Society</i> , 2004 , 151, B252	3.9	207
229	Control of Catechol and Hydroquinone Electron-Transfer Kinetics on Native and Modified Glassy Carbon Electrodes. <i>Analytical Chemistry</i> , 1999 , 71, 4594-4602	7.8	204
228	Self-catalysis by Catechols and Quinones during Heterogeneous Electron Transfer at Carbon Electrodes. <i>Journal of the American Chemical Society</i> , 2000 , 122, 6759-6764	16.4	198
227	Effects of chromate and chromate conversion coatings on corrosion of aluminum alloy 2024-T3. <i>Surface and Coatings Technology</i> , 2001 , 140, 51-57	4.4	193
226	Quantitative relationship between electron transfer rate and surface microstructure of laser-modified graphite electrodes. <i>Analytical Chemistry</i> , 1989 , 61, 1637-1641	7.8	187
225	Elucidation of the Mechanism of Dioxygen Reduction on Metal-Free Carbon Electrodes. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 3420	3.9	177
224	In situ laser activation of glassy carbon electrodes. <i>Analytical Chemistry</i> , 1986 , 58, 2745-2750	7.8	170
223	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings Equilibrium Aspects of Cr[sup VI] Concentration. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 2556	3.9	159
222	Facile Preparation of Active Glassy Carbon Electrodes with Activated Carbon and Organic Solvents. <i>Analytical Chemistry</i> , 1999 , 71, 3574-3580	7.8	157
221	Molecular rectification and conductance switching in carbon-based molecular junctions by structural rearrangement accompanying electron injection. <i>Journal of the American Chemical Society</i> , 2003 , 125, 10748-58	16.4	150
220	Characterization of human breast biopsy specimens with near-IR Raman spectroscopy. <i>Analytical Chemistry</i> , 1994 , 66, 319-26	7.8	150
219	Chemistry of a Chromate Conversion Coating on Aluminum Alloy AA2024-T3 Probed by Vibrational Spectroscopy. <i>Journal of the Electrochemical Society</i> , 1998 , 145, 3083-3089	3.9	149
218	Anthraquinonedisulfonate adsorption, electron-transfer kinetics, and capacitance on ordered graphite electrodes: the important role of surface defects. <i>The Journal of Physical Chemistry</i> , 1992 , 96, 3124-3130		149
217	Quantitative correlations of heterogeneous electron-transfer kinetics with surface properties of glassy carbon electrodes. <i>Journal of the American Chemical Society</i> , 1990 , 112, 4617-4622	16.4	142
216	Isotope and surface preparation effects on alkaline dioxygen reduction at carbon electrodes. <i>Journal of Electroanalytical Chemistry</i> , 1996 , 410, 235-242	4.1	136
215	Activationless charge transport across 4.5 to 22 nm in molecular electronic junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 5326-30	11.5	128
214	Electrochemical Modification of Boron-Doped Chemical Vapor Deposited Diamond Surfaces with Covalently Bonded Monolayers. <i>Electrochemical and Solid-State Letters</i> , 1999 , 2, 288		127
213	Versatile, efficient Raman sampling with fiber optics. <i>Analytical Chemistry</i> , 1984 , 56, 2199-2204	7.8	127

212	Spatially Resolved Raman Spectroscopy of Carbon Electrode Surfaces: Observations of Structural and Chemical Heterogeneity. <i>Analytical Chemistry</i> , 1997 , 69, 4680-4687	7.8	125
211	Electron Transfer Kinetics of Aquated Fe + 3 / + 2, Eu + 3 / + 2, and V + 3 / + 2 at Carbon Electrodes: Inner Sphere Catalysis by Surface Oxides. <i>Journal of the Electrochemical Society</i> , 1993 , 140, 2593-2599	3.9	123
210	A critical perspective on molecular electronic junctions: there is plenty of room in the middle. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 1065-81	3.6	122
209	Proton Transport Property in Supported Nafion Nanothin Films by Electrochemical Impedance Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2014 , 161, F1395-F1402	3.9	122
208	Scanning Tunneling Microscopy of Ordered Graphite and Glassy Carbon Surfaces: Electronic Control of Quinone Adsorption. <i>Langmuir</i> , 1994 , 10, 4307-4314	4	121
