Marc D Porter

List of Publications by Year in Descending Order

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	Molecularly-tunable nanoelectrode arrays created by harnessing intermolecular interactions. *Chemical Science*, **2021**, 12, 6081-6090	9.4	0
91	A simple vaporous probe with atomic-scale sensitivity to structural ordering and orientation of molecular assembly. *Chemical Science*, **2019**, 10, 7104-7110	9.4	3
90	Investigation of Adsorption Thermodynamics at Electrified Liquid/Solid Interfaces by Electrochemically Modulated Liquid Chromatography. *Journal of Physical Chemistry C*, **2019**, 123, 28148-28157	3.8	3
89	Electrochemically Modulated Liquid Chromatography in Fused Silica Capillary Columns. *Analytical Chemistry*, **2019**, 91, 13994-14001	7.8	2
88	Detection of the tuberculosis biomarker mannose-capped lipoarabinomannan in human serum: Impact of sample pretreatment with perchloric acid. *Analytica Chimica Acta*, **2019**, 1046, 140-147	6.6	7
87	SERS detection of neurotoxin serotypes A and B in buffer and serum: Towards the development of a biodefense test platform. *Analytica Chimica Acta: X*, **2019**, 1, 100002	2.2	2
86	Investigation of Issues for the Accurate and Precise Measurement of an Analyte Using Surface-Enhanced Raman Scattering (SERS). *Applied Spectroscopy*, **2019**, 73, 444-453	3.1	2
85	Surface-enhanced resonance Raman scattering for the sensitive detection of a tuberculosis biomarker in human serum. *Journal of Raman Spectroscopy*, **2019**, 50, 15-25	2.3	14
84	Handheld Raman Spectrometer Instrumentation for Quantitative Tuberculosis Biomarker Detection: A Performance Assessment for Point-of-Need Infectious Disease Diagnostics. *Applied Spectroscopy*, **2018**, 72, 1104-1115	3.1	13
83	Gold Nanoparticle Labels and Heterogeneous Immunoassays: The Case for the Inverted Substrate. *Analytical Chemistry*, **2018**, 90, 8665-8672	7.8	3
82	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. *Tuberculosis*, **2018**, 111, 178-187	2.6	27
81	The Case for Human Serum as a Highly Preferable Sample Matrix for Detection of Anthrax Toxins. *ACS Sensors*, **2018**, 3, 2303-2310	9.2	9
80	Adaptable Detection Strategies in Membrane-Based Immunoassays: Calibration-Free Quantitation with Surface-Enhanced Raman Scattering Readout. *Analytical Chemistry*, **2018**, 90, 7769-7776	7.8	4
79	Colloidally Assembled Zinc Ferrite Magnetic Beads: Superparamagnetic Labels with High Magnetic Moments for MR Sensors. *ACS Applied Materials & Interfaces*, **2017**, 9, 19569-19577	9.5	9
78	Calibrant-Free Analyte Quantitation via a Variable Velocity Flow Cell. *Analytical Chemistry*, **2017**, 89, 11477-11544	7.8	4
77	Coupling solid-phase microextractions and surface-enhanced Raman scattering: towards a point-of-need tool for hepatic cancer screening. *Analytical Methods*, **2017**, 9, 4641-4646	3.2	8
76	Ultrasensitive and towards single molecule SERS: general discussion. *Faraday Discussions*, **2017**, 205, 291-330	3.6	9

