

Chidsey Publications List

100. "Vertically Oriented Germanium Nanowires Grown from Gold Colloids on Silicon Substrates and Subsequent Gold Removal," Jacob H. Woodruff, Joshua B. Ratchford, Irene A. Goldthorpe, Paul C. McIntyre, Christopher E. D. Chidsey, *Nano Letters* 7, 1637-1642 (2007).
99. "Azide-Modified Graphitic Surfaces for Covalent Attachment of Alkyne-Terminated Molecules by "Click" Chemistry," Anando Devadoss, C. E. D. Chidsey, *J. Am. Chem. Soc.* 129, 5370-5371 (2007).
98. "A Cytochrome c Oxidase Model Catalyzes Oxygen to Water Reduction Under Rate-Limiting Electron Flux," James P. Collman, Neal K. Devaraj, Richard A. Decreau, Ying Yang, Yi-Long Yan, Watura Ebina, Todd A. Eberspacher, C.E.D. Chidsey, *Science* 315, 1565-1568 (2007).
97. "Nature of germanium nanowire heteroepitaxy on silicon substrates," H. Jagannathan, M. Deal, Y. Nishi, J. Woodruff, C. Chidsey, and P. C. McIntyre, *J. Appl. Phys.* 100, 024318 (2006).
96. "Rate of Interfacial Electron Transfer through the 1,2,3-Triazole Linkage," Neal K. Devaraj, Richard A. Decreau, Wataru Ebina, James P. Collman, C. E. D. Chidsey, *J. Phys. Chem. B.* 110, 15955-15962 (2006).
95. "Mixed Azide-Terminated Monolayers: A Platform for Modifying Electrode Surfaces," James P. Collman, Neal K. Devaraj, Todd P. A. Eberspacher, C.E. D. Chidsey, *Langmuir* 22, 2457-2464 (2006).
94. "Selective Functionalization of Independently Addressed Microelectrodes by Electrochemical Activation and Deactivation of a Coupling Catalyst," Neal K. Devaraj, Peter H. Dinolfo, C.E.D. Chidsey, James P. Collman, *J. Am. Chem. Soc.* 128, 1794-1795 (2006).
93. "Germanium Nanowire Epitaxy: Shape and Orientation Control," Hemant Adhikari, Ann F. Marshall, C.E.D. Chidsey, Paul McIntyre, *Nano Letters* 6, 318-323 (2006).
92. "Photoemission Studies of Passivation of Germanium Nanowires," Hemant Adhikari, Paul C. McIntyre, Shiyu Sun, Piero Pianetta, C.E.D. Chidsey, *Applied Physic Letters* 87, 263109, 1-3 (2005).
91. "Role of O₃ and OH· Radicals in Ozonated Aqueous Solution for the Photoresist Removal of Semiconductor Fabrication," Sang woo Lim, C.E.D. Chidsey, *Ozone: Science & Engineering* 27, 139-146 (2005).

90. "Chemoselective Covalent Coupling of Oligonucleotide Probes to Self-Assembled Monolayers," N. K. Devaraj, G. P. Miller, W. Ebina, B. Kakaradov, J. P. Collman, E. T. Kool, C. E. D. Chidsey, *J. Am. Chem. Soc.* *127*, 8600-8601 (2005).
89. "Interfacial Electron-Transfer Kinetics of Ferrocene through Oligophenyleneethynylene Bridges Attached to Gold Electrodes as Constituents of Self-Assembled Monolayers: Observation of a Nonmonotonic Distance Dependence," J. F. Smalley, S. B. Sachs, C. E. D. Chidsey, S. P. Dudek, H. D. Sikes, S. E. Creager, C. J. Yu, S. W. Feldberg, M. D. Newton, *J. Am. Chem. Soc.* *126*, 14620-14630 (2004).
88. "'Clicking' Functionality onto Electrode Surfaces," J. P. Collman, N. K. Devaraj and C. E. D. Chidsey, *Langmuir* *20*, 1051-1053 (2004).
87. "Charge Transfer on the Nanoscale: Current Status," D. M. Adams, L. Brus, C. E. D. Chidsey, S. Creager, C. Creutz, C. R. Kagan, P. V. Kamat, M. Lieberman, S. Lindsay, R. A. Marcus, *et al.*, *J. Phys. Chem. B* *107*, 6668-6697 (2003).