207	Mechanism of electrochemical activation of carbon electrodes: role of graphite lattice defects. <i>Langmuir</i> , 1989 , 5, 683-688	4	119
206	Covalently Bonded Organic Monolayers on a Carbon Substrate: A New Paradigm for Molecular Electronics. <i>Nano Letters</i> , 2001 , 1, 491-494	11.5	118
205	Comment on electrochemical kinetics at ordered graphite electrodes. <i>Analytical Chemistry</i> , 2012 , 84, 2602-5	7.8	117
204	'Soft' Au, Pt and Cu contacts for molecular junctions through surface-diffusion-mediated deposition. <i>Nature Nanotechnology</i> , 2010 , 5, 612-7	28.7	115
203	Charge transport in molecular electronic junctions: compression of the molecular tunnel barrier in the strong coupling regime. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 11498-503	11.5	115
202	Modified carbon surfaces as "organic electrodes" that exhibit conductance switching. <i>Analytical Chemistry</i> , 2003 , 75, 296-305	7.8	115
201	Raman spectroscopic determination of the structure and orientation of organic monolayers chemisorbed on carbon electrode surfaces. <i>Analytical Chemistry</i> , 1997 , 69, 2091-7	7.8	100
200	Spatially resolved Raman spectroelectrochemistry of solid-state polythiophene/viologen memory devices. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14869-76	16.4	98
199	In situ Raman spectroscopy of bias-induced structural changes in nitroazobenzene molecular electronic junctions. <i>Journal of the American Chemical Society</i> , 2004 , 126, 16621-31	16.4	97
198	A Galvanic Corrosion Approach to Investigating Chromate Effects on Aluminum Alloy 2024-T3. <i>Journal of the Electrochemical Society</i> , 2002 , 149, B179	3.9	97
197	In situ raman spectroelectrochemistry of electron transfer between glassy carbon and a chemisorbed nitroazobenzene monolayer. <i>Journal of the American Chemical Society</i> , 2002 , 124, 10894-902	16.4	97
196	Electronic Conductance Behavior of Carbon-Based Molecular Junctions with Conjugated Structures. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 10355-10362	3.4	95
195	Surface Chemistry and Electron-Transfer Kinetics of Hydrogen-Modified Glassy Carbon Electrodes. <i>Analytical Chemistry</i> , 1999 , 71, 1553-1560	7.8	92

194	A Mechanism for Conductance Switching in Carbon-Based Molecular Electronic Junctions. <i>Electrochemical and Solid-State Letters</i> , 2002 , 5, E43		91
193	Scanning tunneling microscopy of carbon surfaces: relationships between electrode kinetics, capacitance, and morphology for glassy carbon electrodes. <i>Analytical Chemistry</i> , 1993 , 65, 937-944	7.8	91
192	Reduction of Fluorescence Interference in Raman Spectroscopy via Analyte Adsorption on Graphitic Carbon. <i>Analytical Chemistry</i> , 1994 , 66, 4159-4165	7.8	91
191	Determination of the structure and orientation of organic molecules tethered to flat graphitic carbon by ATR-FT-IR and Raman spectroscopy. <i>Analytical Chemistry</i> , 2006 , 78, 3104-12	7.8	90
190	In situ Raman monitoring of electrochemical graphite intercalation and lattice damage in mild aqueous acids. <i>Analytical Chemistry</i> , 1992 , 64, 1528-1533	7.8	90
189	Characterization of carbon/nitroazobenzene/titanium molecular electronic junctions with photoelectron and Raman spectroscopy. <i>Analytical Chemistry</i> , 2004 , 76, 1089-97	7.8	89
188	Effects of Surface Monolayers on the Electron-Transfer Kinetics and Adsorption of Methyl Viologen and Phenothiazine Derivatives on Glassy Carbon Electrodes. <i>Analytical Chemistry</i> , 1999 , 71, 4081-4087	7.8	88
187	All-carbon molecular tunnel junctions. <i>Journal of the American Chemical Society</i> , 2011 , 133, 19168-77	16.4	86
186	Fiber optic probe for remote Raman spectrometry. <i>Analytical Chemistry</i> , 1983 , 55, 146-148	7.8	84
185	Structure and Function of Ferricyanide in the Formation of Chromate Conversion Coatings on Aluminum Aircraft Alloy. <i>Journal of the Electrochemical Society</i> , 1999 , 146, 3696-3701	3.9	83
