Jeanne E Pemberton

List of Publications by Year
in descending order

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	Optical Spectroscopy of Surfaces, Interfaces, and Thin Films. Analytical Chemistry, 2022, 94, 515-558.	6.5	7
2	Layered supramolecular hydrogels from thioglycosides. Journal of Materials Chemistry B, 2022, 10, 3861-3875.	5.8	2
3	Interfacial and Solution Aggregation Behavior of a Series of Bioinspired Rhamnolipid Congeners Rha-C14-C<i>x</i> (<i>x</i> = 6, 8, 10, 12, 14). Journal of Physical Chemistry B, 2021, 125, 13585-13596.	2.6	11
4	Thermally Induced Formation of HF₄TCNQ^{â€“} in F₄TCNQ-Doped Regioregular P3HT. Journal of Physical Chemistry Letters, 2020, 11, 6586-6592.	4.6	13
5	FTIR Spectroelectrochemistry of F4TCNQ Reduction Products and Their Protonated Forms. Analytical Chemistry, 2020, 92, 7154-7161.	6.5	18
6	Biodegradability and Toxicity of Cellobiosides and Melibiosides. Journal of Surfactants and Detergents, 2020, 23, 715-724.	2.1	4
7	Optimization of a Chemical Synthesis for Single-Chain Rhamnolipids. ACS Sustainable Chemistry and Engineering, 2020, 8, 8918-8927.	6.7	9
8	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
9	Stability of pushâ€“pull small molecule donors for organic photovoltaics: spectroscopic degradation of acceptor endcaps on benzo[1,2-<i>b</i>:4,5-<i>b</i>â€²]dithiophene cores. Journal of Materials Chemistry A, 2019, 7, 19984-19995.	10.3	4
10	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
11	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
12	Stability of Charge Transfer States in F₄TCNQ-Doped P3HT. Chemistry of Materials, 2019, 31, 6986-6994.	6.7	54
13	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
14	Optical Spectroscopy of Surfaces, Interfaces, and Thin Films: A Status Report. Analytical Chemistry, 2019, 91, 4235-4265.	6.5	12
15	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
16	Biodegradability and toxicity of monorhamnolipid biosurfactant diastereomers. Journal of Hazardous Materials, 2019, 364, 600-607.	12.4	37
17	Molecular Dynamics Simulation of the Oil Sequestration Properties of a Nonionic Rhamnolipid. Journal of Physical Chemistry B, 2018, 122, 3944-3952.	2.6	13
18	Correlation of Coexistent Charge Transfer States in F₄TCNQ-Doped P3HT with Microstructure. Journal of Physical Chemistry Letters, 2018, 9, 6871-6877.	4.6	65

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19	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
20	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
21	Synthesis and Characterization of Four Diastereomers of Monorhamnolipids. Journal of the American Chemical Society, 2017, 139, 5125-5132.	13.7	33
22	Evolution of Aggregate Structure in Solutions of Anionic Monorhamnolipids: Experimental and Computational Results. Langmuir, 2017, 33, 7412-7424.	3.5	27
23	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
24	Rhamnolipid biosurfactant complexation of rare earth elements. Journal of Hazardous Materials, 2017, 340, 171-178.	12.4	32
25	Phosphonic Acids for Interfacial Engineering of Transparent Conductive Oxides. Chemical Reviews, 2016, 116, 7117-7158.	47.7	189
26	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
27	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
28	Preparation of S-glycoside surfactants and cysteine thioglycosides using minimally competent Lewis acid catalysis. Carbohydrate Research, 2016, 422, 1-4.	2.3	16
29	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
30	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
31	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
32	PM-IRRAS Determination of Molecular Orientation of Phosphonic Acid Self-Assembled Monolayers on Indium Zinc Oxide. Langmuir, 2015, 31, 5603-5613.	3.5	33
33	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
34	Combined Quenching Mechanism of Anthracene Fluorescence by Cetylpyridinium Chloride in Sodium Dodecyl Sulfate Micelles. Journal of Fluorescence, 2014, 24, 295-299.	2.5	20
35	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
36	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

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37	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
38	A PM-IRRAS Investigation of Monorhamnolipid Orientation at the Airâ€“Water Interface. Langmuir, 2013, 29, 4441-4450.	3.5	23
39	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
40	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
41	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
42	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
43	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
44	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
45	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
46	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
47	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
48	Passivation of pinhole defect microelectrode arrays in ultrathin silica films immobilized on gold substrates. Thin Solid Films, 2009, 517, 5399-5403.	1.8	6
49	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
50	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
51	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
52	Reduction of nitric acid on Ag in ultrahigh vacuum: A Raman spectroscopic investigation. Surface Science, 2008, 602, 2395-2401.	1.9	1
53	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
54	Spectroscopic investigation of uranyl(VI) and citrate coadsorption to Al2O3. Geochimica Et Cosmochimica Acta, 2008, 72, 277-287.	3.9	21