86. "Modular Assembly and Air-Stable Electrochemistry of Ruthenium Porphyrin Monolayers," T. A. Eberspacher, J. P. Collman, C. E. D. Chidsey, D. L. Donohue, H. Van Ryswyk, *Langmuir* *19*, 3814-3821 (2003).
85. "Photoelectron Spectroscopy to Probe the Mechanism of Electron Transfer Through Oligo(phenylene vinylene) Bridges," H. D. Sikes, Y. Sun, S. P. Dudek, C. E. D. Chidsey, P. Pianetta, *J. Phys. Chem. B* *107*, 1170-1173 (2003).
84. "Heterogeneous Electron-Transfer Kinetics for Ruthenium and Ferrocene Redox Moieties Through Alkanethiol Monolayers on Gold," J. F. Smalley, H. O. Finklea, C. E. D. Chidsey, M. R. Linford, S. E. Creager, J. P. Ferraris, K. Chalfant, T. Zawodzinsk, S. W. Feldberg, M. D. Newton, *J. Am. Chem. Soc.* *125*, 2004-2013 (2003).
83. "Future Directions in Solid State Chemistry: Report of the NSF-Sponsored Workshop," R. J. Cava, F. J. DiSalvo, L. E. Brus, K. R. Dunbar, C. B. Gorman, S. M. Haile, L. V. Interrante, J. L. Musfeldt, A. Navrotsky, R. G. Nuzzo, W. E. Pickett, A. P. Wilkinson, C. Ahn, J. W. Allen, P. C. Burns, G. Ceder, C. E. D. Chidsey, W. Clegg, E. Coronado, H. J. Dai, M. W. Deem, B. S. Dunn, G. Galli, A. J. Jacobson, M. Kanatzidis, W. B. Lin, A. Manthiram, M. Mrksich, D. J. Norris, A. J. Nozik, X. G. Peng, C. Rawn, D. Rolison, D. J. Singh, B. H. Toby, S. Tolbert, U. B. Wiesner, P. M. Woodward, P. D. Yang, *Progress in Solid State Chemistry* *30*, 1-101 (2002).
82. "Surface Functionalization of Alkyl Monolayers by Free-Radical Activation: Gas-Phase Photochlorination with Cl₂," M. R. Linford and Christopher E. D. Chidsey, *Langmuir* *18*, 6217-6221 (2002).

81. "Submicrosecond Electron Transfer to Monolayer-Bound Redox Species on Gold Electrodes at Large Overpotentials," David B. Robinson and Christopher E. D. Chidsey, *J. Phys. Chem. B* 106, 10706-10713 (2002).
80. "Olefin Additions on H-Si(111): Evidence for a Surface Chain Reaction Initiated at Isolated Dangling Bonds," R. L. Cicero, C. E. D. Chidsey, G. P. Lopinsky, D. D. M. Wayner and R. A. Wolkow, *Langmuir* 18, 305-307 (2002).
79. "Distance Dependence of the Electron-Transfer Rate Across Covalently-Bonded Monolayers on Silicon," J. Cheng, D. B. Robinson, R. L. Cicero, T. A. Eberspacher, C. J. Barrelet and C. E. D. Chidsey, *J. Phys. Chem. B* 105, 10900-10904 (2001).
78. "Synthesis of Ferrocene Thiols Containing Oligo(phenylenevinylene) Bridges and their Characterization on Gold Electrodes," S. P. Dudek, H. D. Sikes and C. E. D. Chidsey, *J. Am. Chem. Soc.* 123, 8033-8038 (2001).
77. "Control of Ozonated Water Cleaning Process for Photoresist Removal," S. W. Lim, C. E. D. Chidsey, *Ultra Clean Processing Of Silicon Surfaces 2000* 76-77, 215-218 (2001).
76. "Surface Characterization and Electrochemical Properties of Alkyl, Fluorinated Alkyl and Alkoxy Monolayers on Silicon," C. J. Barrelet, D. B. Robinson, J. Cheng, T. P. Hunt, C. F. Quate and C. E. D. Chidsey, *Langmuir* 17, 3460-3465 (2001).
75. "Rapid Electron Tunneling Through Oligophenylenevinylene Bridges," H. D. Sikes, J. F. Smalley, S. P. Dudek, A. R. Cook, M. D. Newton, C. E. D. Chidsey and S. W. Feldberg, *Science* 291, 1519-1523 (2001).
