Jeanne E Pemberton

List of Publications by Year
in descending order

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116 papers	4,959 citations	109321 35 h-index	102487 66 g-index
119 all docs	119 docs citations	119 times ranked	5499 citing authors

#	Article	IF	Citations
1	Air Stability of Alkanethiol Self-Assembled Monolayers on Silver and Gold Surfaces. Journal of the American Chemical Society, 1998, 120, 4502-4513.	13.7	502
2	Surface Raman scattering of self-assembled monolayers formed from 1-alkanethiols: behavior of films at gold and comparison to films at silver. Journal of the American Chemical Society, 1991, 113, 8284-8293.	13.7	448
3	Surface Raman scattering of self-assembled monolayers formed from 1-alkanethiols at silver [electrodes]. Journal of the American Chemical Society, 1991, 113, 3629-3637.	13.7	268
4	Phosphonic Acid Modification of Indiumâ˜Tin Oxide Electrodes: Combined XPS/UPS/Contact Angle Studies. Journal of Physical Chemistry C, 2008, 112, 7809-7817.	3.1	207
5	Phosphonic Acids for Interfacial Engineering of Transparent Conductive Oxides. Chemical Reviews, 2016, 116, 7117-7158.	47.7	189
6	Quantitative Correlation of Raman Spectral Indicators in Determining Conformational Order in Alkyl Chains. Journal of Physical Chemistry A, 2002, 106, 6991-6998.	2.5	170
7	Surface Enhancement Factors for Ag and Au Surfaces Relative to Pt Surfaces for Monolayers of Thiophenol. Applied Spectroscopy, 1999, 53, 1212-1221.	2.2	141
8	Speciation and Coordination Chemistry of Uranyl(VI)â˜Citrate Complexes in Aqueous Solution. Inorganic Chemistry, 2003, 42, 6793-6800.	4.0	108
9	Hydrolysis and Condensation of Self-Assembled Monolayers of (3-Mercaptopropyl)trimethoxysilane on Ag and Au Surfaces. Langmuir, 1997, 13, 2291-2302.	3.5	106
10	Carbon Contamination at Silver Surfaces:Â Surface Preparation Procedures Evaluated by Raman Spectroscopy and X-ray Photoelectron Spectroscopy. Analytical Chemistry, 1996, 68, 2401-2408.	6.5	96
11	Raman spectroscopy and vibrational assignments of 1- and 2-methylimidazole. Journal of Raman Spectroscopy, 1997, 28, 939-946.	2.5	94
12	Determination of the Acid Dissociation Constant of the Biosurfactant Monorhamnolipid in Aqueous Solution by Potentiometric and Spectroscopic Methods. Analytical Chemistry, 2006, 78, 7649-7658.	6.5	85
13	Adsorption Interactions of Aromatics and Heteroaromatics with Hydrated and Dehydrated Silica Surfaces by Raman and FTIR Spectroscopies. Environmental Science & Technology, 2000, 34, 259-265.	10.0	81
14	Raman spectroscopy of glycerol/D2O solutions. Vibrational Spectroscopy, 2007, 45, 27-35.	2.2	79
15	Raman Spectroscopy of Covalently Bonded Alkylsilane Layers on Thin Silica Films Immobilized on Silver Substrates. Analytical Chemistry, 1994, 66, 3362-3370.	6.5	75
16	Synthesis of uniform, spherical sub-100nm silica particles using a conceptual modification of the classic LaMer model. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 360, 175-183.	4.7	72
17	Chemical Additives Enable Native Mass Spectrometry Measurement of Membrane Protein Oligomeric State within Intact Nanodiscs. Journal of the American Chemical Society, 2019, 141, 1054-1061.	13.7	70
18	A simple method for determination of orientation of adsorbed organics of low symmetry using surface-enhanced Raman scattering. The Journal of Physical Chemistry, 1992, 96, 3776-3782.	2.9	67