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55	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
56	Structureâˆ'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
57	Ultrathin Silica Films Immobilized on Gold Supports:â€‰ Fabrication, Characterization, and Modification. Langmuir, 2007, 23, 9816-9822.	3.5	5
58	Raman spectroscopy of glycerol/D2O solutions. Vibrational Spectroscopy, 2007, 45, 27-35.	2.2	79
59	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
60	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
61	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
62	Raman Spectral Conformational Order Indicators in Perdeuterated Alkyl Chain Systems. Journal of Physical Chemistry A, 2006, 110, 13744-13753.	2.5	15
63	Structureâˆ'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
64	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
65	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
66	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
67	Model Aluminumâˆ'Poly(p-phenylenevinylene) Interfaces Studied by Surface Raman Spectroscopy. Journal of the American Chemical Society, 2003, 125, 624-625.	13.7	25
68	Structureâˆ'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
69	Structureâˆ'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
70	Speciation and Coordination Chemistry of Uranyl(VI)âˆ'Citrate Complexes in Aqueous Solution. Inorganic Chemistry, 2003, 42, 6793-6800.	4.0	108
71	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
72	Structureâˆ'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

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73	Structureâˆ'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
74	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
75	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
76	Raman spectroscopy of octadecylsilane stationary phase conformational order. Journal of Chromatography A, 2001, 913, 243-252.	3.7	43
77	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
78	Covalent surface chemical modification of electrodes for cardiac pacing applications. , 2000, 51, 209-215.		17
79	Electrochemical Cleaning of Surface-Confined Carbon Contamination in Self-Assembled Monolayers on Polycrystalline Ag and Au. Langmuir, 2000, 16, 2907-2914.	3.5	22
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 Vibrational Spectroscopy of Alkylsilane Layers Covalently Bonded to Monolayers of (3-Mercaptopropyl)trimethoxysilane on Ag Substrates. Langmuir, 2000, 16, 3446-3453.	3.5	47
82	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
83	Sequestration of Carbonaceous Species within Alkanethiol Self-Assembled Monolayers on Ag by Raman Spectroscopy. Langmuir, 2000, 16, 2902-2906.	3.5	22
84	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
85	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
86	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
87	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
88	Determination of Surface Coverage of an Adsorbate on Silica Using FTIR Spectroscopy. Journal of Chemical Education, 1999, 76, 253.	2.3	6
89	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
90	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

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91	Determination of emersed electrochemical interface thickness by ellipsometry: Aqueous electrolytes on Ag. Journal of Electroanalytical Chemistry, 1998, 456, 161-169.	3.8	14
92	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
93	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
94	Alkyl Chain Conformation of Octadecylsilane Stationary Phases by Raman Spectroscopy. 1. Temperature Dependence. Analytical Chemistry, 1998, 70, 4915-4920.	6.5	50
95	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
96	Characterization of Octadecylsilane Stationary Phases on Commercially Available Silica-Based Packing Materials by Raman Spectroscopy. Analytical Chemistry, 1997, 69, 2613-2616.	6.5	43
97	Hydrolysis and Condensation of Self-Assembled Monolayers of (3-Mercaptopropyl)trimethoxysilane on Ag and Au Surfaces. Langmuir, 1997, 13, 2291-2302.	3.5	106
98	Raman Spectroscopy of Langmuir Monolayers at the Airâ˘'Water Interface. Langmuir, 1997, 13, 3074-3079.	3.5	24
99	In situ electrochemistry of Ru(NH3)63+ in a perfused rat heart. Electroanalysis, 1997, 9, 135-140.	2.9	8
100	Raman spectroscopy and vibrational assignments of 1- and 2-methylimidazole. Journal of Raman Spectroscopy, 1997, 28, 939-946.	2.5	94
101	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
102	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
103	Frequency/Wavelength Calibration of Multipurpose Multichannel Raman Spectrometers. Part I: Instrumental Factors Affecting Precision. Applied Spectroscopy, 1995, 49, 1550-1560.	2.2	28
104	Thin Sol-Gel Silica Films on (3-Mercaptopropyl)trimethoxysilane-Modified Ag and Au Surfaces. Chemistry of Materials, 1995, 7, 130-136.	6.7	31
105	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
106	Raman Spectroscopy of Covalently Bonded Alkylsilane Layers on Thin Silica Films Immobilized on Silver Substrates. Analytical Chemistry, 1994, 66, 3362-3370.	6.5	75
107	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
108	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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109	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
110	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
111	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
112	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
113	Raman spectroscopy of the emersed Ag | alcohol electrochemical interface. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 318, 157-169.	0.1	13
114	SERS investigation of interfacial methanol at silver electrodes. Langmuir, 1990, 6, 43-50.	3.5	18
115	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
116	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