

## PUBLICATIONS

1. Chandler, D. and I. Oppenheim, "Some comments on the third and second laws of Thermodynamics," J. Chem. Ed. 43, 525-527 (1966). [[LINK](#)]
2. Chandler, D. and I. Oppenheim, "Fluctuation theory and critical phenomena," J. Chem. Phys. 49, 2121-2127 (1968). [[LINK](#)]
3. Andersen, H.C. and D. Chandler, "Mode expansion in equilibrium statistical mechanics. I. General theory and application to the classical electron gas," J. Chem. Phys. 53, 547-554 (1970). [[LINK](#)]
4. Chandler, D. and J.D. Weeks, "Equilibrium structure of simple liquids," Phys. Rev. Lett. 25, 149-152 (1970). [[LINK](#)]
5. Chandler, D. and H.C. Andersen, "Mode expansion in equilibrium statistical mechanics. II. A rapidly converging theory of ionic solutions," J. Chem. Phys. 54, 26-33 (1971). [[LINK](#)]
6. Weeks, J.D., D. Chandler and H.C. Andersen, "Role of repulsive forces in forming the equilibrium structure of simple liquids," J. Chem. Phys. 54, 5237-5247 (1971). [[LINK](#)]
7. Andersen, H.C. and D. Chandler, "Mode expansion in equilibrium statistical mechanics. III. Optimized convergence and application to ionic solution theory," J. Chem. Phys. 55, 1497-1504 (1971). [[LINK](#)]
8. Wheeler, J.C. and D. Chandler, "Catastrophe in the random-phase approximation: Critique of a theory of phase transitions," J. Chem. Phys. 55, 1645-1654 (1971). [[LINK](#)]
9. Andersen, H.C., J.D. Weeks and D. Chandler, "Relationship between the hard-sphere fluid and fluids with realistic repulsive forces," Phys. Rev. A 4, 1597-1607 (1971). [[LINK](#)]
10. Weeks, J.D., D. Chandler and H.C. Andersen, "Perturbation theory of the thermodynamic properties of simple liquids," J. Chem. Phys. 55, 5422-5423 (1971). [[LINK](#)]
11. Andersen, H.C., D. Chandler and J.D. Weeks, "Roles of repulsive and attractive forces in liquids: The optimized random phase approximation," J. Chem. Phys. 56, 3812-3823 (1972). [[LINK](#)]
12. Sung, S. and D. Chandler, "Perturbation theory for repulsive forces in classical fluids: Selected applications," J. Chem. Phys. 56, 4989-4994 (1972). [[LINK](#)]
13. Katz, I. and D. Chandler, "Nonexistence of solid-like solutions to the mean-spherical-model equations," Phys. Rev. Lett. 29, 247-249 (1972). [[LINK](#)]

14. Andersen, H.C. and D. Chandler, "Optimized cluster expansions for classical fluids. I. General theory and variational formulations of mean spherical model and hard sphere Percus-Yevick equations," J. Chem. Phys. 57, 1918-1929 (1972). [[LINK](#)]
15. Chandler, D. and H.C. Andersen, "Optimized cluster expansions for classical fluids. II. Theory of molecular liquids," J. Chem. Phys. 57, 1930-1931 (1972). [[LINK](#)]
16. Andersen, H.C., D. Chandler and J.D. Weeks, "Optimized cluster expansions for classical fluids. III. Applications to ionic solutions and simple liquids," J. Chem. Phys. 57, 2626-2631 (1972). [[LINK](#)]
17. Chandler, D., "Derivation of an integral equation for pair correlation functions in molecular fluids," J. Chem. Phys. 59, 2742-2746 (1973). [[LINK](#)]
18. Kim, K. and D. Chandler, "Hard sphere diffusion model and the velocity autocorrelation function for the Lennard-Jones fluid," J. Chem. Phys. 59, 5215-5216 (1973). [[LINK](#)]
19. Lowden, L.J. and D. Chandler, "Solution of a new integral equation for pair correlation functions in molecular liquids," J. Chem. Phys. 59, 6587-6595 (1973). [[LINK](#)]
20. Lowden, L.J. and D. Chandler, "Erratum and Addenda: Solution of a new integral equation for pair correlation function in molecular liquids," J. Chem. Phys. 62, 4246 (1975). [[LINK](#)]
21. Sung, S. and D. Chandler, "Optimized cluster theory, the Lennard-Jones fluid, and the liquid-gas phase transition," Phys. Rev. A 9, 1688-1697 (1974). [[LINK](#)]
22. Chandler, D., "Translational and rotational diffusion in liquids. I. Translational single particle correlation functions," J. Chem. Phys. 60, 3500-3507 (1974). [[LINK](#)]
23. Chandler, D., "Translational and rotational diffusion in liquids. II. Orientational single particle correlation functions," J. Chem. Phys. 60, 3508-3512 (1974). [[LINK](#)]
24. Sung, S., D. Chandler and B.J. Alder, "Optimized cluster theory corrections to the van der Waals model of mixtures," J. Chem. Phys. 61, 932-935 (1974). [[LINK](#)]
25. Chandler, D., "Equilibrium structure and molecular motion in liquids," Accts. Chem. Res. 7, 246-251 (1974). [[LINK](#)]
26. Lowden, L.J. and D. Chandler, "Theory of intermolecular pair correlations for molecular liquids. Applications to the liquids Carbon Tetrachloride, Carbon Disulfide, Carbon Diselenide, and Benzene," J. Chem. Phys. 61, 5228-5241 (1974). [[LINK](#)]
27. Chandler, D., "Rough hard sphere theory of the self-diffusion constant for molecular liquids," J. Chem. Phys. 62, 1358-1367 (1975). [[LINK](#)]