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19	Correlation of Coexistent Charge Transfer States in F₄TCNQ-Doped P3HT with Microstructure. Journal of Physical Chemistry Letters, 2018, 9, 6871-6877.	4.6	65
20	Orientation of Phenylphosphonic Acid Self-Assembled Monolayers on a Transparent Conductive Oxide: A Combined NEXAFS, PM-IRRAS, and DFT Study. Langmuir, 2013, 29, 2166-2174.	3.5	61
21	Stability of Charge Transfer States in F₄TCNQ-Doped P3HT. Chemistry of Materials, 2019, 31, 6986-6994.	6.7	54
22	Surface Raman scattering of methanol, 1-propanol, 1-pentanol, and 1-butanethiol on in situ and emersed silver electrodes. Journal of the American Chemical Society, 1990, 112, 6177-6183.	13.7	52
23	Effects of Electrolyte and Potential on the in Situ Structure of Alkanethiol Self-Assembled Monolayers on Silver. Langmuir, 1999, 15, 509-517.	3.5	51
24	Structureâ^'Function Relationships in High-Density Octadecylsilane Stationary Phases by Raman Spectroscopy. 1. Effects of Temperature, Surface Coverage, and Preparation Procedure. Analytical Chemistry, 2002, 74, 5576-5584.	6.5	51
25	Alkyl Chain Conformation of Octadecylsilane Stationary Phases by Raman Spectroscopy. 1. Temperature Dependence. Analytical Chemistry, 1998, 70, 4915-4920.	6.5	50
26	Surface Vibrational Spectroscopy of Alkylsilane Layers Covalently Bonded to Monolayers of (3-Mercaptopropyl)trimethoxysilane on Ag Substrates. Langmuir, 2000, 16, 3446-3453.	3.5	47
27	Fatty Acid Cosubstrates Provide Î²-Oxidation Precursors for Rhamnolipid Biosynthesis in Pseudomonas aeruginosa, as Evidenced by Isotope Tracing and Gene Expression Assays. Applied and Environmental Microbiology, 2012, 78, 8611-8622.	3.1	45
28	Characterization of Octadecylsilane Stationary Phases on Commercially Available Silica-Based Packing Materials by Raman Spectroscopy. Analytical Chemistry, 1997, 69, 2613-2616.	6.5	43
29	Orientation of 1- and 2-Methylimidazole on Silver Electrodes Determined with Surface-Enhanced Raman Scattering. Journal of Physical Chemistry B, 1998, 102, 9870-9880.	2.6	43
30	Raman spectroscopy of octadecylsilane stationary phase conformational order. Journal of Chromatography A, 2001, 913, 243-252.	3.7	43
31	Structureâ^'Function Relationships in High-Density Octadecylsilane Stationary Phases by Raman Spectroscopy. 2. Effect of Common Mobile-Phase Solvents. Analytical Chemistry, 2002, 74, 5585-5592.	6.5	42
32	Effect of fatty acid substrate chain length on Pseudomonas aeruginosa ATCC 9027 monorhamnolipid yield and congener distribution. Process Biochemistry, 2014, 49, 989-995.	3.7	42
33	Ions generated from uranyl nitrate solutions by electrospray ionization (ESI) and detected with fourier transform ion-cyclotron resonance (FT-ICR) mass spectrometry. Journal of the American Society for Mass Spectrometry, 2006, 17, 230-240.	2.8	37
34	Biodegradability and toxicity of monorhamnolipid biosurfactant diastereomers. Journal of Hazardous Materials, 2019, 364, 600-607.	12.4	37
35	Segregation of NaBr in NaBr/NaCl crystals grown from aqueous solutions: Implications for sea salt surface chemistry. Geophysical Research Letters, 2001, 28, 995-998.	4.0	36
36	Emersion of 11-Mercapto-1-undecanol-Modified Ag Substrates from Aqueous and Nonaqueous Solvents:Â The Effect of Emersion Velocity on Emersed Solvent Layer Thicknessâ€. Langmuir, 2003, 19, 6422-6429.	3.5	33

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37	PM-IRRAS Determination of Molecular Orientation of Phosphonic Acid Self-Assembled Monolayers on Indium Zinc Oxide. Langmuir, 2015, 31, 5603-5613.	3.5	33
