

# Marc D Porter

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

92  
papers

7,134  
citations

37  
h-index

84  
g-index

93  
ext. papers

7,605  
ext. citations

8  
avg, IF

5.61  
L-index

#	Paper	IF	Citations
92	The electrochemical desorption of n-alkanethiol monolayers from polycrystalline Au and Ag electrodes. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , <b>1991</b> , 310, 335-359		924
91	Femtomolar detection of prostate-specific antigen: an immunoassay based on surface-enhanced Raman scattering and immunogold labels. <i>Analytical Chemistry</i> , <b>2003</b> , 75, 5936-43	7.8	720
90	SERS as a bioassay platform: fundamentals, design, and applications. <i>Chemical Society Reviews</i> , <b>2008</b> , 37, 1001-11	58.5	478
89	Immunoassay readout method using extrinsic Raman labels adsorbed on immunogold colloids. <i>Analytical Chemistry</i> , <b>1999</b> , 71, 4903-8	7.8	441
88	Structure and interfacial properties of spontaneously adsorbed n-alkanethiolate monolayers on evaporated silver surfaces. <i>Journal of the American Chemical Society</i> , <b>1991</b> , 113, 2370-2378	16.4	341
87	Electrochemical oxidation of amine-containing compounds: a route to the surface modification of glassy carbon electrodes. <i>Langmuir</i> , <b>1994</b> , 10, 1306-1313	4	306
86	Low-level detection of viral pathogens by a surface-enhanced Raman scattering based immunoassay. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 6147-54	7.8	258
85	Electrochemical and X-ray photoelectron spectroscopic evidence for differences in the binding sites of alkanethiolate monolayers chemisorbed at gold. <i>Journal of Electroanalytical Chemistry</i> , <b>1995</b> , 396, 103-114	4.1	236
84	Chemical and biochemical analysis using scanning force microscopy. <i>Chemical Reviews</i> , <b>1999</b> , 99, 2845-9068.1		231
83	Labeled gold nanoparticles immobilized at smooth metallic substrates: systematic investigation of surface plasmon resonance and surface-enhanced Raman scattering. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 17444-51	3.4	198
82	Detection of the potential pancreatic cancer marker MUC4 in serum using surface-enhanced Raman scattering. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 2554-61	7.8	188
81	Prospects for point-of-care pathogen diagnostics using surface-enhanced Raman scattering (SERS). <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 3865-82	58.5	159
80	Evidence for Carbon-Sulfur Bond Cleavage in Spontaneously Adsorbed Organosulfide-Based Monolayers at Gold. <i>Journal of the American Chemical Society</i> , <b>1994</b> , 116, 11616-11617	16.4	158
79	Organosulfur Monolayers at Gold Surfaces: Reexamination of the Case for Sulfide Adsorption and Implications to the Formation of Monolayers from Thiols and Disulfides. <i>Langmuir</i> , <b>1999</b> , 15, 518-525	4	154
78	Fine structure in the voltammetric desorption curves of alkanethiolate monolayers chemisorbed at gold. <i>Journal of Electroanalytical Chemistry</i> , <b>1997</b> , 425, 147-153	4.1	143
77	Voltammetric reductive desorption characteristics of alkanethiolate monolayers at single crystal Au(111) and (110) electrode surfaces. <i>Journal of Electroanalytical Chemistry</i> , <b>1997</b> , 421, 9-13	4.1	135
76	Structural Origins of the Surface Depressions at Alkanethiolate Monolayers on Au(111): A Scanning Tunneling and Atomic Force Microscopic Investigation. <i>The Journal of Physical Chemistry</i> , <b>1995</b> , 99, 13257-13267 <sup>19</sup>		