28. Ladanyi, B.M. and D. Chandler, "New type of cluster theory for molecular fluids: Interaction site cluster expansion," J. Chem. Phys. 62, 4308-4324 (1975). [\[LINK\]](#)
29. Chandler, D., "Cluster diagrammatic analysis of the RISM equation," Mol. Phys. 31, 1213-1223 (1976). [\[PDF\]](#)
30. Hsu, C.S., D. Chandler and L.J. Lowden, "Application of the RISM equation to diatomic fluids: The liquids Nitrogen, Oxygen and Bromine," Chem. Phys. 14, 213-228 (1976). [\[LINK\]](#)
31. Andersen, H.C., D. Chandler and J.D. Weeks, "Roles of repulsive and attractive forces in liquids, The equilibrium theory of classical fluids," Adv. Chem. Phys. 34, 105-155 (1976). [\[PDF\]](#)
32. Chandler, D. and L.R. Pratt, "Statistical mechanics of chemical equilibria and intramolecular structures of non-rigid molecules in condensed phases," J. Chem. Phys. 65, 2925-2940 (1976). [\[LINK\]](#)
33. Pratt, L.R. and D. Chandler, "Interaction site cluster series for the Helmholtz free energy and variational principle for chemical equilibria and intramolecular structures," J. Chem. Phys. 66, 147-151 (1977). [\[LINK\]](#)
34. Chandler, D., C.S. Hsu and W.B. Street, "Comparison of Monte Carlo and RISM calculations for pair correlation functions," J. Chem. Phys. 66, 5231-5234 (1977). [\[LINK\]](#)
35. Chandler, D, "The dielectric constant and related equilibrium properties of molecular fluids: Interaction site cluster theory analysis," J. Chem. Phys. 67, 1113-1124 (1977). [\[LINK\]](#)
36. Pratt, L.R. and D. Chandler, "Theory of the hydrophobic effect," J. Chem. Phys. 67, 3683-3704 (1977). [\[LINK\]](#)
37. Chandler, D., "Statistical mechanics of isomerization dynamics in liquids and the transition state approximation," J. Chem. Phys. 68, 2959-2970 (1978). [\[LINK\]](#)
38. Pratt, L.R., C.S. Hsu and D. Chandler, "Statistical mechanics of small chain molecules in liquids. I. Effects of liquid packing on conformational structures," J. Chem. Phys. 68, 4202-4212 (1978). [\[LINK\]](#)
39. Hsu, C.S., L.R. Pratt and D. Chandler, "Statistical mechanics of small chain molecules in liquids. II. Intermolecular pair correlations for liquid n-Butane," J. Chem. Phys. 68, 4213-4217 (1978). [\[LINK\]](#)
40. Hsu, C.S. and D. Chandler, "RISM calculation of the structure of liquid Acetonitrile," Mol. Phys. 36, 215-224 (1978). [\[PDF\]](#)
41. Chandler, D., "Structures of molecular liquids," Annu. Rev. Phys. Chem. 29, 441-471 (1978). [\[LINK\]](#)

42. Chandler, D., "Effects of liquid structures on chemical reactions and conformational changes of non-rigid molecules in condensed phases," Faraday Discuss. Chem. Soc. 66, 184-190 (1978). [\[LINK\]](#)
43. Hsu, C.S. and D. Chandler, "RISM calculation of the structure of liquid chloroform," Mol. Phys. 37, 299-301 (1979). [\[PDF\]](#)
44. Rebertus, D.W., B.J. Berne and D. Chandler, "A molecular dynamics and Monte Carlo study of solvent effects on the conformational equilibrium of n-Butane in CCl<sub>4</sub>," J. Chem. Phys. 70, 3395-3400 (1979). [\[LINK\]](#)
45. Montgomery, J.A., Jr., D. Chandler and B.J. Berne, "Trajectory analysis of a kinetic theory for isomerization dynamics in condensed phases," J. Chem. Phys. 70, 4056-4066 (1979). [\[LINK\]](#)
46. Chandler, D. and B.J. Berne, "Comment on the role of constraints on the conformational structure of n-Butane in liquid solvents," J. Chem. Phys. 71, 5386-5387 (1979). [\[LINK\]](#)
47. Pratt, L.R. and D. Chandler, "Hydrophobic interactions and osmotic second virial coefficients for Methanol in water," J. Solution Chem. 9, 1-17 (1980). [\[LINK\]](#)
48. Pratt, L.R. and D. Chandler, "Effective intramolecular potentials for molecular Bromine in Argon," J. Chem. Phys. 72, 4045-4048 (1980). [\[LINK\]](#)
49. Pratt, L.R., R.O. Rosenberg, B.J. Berne and D. Chandler, "Comment in the structure of a simple liquid solvent near an n-Butane solute molecule," J. Chem. Phys. 73, 1002-1003 (1980). [\[LINK\]](#)
50. Chandler, D., Book Review "Assemblies in Solution," Science 208, 1363 (1980). [\[LINK\]](#)
51. Pratt, L.R. and D. Chandler, "Hydrophobic solvation of nonspherical solutes," J. Chem. Phys. 73, 3430-3433 (1980). [\[LINK\]](#)
52. Pratt, L.R. and D. Chandler, "Effects of solvent-solute attractive forces on hydrophobic correlations," J. Chem. Phys. 73, 3434-3441 (1980). [\[LINK\]](#)
53. Montgomery, J.A., Jr., S.L. Holmgren and D. Chandler, "Stochastic molecular dynamics study of trans-gauche isomerization processes in simple chain molecules," J. Chem. Phys. 73, 3688-3694 (1980). [\[LINK\]](#)
54. Rosenberg, R.O., B.J. Berne and D. Chandler, "Isomerization dynamics in liquids by molecular dynamics," Chem. Phys. Lett. 75, 162-168 (1980). [\[LINK\]](#)
55. Stratt, R.M., S.L. Holmgren and D. Chandler, "Constrained impulsive molecular dynamics," Mol. Phys. 42, 1233-1243 (1981). [\[PDF\]](#)

56. Chandler, D. and P.G. Wolynes, "Exploiting the isomorphism between Quantum theory and classical statistical mechanics of polyatomic fluids," J. Chem. Phys. 74, 4078-4095 (1981). [\[LINK\]](#)
57. Schweizer, K.S., R.M. Stratt, D. Chandler and P.G. Wolynes, "Convenient and accurate discretized path integral methods for equilibrium Quantum Mechanical calculations," J. Chem. Phys. 75, 1347-1363 (1981). [\[LINK\]](#)
58. Chandler, D. "Equilibrium theory of polyatomic fluids," in Studies in Statistical Mechanics 8, 275-340 (J.L. Lebowitz and E.W. Montroll, eds.), North Holland, Amsterdam (1982).[\[PDF\]](#)
59. Thompson, M.J., K.S. Schweizer and D. Chandler, "Quantum theory of polarization in liquids: Exact solution of the mean spherical and related approximations," J. Chem. Phys. 76, 1128-1135 (1982). [\[LINK\]](#)
60. Schweizer, K.S. and D. Chandler, "Vibrational dephasing and frequency shifts of polyatomic molecules in solution," J. Chem. Phys. 76, 2296-2314 (1982). [\[LINK\]](#)
61. Chandler, D., R. Silbey and B.M. Ladanyi, "New and proper integral equations for site-site equilibrium correlations in molecular fluids," Mol. Phys. 46, 1335-1345 (1982).[\[PDF\]](#)
62. Chandler, D., G.S. Joslin and J.M. Deutch, "Calculation of the dielectric constant of polyatomic fluids with the interaction site formalism," Mol. Phys. 47, 871-879 (1982).[\[PDF\]](#)
63. Chandler, D., K.S. Schweizer and P.G. Wolynes, " Electronic states of a topologically disordered system: Exact solution of the mean spherical model for liquids," Phys. Rev. Lett. 49, 1100-1103 (1982). [\[LINK\]](#)
64. Schweizer, K.S. and D. Chandler, "Quantum theory of solvent effects on electronic spectra; Predictions of the exact solution of the mean spherical model," J. Chem. Phys. 78, 4118-4125 (1983). [\[LINK\]](#)
65. Chandler, D., J.D. Weeks and H.C. Andersen, "The Van der Waals Picture of Liquids, Solids and Phase Transformations," Science 220, 787-794 (1983). Reprinted in "Frontiers in the Chemical Sciences", ed. by W. Spindel and R. M. Simon, American Association for the Advancement of Science, Washington, 1986. [\[LINK\]](#)
66. Chandler, D. and D.M. Richardson, "Theory of orientational pair correlations in molecular fluids," J. Phys. Chem. 87, 2060-2064 (1983). [\[LINK\]](#)
67. Chandler, D., Y. Singh and D.M. Richardson, "Excess electrons in simple fluids. I. General equilibrium theory for classical hard sphere solvents," J. Chem. Phys. 81, 1975-1982 (1984). [\[LINK\]](#)
68. Chandler, D. "Quantum theory of solvation," J. Phys. Chem. 88, 3400-3407 (1984). [\[LINK\]](#)