38	Synthesis and Characterization of Four Diastereomers of Monorhamnolipids. Journal of the American Chemical Society, 2017, 139, 5125-5132.	13.7	33
39	Rhamnolipid biosurfactant complexation of rare earth elements. Journal of Hazardous Materials, 2017, 340, 171-178.	12.4	32
40	Thin Sol-Gel Silica Films on (3-Mercaptopropyl)trimethoxysilane-Modified Ag and Au Surfaces. Chemistry of Materials, 1995, 7, 130-136.	6.7	31
41	Self-Organized Thin Films of Hydrogen-Bonded Phthalocyanines: Characterization of Structure and Electrical Properties on Nanometer Length Scales. Chemistry of Materials, 2010, 22, 2491-2501.	6.7	30
42	Frequency/Wavelength Calibration of Multipurpose Multichannel Raman Spectrometers. Part I: Instrumental Factors Affecting Precision. Applied Spectroscopy, 1995, 49, 1550-1560.	2.2	28
43	In Situ Monitoring of the NaCl + HNO3Surface Reaction:Â The Observation of Mobile Surface Strings. Journal of Physical Chemistry B, 1998, 102, 8950-8953.	2.6	28
44	Investigation of the Interfaces of Tris-(8-hydroxyquinoline) Aluminum with Ag and Al Using Surface Raman Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 4364-4371.	3.1	28
45	Determination of alcohol solvent orientation and bonding at silver electrodes using surface-enhanced Raman scattering: methanol, ethanol, 1-propanol, and 1-pentanol. Langmuir, 1992, 8, 2049-2063.	3.5	27
46	Evolution of Aggregate Structure in Solutions of Anionic Monorhamnolipids: Experimental and Computational Results. Langmuir, 2017, 33, 7412-7424.	3.5	27
47	A surface enhanced Raman scattering investigation of interfacial structure at silver electrodes in electrolyte solutions of the isomers of butanol. Langmuir, 1992, 8, 2301-2310.	3.5	25
48	Water and electrolyte structure at Ag electrodes in nonaqueous butanol solutions using surface-enhanced Raman scattering. Journal of Electroanalytical Chemistry, 1994, 378, 149-158.	3.8	25
49	Raman Spectroscopy of the Reaction of Sodium Chloride with Nitric Acid:Â Sodium Nitrate Growth and Effect of Water Exposure. Journal of Physical Chemistry A, 2001, 105, 3788-3795.	2.5	25
50	Model Aluminumâ^'Poly(p-phenylenevinylene) Interfaces Studied by Surface Raman Spectroscopy. Journal of the American Chemical Society, 2003, 125, 624-625.	13.7	25
51	Raman Spectroscopy of Langmuir Monolayers at the Airâ^'Water Interface. Langmuir, 1997, 13, 3074-3079.	3.5	24
52	Surface Raman Spectroscopy of the Interface of Tris-(8-hydroxyquinoline) Aluminum with Mg. Journal of the American Chemical Society, 2009, 131, 10009-10014.	13.7	24
53	Interfacial structure of dimethylsulfoxide at Ag electrodes from surface enhanced Raman scattering and differential capacitance. Journal of Electroanalytical Chemistry, 1999, 479, 21-31.	3.8	23
54	Structureâ^'Function Relationships in High-Density Octadecylsilane Stationary Phases by Raman Spectroscopy. 3. Effects of Self-Associating Solvents. Analytical Chemistry, 2003, 75, 3360-3368.	6.5	23

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55	Comparison of a Fluorinated Aryl Thiol Self-Assembled Monolayer with Its Hydrogenated Counterpart on Polycrystalline Ag Substrates. Langmuir, 2010, 26, 11862-11869.	3.5	23
56	A PM-IRRAS Investigation of Monorhamnolipid Orientation at the Airâ€“Water Interface. Langmuir, 2013, 29, 4441-4450.	3.5	23
57	Structural Properties of Nonionic Monorhamnolipid Aggregates in Water Studied by Classical Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2017, 121, 5781-5793.	2.6	23