184	In Situ Raman Microscopy of Chromate Effects on Corrosion Pits in Aluminum Alloy. <i>Journal of the Electrochemical Society</i> , 1999 , 146, 4076-4081	3.9	82
183	Conducting polymer memory devices based on dynamic doping. <i>Journal of the American Chemical Society</i> , 2008 , 130, 11073-81	16.4	78
182	Raman spectroscopic analysis of the speciation of dilute chromate solutions. <i>Corrosion Science</i> , 2001 , 43, 1557-1572	6.8	78
181	Control of reactivity at carbon electrode surfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1994 , 93, 211-219	5.1	77
180	Near-Infrared Raman Spectroscopy with a 783-nm Diode Laser and CCD Array Detector. <i>Applied Spectroscopy</i> , 1989 , 43, 372-375	3.1	77
179	Solid-State Electrochemistry in Molecule/TiO ₂ Molecular Heterojunctions as the Basis of the TiO ₂ Memristor. <i>Journal of the Electrochemical Society</i> , 2009 , 156, P29	3.9	75
178	Adsorption of catechols on fractured glassy carbon electrode surfaces. <i>Analytical Chemistry</i> , 1992 , 64, 444-448	7.8	74
177	Evaluation of a diode laser/charge coupled device spectrometer for near-infrared Raman spectroscopy. <i>Analytical Chemistry</i> , 1989 , 61, 2647-2651	7.8	74

176	Electronic Characteristics and Charge Transport Mechanisms for Large Area Aromatic Molecular Junctions. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 15806-15815	3.8	73
175	Electron transport and redox reactions in carbon-based molecular electronic junctions. <i>Physical Chemistry Chemical Physics</i> , 2006 , 8, 2572-90	3.6	71
174	Laser activation of carbon electrodes. Relationship between laser-induced surface effects and electron transfer activation. <i>Analytical Chemistry</i> , 1988 , 60, 1725-1730	7.8	71
173	Kinetics of chlorpromazine cation radical decomposition in aqueous buffers. <i>Journal of the American Chemical Society</i> , 1978 , 100, 962-967	16.4	70
172	Performance of pyrolyzed photoresist carbon films in a microchip capillary electrophoresis device with sinusoidal voltammetric detection. <i>Analytical Chemistry</i> , 2003 , 75, 4265-71	7.8	67
171	Nanoscale platinum(0) clusters in glassy carbon: synthesis, characterization, and uncommon catalytic activity. <i>Journal of the American Chemical Society</i> , 1992 , 114, 769-771	16.4	65
170	Feature articles. Doped glassy carbon: a new material for electrocatalysis. <i>Journal of Materials Chemistry</i> , 1992 , 2, 771		65
169	Direct observation of large quantum interference effect in anthraquinone solid-state junctions. <i>Journal of the American Chemical Society</i> , 2013 , 135, 10218-21	16.4	64
168	Formation of Chromate Conversion Coatings on Al-Cu-Mg Intermetallic Compounds and Alloys. <i>Journal of the Electrochemical Society</i> , 2000 , 147, 4494	3.9	63
167	Morphology and Electrochemical Effects of Defects on Highly Oriented Pyrolytic Graphite. <i>Journal of the Electrochemical Society</i> , 1991 , 138, 2412-2418	3.9	60
166	Remote, Long-Pathlength Cell for High-Sensitivity Raman Spectroscopy. <i>Applied Spectroscopy</i> , 1987 , 41, 126-130	3.1	60
165	Voltammetry in brain tissue: quantitative studies of drug interactions. <i>Brain Research</i> , 1974 , 73, 23-33	3.7	60
164	Strong effects of molecular structure on electron transport in carbon/molecule/copper electronic junctions. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11163-72	3.4	59
163	Electron transfer kinetics of Fe(CN) ₆ ³⁻ on laser-activated and CN-modified Pt electrodes. <i>Journal of Electroanalytical Chemistry</i> , 1992 , 326, 1-12	4.1	58
162	Control of Electronic Symmetry and Rectification through Energy Level Variations in Bilayer Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2016 , 138, 12287-96	16.4	57
161	Simplified Calibration of Instrument Response Function for Raman Spectrometers Based on Luminescent Intensity Standards. <i>Applied Spectroscopy</i> , 1997 , 51, 108-116	3.1	57
