

## John J. Kozak

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### Education:

Case Western Reserve University B.S. (Chemistry) 1961  
Princeton University Ph.D. (Physical Chemistry) 1965  
(Thesis: "Solute-Solute Interactions in Aqueous Solution"; Advisor: Walter Kauzmann)

### Fellowship/Research Appointments:

National Institutes of Health Postdoctoral Fellow, 1965-1967  
Université libre de Bruxelles (with Ilya Prigogine)  
Research Associate, 1967-1968  
University of Chicago (with Stuart A. Rice)

### Academic History:

Assistant Professor (1968-1973), Associate Professor (1973-1978),  
Professor of Chemistry, University of Notre Dame, 1978-1988  
Professor of Chemistry, University of Georgia, 1988-1992  
Professor of Chemistry, Iowa State University, 1992-2003  
Professor of Chemistry (2003-05), University Professor (2005-present),  
DePaul University  
Honorary Degree (Honoris Causa) Univerzita v Nitre, Slovakia: 1999  
Université libre de Bruxelles (Visiting Professor): 1973, 1999  
Ecole Polytechnique Fédérale de Lausanne (Visiting Professor): 1978  
National Agricultural University, Kiev, Ukraine, (Honorary Professor): 1995  
University of Chicago (Visiting Professor): 2006-2007  
Caltech, Beckman Institute (Guest): 2005 – present [kozak@caltech.edu](mailto:kozak@caltech.edu)

### Administrative Appointments:

University of Notre Dame  
Chairman, Program in Unified Science, 1970-1988; Co-Director, Honors Program,  
1983-1988  
Assistant Dean (1983-1987), Associate Dean (1987-1988), College of Science  
University of Georgia, Dean, Franklin College of Arts and Sciences, 1988-1992  
Iowa State University, Provost, 1992-1998  
DePaul University,  
Provost (Executive Vice President for Academic Affairs), 2003-2005;  
Office of the President, 2003-2004

Record of Scholarship:

1. "Diffuse Phase Transitions: Specific-Heat Anomaly."  
A.V. Tobolsky, John J. Kozak and N.H. Canter  
Phys Rev. **138**, A651-A660 (1965).
2. "Quasiphonons in an Isotopically Substituted Crystal."  
Cl. George and John J. Kozak  
Phys. Letters, **25A**, 220-222 (1967).
3. "Solute-Solute Interactions in Aqueous Solution."  
John J. Kozak, William S. Knight and Walter Kauzmann  
J. Chem. Phys. **48**, 675-690 (1968).
4. "Elementary Description of the Equation of State of a Simple Fluid."  
John J. Kozak and Stuart A. Rice  
J. Chem. Phys. **48**, 1226-1230 (1968).
5. "Analytic Approach to the Theory of Phase Transitions."  
John D. Weeks, Stuart A. Rice and John J. Kozak  
J. Chem. Phys. **52**, 2416-2426 (1970).
6. "On the Relaxation to Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. I. A Study of Spontaneous Emission."  
Russell Davidson and John J. Kozak  
J. Math. Phys. **11**, 189-202 (1970).
7. "On the Relaxation to Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. II. Finite Systems."  
Russell Davidson and John J. Kozak  
J. Math. Phys. **11**, 1420-1436 (1970).
8. "Analytic Approach to the Theory of Phase Transitions. II. A Model Equation."  
John J. Kozak, S.A. Rice and J.D. Weeks  
Physica **54**, 573-592 (1971).
9. "Application of Conformal Solution Theory to Gas-Gas Equilibria."  
Paulino Y. Tan, Kraemer D. Luks and John J. Kozak  
J. Chem. Phys. **55**, 1012-1015 (1971).
10. "Analysis of the Barker-Henderson Local Compressibility Approximation."  
Marshall J. Moffat and John J. Kozak  
J. Chem. Phys. **55**, 3794-3809 (1971).