69. Richardson, D.M. and D. Chandler, "Calculation of orientational pair correlation factors with the interaction site formalism," J. Chem. Phys. 80, 4484-4487 (1984). [\[LINK\]](#)
70. Nichols, A.L., III, D. Chandler, Y. Singh and D.M. Richardson, "Excess electrons in simple fluids. II. Numerical results for hard sphere solvents," J. Chem. Phys. 81, 5109-5116 (1984). [\[LINK\]](#)
71. Carmeli, B. and D. Chandler, "Effective Adiabatic approximation for two level system coupled to a bath," J. Chem. Phys. 82, 3400-3404 (1985). [\[LINK\]](#)
72. Sprik, M., M.L. Klein and D. Chandler, "Staging: A sampling technique for the Monte Carlo evaluation of path integrals," Phys. Rev. B 31, 4234-4244 (1985). [\[LINK\]](#)
73. Chandler, D., BOOK REVIEW "The liquid state," Science 228, 1191-1192 (1985). [\[LINK\]](#)
74. Singer, S.J. and D. Chandler, "Free energy functions in the extended RISM approximations," Mol. Phys. 55, 621-625 (1985). [\[PDF\]](#)
75. Sprik, M., M.L. Klein and D. Chandler, "Computer simulation of a quantum particle in a quenched disordered system: Direct observation of Lifshitz traps," Phys. Rev. B. 32, 545-547 (1985). [\[LINK\]](#)
76. Sprik, M., M.L. Klein and D. Chandler, "Simulation of an excess electron in a hard sphere fluid," J. Chem. Phys. 83, 3042-3049 (1985). [\[LINK\]](#)
77. Nichols, A.L., III and D. Chandler, "Excess electrons in simple fluids. III. Role of solvent polarization," J. Chem. Phys. 84, 398-403 (1986). [\[LINK\]](#)
78. Chandler, D., "Roles of classical dynamics and quantum dynamics on activated processes occurring in liquids," J. Stat. Phys. 42, 49-67 (1986). [\[LINK\]](#)
79. Pratt, L.R. and D. Chandler, "Theoretical and computational studies of hydrophobic interactions," Methods in Enzymology 127, 48-63 (1986). [\[PDF\]](#)
80. Allinger, K., B. Carmeli and D. Chandler, "Non-Gaussian influence functional for quantum systems," J. Chem. Phys. 84, 1724-1731 (1986). [\[LINK\]](#)
81. Singer, S.J., R.A. Kuharski and D. Chandler, "RISM calculation of the activation barrier for isomerization of solvated cyclohexane," J. Phys. Chem. 90, 6015-6017 (1986). [\[LINK\]](#)
82. Chandler, D., J.D. McCoy and S.J. Singer, "Density functional theory of nonuniform polyatomic systems. I. General formulation," J. Chem. Phys. 85, 5971-5976 (1986). [\[LINK\]](#)
83. Chandler, D., J.D. McCoy and S.J. Singer, "Density functional theory of nonuniform polyatomic systems. II. Rational closures for integral equations," J. Chem. Phys. 85, 5977-5982 (1986). [\[LINK\]](#)

84. Kuharski, R.A. and D. Chandler, "Solvation of multiply charged ions: Predictions using the reference interaction site method with hypernetted chain closure," J. Phys. Chem. 91, 2978-2981 (1987). [\[LINK\]](#)
85. Chandler, D., "Comment on 'A new rism integral equation for solvent polymers'," Chem. Phys. Lett. 140, 108-110 (1987). [\[LINK\]](#)
86. Laria, D. and D. Chandler, "Comparative Study of Theory and Simulation Calculations for Excess Electrons in Simple Fluids," J. Chem. Phys. 87, 4088-4092 (1987). [\[LINK\]](#)
87. Ding, K., D. Chandler, S.J. Smithline and A.D.J. Haymet, "Density-functional theory for the freezing of water," Phys. Rev. Lett. 59, 1698-1701 (1987). [\[LINK\]](#)
88. McCoy, J.D., S. Singer and D. Chandler, "A density functional treatment of the hard dumbbell freezing transition," J. Chem. Phys. 87, 4853-4858 (1987). [\[LINK\]](#)
89. Nichols, A.L., III and D. Chandler, "Excess electrons in simple fluids. IV. Real time behavior," J. Chem. Phys. 87, 6671-6681 (1987). [\[LINK\]](#)
90. Chandler, D., BOOK, Introduction to Modern Statistical Mechanics, (Oxford U. Press, New York, 1987), 274 pages. Translated and printed in Japanese (1990). Translated into Italian by F. Agostini, S. Bonella, S. Caprara and G. Ciccotti and printed in Italian (Edizione Nuova Cultura, Roma, 2009). [\[LINK\]](#)
91. Wu, D, B. Carmeli and D. Chandler, "Comments on a model influence functional for quantum systems," J. Chem. Phys. 88, 2861-2862 (1988). [\[LINK\]](#)
92. Kuharski, R.A., D. Chandler, J.A. Montgomery, Jr., F. Rabii and S.J. Singer, "Stochastic molecular dynamics study of cyclohexane isomerization," J. Phys. Chem. 92, 3261-3267 (1988). [\[LINK\]](#)
93. Carmeli, B. and D. Chandler, "Dynamics with the effective Adiabatic theory: The Bloch equations," J. Chem. Phys. 89, 452-458 (1988). [\[LINK\]](#)
94. Kuharski, R.A., J.S. Bader, D. Chandler, M. Sprik, M.L. Klein and R.W. Impey, "Molecular model for aqueous Ferrous-Ferric electron transfer," J. Chem. Phys. 89, 3248-3257 (1988). [\[LINK\]](#)
95. Ichiye, T. and D. Chandler, "Hypernetted chain closure reference interaction site method theory of structure and thermodynamics for Alkanes in water," J. Phys. Chem. 92, 5257-5261 (1988). [\[LINK\]](#)
96. Chandler, D., "Field theoretic models of liquids," in The Liquid State and Its Electrical Properties, ed. by E.E. Kunhardt, L.G. Christophorou and L.H. Luessen (Plenum Publishing Corp., 1988), p.1-13. [\[PDF\]](#)