160	Bilayer molecular electronics: all-carbon electronic junctions containing molecular bilayers made with "click" chemistry. <i>Journal of the American Chemical Society</i> , 2013 , 135, 12972-5	16.4	56
159	Optical interference effects in the design of substrates for surface-enhanced Raman spectroscopy. <i>Applied Spectroscopy</i> , 2009 , 63, 133-40	3.1	54

158	Inhibition of Corrosion-Related Reduction Processes via Chromium Monolayer Formation. <i>Journal of the Electrochemical Society</i> , 2002 , 149, B379	3.9	54
157	Intensity Calibration and Sensitivity Comparisons for CCD/Raman Spectrometers. <i>Applied Spectroscopy</i> , 1993 , 47, 1965-1974	3.1	54
156	Ultraflat carbon film electrodes prepared by electron beam evaporation. <i>Analytical Chemistry</i> , 2004 , 76, 2544-52	7.8	52
155	Doped glassy carbon materials (DGC): low-temperature synthesis, structure, and catalytic behavior. <i>Journal of the American Chemical Society</i> , 1990 , 112, 4954-4956	16.4	52
154	Redox-driven conductance switching via filament formation and dissolution in carbon/molecule/TiO ₂ /Ag molecular electronic junctions. <i>Langmuir</i> , 2006 , 22, 10689-96	4	51
153	Control of Rectification in Molecular Junctions: Contact Effects and Molecular Signature. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11913-11922	16.4	48
152	Voltammetry in brain tissue: the fate of injected 6-hydroxydopamine. <i>Brain Research</i> , 1974 , 73, 15-21	3.7	48
151	Robust All-Carbon Molecular Junctions on Flexible or Semi-Transparent Substrates Using "Process-Friendly" Fabrication. <i>ACS Nano</i> , 2016 , 10, 8918-28	16.7	47
150	Raman Spectroscopy of Monolayers Formed from Chromate Corrosion Inhibitor on Copper Surfaces. <i>Journal of the Electrochemical Society</i> , 2003 , 150, B367	3.9	47
149	Near-Infrared Raman Spectroscopy of Liquids and Solids with a Fiber-Optic Sampler, Diode Laser, and CCD Detector. <i>Applied Spectroscopy</i> , 1990 , 44, 1229-1231	3.1	47
148	Calibration of Raman Spectrometer Instrument Response Function with Luminescence Standards: An Update. <i>Applied Spectroscopy</i> , 1998 , 52, 1614-1618	3.1	46
147	Hadamard Transform Raman Microscopy of Laser-Modified Graphite Electrodes. <i>Applied Spectroscopy</i> , 1990 , 44, 1270-1275	3.1	45
146	In situ cleaning and activation of solid electrode surfaces by pulsed laser light. <i>Analytical Chemistry</i> , 1984 , 56, 2256-2257	7.8	45
145	Quantitative Surface Raman Spectroscopy of Physisorbed Monolayers on Glassy Carbon. <i>Langmuir</i> , 1995 , 11, 4041-4047	4	44
144	Side-chain effects on phenothiazine cation radical reactions. <i>Journal of Medicinal Chemistry</i> , 1981 , 24, 1342-7	8.3	44
143	Analytical challenges in molecular electronics. <i>Analytical Chemistry</i> , 2006 , 78, 3490-7	7.8	43
142	Carbon/molecule/metal molecular electronic junctions: the importance of "contacts". <i>Faraday Discussions</i> , 2006 , 131, 33-43; discussion 91-109	3.6	42
141	Microstructural and morphological changes induced in glassy carbon electrodes by laser irradiation. <i>Journal of Electroanalytical Chemistry</i> , 1992 , 324, 229-242	4.1	42

140	Repetitive in situ renewal and activation of carbon and platinum electrodes: application to pulse voltammetry. <i>Analytical Chemistry</i> , 1987 , 59, 1615-1620	7.8	42
139	Normal and resonance Raman spectroelectrochemistry with fiber optic light collection. <i>Analytical Chemistry</i> , 1986 , 58, 2486-2492	7.8	42
138	Robust Bipolar Light Emission and Charge Transport in Symmetric Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2017 , 139, 7436-7439	16.4	41
137	Direct optical determination of interfacial transport barriers in molecular tunnel junctions. <i>Journal of the American Chemical Society</i> , 2013 , 135, 9584-7	16.4	41
136	Storage and Release of Soluble Hexavalent Chromium from Chromate Conversion Coatings on Al Alloys: Kinetics of Release. <i>Journal of the Electrochemical Society</i> , 2003 , 150, B83	3.9	41