11. "On the Relaxation to Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. III. The Quantum-Mechanical Solution."  
Russell Davidson and John J. Kozak  
*J. Math. Phys.* **12**, 903-917 (1971).
12. "Comparative Study of Spontaneous Emission and Spin Lattice Relaxation at  $T=0$ ."  
Henry Douglas Kutz, Russell Davidson and John J. Kozak  
*Phys. Rev. B* **4**, 1471-1484 (1971).
13. "Interactions between Oppositely-Charged Nonspherical Ions."  
Patrick Fenton Hay and John J. Kozak  
*J. Chem. Phys.* **56**, 1246-1252 (1972).
14. "The Square-Well Potential. II. Some Comments on Critical Point Behavior and Scaling Laws."  
John J. Kozak, I.B. Schrodtn and K.D. Luks  
*J. Chem. Phys.* **57**, 206-209 (1972).
15. "Application of the Theory of Orlicz Space to Statistical Mechanics. I. Integral Equations."  
Ing-Yih S. Cheng and John J. Kozak  
*J. Math. Phys.* **13**, 51-58 (1972).
16. "On the Relaxation of Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. IV. Exact Solution for Finite Systems."  
Russell Davidson and John J. Kozak  
*J. Math. Phys.* **14**, 414-421 (1973).
17. "On the Relaxation of Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. V. Exact Solution for Infinite Systems."  
Russell Davidson and John J. Kozak  
*J. Math. Phys.* **14**, 423-431 (1973).
18. "Analysis of the Barker-Henderson Local-Compressibility Approximation. II. Comparison with Other Theories of Liquids."  
M.J. Moffat and John J. Kozak  
*J. Chem. Phys.* **58**, 876-889 (1973).
19. "Modern Interpretation of the Average-Potential-Model Theory of Solutions."  
M.J. Moffat and John J. Kozak  
*Physica* **65**, 485-504 (1973).
20. "On the Relationship between Bifurcation Points of the Kirkwood-Salsburg Equation and Phase Transitions."  
Ing-Yih S. Cheng and John J. Kozak  
*J. Math. Phys.* **14**, 632-637 (1973).

21. "A Study of the Asymptotic Behavior of the D-Dimensional Ising Model."  
R.A. Goldstein and John J. Kozak  
*Physica* **71**, 267-293 (1974)
22. "Phase Transitions in D-Dimensional Ising Lattices."  
R.A. Goldstein and John J. Kozak  
(in) Global Analysis and its Applications.  
(International Atomic Energy Agency, Vienna, 1974), Vol. II, pp. 245-261.
23. "The Square-Well Potential. IV. Use of a Modification of the Kirkwood Superposition Approximation."  
I.B. Schrod, John J. Kozak, and K.D. Luks  
*J. Chem. Phys.* **60**, 170-175 (1974).
24. "On the Relaxation to Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. VI. Influence of the Coupling Function on The Dynamics."  
Janilla Jyy-Wen Yang, Russell Davidson and John J. Kozak  
*J. Math. Phys.* **15**, 491-501 (1974).
25. "Energy Transfer in Radiation Chemistry. I. Dynamics of the Electron-Oscillators System."  
Henry Douglas Kutz and John J. Kozak  
*J. Math. Phys.* **15**, 508-519 (1974).
26. "Denaturation: An Example of Catastrophe."  
John J. Kozak and Craig J. Benham  
*Proc. Natl. Acad. Sci (U.S.A.)* **71**, 1977-1981 (1974).
27. "On the Relaxation to Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. VII. Emission in a Finite System in the Presence of an Extra Photon."  
Russell Davidson and John J. Kozak  
*J. Math. Phys.* **16**, 1013-1022 (1975).
28. "Relaxation of the Continuum Approximation in the Theory of Electrolytes. I. Formal Results."  
Ronald A. Goldstein and John J. Kozak  
*J. Chem. Phys.* **62**, 276-284 (1975).
29. "On the Relaxation of the Continuum Approximation in the Theory of Electrolytes. II. Ion Distributions."  
Ronald A. Goldstein, Patrick Fenton Hay and John J. Kozak  
*J. Chem. Phys.* **62**, 285-291 (1975).