75	SERS in biology/biomedical SERS: general discussion. *Faraday Discussions*, **2017**, 205, 429-456	3.6	15
74	Analytical SERS: general discussion. *Faraday Discussions*, **2017**, 205, 561-600	3.6	9
73	Theory of SERS enhancement: general discussion. *Faraday Discussions*, **2017**, 205, 173-211	3.6	21
72	Surface-enhanced Raman scattering II: concluding remarks. *Faraday Discussions*, **2017**, 205, 601-613	3.6	5
71	Detection of the tuberculosis antigenic marker mannose-capped lipoarabinomannan in pretreated serum by surface-enhanced Raman scattering. *Analyst, The*, **2016**, 142, 186-196	5	31
70	Importance of specimen pretreatment for the low-level detection of mycobacterial lipoarabinomannan in human serum. *Analyst, The*, **2016**, 142, 177-185	5	13
69	Advantages and limitations of nanoparticle labeling for early diagnosis of infection. *Expert Review of Molecular Diagnostics*, **2016**, 16, 883-95	3.8	13
68	Prospects for point-of-care pathogen diagnostics using surface-enhanced Raman scattering (SERS). *Chemical Society Reviews*, **2016**, 45, 3865-82	58.5	159
67	Sampling Error: Impact on the Quantitative Analysis of Nanoparticle-Based Surface-Enhanced Raman Scattering Immunoassays. *Analytical Chemistry*, **2016**, 88, 6515-22	7.8	40
66	Frequency-Domain Approach To Determine Magnetic Address-Sensor Separation Distance Using the Harmonic Ratio Method. *Analytical Chemistry*, **2016**, 88, 2015-20	7.8	4
65	Silica encapsulation of ferrimagnetic zinc ferrite nanocubes enabled by layer-by-layer polyelectrolyte deposition. *Langmuir*, **2015**, 31, 3537-45	4	14
64	Succinimidyl ester surface chemistry: implications of the competition between aminolysis and hydrolysis on covalent protein immobilization. *Langmuir*, **2014**, 30, 12868-78	4	65
63	Toward development of a surface-enhanced Raman scattering (SERS)-based cancer diagnostic immunoassay panel. *Analyst, The*, **2013**, 138, 410-6	5	67
62	Detection of the potential pancreatic cancer marker MUC4 in serum using surface-enhanced Raman scattering. *Analytical Chemistry*, **2011**, 83, 2554-61	7.8	188
61	Determination of colloidal and dissolved silver in water samples using colorimetric solid-phase extraction. *Talanta*, **2010**, 80, 1606-10	6.2	18
60	Competitive surface-enhanced Raman scattering assay for the 1,25-dihydroxy metabolite of vitamin D3. *Analyst, The*, **2010**, 135, 2811-7	5	30
59	Electrochemically modulated liquid chromatographic separation of triazines and the effect of pH on retention. *Journal of Chromatography A*, **2010**, 1217, 4395-401	4.5	10
58	Characterization and optimization of mixed thiol-derivatized beta-cyclodextrin/pentanethiol monolayers with high-density guest-accessible cavities. *Langmuir*, **2009**, 25, 8094-100	4	31

57	A rapid, simple method for determining formaldehyde in drinking water using colorimetric-solid phase extraction. *Talanta*, **2009**, 77, 1405-8	6.2	31
56	Control of antigen mass transport via capture substrate rotation: binding kinetics and implications on immunoassay speed and detection limits. *Analytical Chemistry*, **2009**, 81, 6175-85	7.8	17
55	Mixed monolayers on gold nanoparticle labels for multiplexed surface-enhanced Raman scattering based immunoassays. *Analytical Chemistry*, **2009**, 81, 9643-50	7.8	109
54	Detection of Mycobacterium avium subsp. paratuberculosis by a sonicate immunoassay based on surface-enhanced Raman scattering. *Vaccine Journal*, **2008**, 15, 227-34		70
53	Importance of reactant mass transfer in the reproducible preparation of self-assembled monolayers. *Journal of Electroanalytical Chemistry*, **2008**, 622, 193-203	4.1	8
52	On-column electrochemical redox derivatization for enhancement of separation selectivity of liquid chromatography use of redox reaction as secondary chemical equilibrium. *Journal of Chromatography A*, **2008**, 1180, 66-72	4.5	16
51	Electrochemically modulated liquid chromatography using a boron-doped diamond particle stationary phase. *Journal of Chromatography A*, **2008**, 1210, 154-9	4.5	19
50	SERS as a bioassay platform: fundamentals, design, and applications. *Chemical Society Reviews*, **2008**, 37, 1001-11	58.5	478
49	Surface-enhanced Raman scattering immunoassays using a rotated capture substrate. *Analytical Chemistry*, **2007**, 79, 4141-8	7.8	74
48	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. *Journal of Virological Methods*, **2006**, 138, 160-9	2.6	14
47	Labeled gold nanoparticles immobilized at smooth metallic substrates: systematic investigation of surface plasmon resonance and surface-enhanced Raman scattering. *Journal of Physical Chemistry B* , **2006**, 110, 17444-51	3.4	198
46	Ultrasensitive Immunoassays Based on Surface-Enhanced Raman Scattering by Immunogold Labels **2006**, 427-446		14
45	Principles and applications of colorimetric solid-phase extraction with negligible depletion. *Analytica Chimica Acta*, **2006**, 558, 230-236	6.6	25
44	Ultrasensitive Immunoassays Based on Surface-Enhanced Raman Scattering by Immunogold Labels **2006**, 427		3
43	Low-level detection of viral pathogens by a surface-enhanced Raman scattering based immunoassay. *Analytical Chemistry*, **2005**, 77, 6147-54	7.8	258
42	Electrochemically modulated liquid chromatography and the Gibbs adsorption equation. *Analytical Chemistry*, **2005**, 77, 7399-407	7.8	12
41	Assessment of supporting electrolyte contributions in electrochemically modulated liquid chromatography. *Journal of Chromatography A*, **2005**, 1089, 72-81	4.5	15
40	Novel biosensor chip for simultaneous detection of DNA-carcinogen adducts with low-temperature fluorescence. *Biosensors and Bioelectronics*, **2004**, 19, 547-56	11.8	51