97. Chandler, D., "Geometrical perspectives of a solvated electron," in *The Liquid State and Its Electrical Properties*, ed. by E.E. Kunhardt, L.G. Christophorou and L.H. Luessen (Plenum Publishing Corp., 1988), p. 173-177. [\[PDF\]](#)
98. Chandler, D. and R.A. Kuharski, "Two simulation studies of chemical dynamics in liquids," *Faraday Discuss. Chem. Soc.* 85, 329-339 (1988). [\[LINK\]](#)
99. Wu, D. and D. Chandler, BOOK, *Solution Manual for Introduction to Modern Statistical Mechanics* (Oxford U. Press, NY, 1988), 91 pages. Translated into Italian by F. Agostini, S. Bonella, S. Caprara and G. Ciccotti and printed in Italian (Edizione Nuova Cultura, Roma, 2009). [\[LINK\]](#)
100. Bader, J.S. and D. Chandler, "Computer simulation of photochemically induced electron transfer," *Chem. Phys. Lett.* 157, 501-504 (1989). [\[LINK\]](#)
101. Chandler, D., "Computer simulation of electron transfer," *Chemica Scripta* 29A, 61-62 (1989). [\[PDF\]](#)
102. Voth, G. A. , D. Chandler and W.H. Miller, "Time correlation function and path integral analysis of quantum rate constants," *J. Phys. Chem.* 93, 7009-7015 (1989). [\[LINK\]](#)
103. Voth, G.A., D. Chandler and W.H. Miller, "Rigorous formulation of quantum transition state theory and its dynamical corrections," *J. Chem. Phys.* 91, 7749-7760 (1989). [\[LINK\]](#)
104. Mak, C.H. and D. Chandler, "Solving the sign problem in quantum Monte Carlo dynamics," *Physical Rev. A* 41, 5709-5712 (1990). [\[LINK\]](#)
105. Bader, J.S., R.A. Kuharski and D. Chandler, "Role of nuclear tunneling in aqueous Ferrous-Ferric electron transfer," *J. Chem. Phys.* 93, 230-236 (1990). [\[LINK\]](#)
106. Voth, G.A., D. Chandler and W.H. Miller, "A new perspective on quantum mechanical transition state theory," in *Quantum Simulations of Condensed Matter Phenomena*, eds. J.D. Doll and J.E. Gubernatis (World Scientific Press, 1990), p. 391-400. [\[PDF\]](#)
107. Hsu, D and D. Chandler, "Reference interaction site model polaron theory of electron mobility in fluids," *J. Chem. Phys.* 93, 5075-5083 (1990). [\[LINK\]](#)
108. Chandler, D., "Liquid-phase chemical reactions, the pathways for important rare events," *J. Phys.: Condens. Matter* 2, SA9-SA13 (1990). [\[LINK\]](#)
109. Wilson, M.A. and D. Chandler, "Molecular dynamics study of Cyclohexane interconversion," *Chem. Phys.* 149, 11-20 (1990). [\[LINK\]](#)
110. Chandler, D., "Theory of quantum processes in liquids," in *Les Houches 51, Part 1, Liquids Freezing and Glass Transition*, ed. by D. Levesque, J.P. Hansen and J. Zinn-Justin [Elsevier Science Publishers, B.V. (North Holland) 1991], p. 193-285. [\[PDF\]](#)



111. Mak, C.H. and D. Chandler, "Coherent-incoherent transition and relaxation in condensed-phase tunneling systems," *Phys. Rev. A* 44, 2352-2369 (1991). [[LINK](#)]
112. Marchi, M. and D. Chandler, "Path integral calculation of the tunnel splitting in aqueous Ferrous-Ferric electron transfer," *J. Chem. Phys.* 95, 889-894 (1991). [[LINK](#)]
113. Leung, K. and D. Chandler, "Theory of percolation in fluids of long molecules," *J. Stat. Phys.* 63, 837-856 (1991). [[LINK](#)]
114. Laria, D., D. Wu and D. Chandler, "Reference interaction site model polaron theory of the hydrated electron," *J. Chem. Phys.* 95, 4444-4453 (1991). [[LINK](#)]
115. Chandler, D., "RISM equations for fluids in quenched amorphous materials," *J. Phys.: Condens. Matter* 3, F1-F8 (1991). [[PDF](#)]
116. Wu, D., K. Hui and D. Chandler, "Monte Carlo study of polymers in equilibrium with random obstacles," *J. Chem. Phys.* 96, 835-841 (1992). [[LINK](#)]
117. Gehlen, J.N., D. Chandler, H.J. Kim and J.T. Hynes, "Free energies of electron transfer," *J. Phys. Chem.* 96, 1748-1753 (1992). [[LINK](#)]
118. Wu, D., D. Chandler and B. Smit, "Electrostatic analogy for surfactant assemblies," *J. Phys. Chem.* 96, 4077-4083 (1992). [[LINK](#)]
119. Bader, J.S. and D. Chandler, "Computer simulation study of the mean forces between Ferrous and Ferric ions in water," *J. Phys. Chem.* 96, 6423-6427 (1992). [[LINK](#)]
120. Gehlen, J.N. and D. Chandler, "Quantum theory for free energies of electron transfer," *J. Chem. Phys.* 97, 4958-4963 (1992). [[LINK](#)]
121. Takasu, M. and D. Chandler, "A study of electron transfer using a three-level system coupled to an ohmic bath," in *Proceedings of the Workshop of Harmonic Oscillators*, NASA Publication 3197, 365-370 (1992). [[PDF](#)]
122. Takasu, M. and D. Chandler, "Numerical studies of electron transfer," in *Computer-Aided Innovation of New Materials II*, ed. by M. Doyama, J. Kihira, M. Tanaka and R. Yamamoto [Elsevier Science Publishers, B.V. (Amsterdam) 1993], p. 375-378. [[PDF](#)]
123. Kurtovic, Z., M. Marchi and D. Chandler, "Umbrella sampling molecular dynamics study of the dielectric constant of water," *Mol. Phys.* 78, 1155-1165 (1993). [[LINK](#)]
124. Luzar, A. and D. Chandler, "Structure and hydrogen bond dynamics of water-dimethyl sulfoxide mixtures by computer simulations," *J. Chem. Phys.* 98, 8160-8173 (1993). [[LINK](#)]

