Michael C Leopold

List of Publications by Year in descending order

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45 papers

1,654 citations

331670 21 h-index 276875 41 g-index

45 all docs

45 docs citations

45 times ranked

2128 citing authors

#	Article	IF	Citations
1	Electron Hopping Conductivity and Vapor Sensing Properties of Flexible Network Polymer Films of Metal Nanoparticles. Journal of the American Chemical Society, 2002, 124, 8958-8964.	13.7	328
2	Evaluating engineered nanoparticles in natural waters. TrAC - Trends in Analytical Chemistry, 2011, 30, 72-83.	11.4	174
3	Influence of Gold Substrate Topography on the Voltammetry of Cytochrome c Adsorbed on Carboxylic Acid Terminated Self-Assembled Monolayers. Langmuir, 2002, 18, 2239-2245.	3.5	122
4	Adsorptive immobilization of cytochrome c on indium/tin oxide (ITO): electrochemical evidence for electron transfer-induced conformational changes. Electrochemistry Communications, 2002, 4, 177-181.	4.7	105
5	Influence of Gold Topography on Carboxylic Acid Terminated Self-Assembled Monolayers. Langmuir, 2002, 18, 978-980.	3.5	102
6	Growth, conductivity, and vapor response properties of metal ion-carboxylate linked nanoparticle films. Faraday Discussions, 2004, 125, 63.	3.2	79
7	Distance-dependent electron hopping conductivity and nanoscale lithography of chemically-linked gold monolayer protected cluster films. Analytica Chimica Acta, 2003, 496, 3-16.	5.4	61
8	Monolayer-Protected Nanoparticle Film Assemblies as Platforms for Controlling Interfacial and Adsorption Properties in Protein Monolayer Electrochemistry. Journal of the American Chemical Society, 2008, 130, 1649-1661.	13.7	50
9	Monolayer-Protected Nanoparticle Doped Xerogels as Functional Components of Amperometric Glucose Biosensors. Analytical Chemistry, 2013, 85, 4057-4065.	6.5	50
10	Distance Dependence of Electron Transfer Kinetics for Azurin Protein Adsorbed to Monolayer Protected Nanoparticle Film Assemblies. Langmuir, 2010, 26, 560-569.	3.5	40
11	Electropolymerization of \hat{l}^2 -cyclodextrin onto multi-walled carbon nanotube composite films for enhanced selective detection of uric acid. Journal of Electroanalytical Chemistry, 2016, 783, 192-200.	3.8	33
12	Enzyme-free uric acid electrochemical sensors using \hat{l}^2 -cyclodextrin-modified carboxylic acid-functionalized carbon nanotubes. Journal of Materials Science, 2017, 52, 6050-6062.	3.7	33
13	Multi-technique quantitative analysis and socioeconomic considerations of lead, cadmium, and arsenic in children's toys and toy jewelry. Chemosphere, 2014, 108, 205-213.	8.2	31
14	Quantitative Analysis of Heavy Metals in Children's Toys and Jewelry: A Multi-Instrument, Multitechnique Exercise in Analytical Chemistry and Public Health. Journal of Chemical Education, 2015, 92, 849-854.	2.3	30
15	Functional Layer-By-Layer Design of Xerogel-Based First-Generation Amperometric Glucose Biosensors. Langmuir, 2015, 31, 1547-1555.	3.5	29
16	Versatile sarcosine and creatinine biosensing schemes utilizing layer-by-layer construction of carbon nanotube-chitosan composite films. Journal of Electroanalytical Chemistry, 2018, 814, 20-30.	3.8	27
17	Layer-by-layer design and optimization of xerogel-based amperometric first generation biosensors for uric acid. Journal of Electroanalytical Chemistry, 2016, 775, 135-145.	3.8	26
18	Nanoparticle Film Assemblies as Platforms for Electrochemical Biosensingâ€"Factors Affecting the Amperometric Signal Enhancement of Hydrogen Peroxide. Langmuir, 2013, 29, 4574-4583.	3.5	25