74. "Effect of Silicon Surface Termination on Copper Deposition in Deionized Water," S. W. Lim, R. T. Mo, P. A. Pianetta and C. E. D. Chidsey, *Journal of the Electrochemical Society* 148, C16-C20 (2001).
73. "Photoreactivity of Unsaturated Compounds with Hydrogen-Terminated Silicon (111)," R. L. Cicero, M. R. Linford, C. E. D. Chidsey, *Langmuir* 16, 5688-5695 (2000).
72. "Kinetics of Electrode Reactions," C. E. D. Chidsey, a vignette within R. S. Berry, S. A. Rice, J. Ross, *Physical Chemistry*, Oxford Press, New York (2000).
71. "Defect States at Silicon Surfaces," A. J. Reddy, J. V. Chan, T. A. Burr, R. Mo, C. P. Wade, C. E. D. Chidsey, J. Michel and L. C. Kimerling, *Physica B* 274, 468-472 (1999).

70. "Alkyl-Terminated Si(111) Surfaces: A High-Resolution, Core-Level Photoelectron-Spectroscopy Study," J. Terry, M. R. Linford, C. Wigren, R. Y. Cao, P. Pianetta, C. E. D. Chidsey, *J. Appl. Phys.* 85, 213-221 (1999).
69. "Hole Limited Recombination in Polymer Light-Emitting Diodes," J. C. Scott, G. G. Malliaras, W. D. Chen, J.-C. Breach, J. R. Salem, P. J. Brock, S. B. Sachs and C. E. D. Chidsey, *Appl. Phys. Lett.* 74, 1510-1512 (1999).
68. "Selective Nucleation Mechanism of Trace Metal Contaminants at Surface Defects of Silicon Wafers in Aqueous Fluoride Solution," T. Homma, C. E. D. Chidsey, M. Watanabe and K. Nagai, *Electrochemical Society Proceedings* PV98(13), 250 (1998).
67. "Electronic Desorption of Alkyl Monolayers from Silicon by Very Highly-Charged Ions," T. Schenkel, M. Schneider, M. Hattass, M. W. Newman, A. V. Barnes, A. V. Hamza, D. H. Schneider, R. L. Cicero, C. E. D. Chidsey, *J. Vac. Sci. & Technol. B* 16, 3298-3300 (1998).
66. "Nucleation of Trace Copper on the H-Si(111) Surface in Aqueous Fluoride Solutions," T. Homma, C. P. Wade, C. E. D. Chidsey, *J. Phys. Chem. B.* 102, 7919-7923 (1998).
65. "Synthesis and Properties of Metalloporphyrin Monolayers and Stacked Multilayers Bound to an Electrode via Site Specific Axial Ligation to a Self-Assembled Monolayer", D. A. Offord, S. B. Sachs, M. S. Ennis, T. A. Eberspacher, J. H. Griffin, C. E. D. Chidsey and J. P. Collman, *J. Am. Chem. Soc.* 120, 4478-4487 (1998).
64. "D-Si(111) (1x1) Surface for the Study of Silicon Etching in Aqueous Solutions," H. Luo and C. E. D. Chidsey, *Appl. Phys. Lett.* 72, 477-479 (1998).
63. "Reactivity of the H-Si(111) Surface," J. Terry, R. Mo, C. Wigren, R. Cao, G. Mount, P. Pianetta, M. Linford, C.E.D. Chidsey, *Nucl. Instrum. Methods Phys. Res. B* 133, 94-101 (1997)
62. "Preparation of Pit-Free Hydrogen-Terminated Si(111) in Deoxygenated Ammonium Fluoride," C. P. Wade and C. E. D. Chidsey, *Mat. Res. Soc. Symp. Proc.* 477, 299-304 (1997).
61. "Infrared Spectroscopy of Covalently Bonded Species on Silicon Surfaces: Deuterium, Chlorine and Cobalt Tetracarbonyl," H. Luo, C. E. D. Chidsey and Y. Chabal, *Mat. Res. Symp. Proc.* 477, 415-420 (1997).
60. "An Analysis of Infrared Spectroscopic Geometries," G. T. Merklin, H. Luo and C. E. D. Chidsey, *Mat. Res. Symp. Proc.* 477, 353-358 (1997).