125. Marchi, M., J.N. Gehlen, D. Chandler and M. Newton, "Diabatic surfaces and the pathway for primary electron transfer in a photosynthetic reaction center," *J. Am. Chem. Soc.* 115, 4178-4190 (1993). [[LINK](#)]
126. Luzar, A., A.K. Soper and D. Chandler, "Combined neutron diffraction and computer simulation study of liquid dimethyl sulphoxide," *J. Chem. Phys.* 99, 6836-6847 (1993). [[LINK](#)]
127. Chandler, D., "Gaussian field model of fluids with an application to polymeric fluids," *Phys. Rev. E* 48, 2898-2905 (1993). [[LINK](#)]
128. Chandler, D., "Boltzmann's legacy in condensed matter theory: Ideas from van der Waals to Feynman," in *Proceedings of the International Symposium on Ludwig Boltzmann (Rome, February 9-11, 1989)*, ed. by G. Battimelli, M. G. Ianniello and O. Kresten [sterreichische Akademie Der Wissenschaften (Austria), 1993], p. 215-228. [[PDF](#)]
129. Chakraborty, A.K., D. Bratko and D. Chandler, "Diffusion of ionic penetrants in charged disordered media," *J. Chem. Phys.* 100, 1528-1541 (1994). [[LINK](#)]
130. Gehlen, J.N., M. Marchi and D. Chandler, "Dynamics affecting the primary charge transfer in photosynthesis," *Science* 263, 499-502 (1994). [[LINK](#)]
131. Chandler, D., J.N. Gehlen and M. Marchi, "On the mechanism of the primary charge transfer in photosynthesis," in *AIP Conference Proceedings 298, Ultrafast Reaction Dynamics and Solvent Effects*, (Royauumont, France, 1993), ed. by Y. Gauduel and P.J. Rossky [American Institute of Physics, New York, 1994], p. 50-58. [[PDF](#)]
132. Leung, K. and D. Chandler, "Phase diagram for excess electrons in simple fluids," *Phys. Rev. E* 49, 2851-2865 (1994). [[LINK](#)]
133. Deem, M.W. and D. Chandler, "Charge frustrated model of bicontinuous phases," *Phys. Rev. E* 49, 4268-4275 (1994). [[LINK](#)]
134. Deem, M.W. and D. Chandler, "Formation of interfaces in bicontinuous phases," *Phys. Rev. E* 49, 4276-4285 (1994). [[LINK](#)]
135. Xu, H., J.-P. Hansen and D. Chandler, "Density functional theory and freezing of an ion-electron plasma," *Europhys. Lett.* 26, 419-424 (1994). [[LINK](#)]
136. Luzar, A. and D. Chandler, "Application of the reactive flux formalism to study water hydrogen bond dynamics," in *Hydrogen Bond Networks*, ed. by M.-C. Bellissent-Funel and J. C. Dore [Kluwer Academic Publishers, Dordrecht, 1994], p. 239-246. [[PDF](#)]
137. Deem, M. W. and D. Chandler, "Classical diffusion in strong random media," *J. Stat. Phys.* 76, 911-927 (1994). [[LINK](#)]

138. Chandler, D. and K. Leung, "Excess electrons in liquids: Geometrical perspectives," *Annu. Rev. Phys. Chem.* 45, 557-591 (1994). [[LINK](#)]
139. Rejto, P.A. and D. Chandler, "Energy flow during isomerization reactions in liquids," *J. Phys. Chem.* 98, 12310-12314 (1994). [[LINK](#)]
140. Leung, K. and D. Chandler, "Statistics of simple chains in a sea of blockers," *J. Chem. Phys.* 102, 1405-1415 (1995). [[LINK](#)]
141. Rejto, P.A., E. Bindewald and D. Chandler, "Visualization of fast energy flow and solvent caging in unimolecular dynamics," *Nature* 375 129-131 (1995). [[LINK](#)]
142. Woo, H.-J., C. Carraro and D. Chandler, "Quantitative molecular interpretation of mesoscopic correlations in bicontinuous microemulsions," *Phys. Rev. E* 52, 6497-6507 (1995). [[LINK](#)]
143. Luzar, A. and D. Chandler, "Hydrogen-bond kinetics in liquid water." *Nature* 379, 55-57 (1996). [[LINK](#)]
144. Woo, H.-J., C. Carraro and D. Chandler, "Quantitative molecular interpretation of curvature elasticity of saturated surfactant monolayers," *Phys. Rev. E* 53, R41-R44 (1996). [[LINK](#)]
145. Luzar, A. and D. Chandler, "Effect of environment on hydrogen bond dynamics in liquid water," *Phys. Rev. Lett.* 76, 928-931 (1996). [[LINK](#)]
146. Song, X., D. Chandler and R.A. Marcus, "Gaussian field model of dielectric solvation dynamics," *J. Phys. Chem.* 100, 11954-11959 (1996). [[LINK](#)]
147. Chandler, D., "Charge frustration, bicontinuity and interfaces," *STATPHYS* 19, 167-177 (1996). [[PDF](#)]
148. Woo, H.-J., C. Carraro and D. Chandler, "Assembly of extended interfaces and micelles: Charge frustrated models of amphiphilic mixtures," *Faraday Discuss. Chem. Soc.* 104, 183-191 (1996). [[LINK](#)]
149. Crooks, G., and D. Chandler, "Gaussian statistics of the hard sphere fluid," *Phys. Rev. E* 56, 4217-4221 (1997). [[LINK](#)]
150. Dellago, C., P. Bolhuis, F. Csajka, and D. Chandler, "Transition path sampling and the calculation of rate constants," *J. Chem. Phys.* 108, 1964-1977 (1998). [[LINK](#)]
151. Song, X. and D. Chandler, "Dielectric solvation of molecules of arbitrary shape and charge distribution," *J. Chem. Phys.* 108, 2594-2600 (1998). [[LINK](#)]
152. Dellago, C., P. Bolhuis, and D. Chandler, "Efficient transition path sampling: Application to Lennard-Jones cluster rearrangements," *J. Chem Phys.* 108, 9236-9245 (1998). [[LINK](#)]