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19	Covalently Networked Monolayer-Protected Nanoparticle Films. Langmuir, 2005, 21, 11119-11127.	3.5	23
20	Halogen Bonding Interactions for Aromatic and Nonaromatic Explosive Detection. ACS Sensors, 2019, 4, 389-397.	7.8	23
21	Stable Aqueous Nanoparticle Film Assemblies with Covalent and Charged Polymer Linking Networks. Langmuir, 2007, 23, 7466-7471.	3.5	21
22	Functionalized carbon nanotube adsorption interfaces for electron transfer studies of galactose oxidase. Bioelectrochemistry, 2019, 125, 116-126.	4.6	21
23	Simulations of quantized double layer charging voltammetry of poly-disperse and mono-disperse monolayer-protected clusters. Journal of Electroanalytical Chemistry, 2003, 554-555, 87-97.	3.8	19
24	Gold nanoparticle colorants as traditional ceramic glaze alternatives. Journal of the American Ceramic Society, 2017, 100, 3943-3951.	3.8	19
25	Polyelectrolyte-linked film assemblies of nanoparticles and nanoshells: Growth, stability, and optical properties. Journal of Colloid and Interface Science, 2009, 331, 532-542.	9.4	17
26	Crown ether-metal "sandwiches―as linking mechanisms in assembled nanoparticle films. Thin Solid Films, 2006, 510, 311-319.	1.8	16
27	Assembled nanoparticle films with crown ether–metal ion "sandwiches―as sensing mechanisms for metal ions. Journal of Materials Science, 2007, 42, 7100-7108.	3.7	16
28	Ultra-fast formation and characterization of stable nanoparticle film assemblies. Journal of Materials Chemistry, 2005, 15, 491.	6.7	14
29	Layered Xerogel Films Incorporating Monolayerâ€Protected Cluster Networks on Platinumâ€Blackâ€Modified Electrodes for Enhanced Sensitivity in Firstâ€Generation Uric Acid Biosensing. ChemElectroChem, 2016, 3, 1245-1252.	3.4	14
30	First Generation Amperometric Biosensing of Galactose with Xerogel-Carbon Nanotube Layer-By-Layer Assemblies. Nanomaterials, 2019, 9, 42.	4.1	14
31	Enhanced electrochemistry of nanoparticle-embedded polyelectrolyte films: Interfacial electronic coupling and distance dependence. Thin Solid Films, 2010, 519, 790-796.	1.8	13
32	Sweep, step, pulse, and frequency-based techniques applied to protein monolayer electrochemistry at nanoparticle interfaces. Journal of Electroanalytical Chemistry, 2011, 662, 343-354.	3.8	12
33	Structureâ€"function relationships affecting the sensing mechanism of monolayer-protected cluster doped xerogel amperometric glucose biosensors. Journal of Colloid and Interface Science, 2015, 450, 202-212.	9.4	12
34	Electrochemical analysis of azurin thermodynamic and adsorption properties at monolayer-protected cluster film assemblies $\hat{a} \in \mathbb{C}$ Evidence for a more homogeneous adsorption interface. Journal of Colloid and Interface Science, 2010, 352, 50-58.	9.4	11
35	Evaluating Halogen-Bond Strength as a Function of Molecular Structure Using Nuclear Magnetic Resonance Spectroscopy and Computational Analysis. Journal of Physical Chemistry A, 2021, 125, 9377-9393.	2.5	10
36	Adaptable Xerogel-Layered Amperometric Biosensor Platforms on Wire Electrodes for Clinically Relevant Measurements. Sensors, 2019, 19, 2584.	3.8	7

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37	Optical and electrochemical properties of multilayer polyelectrolyte thin films incorporating spherical, gold colloid nanomaterials. Journal of Materials Science, 2012, 47, 108-120.	3.7	6
38	Electrochemical characterization of self-assembled monolayers on gold substrates derived from thermal decomposition of monolayer-protected cluster films. Journal of Applied Electrochemistry, 2015, 45, 1069-1084.	2.9	6
39	Electropolymerized layers as selective membranes in first generation uric acid biosensors. Journal of Applied Electrochemistry, 2016, 46, 603-615.	2.9	5
40	A multi-size study of gold nanoparticle degradation and reformation in ceramic glazes. Gold Bulletin, 2018, 51, 75-83.	2.4	4
41	Sintering-Induced Nucleation and Growth of Noble Metal Nanoparticles for Plasmonic Resonance Ceramic Color. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 2770-2778.	3.7	2
42	Monolayer-Protected Gold Nanoparticles Functionalized with Halogen Bonding Capability─An Avenue for Molecular Detection Schemes. Langmuir, 2022, 38, 4747-4762.	3.5	2
43	Characterization of Engineered Nanoparticles in Natural Waters. Comprehensive Analytical Chemistry, 2012, 59, 169-195.	1.3	1
44	Sintering-Based In-Situ Synthesis and Characterization by TEM of Noble Metal Nanoparticles for Ceramic Glaze Color Control. Nanomaterials, 2021, 11, 2103.	4.1	1
45	Synthesis, Assembly, and Characterization of Monolayer Protected Gold Nanoparticle Films for Protein Monolayer Electrochemistry. Journal of Visualized Experiments, 2011, , .	0.3	0