39	Electrochemically modulated liquid chromatographic separations of inorganic anions. *Journal of Chromatography A*, **2004**, 1059, 103-9	4.5	18
38	Determination of nickel(II) as the nickel dimethylglyoxime complex using colorimetric solid phase extraction. *Analytica Chimica Acta*, **2004**, 508, 53-59	6.6	70
37	Multiplexed colorimetric solid-phase extraction: determination of silver(I), nickel(II), and sample Ph. *Analytical Chemistry*, **2004**, 76, 4881-7	7.8	38
36	High-speed electrochemically modulated liquid chromatography. *Analytical Chemistry*, **2004**, 76, 5823-8	7.8	21
35	Femtomolar detection of prostate-specific antigen: an immunoassay based on surface-enhanced Raman scattering and immunogold labels. *Analytical Chemistry*, **2003**, 75, 5936-43	7.8	720
34	Creation of Submicrometer Structures Using Polymeric Nanoparticle Layers and Photolithography. *Nano Letters*, **2002**, 2, 1087-1091	11.5	5
33	Chemical modification of carbonaceous stationary phases by the reduction of diazonium salts. *Analytical Chemistry*, **2001**, 73, 3954-9	7.8	50
32	Electrochemically modulated liquid chromatography: an electrochemical strategy for manipulating chromatographic retention. *Analyst, The*, **2001**, 126, 1841-9	5	38
31	Alkanethiolate-Protected Gold Clusters Generated from Sodium S-Dodecylthiosulfate (Bunte Salts). *Langmuir*, **2000**, 16, 6555-6561	4	74
30	Graphite microparticles as coatings for quartz crystal microbalance-based gas sensors. *Analytical Chemistry*, **2000**, 72, 5981-7	7.8	27
29	Electrochemically modulated liquid chromatography coupled on-line with electrospray mass spectrometry. *Analytical Chemistry*, **2000**, 72, 2641-7	7.8	33
28	Immunoassay readout method using extrinsic Raman labels adsorbed on immunogold colloids. *Analytical Chemistry*, **1999**, 71, 4903-8	7.8	441
27	Organosulfur Monolayers at Gold Surfaces:Reexamination of the Case for Sulfide Adsorption and Implications to the Formation of Monolayers from Thiols and Disulfides. *Langmuir*, **1999**, 15, 518-525	4	154
26	Chemical and biochemical analysis using scanning force microscopy. *Chemical Reviews*, **1999**, 99, 2845-90	68.1	231
25	Electrochemically modulated liquid chromatography (EMLC) as a probe of the adsorption characteristics of monosubstituted benzenes at porous graphitic carbon. *Journal of Electroanalytical Chemistry*, **1998**, 443, 180-185	4.1	18
24	Column design for electrochemically modulated liquid chromatography. *Analytical Chemistry*, **1998**, 70, 94-9	7.8	23
23	Mapping Orientation Differences of Terminal Functional Groups by Friction Force Microscopy. *Analytical Chemistry*, **1998**, 70, 5209-5212	7.8	76
22	Electrosorption-Based Modification of Porous Graphitic Carbon: Use of Electrochemically Modulated Liquid Chromatography To Create a Chiral Stationary Phase for Enantiomeric Separations. *Analytical Chemistry*, **1998**, 70, 4314-4319	7.8	15