153. Chandler, D. 1998. "Chapter 1 -- Barrier crossings: classical theory of rare but important events" In Computer Simulation of Rare Events and Dynamics of Classical and Quantum Condensed-Phase Systems -- Classical and Quantum Dynamics in Condensed Phase Simulations, ed. B.J. Berne, G. Ciccotti and D.F. Coker, pp. 3-23. Singapore: World Sci. [\[PDF\]](#)
154. Chandler, D. 1998. "Chapter 2 -- Electron transfer in water and other polar environments, how it happens" In Computer Simulation of Rare Events and Dynamics of Classical and Quantum Condensed-Phase Systems -- Classical and Quantum Dynamics in Condensed Phase Simulations, ed. by B.J. Berne, G. Ciccotti and D.F. Coker, pp. 25-49. Singapore: World Sci. [\[PDF\]](#)
155. Chandler, D. 1998. "Chapter 3 -- Finding transition pathways: throwing ropes over rough mountain passes, in the dark" In Computer Simulation of Rare Events and Dynamics of Classical and Quantum Condensed-Phase Systems -- Classical and Quantum Dynamics in Condensed Phase Simulations, ed. by B.J. Berne, G. Ciccotti and D.F. Coker, pp. 51-66. Singapore: World Sci. [\[PDF\]](#)
156. Csajka, F. and D. Chandler, "Transition pathways in a many-body system: Application to hydrogen-bond breaking in water," J. Chem. Phys. 109, 1125-1133 (1998). [\[LINK\]](#)
157. Lum, K. and D. Chandler, "Phase diagram and free energies of vapor films and tubes for a confined fluid," International Journal of Thermophysics 19, 845-855 (1998). [\[LINK\]](#)
158. Bolhuis, P., C. Dellago and D. Chandler, "Sampling ensembles of deterministic transition pathways," Faraday Discussions 110, 421-436 (1998). [\[LINK\]](#)
159. Lum, K., D. Chandler and J. D. Weeks, "Hydrophobicity at small and large length scales," J. Phys. Chem. B 103, 4570-4577 (1999). [\[LINK\]](#)
160. Geissler, P., C. Dellago and D. Chandler, "Chemical dynamics of the protonated water trimer," Phys. Chem. Chem. Phys. 1, 1317-1322 (1999). [\[LINK\]](#)
161. Dellago, C., P. Bolhuis and D. Chandler, "On the calculation of reaction rate constants in the transition path ensemble," J. Chem. Phys. 110, 6617-6625 (1999). [\[LINK\]](#)
162. Wang, H., X. Song, D. Chandler, and W.H. Miller, "Semiclassical study of electronically nonadiabatic dynamics in the condensed-phase: Spin-boson problem with Debye spectral density," J. Chem. Phys. 110, 4828-4840 (1999). [\[LINK\]](#)
163. Geissler, P. L., Dellago, C. and D. Chandler, "Kinetic pathways of ion pair dissociation in water," J. Phys. Chem. B 103, 3706-3710 (1999). [\[LINK\]](#)
164. Huang, D. M. and D. Chandler, "Cavity formation and the drying transition in a Lennard-Jones fluid," Phys. Rev. E 61, 1501-1506 (2000). [\[LINK\]](#)

165. Bolhuis, P. G., C. Dellago, P.P. Geissler, and D. Chandler, "Transition path sampling: throwing ropes over mountains in the dark," *J. Phys. Condens. Matter*, 12, A147-A152 (2000). [[LINK](#)]
166. Geissler, P.L., C. Dellago, D. Chandler, J. Hutter and M. Parrinello, "Ab initio analysis of proton transfer dynamics in (H<sub>2</sub>O)<sub>3</sub>H<sup>+</sup>," *Chem. Phys. Lett.*, 321, 225-230 (2000). [[LINK](#)]
167. Bolhuis, P.G., C. Dellago and D. Chandler, "Reaction coordinates of biomolecular isomerization," *Proc. Natl Acad. Sci. USA* 97, 5877-5882 (2000). [[LINK](#)]
168. Huang, D. and D. Chandler, "Temperature and length scale dependence of hydrophobic effects and their possible implications for protein folding," *Proc. Natl Acad. Sci. USA* 97, 8324-8327 (2000). [[LINK](#)]
169. Song, X. and D. Chandler, "Dielectric response of a polarizable system with quenched disorder," *Phys. Rev. E* 62, 7949-7956 (2000). [[LINK](#)]
170. Yu, Z.G., X. Song and D. Chandler, "Polarizability in dielectric materials with quenched disorder," *Phys. Rev. E* 62, 4698-4701 (2000). [[LINK](#)]
171. Geissler, P.L. and D. Chandler, "Importance sampling and theory of nonequilibrium solvation dynamics in water," *J. Chem. Phys.* 113, 9759-9765 (2000) . [[LINK](#)]
172. Bolhuis, P. G. and D. Chandler, "Transition path sampling of cavitation between molecular scale solvophobic surfaces," *J. Chem. Phys.* 113, 8154-8160 (2000). [[LINK](#)]
173. Marti, J., F. Csajka and D. Chandler, "Stochastic transition pathways in the aqueous sodium chloride dissociation process," *Chem. Phys. Lett.* 328, 169-176 (2000). [[LINK](#)]
174. Geissler, P.L., C. Dellago, D. Chandler, J. Hutter and M. Parrinello, "Autoionization in liquid water", *Science* 291, 2121-2124 (2001). [[PDF](#)] Supplementary Information. [[LINK](#)]
175. Laria, D., J. Rodriguez, C. Dellago and D. Chandler, "Dynamical aspects of isomerization and melting transition in [H<sub>2</sub>O]<sub>8</sub>," *J. Phys. Chem. A* 105, 2646-2651 (2001). [[LINK](#)]
176. Crooks, G.E. and D. Chandler, "Efficient transition path sampling for nonequilibrium stochastic dynamics," *Phys. Rev. E* 64, 026109.1- 4 (2001). [[LINK](#)]
177. Huang, D.M., P. L. Geissler and D. Chandler, "Scaling of hydrophobic free energies," *J. Phys. Chem. B* 105, 6704-6709 (2001). [[LINK](#)]
178. TenWolde, P.R., S.X. Sun, and D. Chandler, "Model of a fluid at small and large length scales and the hydrophobic effect," *Phys. Rev E* 65, 011201.1-9 (2001). [[LINK](#)]
179. Huang, D.M. and D. Chandler, "The hydrophobic effect and the influence of solute-solvent attractions," *J. Phys. Chem. B* 106, 2047-2053 (2002). [[LINK](#)]

180. Bolhuis, P. G., D. Chandler, C. Dellago, and P. Geissler, "Transition Path Sampling: Throwing ropes over mountain passes, in the dark," *Annu. Rev. Phys. Chem.* 59, 291-318 (2002). [[LINK](#)]
181. TenWolde, P. R and D. Chandler, "Drying induced hydrophobic polymer collapse," *Proc. Natl Acad. Sci. USA* 99, 6539-6543 (2002). [[LINK](#)]
182. Garrahan, J.P. and D. Chandler, "Geometrical explanation and scaling of dynamical heterogeneities in glass forming systems," *Phys. Rev. Lett.* 89, 035704.1-4 (2002). [[LINK](#)]
183. Chandler, D., "Two faces of water," *Nature* 417, 491 (2002). [[LINK](#)]
184. Dellago, C. and D. Chandler, "Bridging the time scale gap with Transition Path Sampling" Part VIII of *Bridging Time Scales: Molecular Simulations for the Next Decade*, P. Nielaba, M. Mareschal, and G. Ciccotti, Eds., *Lecture Notes in Physics (LNP)*, 605, 321-333(2002). [[LINK](#)]
185. Maibaum, L. and D. Chandler, "A coarse-grained model of water confined in a hydrophobic tube," *J. Phys. Chem. B* 107, 1189-1193 (2003). [[LINK](#)]
186. Antes, I., D. Chandler, H. Wang and G. Oster, "The unbinding of ATP from F1-ATPase," *Biophys. J.* 85, 695-706 (2003). [[LINK](#)]
187. Dellago, C., P. Geissler, D. Chandler, J. Hutter and M. Parrinello, "Comment on Dissociation of water under pressure," *Phys. Rev. Lett.* 89, 199601.1 (2002). [[LINK](#)]
188. McCormick, T. and D. Chandler, "Grid-flux method for learning the solvent contribution to the mechanisms of reactions," *J. Phys. Chem. B* 107, 2796-2801 (2003). [[LINK](#)]
189. Garrahan, J.P and D. Chandler, "Coarse grained microscopic model for glass formers," *Proc. Natl Acad. Sci. USA* 100, 9710-9714 (2003). [[LINK](#)]
190. Hagan, M.F., Dinner, A.R., Chandler, D. and A.K. Chakraborty, "Atomistic understanding of kinetic pathways for single base-pair binding and unbinding in DNA," *Proc. Natl Acad. Sci. USA* 100, 13922-13927 (2003). [[LINK](#)]
191. Sun, S., A. Dinner, D. Chandler and G. Oster. "Elastic energy storage in beta-sheets with application to F1 ATPase," *Eur. Biophys. J.* 32, 676-683 (2003). [[LINK](#)]
192. Liao, J., S. Sun, D. Chandler and G. Oster. "The conformational states of MgATP in water," *Eur. Biophys. J.* 33, 29-37 (2003). [[LINK](#)]