75	Mixed monolayers on gold nanoparticle labels for multiplexed surface-enhanced Raman scattering based immunoassays. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 9643-50	7.8	109
74	Correlation of the Structural Decomposition and Performance of Pyridinethiolate Surface Modifiers at Gold Electrodes for the Facilitation of Cytochrome c Heterogeneous Electron-Transfer Reactions. <i>Langmuir</i> , <b>1997</b> , 13, 736-741	4	83
73	Mapping Orientation Differences of Terminal Functional Groups by Friction Force Microscopy. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 5209-5212	7.8	76
72	Surface-enhanced Raman scattering immunoassays using a rotated capture substrate. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 4141-8	7.8	74
71	Alkanethiolate-Protected Gold Clusters Generated from Sodium S-Dodecylthiosulfate (Bunte Salts). <i>Langmuir</i> , <b>2000</b> , 16, 6555-6561	4	74
70	Detection of Mycobacterium avium subsp. paratuberculosis by a sonicate immunoassay based on surface-enhanced Raman scattering. <i>Vaccine Journal</i> , <b>2008</b> , 15, 227-34		70
69	Determination of nickel(II) as the nickel dimethylglyoxime complex using colorimetric solid phase extraction. <i>Analytica Chimica Acta</i> , <b>2004</b> , 508, 53-59	6.6	70
68	Designing Interfaces at the Molecular Level. <i>Analytical Chemistry</i> , <b>1995</b> , 67, 709A-715A	7.8	68
67	Toward development of a surface-enhanced Raman scattering (SERS)-based cancer diagnostic immunoassay panel. <i>Analyst, The</i> , <b>2013</b> , 138, 410-6	5	67
66	Succinimidyl ester surface chemistry: implications of the competition between aminolysis and hydrolysis on covalent protein immobilization. <i>Langmuir</i> , <b>2014</b> , 30, 12868-78	4	65
65	Novel biosensor chip for simultaneous detection of DNA-carcinogen adducts with low-temperature fluorescence. <i>Biosensors and Bioelectronics</i> , <b>2004</b> , 19, 547-56	11.8	51
64	Chemical modification of carbonaceous stationary phases by the reduction of diazonium salts. <i>Analytical Chemistry</i> , <b>2001</b> , 73, 3954-9	7.8	50
63	Dynamic Modification of Separations Using Electrochemically Modulated Liquid Chromatography. <i>Analytical Chemistry</i> , <b>1995</b> , 67, 237-246	7.8	49
62	Real Time Monitoring of the Electrochemical Transformation of a Ferrocene-Terminated Alkanethiolate Monolayer at Gold via an Adhesion-Based Atomic Force Microscopic Characterization. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 13342-13345		44
61	Ion chromatographic separations using step and linear voltage waveforms at a charge-controllable polymeric stationary phase. <i>Analytical Chemistry</i> , <b>1991</b> , 63, 1889-1894	7.8	44
60	Electrochemically modulated liquid chromatography (EMLC): A new approach to gradient elution separations. <i>Journal of Electroanalytical Chemistry</i> , <b>1993</b> , 362, 295-299	4.1	42
59	Sampling Error: Impact on the Quantitative Analysis of Nanoparticle-Based Surface-Enhanced Raman Scattering Immunoassays. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 6515-22	7.8	40
58	Multiplexed colorimetric solid-phase extraction: determination of silver(I), nickel(II), and sample Ph. <i>Analytical Chemistry</i> , <b>2004</b> , 76, 4881-7	7.8	38

57	Electrochemically modulated liquid chromatography: an electrochemical strategy for manipulating chromatographic retention. <i>Analyst, The</i> , <b>2001</b> , 126, 1841-9	5	38
56	Retention characteristics of polypyrrole as a stationary phase for the electrochemically modulated liquid chromatographic (EMLC) separations of dansyl amino acids. <i>Journal of Electroanalytical Chemistry</i> , <b>1995</b> , 387, 35-46	4.1	37
55	Separations of Corticosteroids Using Electrochemically Modulated Liquid Chromatography: Selectivity Enhancements at a Porous Graphitic Carbon Stationary Phase. <i>Analytical Chemistry</i> , <b>1997</b> , 69, 675-678	7.8	34
54	Electrochemically modulated liquid chromatography coupled on-line with electrospray mass spectrometry. <i>Analytical Chemistry</i> , <b>2000</b> , 72, 2641-7	7.8	33
53	Detection of the tuberculosis antigenic marker mannose-capped lipoarabinomannan in pretreated serum by surface-enhanced Raman scattering. <i>Analyst, The</i> , <b>2016</b> , 142, 186-196	5	31
52	Characterization and optimization of mixed thiol-derivatized beta-cyclodextrin/pentanethiol monolayers with high-density guest-accessible cavities. <i>Langmuir</i> , <b>2009</b> , 25, 8094-100	4	31
51	A rapid, simple method for determining formaldehyde in drinking water using colorimetric-solid phase extraction. <i>Talanta</i> , <b>2009</b> , 77, 1405-8	6.2	31
50	Competitive surface-enhanced Raman scattering assay for the 1,25-dihydroxy metabolite of vitamin D3. <i>Analyst, The</i> , <b>2010</b> , 135, 2811-7	5	30
49	SFM Tip-Assisted Hydrolysis of a Dithiobis(succinimido undecanoate) Monolayer Chemisorbed on a Au(111) Surface. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 12796-12799	16.4	29
48	Detection of lipoarabinomannan in urine and serum of HIV-positive and HIV-negative TB suspects using an improved capture-enzyme linked immuno absorbent assay and gas chromatography/mass spectrometry. <i>Tuberculosis</i> , <b>2018</b> , 111, 178-187	2.6	27
47	Graphite microparticles as coatings for quartz crystal microbalance-based gas sensors. <i>Analytical Chemistry</i> , <b>2000</b> , 72, 5981-7	7.8	27
46	Principles and applications of colorimetric solid-phase extraction with negligible depletion. <i>Analytica Chimica Acta</i> , <b>2006</b> , 558, 230-236	6.6	25
45	Column design for electrochemically modulated liquid chromatography. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 94-9	7.8	23
44	Theory of SERS enhancement: general discussion. <i>Faraday Discussions</i> , <b>2017</b> , 205, 173-211	3.6	21
43	High-speed electrochemically modulated liquid chromatography. <i>Analytical Chemistry</i> , <b>2004</b> , 76, 5823-8	7.8	21
42	Surface Films Produced by Cathodic Polarization of Aluminum. <i>Journal of the Electrochemical Society</i> , <b>1994</b> , 141, 96-104	3.9	20
41	Electrochemically modulated liquid chromatography using a boron-doped diamond particle stationary phase. <i>Journal of Chromatography A</i> , <b>2008</b> , 1210, 154-9	4.5	19
40	Determination of colloidal and dissolved silver in water samples using colorimetric solid-phase extraction. <i>Talanta</i> , <b>2010</b> , 80, 1606-10	6.2	18