21	Effects of Electrolytes on Manipulation of the Stationary Phase in Electrochemically Modulated Liquid Chromatography. *Analytical Letters*, **1998**, 31, 1743-1756	2.2	4
20	SFM Tip-Assisted Hydrolysis of a Dithiobis(succinimido undecanoate) Monolayer Chemisorbed on a Au(111) Surface. *Journal of the American Chemical Society*, **1997**, 119, 12796-12799	16.4	29
19	Correlation of the Structural Decomposition and Performance of Pyridinethiolate Surface Modifiers at Gold Electrodes for the Facilitation of Cytochrome c Heterogeneous Electron-Transfer Reactions. *Langmuir*, **1997**, 13, 736-741	4	83
18	Separations of Corticosteroids Using Electrochemically Modulated Liquid Chromatography: Selectivity Enhancements at a Porous Graphitic Carbon Stationary Phase. *Analytical Chemistry*, **1997**, 69, 675-678	7.8	34
17	Voltammetric reductive desorption characteristics of alkanethiolate monolayers at single crystal Au(111) and (110) electrode surfaces. *Journal of Electroanalytical Chemistry*, **1997**, 421, 9-13	4.1	135
16	Fine structure in the voltammetric desorption curves of alkanethiolate monolayers chemisorbed at gold. *Journal of Electroanalytical Chemistry*, **1997**, 425, 147-153	4.1	143
15	Real Time Monitoring of the Electrochemical Transformation of a Ferrocene-Terminated Alkanethiolate Monolayer at Gold via an Adhesion-Based Atomic Force Microscopic Characterization. *The Journal of Physical Chemistry*, **1996**, 100, 13342-13345		44
14	Retention characteristics of polypyrrole as a stationary phase for the electrochemically modulated liquid chromatographic (EMLC) separations of dansyl amino acids. *Journal of Electroanalytical Chemistry*, **1995**, 387, 35-46	4.1	37
13	Electrochemical and X-ray photoelectron spectroscopic evidence for differences in the binding sites of alkanethiolate monolayers chemisorbed at gold. *Journal of Electroanalytical Chemistry*, **1995**, 396, 103-114	4.1	236
12	Structural Origins of the Surface Depressions at Alkanethiolate Monolayers on Au(111): A Scanning Tunneling and Atomic Force Microscopic Investigation. *The Journal of Physical Chemistry*, **1995**, 99, 13257-13267		119
11	Designing Interfaces at the Molecular Level. *Analytical Chemistry*, **1995**, 67, 709A-715A	7.8	68
10	Dynamic Modification of Separations Using Electrochemically Modulated Liquid Chromatography. *Analytical Chemistry*, **1995**, 67, 237-246	7.8	49
9	Surface Films Produced by Cathodic Polarization of Aluminum. *Journal of the Electrochemical Society*, **1994**, 141, 96-104	3.9	20
8	Electrochemical oxidation of amine-containing compounds: a route to the surface modification of glassy carbon electrodes. *Langmuir*, **1994**, 10, 1306-1313	4	306
7	Evidence for Carbon-Sulfur Bond Cleavage in Spontaneously Adsorbed Organosulfide-Based Monolayers at Gold. *Journal of the American Chemical Society*, **1994**, 116, 11616-11617	16.4	158
6	Electrochemically modulated liquid chromatography (EMLC): A new approach to gradient elution separations. *Journal of Electroanalytical Chemistry*, **1993**, 362, 295-299	4.1	42
5	The electrochemical desorption of n-alkanethiol monolayers from polycrystalline Au and Ag electrodes. *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, **1991**, 310, 335-359		924
4	Ion chromatographic separations using step and linear voltage waveforms at a charge-controllable polymeric stationary phase. *Analytical Chemistry*, **1991**, 63, 1889-1894	7.8	44

3	Structure and interfacial properties of spontaneously adsorbed n-alkanethiolate monolayers on evaporated silver surfaces. *Journal of the American Chemical Society*, **1991**, 113, 2370-2378	16.4	341
2	Fluorinated Monomolecular Assemblies: Model Systems to Probe Chemical Interactions at the Polymer-Metal Interface. *Materials Research Society Symposia Proceedings*, **1989**, 153, 267		1
1	Fluorinated Monomolecular Assemblies: Model Systems to Probe Chemical Interactions at the Polymer-Metal Interface. *Materials Research Society Symposia Proceedings*, **1989**, 154, 311		