Mark T Mcdermott

List of Publications by Year
in descending order

67 papers	4,790 citations	101384 36 h-index	98622 67 g-index
69 all docs	69 docs citations	69 times ranked	5395 citing authors

#	Article	IF	Citations
1	Application of Surface-Enhanced Raman Spectroscopy to Guide Therapy for Advanced Prostate Cancer Patients. ACS Sensors, 2022, 7, 827-838.	4.0	7
2	On the Counterâ€intuitive Heterogeneous Electron Transfer Barrier Properties of Alkanethiolate Monolayers on Gold: Smooth versus Rough Surfaces. Electroanalysis, 2022, 34, 1936-1952.	1.5	3
3	Cellulose Nanocrystals Influence Polyamide 6 Crystal Structure, Spherulite Uniformity, and Mechanical Performance of Nanocomposite Films. ACS Applied Polymer Materials, 2021, 3, 4673-4684.	2.0	17
4	Fabrication of oriented electrospun cellulose nanocrystalsâ€“polystyrene composite fibers on a rotating drum. Journal of Applied Polymer Science, 2020, 137, 48942.	1.3	5
5	Plasmonic Cellulose Nanofibers as Water-Dispersible Surface-Enhanced Raman Scattering Substrates. ACS Applied Nano Materials, 2020, 3, 6584-6597.	2.4	18
6	Evaluation of the electroanalytical performance of carbon-on-gold films prepared by electron-beam evaporation. Analyst, The, 2020, 145, 5041-5052.	1.7	1
7	Gold nanostars as a colloidal substrate for in-solution SERS measurements using a handheld Raman spectrometer. Analyst, The, 2020, 145, 1396-1407.	1.7	28
8	Stretchable, tough, self-recoverable, and cytocompatible chitosan/cellulose nanocrystals/polyacrylamide hybrid hydrogels. Carbohydrate Polymers, 2019, 222, 114977.	5.1	44
9	Functionalized gold nanoparticle-enhanced competitive assay for sensitive small-molecule metabolite detection using surface plasmon resonance. Analyst, The, 2018, 143, 289-296.	1.7	36
10	A surface plasmon resonance based inhibition immunoassay for measurement of steroid hormones. Analytical Biochemistry, 2018, 557, 7-12.	1.1	13
11	Immuno-impedimetric Biosensor for Onsite Monitoring of Ascospores and Forecasting of Sclerotinia Stem Rot of Canola. Scientific Reports, 2018, 8, 12396.	1.6	14
12	Humidity affects the morphology of particles emitted from beclomethasone dipropionate pressurized metered dose inhalers. International Journal of Pharmaceutics, 2017, 520, 207-215.	2.6	13
13	Cellulose nanocrystal-derived hollow mesoporous carbon spheres and their application as a metal-free catalyst. Nanotechnology, 2017, 28, 505606.	1.3	9
14	Aryl Diazonium Chemistry for the Surface Functionalization of Glassy Biosensors. Biosensors, 2016, 6, 8.	2.3	9
15	Fungal Isolate Optimized for Biogenesis of Silver Nanoparticles with Enhanced Colloidal Stability. Langmuir, 2016, 32, 8688-8697.	1.6	85
16	Diazonium Chemistry for the Bio-Functionalization of Glassy Nanostring Resonator Arrays. Sensors, 2015, 15, 18724-18741.	2.1	5
17	Comment on Electrochemical Kinetics at Ordered Graphite Electrodes. Analytical Chemistry, 2012, 84, 2602-2605.	3.2	129
18	A review of fabrication processes for vertical comb drives. Microsystem Technologies, 2012, 18, 381-397.	1.2	5

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19	Adhesive surface interactions of cellulose nanocrystals from different sources. Journal of Materials Science, 2012, 47, 3961-3970.	1.7	15
20	Specific detection of Campylobacter jejuni using the bacteriophage NCTC 12673 receptor binding protein as a probe. Analyst, The, 2011, 136, 4780.	1.7	83
21	Chemically immobilized T4-bacteriophage for specific Escherichia coli detection using surface plasmon resonance. Analyst, The, 2011, 136, 486-492.	1.7	141
22	Diazonium-Derived Aryl Films on Gold Nanoparticles: Evidence for a Carbonâ€“Gold Covalent Bond. ACS Nano, 2011, 5, 4219-4227.	7.3	189
23	Suspension viscosities and shape parameter of cellulose nanocrystals (CNC). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 377, 297-303.	2.3	191
24	An enzyme-linked assay for the rapid quantification of microRNAs based on the viral suppressor of RNA silencing protein p19. Analytical Biochemistry, 2011, 412, 165-172.	1.1	46
25	Direct Tip Shape Determination of a Berkovich Indenter: Effect on Nanomechanical Property Measurement and Description of a Worn Indenter. IEEE Nanotechnology Magazine, 2010, 9, 487-493.	1.1	11
26	Fabrication of arrays of carbon micro- and nanostructures via electrochemical etching. Micro and Nano Letters, 2009, 4, 22-26.	0.6	4
27	Fabrication and Characterization of Graphitic Carbon Nanostructures with Controllable Size, Shape, and Position. Small, 2009, 5, 1162-1168.	5.2	29
28	Comparison of Diazonium Salt Derived and Thiol Derived Nitrobenzene Layers on Gold. Langmuir, 2009, 25, 4556-4563.	1.6	119
29	Covalently modified graphitic carbon-based stationary phases for anion chromatography. Analyst, The, 2009, 134, 2273.	1.7	13
30	Specific detection of proteins using nanomechanical resonators. Sensors and Actuators B: Chemical, 2008, 134, 613-617.	4.0	35
31	Optimization of Immobilized Bacterial Disaccharides for Surface Plasmon Resonance Imaging Measurements of Antibody Binding. Langmuir, 2008, 24, 14125-14132.	1.6	34
32	Localized Surface Plasmon Resonance Biosensor Using Silver Nanostructures Fabricated by Glancing Angle Deposition. Analytical Chemistry, 2007, 79, 4228-4232.	3.2	65
33	Study of Nitroazobenzene Films Covalently Attached at the Surface of Carbon that Exhibit Conductance Switching. E-Journal of Surface Science and Nanotechnology, 2006, 4, 419-425.	0.1	8
34	Surface Plasmon Resonance Imaging Measurements of the Inhibition of Shiga-like Toxin by Synthetic Multivalent Inhibitors. Analytical Chemistry, 2005, 77, 7497-7504.	3.2	46
35	Microfabrication of Glassy Carbon by Electrochemical Etching. Journal of the Electrochemical Society, 2004, 151, C142.	1.3	16
36	A Glassy Carbon Microfluidic Device for Electrospray Mass Spectrometry. Analytical Chemistry, 2004, 76, 2393-2397.	3.2	28