39	Electrochemically modulated liquid chromatography (EMLC) as a probe of the adsorption characteristics of monosubstituted benzenes at porous graphitic carbon. <i>Journal of Electroanalytical Chemistry</i> , <b>1998</b> , 443, 180-185	4.1	18
38	Electrochemically modulated liquid chromatographic separations of inorganic anions. <i>Journal of Chromatography A</i> , <b>2004</b> , 1059, 103-9	4.5	18
37	Control of antigen mass transport via capture substrate rotation: binding kinetics and implications on immunoassay speed and detection limits. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 6175-85	7.8	17
36	On-column electrochemical redox derivatization for enhancement of separation selectivity of liquid chromatography use of redox reaction as secondary chemical equilibrium. <i>Journal of Chromatography A</i> , <b>2008</b> , 1180, 66-72	4.5	16
35	SERS in biology/biomedical SERS: general discussion. <i>Faraday Discussions</i> , <b>2017</b> , 205, 429-456	3.6	15
34	Assessment of supporting electrolyte contributions in electrochemically modulated liquid chromatography. <i>Journal of Chromatography A</i> , <b>2005</b> , 1089, 72-81	4.5	15
33	Electrosorption-Based Modification of Porous Graphitic Carbon: Use of Electrochemically Modulated Liquid Chromatography To Create a Chiral Stationary Phase for Enantiomeric Separations. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 4314-4319	7.8	15
32	Silica encapsulation of ferrimagnetic zinc ferrite nanocubes enabled by layer-by-layer polyelectrolyte deposition. <i>Langmuir</i> , <b>2015</b> , 31, 3537-45	4	14
31	Control of antigen mass transfer via capture substrate rotation: an absolute method for the determination of viral pathogen concentration and reduction of heterogeneous immunoassay incubation times. <i>Journal of Virological Methods</i> , <b>2006</b> , 138, 160-9	2.6	14
30	Ultrasensitive Immunoassays Based on Surface-Enhanced Raman Scattering by Immunogold Labels <b>2006</b> , 427-446		14
29	Surface-enhanced resonance Raman scattering for the sensitive detection of a tuberculosis biomarker in human serum. <i>Journal of Raman Spectroscopy</i> , <b>2019</b> , 50, 15-25	2.3	14
28	Importance of specimen pretreatment for the low-level detection of mycobacterial lipoarabinomannan in human serum. <i>Analyst, The</i> , <b>2016</b> , 142, 177-185	5	13
27	Handheld Raman Spectrometer Instrumentation for Quantitative Tuberculosis Biomarker Detection: A Performance Assessment for Point-of-Need Infectious Disease Diagnostics. <i>Applied Spectroscopy</i> , <b>2018</b> , 72, 1104-1115	3.1	13
26	Advantages and limitations of nanoparticle labeling for early diagnosis of infection. <i>Expert Review of Molecular Diagnostics</i> , <b>2016</b> , 16, 883-95	3.8	13
25	Electrochemically modulated liquid chromatography and the Gibbs adsorption equation. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 7399-407	7.8	12
24	Electrochemically modulated liquid chromatographic separation of triazines and the effect of pH on retention. <i>Journal of Chromatography A</i> , <b>2010</b> , 1217, 4395-401	4.5	10
23	Colloidally Assembled Zinc Ferrite Magnetic Beads: Superparamagnetic Labels with High Magnetic Moments for MR Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 19569-19577	9.5	9
22	Ultrasensitive and towards single molecule SERS: general discussion. <i>Faraday Discussions</i> , <b>2017</b> , 205, 291-330	3.6	9