59. "Rates of Interfacial Electron Transfer Through π -Conjugated Spacers," S. B. Sachs, S. P. Dudek, R. P. Hsung, L. R. Sita, J. F. Smalley, M. D. Newton, S. W. Feldberg and C. E. D. Chidsey, *J. Am. Chem. Soc.* *119*, 10563-10564 (1997).
58. "Etch Pit Initiation by Dissolved Oxygen on Terraces of H-Si(111)," C. P. Wade and C. E. D. Chidsey, *Appl. Phys. Lett.* *71*, 1679-1681 (1997).
57. "Determination of the Bonding of Alkyl Monolayers to the Si(111) Surface Using Chemical-Shift, Scanned-Energy Photoelectron Diffraction," J. Terry, M. R. Linford, C. Wigren, R. Cao, P. Pianetta and C. E. D. Chidsey, *Appl. Phys. Lett.* *71*, 1056-1058 (1997).
56. "STM Studies of Electrode/Electrolyte Interfaces and Silicon Surface Reactions in Controlled Atmospheres," C. P. Wade, H. Luo, W. L. Dunbar, M. R. Linford and C. E. D. Chidsey, *Mat. Res. Soc. Symp. Proc.* *451*, 173-183 (1997).
55. "Bioreactive Self-Assembled Monolayers on Hydrogen-Passivated Si(111) as a New Class of Atomically Flat Substrates for Biological Scanning Probe Microscopy", P. Wagner, S. Nock, J. A. Spudich, W. D. Volkmuth, S. Chu, R. L. Cicero, C. P. Wade, M. R. Linford, C. E. D. Chidsey, *J. Struct. Biology* *119*, 189-201 (1997).
54. "Using Self-Assembled Monolayers to Modify Electrode Interfaces in Organic Light-Emitting Diodes," W. Chen, S. Burnham and C. E. D. Chidsey, J. C. Scott, *Polym. Prepr.* *38*, 936 (1997).
53. "Functionalization of Alkyl Monolayers on Surfaces with Diverse Amines: Photochemical Chlorosulfonation Followed by Sulfonamide Formation," R. L. Cicero, P. Wagner, M. R. Linford, C. J. Hawker, R. M. Waymouth and C. E. D. Chidsey, *Polym. Prepr.* *38*, 904-905 (1997).
52. "The Bulge-Blister Test As a Probe of Adhesion at the Polymer/Solid Interface," C. E. D. Chidsey, H. Luo, W. H. Limburg, W. D. Nix and R. J. Hohlfelder, *Polym. Prepr.* *38*, 947-948 (1997).
51. "Measuring Interfacial Fracture Toughness with the Blister Test," R. J. Hohlfelder, H. Luo, J. J. Vlassak, C. E. D. Chidsey and W. D. Nix, *Mater. Res. Soc. Symp. Proc.* *436*, 115-120 (1997).
50. "Mechanism for the Chemisorption of Contaminants on Hydrogen-terminated Silicon Surfaces," C. E. D. Chidsey and M. R. Linford, *Proc. 4th International Symposium on Cleaning Technology in Semiconductor Device Manufacturing, Electrochemical Society Proceedings 95-20*, 455-463, (1996).

49. "Thiophenol Protecting Groups for the Palladium-Catalyzed Heck Reaction: Efficient Syntheses of Conjugated Arylthiols," R. P. Hsung, J. R. Babcock, C. E. D. Chidsey and L. R. Sita, *Tet. Lett.* *36*, 4525-4528 (1995).
48. "Molecular Layers Covalently Bonded to Silicon Surfaces," M. R. Linford and C. E. D. Chidsey, US Patent No. 5,429,708 (1995).
47. "Synthesis and Characterization of Unsymmetric Ferrocene-Terminated Phenylethynyl Oligomers, $\text{Cp}_2\text{Fe}-[\text{C}\equiv\text{C}-\text{C}_6\text{H}_4]_n\text{-X}$, for $\text{X} = \text{SH}$, SMe , SOMe , and SO_2Me ," R. P. Hsung, C. E. D. Chidsey and L. R. Sita, *Organometallics* *14*, 4808-4815 (1995).
46. "The Kinetics of Electron Transfer Through Ferrocene-Terminated Alkanethiol Monolayers on Gold," J. F. Smalley, S. W. Feldberg, C. E. D. Chidsey, M. R. Linford, M. D. Newton and Y.-P. Liu, *J. Phys. Chem.* *99*, 13141-13149 (1995).