58	Electrochemical Cleaning of Surface-Confined Carbon Contamination in Self-Assembled Monolayers on Polycrystalline Ag and Au. Langmuir, 2000, 16, 2907-2914.	3.5	22
59	Sequestration of Carbonaceous Species within Alkanethiol Self-Assembled Monolayers on Ag by Raman Spectroscopy. Langmuir, 2000, 16, 2902-2906.	3.5	22
60	Signature Vibrational Bands for Defects in CVD Single-Layer Graphene by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 964-969.	4.6	22
61	Interfacial solvent structure in butan-1-ol, butan-2-ol and 2-methylpropan-1-ol at Au and Ag electrodes from surface enhanced Raman scattering and capacitance measurements. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 3683.	1.7	21
62	Spectroscopic investigation of uranyl(VI) and citrate coadsorption to Al2O3. Geochimica Et Cosmochimica Acta, 2008, 72, 277-287.	3.9	21
63	Deciphering the Metal-C₆₀ Interface in Optoelectronic Devices: Evidence for C₆₀ Reduction by Vapor Deposited Al. ACS Applied Materials & Interfaces, 2013, 5, 6001-6008.	8.0	21
64	Unraveling the Differential Aggregation of Anionic and Nonionic Monorhamnolipids at Airâ€“Water and Oilâ€“Water Interfaces: A Classical Molecular Dynamics Simulation Study. Journal of Physical Chemistry B, 2018, 122, 6403-6416.	2.6	21
65	Electrospray ionization of uranyl-citrate complexes: Adduct formation and ion-molecule reactions in 3D ion trap and ion cyclotron resonance trapping instruments. International Journal of Mass Spectrometry, 2007, 265, 281-294.	1.5	20
66	Combined Quenching Mechanism of Anthracene Fluorescence by Cetylpyridinium Chloride in Sodium Dodecyl Sulfate Micelles. Journal of Fluorescence, 2014, 24, 295-299.	2.5	20
67	SERS investigation of interfacial methanol at silver electrodes. Langmuir, 1990, 6, 43-50.	3.5	18
68	Structureâ^'Function Relationships in High-Density Docosylsilane Bonded Stationary Phases by Raman Spectroscopy and Comparison to Octadecylsilane Bonded Stationary Phases:â€‰ Effects of Common Solvents. Analytical Chemistry, 2008, 80, 2911-2920.	6.5	18
69	FTIR Spectroelectrochemistry of F4TCNQ Reduction Products and Their Protonated Forms. Analytical Chemistry, 2020, 92, 7154-7161.	6.5	18
70	Surface Raman scattering of interfaces at Ag electrodes emersed from dimethylsulfoxide: spectroscopic evidence for an emersion-induced potential shift. Journal of Electroanalytical Chemistry, 1999, 479, 32-42.	3.8	17
71	Covalent surface chemical modification of electrodes for cardiac pacing applications. , 2000, 51, 209-215.		17
72	A Classical Molecular Dynamics Simulation Study of Interfacial and Bulk Solution Aggregation Properties of Dirhamnolipids. Journal of Physical Chemistry B, 2020, 124, 814-827.	2.6	17

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73	Raman Spectroscopy of the Reaction of Thin Films of Solid-State Benzene with Vapor-Deposited Ag, Mg, and Al. Journal of Physical Chemistry C, 2011, 115, 13717-13724.	3.1	16
74	Alkyl melibioside and alkyl cellobioside surfactants: effect of sugar headgroup and alkyl chain length on performance. Green Chemistry, 2016, 18, 4446-4460.	9.0	16
75	Preparation of S-glycoside surfactants and cysteine thioglycosides using minimally competent Lewis acid catalysis. Carbohydrate Research, 2016, 422, 1-4.	2.3	16
76	Structureâ^'Function Relationships in High-Density Octadecylsilane Stationary Phases by Raman Spectroscopy. 4. Effects of Neutral and Basic Aromatic Compounds. Analytical Chemistry, 2003, 75, 3369-3375.	6.5	15