193. Maibaum, L. , A. R. Dinner and D. Chandler. "Micelle formation and the hydrophobic effect," J. Phys. Chem. B 108, 6778-6781 (2004). [[LINK](#)]
194. Jung, Y., J.P. Garrahan and D. Chandler. "Excitation lines and the breakdown of Stokes-Einstein relations in super-cooled liquids," Phys. Rev. E 69, 061205.1-7 (2004). [[LINK](#)]
195. Chandler, D. "Willis H. Flygare, July 24, 1936 – May 18, 1981," Natl Acad. Sci. Biographl Memoir 86 (2005). [[LINK](#)]
196. Pan, A. and D. Chandler. "Dynamics of nucleation in the ising model," J. Phys. Chem. B 108, 19681-19686 (2004). [[LINK](#)]
197. Berthier, L., D. Chandler and J. P. Garrahan. "Length scale for the onset of Fickian diffusion in super-cooled liquids," Euro. Phys. Lett. 69, 320-326 (2005). [[LINK](#)]
198. Pan, A., J.P. Garrahan and D. Chandler. "Heterogeneity and growing lengthscales in the dynamics of kinetically constrained lattice gases in two dimensions," Phys. Rev. E. 72, 041106.1-10 (2005). [[LINK](#)]
199. Pan, A., J.P. Garrahan and D. Chandler. "Decoupling of self-diffusion and structural relaxation during a fragile-to-strong crossover in a kinetically constrained lattice gas," ChemPhysChem 6, 1783-1785 (2005). [[LINK](#)]
200. Merolle, M., J.P. Garrahan and D. Chandler. "Space-time thermodynamics of the glass transition," Proc. Natl. Acad. Sci. USA 102, 10837-10840 (2005). [[LINK](#)]
201. Chandler, D., and J.P. Garrahan, "Thermodynamics of coarse grained models of super-cooled liquids," J. Chem. Phys. 123, 044511.1-5 (2005). [[LINK](#)]
202. Chandler, D., "Insight Review: Interfaces and the driving force of hydrophobic assembly" Nature 437, 640-647 (2005). [[LINK](#)]
203. Jung, Y.J., J.P. Garrahan and D. Chandler, "Dynamical exchanges in facilitated models of supercooled liquids," J. Chem. Phys. 123, 084509.1-10 (2005). [[LINK](#)]
204. Chandler, D., "Autobiography of David Chandler," J. Phys. Chem. B. 109, 6459-6464 (2005). [[LINK](#)]. This publication is a part of the David Chandler Festschrift issue of the Journal of Physical Chemistry.
205. Pan, A.C, T.J. Rappl, D. Chandler, and N.P. Balsara, "Neutron scattering and Monte Carlo determination of the variation of the critical nucleus size with quench depth," J. Phys. Chem. B 110, 3692-3696 (2006). [[LINK](#)]



206. Hagan, M.F. and D. Chandler, " Dynamic pathways for viral capsid assembly," *Biophysical J.* 91, 42-54 (2006). [[LINK](#)]
207. Jack, R.L., J.P. Garrahan and D. Chandler, "Spacetime thermodynamics and subsystem observables in a kinetically constrained model of glassy systems," *J. Chem. Phys.* 125, 184509.1-11 (2006). [[LINK](#)]
208. Chandler, D., J.P. Garrahan, R.L. Jack, L. Maibaum and A.C. Pan, "Lengthscale dependence of dynamic four-point susceptibilities in glass formers," *Phys. Rev. E* 74, 051501.1-9 (2006). [[LINK](#)]
209. Chandler, D., "Oil on troubled waters" *Nature* 445, 831-832 (2007). [[LINK](#)]
210. Miller, T.F., E. Vanden-Eijnden and D. Chandler, "Solvent coarse-graining and the string method applied to the hydrophobic collapse of a hydrated chain," *Proc. Natl Acad. Sci. USA* 104, 14559-14564 (2007). [[LINK](#)]
211. Maibaum, L. and D. Chandler, "Segue between favorable and unfavorable solvation," *J. Phys. Chem. B* 111, 9025-9030 (2007). [[LINK](#)]
212. Jack, R.L., M.F. Hagan and D. Chandler, "Fluctuation-dissipation ratios in the dynamics of self-assembly," *Phys. Rev. E* 76, 021119.1-8 (2007). [[LINK](#)]
213. Hedges, L.O., L. Maibaum, D. Chandler and J.P. Garrahan, "De-coupling of Exchange and Persistence Times in Atomistic Models of Glass Formers," *J. Chem. Phys.* 127, 211101.1-4 (2007). [[LINK](#)]
214. Willard, A.P., D. Chandler, "The Role of Solvent Fluctuations in Hydrophobic Assembly," *J. Phys. Chem. B* 112, 6187-6192 (2008). [[LINK](#)]
215. Jack, R.L., D. Kelsey, J.P. Garrahan and D. Chandler, "Negative differential mobility of weakly driven particles in models of glass formers," *Phys. Rev. E* 78, 011506.1-9 (2008). [[LINK](#)]
216. Willard, A.P., and D. Chandler, "Coarse-grained modeling of the interface between water and heterogeneous surfaces," *Faraday Discuss.* 141, 209-220 (2009). [[LINK](#)]
217. Willard, A.P., S.K. Reed, P.A. Madden, and D. Chandler, "Water at an electrochemical interface—a simulation study," *Faraday Discuss.* 141, 423-441 (2009). [[LINK](#)]
218. Elmatad, Y.S., D. Chandler, and J.P. Garrahan, "Corresponding States of Structural Glass Formers", *J. Phys. Chem. B* 113, 5563-5567 (2009). [[LINK](#)]