45. "Alkyl Monolayers on Silicon Prepared from 1-Alkenes and Hydrogen-Terminated Silicon," M. R. Linford, P. Fenter, P. M. Eisenberger and C. E. D. Chidsey, *J. Am. Chem. Soc.* *117*, 3145-3155 (1995).
44. "Blister Test Analysis Methods," R. J. Hohlfelder, J. J. Vlassak, W. D. Nix, H. Luo and C. E. D. Chidsey, *Mat. Res. Soc. Symp. Proc.* *356*, 585-590 (1995).
43. "An Unexpected Packing of Fluorinated n-Alkane Thiols on Au(111): A Combined Atomic Force Microscopy and X-Ray Diffraction Study," G.-Y. Liu, P. Fenter, C. E. D. Chidsey, D. F. Ogletree, P. Eisenberger and M. Salmeron, *J. Chem. Phys.* *101*, 4301-4306 (1994).
42. "Protective Treatments for Nickel-Based Contact Materials," H. H. Law, J. Sapjeta, C. E. D. Chidsey and T. M. Putvinski, *J. Electrochem. Soc.* *141*, 1977-1982 (1994).
41. "Alkyl Monolayers Covalently Bonded to Silicon Surfaces," M. R. Linford and C. E. D. Chidsey, *J. Am. Chem. Soc.* *115*, 12631-12632 (1993).
40. "Stable Polar Optical Nonlinear Multilayer Films and Devices Using the Same," C. E. D. Chidsey, H. E. Katz, T. M. Putvinski, G. Scheller, M. L. Schilling and W. L. Wilson, US Patent #5,217,792 (1993).
39. "Structural Defects in Self-Assembled Organic Monolayers Via Combined Atomic Beam and X-Ray Diffraction," N. Camillone, III, C. E. D. Chidsey, P. Eisenberger, P. Fenter, J. Li, K. S. Liang, G. -Y. Liu, G. Scoles, *J. Chem. Phys.* *99*, 744-747 (1993).

38. "Structural Studies of Zirconium Alkylphosphonate Monolayers and Multilayer Assemblies," M. L. Schilling, H. E. Katz, S. M. Stein, S. F. Shane, W. L. Wilson, S. B. Ungashe, G. N. Taylor, T. M. Putvinski, C. E. D. Chidsey and S. Buratto, *Langmuir* 9, 2156-2160 (1993).
37. "The Electrode/Electrolyte Interface -- A Status Report," A. J. Bard, H. D. Abruna, C. E. Chidsey, L. R. Faulkner, S. W. Feldberg, K. Itaya, M. Majda, O. Melroy, R. W. Murray, M. Porter, M. Soriaga, H. White, *J. Phys. Chem.* 97, 7147-7173 (1993).
36. "Superlattice Structure at the Surface of a Monolayer of Octadecanethiol Self-Assembled on Au(111)," N. Camillone III, C. E. D. Chidsey, G. Liu and G. Scoles, *J. Chem. Phys.* 98, 3503-3511 (1993).
35. "Substrate Dependence of the Surface Structure and Chain Packing of Docosyl Mercaptan Self-Assembled on the (111), (110) and (100) Faces of Single Crystal Gold," N. Camillone III, C. E. D. Chidsey, G. Liu and G. Scoles, *J. Chem. Phys.* 98, 4234-4245 (1993).
34. "Process for Making Corrosion-Resistant Articles." C. E. D. Chidsey and H. H. Law, US Patent #5,178,916 (1993); Eur. Patent #520649.
33. "Ion/Surface Collisions at Functionalized Self-Assembled Monolayer Surfaces," M. Morris, D. E. Riederer, Jr., B. E. Winger, R. G. Cooks, T. Ast and C. E. D. Chidsey, *Int. J. Mass Spectrom. Ion Processes* 122, 181-217 (1992).
32. "Synthesis and Deposition of Electron Donors, Acceptors, and Insulators as Components of Zirconium Diphosphonate Multilayer Films," H. E. Katz, M. L. Schilling, S. Ungashe, T. M. Putvinski, C. E. Chidsey, *ACS Symp. Ser.* 499, 24-32 (1992).