30. "Perturbation Theory using the Yvon-Born-Green Equation for the Square-Well Fluid."  
W.W. Lincoln, John J. Kozak and K.D. Luks  
J. Chem. Phys. **62**, 1116-1121 (1975).
31. "Electron Reactions and Electron Transfer Reactions Catalyzed by Micellar Systems."  
M. Gratzel, John J. Kozak and J.K. Thomas  
J. Chem. Phys. **62**, 1632-1640 (1975).
32. "Properties of Solutions to the Yvon-Born-Green Equation for the Square-Well Fluid."  
William W. Lincoln, John J. Kozak and Kraemer D. Luks  
J. Chem. Phys. **62**, 2171-2182 (1975).
33. "Study of the Structure of Molecular Complexes. IX. The Hartree-Fock Energy Surface for the H<sub>2</sub>O-Li-F Complex."  
James W. Kress, E. Clementi, John J. Kozak and Maurice E. Schwartz  
J. Chem. Phys. **63**, 3907-3928 (1975).
34. "Spectator-Ion Effect on the Passage of Ions through Membranes."  
John J. Kozak  
Proc. Natl. Acad. Sci. (U.S.A.) **72**, 683-687 (1975).
35. "Denaturation: An Example of a Catastrophe. II. Two-State Transitions."  
Craig J. Benham and John J. Kozak  
J. Theor. Biol. **63**, 125-149 (1976).
36. "On the Reduction of Dimensionality in Radical Decay Kinetics Induced by Micellar Systems."  
A. J. Frank, M. Gratzel and John J. Kozak  
J. Am. Chem Soc. **98**, 3317-3321 (1976).
37. "Exact Dynamics of a Model for a Three-Level Atom."  
Russell Davidson and John J. Kozak  
J. Math. Phys. **17**, 1692-1702 (1976).
38. "Estimate of the Intermolecular Polarization Contribution to the Static Dielectric Constant of Water."  
James W. Kress and John J. Kozak  
J. Chem. Phys. **64**, 1706-1719 (1976).
39. "Comments on the Behavior of the Yvon-Born-Green Equation for the Square-Well Fluid Near the Critical Point."  
King U.Co, John J. Kozak and Kraemer D. Luks  
J. Chem. Phys. **64**, 2197-2201 (1976).

40. "Solutions of the Yvon-Born-Green Equation for the Square-Well Fluid at Very High Densities."  
King U. Co, John J. Kozak and Kraemer D. Luks  
J. Chem.Phys. **65**, 2327-2332 (1976).
41. "Solutions of the Yvon-Born-Green and Kirkwood Equations for Hard-Spheres at Very High Densities."  
King U. Co, John J. Kozak and Kraemer D. Luks  
J. Chem. Phys. **66**, 581-585 (1977).
42. "The Molecular Structure of a Liquid-Vapor Interface: Comments on the Integral Equation Approach."  
K. U. Co, John J. Kozak and K. D. Luks  
J. Chem. Phys. **66**, 1002-1005 (1977).
43. "Application of Complementary Variational Principles to the Kirkwood Equation for Hard Spheres at Very High Densities."  
King U. Co, John J. Kozak and Kraemer D. Luks  
J. Chem. Phys. **66**, 4306-4308 (1977).
44. "Determination of the Pair-Polarizability Tensor for the Ne Diatom."  
James W. Kress and John J. Kozak  
J. Chem. Phys. **66**, 4516-4519 (1977).
45. "Effect of Relaxing the Continuum Dielectric Approximation on Poisson-Boltzmann Thermodynamics."  
Donald G. Knox and John J. Kozak  
Mol. Phys. **33**, 811-831 (1977).
46. "Denaturation: An Example of Catastrophe. III. Phase Diagrams for Multistate Transformations."  
Craig J. Benham and John J. Kozak  
J. Theor. Biol. **66**, 679-693 (1977).
47. "Statistical Mechanics of the Square-Well Fluid." (invited chapter)  
Kraemer D. Luks and John J. Kozak  
Adv. Chem. Phys. [John Wiley & Sons, New York, 1978], **37**, 139-201.
48. "On the Relaxation to Quantum-Statistical Equilibrium of the Wigner-Weisskopf Atom in a One-Dimensional Radiation Field. VIII. Emission in an Infinite System in the Presence of an Extra Photon."  
Russell Davidson and John J. Kozak  
J. Math. Phys. **19**, 1074-1086 (1978).