77	Raman Spectral Conformational Order Indicators in Perdeuterated Alkyl Chain Systems. Journal of Physical Chemistry A, 2006, 110, 13744-13753.	2.5	15
78	Flow Field Penetration in Thin Nanoporous Polymer Films under Laminar Flow by FÃ¶rster Resonance Energy Transfer Coupled with Total Internal Reflectance Fluorescence Microscopy. Analytical Chemistry, 2015, 87, 11746-11754.	6.5	15
79	Determination of emersed electrochemical interface thickness by ellipsometry: Aqueous electrolytes on Ag. Journal of Electroanalytical Chemistry, 1998, 456, 161-169.	3.8	14
80	Raman Spectroscopy and Atomic Force Microscopy of the Reaction of Sulfuric Acid with Sodium Chloride. Journal of the American Chemical Society, 2000, 122, 12289-12296.	13.7	14
81	Surface Raman Spectroscopy of Chemistry at the Tris(8-hydroxyquinoline) aluminum/Ca Interface. Journal of Physical Chemistry A, 2009, 113, 4397-4402.	2.5	14
82	Effect of time and deposition method on quality of phosphonic acid modifier self-assembled monolayers on indium zinc oxide. Applied Surface Science, 2016, 389, 190-198.	6.1	14
83	Raman spectroscopy of the emersed Ag | alcohol electrochemical interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 318, 157-169.	0.1	13
84	Surface Raman scattering of the butanol isomers on emersed silver and gold electrodes. The Journal of Physical Chemistry, 1993, 97, 9420-9424.	2.9	13
85	Minimally CompetentLewisAcid Catalysts: Indium(III) and Bismuth(III) Salts Produce Rhamnosides (=6-Deoxymannosides) in High Yield and Purity. Helvetica Chimica Acta, 2012, 95, 2652-2659.	1.6	13
86	Effect of Solvent Quality on Laminar Slip Flow Penetration of Poly(N-isopropylacrylamide) Films with an Exploration of the Mass Transport Mechanism. Langmuir, 2017, 33, 7468-7478.	3.5	13
87	Molecular Dynamics Simulation of the Oil Sequestration Properties of a Nonionic Rhamnolipid. Journal of Physical Chemistry B, 2018, 122, 3944-3952.	2.6	13
88	Thermally Induced Formation of HF₄TCNQ^{â€“} in F₄TCNQ-Doped Regioregular P3HT. Journal of Physical Chemistry Letters, 2020, 11, 6586-6592.	4.6	13
89	Raman spectroscopic study of the conformational order of octadecylsilane stationary phases: effects of electrolyte and pH. Analytical and Bioanalytical Chemistry, 2005, 382, 691-697.	3.7	12
90	Fabrication of colloidal arrays by self-assembly of sub-100 nm silica particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 377, 76-86.	4.7	12

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91	Optical Spectroscopy of Surfaces, Interfaces, and Thin Films: A Status Report. Analytical Chemistry, 2019, 91, 4235-4265.	6.5	12
92	Electrochemical and surface enhanced Raman scattering studies of bromide ion adsorption at silver electrodes in a series of normal alcohols. Physical Chemistry Chemical Physics, 1999, 1, 5671-5676.	2.8	11
93	Interfacial and Solution Aggregation Behavior of a Series of Bioinspired Rhamnolipid Congeners Rha-C14-Cx (x = 6, 8, 10, 12, 14). Journal of Physical Chemistry B, 2021, 125, 13585-13596.	2.6	11
94	Optimization of a Chemical Synthesis for Single-Chain Rhamnolipids. ACS Sustainable Chemistry and Engineering, 2020, 8, 8918-8927.	6.7	9
95	In situ electrochemistry of Ru(NH3)63+ in a perfused rat heart. Electroanalysis, 1997, 9, 135-140.	2.9	8
96	Investigation of trace interfacial water at silver electrodes in a series of normal alcohols using surface enhanced Raman scattering. Physical Chemistry Chemical Physics, 1999, 1, 5677-5684.	2.8	8