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37	Ultraflat Carbon Film Electrodes Prepared by Electron Beam Evaporation. Analytical Chemistry, 2004, 76, 2544-2552.	3.2	54
38	Label-Free Reading of Microarray-Based Immunoassays with Surface Plasmon Resonance Imaging. Analytical Chemistry, 2004, 76, 7257-7262.	3.2	212
39	Preparation of reproducible glassy carbon electrodes by removal of polishing impurities. Journal of Electroanalytical Chemistry, 2003, 540, 7-15.	1.9	64
40	Investigation of dual component protein films on graphite with scanning force microscopy. Colloids and Surfaces B: Biointerfaces, 2003, 32, 191-202.	2.5	4
41	Morphology and Nanoindentation Profiles of Automotive Engine Components. Surface Engineering, 2002, 18, 70-74.	1.1	2
42	Title is missing!. Tribology Letters, 2002, 12, 155-162.	1.2	136
43	Characterization of Surfactant Coatings in Capillary Electrophoresis by Atomic Force Microscopy. Analytical Chemistry, 2001, 73, 4558-4565.	3.2	88
44	Morphological evolution of films formed from thermooxidative decomposition of ZDDP. Wear, 2001, 247, 172-179.	1.5	47
45	Formation of Multilayers on Glassy Carbon Electrodes via the Reduction of Diazonium Salts. Langmuir, 2001, 17, 5947-5951.	1.6	289
46	Characterization of n-alkanethiolate monolayers adsorbed to electrochemically deposited gold nanocrystals on glassy carbon electrodes. Journal of Electroanalytical Chemistry, 2000, 488, 125-132.	1.9	51
47	Surface-Directed Deposition of Platinum Nanostructures on Graphite by Chemical Vapor Deposition. Langmuir, 2000, 16, 5837-5840.	1.6	19
48	Mapping Interfacial Chemistry Induced Variations in Protein Adsorption with Scanning Force Microscopy. Analytical Chemistry, 2000, 72, 2627-2634.	3.2	55
49	Characterization of electrochemically deposited gold nanocrystals on glassy carbon electrodes. Journal of Electroanalytical Chemistry, 1999, 466, 234-241.	1.9	202
50	Voltammetric and Scanning Force Microscopic Investigation of Anthraquinone Films Spontaneously Adsorbed on Ordered Graphite. Journal of Physical Chemistry B, 1999, 103, 1295-1302.	1.2	18
51	Nucleation and Growth of Functionalized Aryl Films on Graphite Electrodes. Langmuir, 1999, 15, 6534-6540.	1.6	295
52	Probing Morphological and Compositional Variations of Anodized Carbon Electrodes with Tapping-Mode Scanning Force Microscopy. Analytical Chemistry, 1999, 71, 4306-4312.	3.2	32
53	Real-Time Observation of Plasma Protein Film Formation on Well-Defined Surfaces with Scanning Force Microscopy. Langmuir, 1998, 14, 2435-2443.	1.6	79
54	Hydroxylated naphthoquinones as substrates for Escherichia coli anaerobic reductases. Biochemical Journal, 1998, 332, 35-41.	1.7	50

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55	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.	6.6	34
56	High-Resolution Chemical Mapping of Surface Bound Functional Groups with Tapping-Mode Scanning Force Microscopy. Journal of the American Chemical Society, 1997, 119, 8564-8565.	6.6	56
57	Scanning Force Microscopic Exploration of the Lubrication Capabilities of n-Alkanethiolate Monolayers Chemisorbed at Gold:â€‰ Structural Basis of Microscopic Friction and Wear. Langmuir, 1997, 13, 2504-2510.	1.6	167
58	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.	2.9	46
59	Nanometer-Scale Mapping of Chemically Distinct Domains at Well-Defined Organic Interfaces Using Frictional Force Microscopy. The Journal of Physical Chemistry, 1995, 99, 10960-10965.	2.9	186
60	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.	2.9	125
61	Control of reactivity at carbon electrode surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1994, 93, 211-219.	2.3	86
62	Scanning Tunneling Microscopy of Ordered Graphite and Glassy Carbon Surfaces: Electronic Control of Quinone Adsorption. Langmuir, 1994, 10, 4307-4314.	1.6	131
63	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
64	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
65	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
66	Morphology and Electrochemical Effects of Defects on Highly Oriented Pyrolytic Graphite. Journal of the Electrochemical Society, 1991, 138, 2412-2418.	1.3	73
67	Observation of the doubly charged, gas-phase fullerene anions C602- and C702-. Journal of the American Chemical Society, 1991, 113, 6795-6798.	6.6	157