49. "Catastrophes in Statistical Biophysics."  
Craig J. Benham and John J. Kozak  
Behavioral Sci. **23**, 355-359 (1978).
50. "Solutions of the Yvon Born-Green Equation for a System of Square-Well Molecules at a Temperature Below the Triple Point."  
King U. Co, Kraemer D. Luks and John J. Kozak  
Mol. Phys. **36**, 1883-1896 (1978).
51. "Nonequilibrium Phenomena in the Kinetics of Photochemical Ozone Production."  
John J. Kozak, G. Nicolis, J. W. Kress and M. Sanglier  
J. Non-Equilib. Thermodyn. **4**, 67-74 (1979).
52. "Phase Transitions as a Problem in Bifurcation Theory." (Invited Lecture)  
John J. Kozak  
Anals. N. Y. Acad. Sci. **316**, 417-432 (1979).
53. "Precise Determination of the Critical Exponent for the Yvon-Born-Green Square-Well Fluid."  
K. A. Green, K. D. Luks and John J. Kozak  
Phys. Rev. Lett. **42**, 985-988 (1979).
54. "Nonlinear Problems in the Theory of Phase Transitions." (invited chapter)  
John J. Kozak  
Adv. Chem. Phys. [John Wiley & Sons, New York, 1979], **40**, 229-368.
55. "Role of Dimensionality and Spatial Extent in Influencing Intracellular Kinetic Processes."  
Michael D. Hatlee, John J. Kozak, Guido Rothenberger, Pierre P. Infelta and Michael Gratzel  
J. Phys. Chem. **84**, 1508-1519 (1980).
56. "Random Walks on Finite Lattices with Traps."  
Michael D. Hatlee and John J. Kozak  
Phys. Rev. B **21**, 1400-1407 (1980).
57. "A Stochastic Approach to the Theory of Intracellular Kinetics. I. Master Equation for Irreversible Reactions."  
Michael D. Hatlee and John J. Kozak  
J. Chem. Phys. **72**, 4358-4367 (1980).
58. "Nonclassical Critical Behavior of the Square-Well Fluid."  
K. A. Green, K. D. Luks, Eok Lee and John J. Kozak  
Phys. Rev. A **21**, 356-361 (1980).

59. "Monomer-Eximer Dynamics in Spread Monolayers. I. Lateral Diffusion of Pyrene Dodecanoic Acid at the Air-Water Interface."  
Thomas Loughran, Michael D. Hatlee, L. K. Patterson and John J. Kozak  
*J. Chem. Phys.* **72**, 5791-5797 (1980).
60. "Electrostatic Focusing in Micellar and Microelectrode Kinetic Processes."  
Mei Hsu Dung, Donald G. Knox and John J. Kozak  
*Ber. Bunsenges. Phys. Chem.* **84**, 789-795 (1980).
61. "Stability of Photochemical Mechanisms for Photogalvanic Cells."  
Mei Hsu Dung and John J. Kozak  
*J. Photochem.* **14**, 205-232 (1980).
62. "Isopiestic Determination of Water Binding by Fish Antifreeze Glycoproteins."  
John G. Duman, Jean L. Patterson, John J. Kozak and Arthur L. Devries  
*Biochim. Biophys. Acta* **626**, 332-336 (1980).
63. "A Dynamic Model for *in vivo* Virus Replication."  
J. E. MacCarthy and John J. Kozak  
*J. Theor. Biol.* **90**, 265-281 (1981).
64. "A Stochastic Approach to the Theory of Intracellular Kinetics. II. Master Equation for Reversible Reactions."  
Michael D. Hatlee and John J. Kozak  
*J. Chem. Phys.* **74**, 1098-1109 (1981).
65. "Random Walks on Finite Lattices with Traps. II. The Case of a Partially Absorbing Trap."  
Michael D. Hatlee and John J. Kozak  
*Phys. Rev. B* **23**, 1713-1718 (1981).
66. "Stochastic Flows in Integral and Fractal Dimensions and Morphogenesis."  
Michael D. Hatlee and John J. Kozak  
*Proc. Natl. Acad. Sci (U.S.A.)* **78**, 972-975 (1981).
67. "Solutions of the Yvon-Born-Green Equation for Hard Disks at Very High Densities."  
K. A. Green, K.D. Luks and John J. Kozak  
*Mol. Phys.* **43**, 685-696 (1981).
68. "A Stochastic Approach to the Theory of Intracellular Kinetics. III. The Homogeneous-System Limit."  
Michael D. Hatlee and John J. Kozak  
*J. Chem. Phys.* **74**, 5627-5635 (1981).