219. Hedges, L.O., R.L. Jack, J.P. Garrahan, and D. Chandler, "Dynamic Order-Disorder in Atomistic Models of Structural Glass Formers", *Science* 323, 1309-1313 (2009). [[LINK](#)]  
Preprint for personal use only: [PDF](#), [SUPP](#)
220. Chandler, D., Book Review "Statistical Physics of Particles" and "Statistical Physics of Fields," *Physics Today* 62, Issue 5, 55-56 (2009). [[LINK](#)]
221. Chandler, D., "Liquids: Condensed, disordered, and sometimes complex," *Proc. Natl. Acad. Sci. USA* 106, 15111-15112. (2009). [[PDF](#)] This article is the Introduction to a Special Feature.
222. Patel, A. J., P. Varilly and D. Chandler, "Fluctuations of water near extended hydrophobic and hydrophilic surfaces," *J. Phys. Chem. B*, 114, 1632–1637 (2010). [[LINK](#)]
223. Willard, A.P. and D. Chandler, "Instantaneous Liquid Interfaces," *J. Phys. Chem. B*, 114, 1954–1958 (2010). [[LINK](#)]
224. Chandler, D. and J.P. Garrahan, "Dynamics on the Way to Forming Glass: Bubbles in Space-time" *Annu. Rev. Phys. Chem.*, 61, 191-217 (2010). [[LINK](#)]
225. Elmatad, Y.S., R.L. Jack, D. Chandler, and J.P. Garrahan. "Finite-temperature critical point of a glass transition" *Proc. Natl. Acad. Sci.* 107, 12793-12798 (2010). [[LINK](#)]
226. Elmatad, Y.S., J.P. Garrahan & D. Chandler. "Corresponding States of Structural Glass Formers: II" *J. Phys. Chem. B* 114, 17113-17119 (2010) [[LINK](#)]
227. 227. Varilly, P., A. J. Patel & D. Chandler. "An improved coarse-grained model of solvation and the hydrophobic effect" *J. Chem. Phys.* 134, 074109 (2011). [[LINK](#)]
228. 228. Chandler, D., & P. Varilly. "Lectures on molecular- and nano-scale fluctuations in water" *arXiv: 1101:2235* (2011). [[LINK](#)]
229. 229. Patel, A. J., P. Varilly, D. Chandler and S. Garde. "Quantifying density fluctuations in volumes of all shapes and sizes using indirect umbrella sampling" *J. Stat. Phys.* 145, 265-275 (2011). [[LINK](#)]
230. 230. Patel, A. J., P. Varilly, S. N. Jamadagni, H. Acharya, S. Garde and D. Chandler. "Extended surfaces modulate hydrophobic interactions of neighboring solutes" *Proc. Natl. Acad. Sci. U.S.A.* 108, 17678-17683 (2011) [[LINK](#)]
231. 231. Limmer, D.T., and D. Chandler, "The Putative Liquid-Liquid Transition is a Liquid-Solid Transition in Atomistic Models of Water," *J. Chem. Phys.* 135, 134503 (2011). [[LINK](#)] Addendum discussing issues of equilibration and proper sampling techniques is found in the Appendix to the arXiv version of this paper: *arXiv:1107.0337v2*. [[LINK](#)]

232. 232. Keys, A.S., L.O. Hedges, J.P. Garrahan, S.C. Glotzer, and D. Chandler, "Excitations are localized and relaxation is hierarchical in glass-forming liquids," Phys. Rev. X 1, 021013 (2011). [\[LINK\]](#)
233. 233. Jack, R. L., L. O. Hedges, J. P. Garrahan, and D. Chandler, "Preparation and relaxation of very stable glassy states of a simulated liquid" Phys. Rev. Lett. 107, 275702 (2011) [\[LINK\]](#)
234. 234. Rotenberg, B., A. J. Patel, and D. Chandler, "Molecular explanation for why talc surfaces can be both hydrophilic and hydrophobic" J. Am. Chem. Soc. 113, 20521-20527 (2011). [\[LINK\]](#)
235. 235. Patel A. J., P. Varilly, S. N. Jamadagni, M. Hagan, D. Chandler and S. Garde, "Sitting at the edge: How biomolecules use hydrophobicity to tune their interactions and function" J. Phys. Chem. B 116, 2498-2503 (2012). [\[LINK\]](#)
236. 236. Speck, T., and D. Chandler, "Constrained dynamics of localized excitations causes a non-equilibrium phase transition in an atomistic model of glass formers" J.Chem.Phys. 136, 184509.1-9 (2012). [\[LINK\]](#)
237. 237. Chandler, D., C. Dellago and P. Geissler, "Ion dynamics: Wired-up water," Nature Chem. 4, 245-247 (2012). [\[LINK\]](#) A YouTube presentation linked to this paper: <http://www.youtube.com/watch?v=zeFSzt5x9uo>
238. 238. Limmer, D. T., and D. Chandler, "Phase diagram of supercooled water confined to hydrophilic nanopores," J. Chem. Phys. 137, 045509.1-11 (2012). [\[LINK\]](#)
239. 239. Limmer, D. T., A. P. Willard, P. A. Madden and D. Chandler, "Hydration of metal surfaces can be dynamically heterogeneous and hydrophobic," Proc. Natl. Acad. Sci. USA 110, 4200-4205 (2013). [\[LINK\]](#)
240. 240. Varilly, P., and D. Chandler, "Water evaporation: a transition path sampling study," J. Phys. Chem. B 117, 1419-1428 (2013). [\[LINK\]](#)
241. 241. Keys, A. S., J. P. Garrahan, and D. Chandler, "Calorimetric glass transition explained by hierarchical dynamic facilitation," Proc. Natl. Acad. Sci. USA 110, 4482-4487 (2013). [\[LINK\]](#)
242. 242. Willard, A. P., D. T. Limmer, P. A. Madden and D. Chandler, "Characterizing heterogeneous dynamics at hydrated electrode surfaces," J. Chem. Phys. 138, 184702 (2013) [\[LINK\]](#)
243. 243. Limmer, D. T., and D. Chandler, "The putative liquid-liquid transition is a liquid-solid transition in atomistic models of water, Part II, J. Chem. Phys.138, 214504.1-15 (2013). [\[LINK\]](#)

244. 244. Limmer, D. T., and D. Chandler, “Corresponding states for mesostructure and dynamics of supercooled water,” arXiv: 1305.1382. [\[LINK\]](#)

245. 245. Limmer, D.T., and D. Chandler, “Theory of amorphous ices,” arXiv:1306.4728. [\[LINK\]](#)

246. 246. Limmer, D.T., C. Merlet, M. Salanne, D. Chandler, P.A. Madden, R. van Roij, B. Rotenberg, “Charge fluctuations in nano-scale capacitors,” Phys. Rev. Lett. 111, 106102.1-5 (2013). [\[LINK\]](#)

247. 247. Jung, Y-J, S. Kim, J. P. Garrahan and D. Chandler, “Comment on ‘Is there a breakdown of the Stokes-Einstein relation in Kinetically Constrained Models at low temperature?’ by Blondel and Toninelli,” arXiv:1309.5894 (2013). [\[LINK\]](#)

**Chandler Research Group**