97	Structureâ^'Function Relationships in High-Density Docosylsilane Bonded Stationary Phases by Raman Spectroscopy and Comparison to Octadecylsilane Bonded Stationary Phases. Analytical Chemistry, 2006, 78, 5813-5822.	6.5	8
98	Reaction Chemistry of Solid-State Pyridine Thin Films with Vapor Deposited Ag, Mg, and Al. Journal of Physical Chemistry C, 2012, 116, 11548-11555.	3.1	8
99	Reaction of Thin Films of Solid-State Benzene and Pyridine with Calcium. Journal of the American Chemical Society, 2012, 134, 12989-12997.	13.7	7
100	Chemistry at the Interface of Î±-Sexithiophene and Vapor-Deposited Ag, Al, Mg, and Ca: A Molecular View. Journal of Physical Chemistry C, 2019, 123, 18877-18888.	3.1	7
101	Direct Nanoscopic Measurement of Laminar Slip Flow Penetration of Deformable Polymer Brush Surfaces: Synergistic Effect of Grafting Density and Solvent Quality. Langmuir, 2019, 35, 13646-13655.	3.5	7
102	Optical Spectroscopy of Surfaces, Interfaces, and Thin Films. Analytical Chemistry, 2022, 94, 515-558.	6.5	7
103	Determination of Surface Coverage of an Adsorbate on Silica Using FTIR Spectroscopy. Journal of Chemical Education, 1999, 76, 253.	2.3	6
104	Raman spectroscopy of model membrane monolayers of dipalmitoylphosphatidic acid at the air-water interface using surface enhancement from buoyant thin silver films. , 2000, 57, 103-116.		6
105	Phase transition between two anhydrous modifications of NaHSO4 mediated by heat and water. Journal of Solid State Chemistry, 2007, 180, 1826-1831.	2.9	6
106	Passivation of pinhole defect microelectrode arrays in ultrathin silica films immobilized on gold substrates. Thin Solid Films, 2009, 517, 5399-5403.	1.8	6
107	Ultrathin Silica Films Immobilized on Gold Supports:â€‰ Fabrication, Characterization, and Modification. Langmuir, 2007, 23, 9816-9822.	3.5	5
108	Understanding the Reaction Chemistry of 2,2â€²:5â€²,2â€³-Terthiophene Films with Vapor-Deposited Ag, Al, and Ca. Journal of Physical Chemistry C, 2015, 119, 24290-24298.	3.1	5

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109	Penetration and Reaction Depths of Vapor Deposited Ag, Mg, Al, and Ca on Oligothiophene Thin Films. Chemistry of Materials, 2019, 31, 6908-6917.	6.7	5
110	Thickness, Composition, and Molecular Structure of Residual Thin Films Formed by Forced Dewetting of Ag from Glycerol/D₂O Solutions. Langmuir, 2014, 30, 15181-15192.	3.5	4
111	Stability of pushâ€“pull small molecule donors for organic photovoltaics: spectroscopic degradation of acceptor endcaps on benzo[1,2-b:4,5-bâ€²]dithiophene cores. Journal of Materials Chemistry A, 2019, 7, 19984-19995.	10.3	4
112	Biodegradability and Toxicity of Cellobiosides and Melibiosides. Journal of Surfactants and Detergents, 2020, 23, 715-724.	2.1	4
113	Effect of Underpotentially Deposited Lead on the Surface-Enhanced Raman Scattering of Interfacial Water at Silver Electrode Surfaces. ACS Symposium Series, 1988, , 398-407.	0.5	2
114	Layered supramolecular hydrogels from thioglycosides. Journal of Materials Chemistry B, 2022, 10, 3861-3875.	5.8	2
115	Structure-function relationships in high-density docosylsilane bonded stationary phases by Raman spectroscopy and comparison to octadecylsilane bonded stationary phases: Effects of aromatic compounds. Journal of Chromatography A, 2008, 1193, 60-69.	3.7	1
116	Reduction of nitric acid on Ag in ultrahigh vacuum: A Raman spectroscopic investigation. Surface Science, 2008, 602, 2395-2401.	1.9	1