69. "Analysis of Mechanisms for the Cyclic Cleavage of Water by Visible Light."  
Mei Hsu Dung and John J. Kozak  
J. Photochem. **16**, 121-145 (1981).
70. "The Critical Correlations of the Yvon-Born-Green Equation."  
Gerald L. Jones, John J. Kozak, E. Lee, Shmuel Fishman and Michael E. Fisher  
Phys. Rev. Lett. **46**, 795-798 (1981).
71. "Pattern Formation in the Schlögl Model of Nonlinear Kinetics."  
Mei Hsu Dung and John J. Kozak  
Physica A **180**, 63-76 (1981).
72. "A Variational Approach to the Statistical Mechanics of Hard Disks and Hard Spheres."  
John E. MacCarthy, John J. Kozak, K. A. Green and K. D. Luks  
Mol. Phys. **44**, 17-31 (1981).
73. "Nonclassical Critical Behavior of the Square-Well Fluid. II. The Specific Heat Function  $C_v$  and its Exponent."  
K.A. Green, K. D. Luks and John J. Kozak  
Phys. Rev. A **24**, 2093-2095 (1981).
74. "Statistical Mechanics via the Method of Complementary Variational Principles. I. Application to Classical, Two-Dimensional Systems."  
John E. MacCarthy and John J. Kozak  
Mol. Phys. **44**, 761-781 (1981).
75. "An Exact Algorithm for d-Dimensional Walks on Finite and Infinite Lattices with Traps."  
Cecilia A. Walsh and John J. Kozak  
Phys. Rev. Lett. **47**, 1500-1502 (1981).
76. "On the Interplay between Geometry and Mobility in Intracellular Kinetics."  
Michael D. Hatlee, John J. Kozak and Michael Gratzel  
Ber. Bunsenges. Phys. Chem. **86**, 157-161 (1982).
77. "Effects of Ionic Strength on the Kinetics of Ionic and Micellar Reactions in Aqueous Solution."  
Mei Hsu Dung and John J. Kozak  
J. Chem. Phys. **76**, 984-996 (1982).
78. "The Influence of Closure on the Behavior of the Yvon-Born-Green Equation for a System of Hard Rods."  
K. A. Green, K. D. Luks, John E. MacCarthy and John J. Kozak  
Mol. Phys. **45**, 897-913 (1982).

79. "Observations on the Criticality of the Yvon-Born-Green Equation."  
K. A. Green, K. D. Luks, G. L. Jones, E. Lee and John J. Kozak  
Phys. Rev. A **25**, 1060-1064 (1982).
80. "The Critical Behavior of the Yvon-Born-Green Equation. Effects of Dimensionality."  
Gerald L. Jones, Eok K. Lee and John J. Kozak  
Phys. Rev. Lett. **48**, 447-450 (1982).
81. "Weak Mixing in a Quantum System."  
John J. Kozak and O. E. Rössler  
Z. Naturforsch. **37a**, 33-38 (1982).
82. "Photoinduced Structural Transformations in Mixed Monolayer Assemblies."  
L. K. Patterson, J. E. MacCarthy and John J. Kozak  
Chem. Phys. Lett. **89**, 435-437 (1982).
83. "Efficiency of Light-Energy Conversion in Photogalvanic Cells and Water Cleavage Systems."  
Mei Hsu Dung and John J. Kozak  
J. Chem. Phys. **77**, 3246-3257 (1982).
84. "Statistical Mechanics via the Method of Complementary Variational Principles.  
II. Application to d-Dimensional Ionic and Dipolar Fluids."  
B. L. Tembe and John J. Kozak  
Mol. Phys. **47**, 753-769 (1982).
85. "Lateral Diffusion in Fluid Systems."  
John E. MacCarthy and John J. Kozak  
J. Chem. Phys. **77**, 2214-2216 (1982).
86. "Exact Algorithm for d-Dimensional Walks on Finite and Infinite Lattices with Traps.  
II. General Formulation and Application to Diffusion-Controlled Reactions."  
Cecilia A. Walsh and John J. Kozak  
Phys. Rev. B **26**, 4166-4189 (1982).
87. "Chaos, Periodic Chaos and the Random Walk Problem."  
John J. Kozak, Matthew K. Musho and Michael D. Hatlee  
Phys. Rev. Lett. **49**, 1801-1804 (1982).
88. "Stochastic Flows, Reaction-Diffusion Processes and Morphogenesis." (Invited Lecture)  
John J. Kozak, Michael D. Hatlee, Matthew K. Musho, Philip A. Politowicz and Cecilia  
A. Walsh J. Stat. Phys. **30**, 263-271 (1983).