31. "Polar Orientation of Dyes in Robust Multilayers by Zirconium Phosphate-Phosphonate Interlayers," H. E. Katz, G. Scheller, T.M. Putvinski, M. L. Schilling, W. L. Wilson and C. E. D. Chidsey, *Science* 254, 1485-1487 (1991).
30. "Surface Reactions and Surface-Induced Dissociation of Polyatomic Ions at Self-Assembled Organic Monolayer Surfaces," B. E. Winger, R. K. Julian, R. G. Cooks and C. E. D. Chidsey, *J. Am. Chem. Soc.* 113, 8967-8969 (1991).
29. "In-Situ STM Observation of Corrosion of Silver/Gold Alloys," I. C. Oppenheim, D. J. Trevor, C. E. D. Chidsey, P. L. Trevor and K. Sieradzki, *Science* 254, 687-689 (1991).
28. "Quaterthiophenediphosphonic Acid (QDP): A Rigid, Electron-Rich Building Block for Zirconium-Based Multilayers," H. E. Katz, M. L. Schilling, C. E. D. Chidsey, T. M. Putvinski and R. S. Hutton, *Chem. Mater.* 3, 699-703 (1991).

27. "Scanning Tunneling Microscopy at the Metal-Electrolyte Interface," C. E. D. Chidsey, *Proc. Symposium on Applications of Surface Analysis Methods to Environmental/Material Interactions, Electrochemical Society Proceedings 91-7*, 257-264 (1991).
26. "Surface Structure and Thermal Motion of n-Alkane Thiols Self-Assembled on Au (111) Studied by Low Energy Helium Diffraction," N. Camillone, C. E. D. Chidsey, G.-Y. Liu, T. M. Putvinski and G. Scoles, *J. Chem. Phys.* *94*, 8493-8502 (1991).
25. "Free Energy and Temperature Dependence of Electron Transfer at the Metal-Electrolyte Interface," C. E. D. Chidsey, *Science* *251*, 919-922 (1991).
24. "Room Temperature Surface Diffusion Mechanisms Observed by Scanning Tunneling Microscopy," D. J. Trevor and C. E. D. Chidsey, *J. Vac. Sci. Technol. B* *9*, 964-968 (1991).
23. "Helium Diffraction from Overlayers Physisorbed on a Self-Assembled Organic Monolayer," C. E. D. Chidsey, G.-Y. Liu, G. Scoles and J. Wang, *Langmuir* *6*, 1804-1806 (1990).
22. "Self-Assembly of Organic Multilayers with Polar Order Using Zirconium Phosphate Bonding Between Layers," T. M. Putvinski, M. L. Schilling, H. E. Katz, C. E. D. Chidsey, A. M. Majsce and A. B. Emerson, *Langmuir* *6*, 1567-1571 (1990).
21. "Coadsorption of Ferrocene-Terminated and Unsubstituted Alkane Thiols on Gold: Electroactive Self-Assembled Monolayers," C. E. D. Chidsey, C. R. Bertozzi, T. M. Putvinski and A. M. Majsce, *J. Am. Chem. Soc.* *112*, 4301-4306 (1990).
20. "Chemical Functionality in Self-Assembled Monolayers: Structural and Electrochemical Properties," C. E. D. Chidsey and D. N. Loiacono, *Langmuir* *6*, 682-691 (1990).
19. "Molecular Order at the Surface of an Organic Monolayer Studied by Low Energy Helium Diffraction," C. E. D. Chidsey, G.-Y. Liu, P. Rowntree and G. Scoles, *J. Chem. Phys.* *91*, 4421-4423 (1989).
18. "*In Situ* Scanning-Tunneling-Microscope Observation of Roughening, Annealing, and Dissolution of Gold (111) in an Electrochemical Cell," D. J. Trevor, C. E. D. Chidsey and D. N. Loiacono, *Phys. Rev. Lett.* *62*, 929-932 (1989).
17. "STM Study of the Surface Morphology of Gold on Mica," C. E. D. Chidsey, D. N. Loiacono, T. Sleator and S. Nakahara, *Surf. Sci.* *200*, 45-66 (1988).

16. "Monolayer Vibrational Spectroscopy by Infrared-Visible Sum Generation at Metal and Semiconductor Surfaces," A. L. Harris, C. E. D. Chidsey, N. J. Levinos and D. N. Loiacono, *Chem. Phys. Lett.* *141*, 350-356 (1987).