135	Observation of kinetic heterogeneity on highly ordered pyrolytic graphite using electrogenerated chemiluminescence. <i>Analytical Chemistry</i> , 1989 , 61, 2763-2766	7.8	41
134	Anodic oxidation of 1,4-dimethoxy aromatic compounds. A facile route to functionalized quinone bisketals. <i>Journal of Organic Chemistry</i> , 1980 , 45, 369-378	4.2	41
133	Electronic characteristics of fluorene/TiO ₂ molecular heterojunctions. <i>Journal of Chemical Physics</i> , 2007 , 126, 024704	3.9	40
132	Carbon/Molecule/Metal and Carbon/Molecule/Metal Oxide Molecular Electronic Junctions. <i>Chemistry of Materials</i> , 2005 , 17, 4939-4948	9.6	40
131	Resonance Raman Observation of Surface Carbonyl Groups on Carbon Electrodes Following Dinitrophenylhydrazine Derivatization. <i>Analytical Chemistry</i> , 1995 , 67, 967-975	7.8	40
130	Diagnosis of adsorption on solid electrodes with semiintegral voltammetry. <i>Analytical Chemistry</i> , 1988 , 60, 605-608	7.8	40
129	Effect of structure on phenothiazine cation radical reactions in aqueous buffers. <i>Journal of Medicinal Chemistry</i> , 1979 , 22, 1447-53	8.3	40
128	Microfabrication and integration of diazonium-based aromatic molecular junctions. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 3693-701	9.5	39
127	Redox Flow Batteries: How to Determine Electrochemical Kinetic Parameters. <i>ACS Nano</i> , 2020 , 14, 2575-2584	15.7	38
126	Musical molecules: the molecular junction as an active component in audio distortion circuits. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 094011	1.8	38
125	Noninvasive identification of materials inside USP vials with Raman spectroscopy and a Raman spectral library. <i>Journal of Pharmaceutical Sciences</i> , 1998 , 87, 1-8	3.9	38
124	Surface-enhanced Raman spectroscopy of carbon electrode surfaces following silver electrodeposition. <i>Analytical Chemistry</i> , 1991 , 63, 1289-1295	7.8	38
123	Redox driven conductance changes for resistive memory. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 102, 841-850	2.6	37

122	Submicrosecond spectroelectrochemistry applied to chlorpromazine cation radical charge transfer reactions. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1985 , 182, 61-72		36
121	Reactions of chlorpromazine cation radical with physiologically occurring nucleophiles. <i>Journal of Medicinal Chemistry</i> , 1978 , 21, 948-52	8.3	36
120	Characterization of the surface carbonyl and hydroxyl coverage on glassy carbon electrodes using Raman spectroscopy. <i>Journal of Electroanalytical Chemistry</i> , 1999 , 469, 150-158	4.1	35
119	Fast heterogeneous electron transfer rates for glassy carbon electrodes without polishing or activation procedures. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1989 , 263, 163-169		35
118	Redox-gated three-terminal organic memory devices: effect of composition and environment on performance. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 11052-8	9.5	34
117	Derivatization of optically transparent materials with diazonium reagents for spectroscopy of buried interfaces. <i>Analytical Chemistry</i> , 2009 , 81, 6972-80	7.8	34
116	Importance of Oxides in Carbon/Molecule/Metal Molecular Junctions with Titanium and Copper Top Contacts. <i>Journal of the Electrochemical Society</i> , 2005 , 152, E176	3.9	34
115	Covalent bonding of alkene and alkyne reagents to graphitic carbon surfaces. <i>Langmuir</i> , 2005 , 21, 11105-12	4.1	33
114	Laser microfabrication and activation of graphite and glassy carbon electrodes. <i>Analytical Chemistry</i> , 1990 , 62, 1339-1344	7.8	33
113	Microsecond spectroelectrochemistry by external reflection from cylindrical microelectrodes. <i>Analytical Chemistry</i> , 1982 , 54, 2356-2361	7.8	33
112	Fiber-Optic Sampling Combined with an Imaging Spectrograph for Routine Raman Spectroscopy. <i>Applied Spectroscopy</i> , 1992 , 46, 262-265	3.1	32