21	Analytical SERS: general discussion. <i>Faraday Discussions</i> , <b>2017</b> , 205, 561-600	3.6	9
20	The Case for Human Serum as a Highly Preferable Sample Matrix for Detection of Anthrax Toxins. <i>ACS Sensors</i> , <b>2018</b> , 3, 2303-2310	9.2	9
19	Coupling solid-phase microextractions and surface-enhanced Raman scattering: towards a point-of-need tool for hepatic cancer screening. <i>Analytical Methods</i> , <b>2017</b> , 9, 4641-4646	3.2	8
18	Importance of reactant mass transfer in the reproducible preparation of self-assembled monolayers. <i>Journal of Electroanalytical Chemistry</i> , <b>2008</b> , 622, 193-203	4.1	8
17	Detection of the tuberculosis biomarker mannose-capped lipoarabinomannan in human serum: Impact of sample pretreatment with perchloric acid. <i>Analytica Chimica Acta</i> , <b>2019</b> , 1046, 140-147	6.6	7
16	Surface-enhanced Raman scattering II: concluding remarks. <i>Faraday Discussions</i> , <b>2017</b> , 205, 601-613	3.6	5
15	Creation of Submicrometer Structures Using Polymeric Nanoparticle Layers and Photolithography. <i>Nano Letters</i> , <b>2002</b> , 2, 1087-1091	11.5	5
14	Calibrant-Free Analyte Quantitation via a Variable Velocity Flow Cell. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 1147-1154	3.8	4
13	Effects of Electrolytes on Manipulation of the Stationary Phase in Electrochemically Modulated Liquid Chromatography. <i>Analytical Letters</i> , <b>1998</b> , 31, 1743-1756	2.2	4
12	Frequency-Domain Approach To Determine Magnetic Address-Sensor Separation Distance Using the Harmonic Ratio Method. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 2015-20	7.8	4
11	Adaptable Detection Strategies in Membrane-Based Immunoassays: Calibration-Free Quantitation with Surface-Enhanced Raman Scattering Readout. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 7769-7776	7.8	4
10	A simple vaporous probe with atomic-scale sensitivity to structural ordering and orientation of molecular assembly. <i>Chemical Science</i> , <b>2019</b> , 10, 7104-7110	9.4	3
9	Gold Nanoparticle Labels and Heterogeneous Immunoassays: The Case for the Inverted Substrate. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 8665-8672	7.8	3
8	Investigation of Adsorption Thermodynamics at Electrified Liquid-Solid Interfaces by Electrochemically Modulated Liquid Chromatography. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 28148-28157	3.8	3
7	Ultrasensitive Immunoassays Based on Surface-Enhanced Raman Scattering by Immunogold Labels <b>2006</b> , 427		3
6	Electrochemically Modulated Liquid Chromatography in Fused Silica Capillary Columns. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 13994-14001	7.8	2
5	SERS detection of neurotoxin serotypes A and B in buffer and serum: Towards the development of a biodefense test platform. <i>Analytica Chimica Acta: X</i> , <b>2019</b> , 1, 100002	2.2	2
4	Investigation of Issues for the Accurate and Precise Measurement of an Analyte Using Surface-Enhanced Raman Scattering (SERS). <i>Applied Spectroscopy</i> , <b>2019</b> , 73, 444-453	3.1	2

- 3 Fluorinated Monomolecular Assemblies: Model Systems to Probe Chemical Interactions at the Polymer-Metal Interface. *Materials Research Society Symposia Proceedings*, **1989**, 153, 267 1
- 2 Molecularly-tunable nanoelectrode arrays created by harnessing intermolecular interactions. *Chemical Science*, **2021**, 12, 6081-6090 94 0
- 1 Fluorinated Monomolecular Assemblies: Model Systems to Probe Chemical Interactions at the Polymer-Metal Interface. *Materials Research Society Symposia Proceedings*, **1989**, 154, 311