15. "Spontaneously Organized Molecular Assemblies. 4. Structural Characterization of n-Alkyl Thiol Monolayers on Gold by Optical Ellipsometry, Infrared Spectroscopy, and Electrochemistry," M. D. Porter, T. B. Bright, D. L. Allara and C. E. D. Chidsey, *J. Am. Chem. Soc.* *109*, 3559-3568 (1987).
14. "Micrometer-Spaced Platinum Interdigitated Array Electrode: Fabrication, Theory and Initial Use," C. E. D. Chidsey, B. J. Feldman, C. Lundgren and R. W. Murray, *Anal. Chem.* *58*, 601-607 (1986).
13. "Redox Capacity and Direct Current Electron Conductivity in Electroactive Materials," C. E. D. Chidsey and R. W. Murray, *J. Phys. Chem.* *90*, 1479-1484 (1986).
12. "Electroactive Polymers and Macromolecular Electronics," C. E. D. Chidsey and R. W. Murray, *Science* *231*, 25-31 (1986).
11. "Electrochemistry of Polymer Films Not Immersed in Solution: Electron Transfer on an Ion Budget," J. J. Jernigan, C. E. D. Chidsey and R. W. Murray, *J. Am. Chem. Soc.* *107*, 2824-2826 (1985).
10. "Effect of Magnetic Fields on the Triplet State Lifetime in Photosynthetic Reaction Centers: Evidence for Thermal Repopulation of the Initial Radical Pair," C. E. D. Chidsey, L. Takiff, R. A. Goldstein and S. G. Boxer, *Proc. Natl. Acad. Sci. USA* *82*, 6850-6854 (1985).
9. "Magnetic Field Dependence of Radical-Pair Decay Kinetics and Molecular Triplet Quantum Yield in Quinone-Depleted Reaction Centers," C. E. D. Chidsey, C. Kirmaier, D. Holten and S. G. Boxer, *Biochim. Biophys. Acta* *766*, 424-437 (1984).
8. "Magnetic Field Effects on Reaction Yields in the Solid State: An Example from Photosynthetic Reaction Centers," S. G. Boxer, C. E. D. Chidsey and M. G. Roelofs, *Ann. Rev. Phys. Chem.* *34*, 389-417 (1983).
7. "Anisotropic Magnetic Interactions in the Primary Radical Ion-Pair of Photosynthetic Reaction Centers," S. G. Boxer, C. E. D. Chidsey and M. G. Roelofs, *Proc. Natl. Acad. Sci. USA* *79*, 4632-4636 (1982).
6. "Contributions of Spin-Spin Interactions to the Magnetic Field Dependence of the Triplet Quantum Yield in Photosynthetic Reaction Centers," M. G. Roelofs, C. E. D. Chidsey and S. G. Boxer, *Chem. Phys. Lett.* *87*, 582-588 (1982).

5. "Dependence of the Yield of a Radical-Pair Reaction in the Solid State on Orientation in a Magnetic Field," S. G. Boxer, C. E. D. Chidsey and M. G. Roelofs, *J. Am. Chem. Soc.* *104*, 2674-2675 (1982).
4. "Use of Large Magnetic Fields To Probe Photoinduced Electron-Transfer Reactions: An Example from Photosynthetic Reaction Centers," S. G. Boxer, C. E. D. Chidsey and M. G. Roelofs, *J. Am. Chem. Soc.* *104*, 1452-1454 (1982).
3. "The Effects of Large Magnetic Fields and the g-Factor Difference on the Triplet Population in Photosynthetic Reaction Centers," C. E. D. Chidsey, M. G. Roelofs and S. G. Boxer, *Chem. Phys. Lett.* *74*, 113-118 (1980).
2. "Cationic Cobalt(I) Carbonyl Compounds Containing Complexed Cyclobutadienes," C. E. D. Chidsey, W. A. Donaldson and R. P. Hughes, *J. Organomet. Chem.* *169*, C12-C14 (1979).
1. "Interactions of Small Organic Rings with Transition Metals. Formation of η^3 -Cyclobutenoyl Complexes by the Ring Expansion of 2-Cyclopropene-1-carbonyl Metal Species," C. E. D. Chidsey, W. A. Donaldson, R. P. Hughes and P. F. Sherwin, *J. Am. Chem. Soc.* *101*, 233-235 (1979).