111	High-resolution spatially resolved visible absorption spectrometry of the electrochemical diffusion layer. <i>Analytical Chemistry</i> , 1986 , 58, 2771-2777	7.8	32
110	Towards Integrated Molecular Electronic Devices: Characterization of Molecular Layer Integrity During Fabrication Processes. <i>Advanced Functional Materials</i> , 2011 , 21, 2273-2281	15.6	31
109	Preparation of nanoscale platinum(0) clusters in glassy carbon and their catalytic activity. <i>Chemistry of Materials</i> , 1993 , 5, 1727-1738	9.6	31
108	Intracyclization rates of 6-hydroxydopamine and 6-aminodopamine analogs under physiological conditions. <i>Journal of Medicinal Chemistry</i> , 1976 , 19, 178-80	8.3	31
107	Molecular electronics using diazonium-derived adlayers on carbon with Cu top contacts: critical analysis of metal oxides and filaments. <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 374117	1.8	30
106	Absorption spectroelectrochemistry with microelectrodes. <i>Analytical Chemistry</i> , 1981 , 53, 997-1001	7.8	30
105	Internal photoemission in molecular junctions: parameters for interfacial barrier determinations. <i>Journal of the American Chemical Society</i> , 2015 , 137, 1296-304	16.4	29

104	Ultraviolet-visible spectroelectrochemistry of chemisorbed molecular layers on optically transparent carbon electrodes. <i>Applied Spectroscopy</i> , 2007 , 61, 1246-53	3.1	29
103	Performance Comparisons of Conventional and Line-Focused Surface Raman Spectrometers. <i>Applied Spectroscopy</i> , 2001 , 55, 767-773	3.1	29
102	Surface enhanced Raman examination of carbon electrodes: effects of laser activation and electrochemical pretreatment. <i>Langmuir</i> , 1991 , 7, 2370-2375	4	29
101	Observation of electrochemical concentration profiles by absorption spectroelectrochemistry. <i>Analytical Chemistry</i> , 1979 , 51, 2253-2257	7.8	29
100	Assembling molecular electronic junctions one molecule at a time. <i>Nano Letters</i> , 2011 , 11, 4725-9	11.5	28
99	Structure Controlled Long-Range Sequential Tunneling in Carbon-Based Molecular Junctions. <i>ACS Nano</i> , 2017 , 11, 3542-3552	16.7	27
98	Light Emission as a Probe of Energy Losses in Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2016 , 138, 722-5	16.4	27
97	Analytical chemistry in molecular electronics. <i>Annual Review of Analytical Chemistry</i> , 2011 , 4, 173-95	12.5	27
96	Carbon-Based Molecular Electronic Junctions. <i>Electrochemical Society Interface</i> , 2004 , 13, 46-51	3.6	26
95	Electron transport in all-carbon molecular electronic devices. <i>Faraday Discussions</i> , 2014 , 172, 9-25	3.6	25
94	Polarized Raman Spectroscopy of Metallophthalocyanine Monolayers on Carbon Surfaces. <i>Langmuir</i> , 1995 , 11, 4036-4040	4	25
93	The merger of electrochemistry and molecular electronics. <i>Chemical Record</i> , 2012 , 12, 149-63	6.6	24
92	Diffusion layer imaging: spatial resolution of electrochemical concentration profiles. <i>Analytical Chemistry</i> , 1985 , 57, 1763-1765	7.8	24
91	Efficient hydrodynamic modulation voltammetry with a microcylinder electrode. <i>Analytical Chemistry</i> , 1986 , 58, 1778-1782	7.8	23
90	Orbital Control of Photocurrents in Large Area All-Carbon Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2018 , 140, 1900-1909	16.4	22
89	Solid state spectroelectrochemistry of redox reactions in polypyrrole/oxide molecular heterojunctions. <i>Analytical Chemistry</i> , 2012 , 84, 2459-65	7.8	22
88	In-Situ Optical Absorbance Spectroscopy of Molecular Layers in Carbon Based Molecular Electronic Devices. <i>Chemistry of Materials</i> , 2008 , 20, 3849-3856	9.6	22
87	Laser activation of carbon microdisk electrodes: Surface oxide effects on Ru(NH ₃) ₆ ²⁺ +3 ⁺ kinetics. <i>Journal of Electroanalytical Chemistry</i> , 1994 , 369, 175-181	4.1	22

86	Raman microscopy of chromate interactions with corroding aluminum alloy 2024-T3. <i>Corrosion Science</i> , 2004 , 46, 1729-1739	6.8	20
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