89. "Exact Dynamics of a Model for a Three-Level Quantum System Interacting with a Continuous Spectrum."  
Russell Davidson and John J. Kozak  
*J. Math. Phys.* **24**, 1911-1922 (1983).
90. "Numerical and Analytical Studies of the Long-ranged Solutions of the Yvon-Born-Green Equation."  
Gerald L. Jones, Eok K. Lee and John J. Kozak  
*J. Chem. Phys.* **79**, 459-468 (1983).
91. "Non-Nearest Neighbor Random Walks in Reaction-Diffusion Processes."  
Matthew K. Musho and John J. Kozak  
*J. Chem. Phys.* **79**, 1942-1947 (1983).
92. "Transition Phenomena in Monolayers at the Air-Water Interface."  
Bhalachandra L. Tembe, John E. MacCarthy and John J. Kozak  
*J. Phys. Chem.* **87**, 4562-4563 (1983).
93. "Exact Algorithm for d-Dimensional Walks on Finite and Infinite Lattices with Traps. III. Role of Lattice Valency in Influencing the Efficiency of Diffusion-Controlled Reactions."  
Philip A. Politowicz and John J. Kozak  
*Phys. Rev. B* **28**, 5549-5569 (1983).
94. "Lattice Theory of Reaction Efficiency in Compartmentalized Systems."  
Matthew K. Musho and John J. Kozak  
*J. Chem. Phys.* **80**, 159-169 (1984).
95. "Lattice Theory of Reaction Efficiency in Compartmentalized Systems. II. Reduction of Dimensionality."  
Pil H. Lee and John J. Kozak  
*J. Chem. Phys.* **80**, 705-713 (1984).
96. "Factors Affecting the Efficiency of Photochemical Water Cleavage Systems. The Reaction between O<sub>2</sub> and the Reduced Electron Acceptor."  
Thomas W. Ebbesen, Bhalachandra L. Tembe and John J. Kozak  
*J. Phys. Chem.* **88**, 683-688 (1984).
97. "Perturbation Theory for Square-Well Fluids in d=2,3."  
Bhalachandra L. Tembe and John J. Kozak  
*Mol. Phys.* **51**, 825-834 (1984).
98. "Thermodynamically Consistent Truncations for Distribution Function Hierarchies."  
Gerald L. Jones, John J. Kozak and Eok K. Lee  
*J. Chem. Phys.* **80**, 2092-2101 (1984).

99. "Characteristics of the Probability Function for Three Random-Walk Models of Reaction-Diffusion Processes."  
Matthew K. Musho and John J. Kozak  
*J. Chem. Phys.* **81**, 3229-3238 (1984).
100. "The Kirkwood Superposition Approximation for Hard Rods at High Pressures."  
Paul Siders and John J. Kozak  
*J. Chem. Phys.* **81**, 4594-4602 (1984).
101. "Linear Chaos."  
O.E. RöSSLer, John J. Kozak and D. Hoffman  
*Physica D* **11**, 416 (1984).
102. "Exact Calculation of the Lineshape and Scattering Operator for a Model of a Two-Level Atom Interacting with a Continuous Spectrum of Radiation."  
Russell Davidson and John J. Kozak  
*J. Math. Phys.* **26**, 556-565 (1985).
103. "Thermodynamic Self-Consistency for Hard Spheres at Low Density."  
Paul Siders and John J. Kozak  
*J. Chem. Phys.* **82**, 4257-4263 (1985).
104. "Theory of Intramolecular Electron Transfer Reactions in Anion Radicals of Nitrobenzyl Halides."  
Kristine E. Miller and John J. Kozak  
*J. Phys. Chem.* **89**, 401-403 (1985).
105. "Reply to the Comment on 'Factors Affecting the Efficiency of Photochemical Water Cleavage Systems. The Reaction between O<sub>2</sub> and the Reduced Electron Acceptor.'"  
T.W. Ebbesen, P. Lenoir and John J. Kozak  
*J. Phys. Chem.* **89**, 553 (1985).
106. "Influence of Structure on Reaction Efficiency in Surface Catalysis. I. Sensitivity to Multiplet Concentration and Configuration."  
Philip A. Politowicz and John J. Kozak  
*Langmuir* **1**, 429-443 (1985).
107. "Influence of Structure on Reaction Efficiency in Surface Catalysis. II. Reactivity at Terraces, Ledges and Kinks."  
G. Joseph Staten, Matthew K. Musho and John J. Kozak  
*Langmuir* **1**, 443-452 (1985).
108. "Random Walks on Finite High-Dimensional Cubic Lattices with a Single Trap."  
Philip A. Politowicz, John J. Kozak and George H. Weiss  
*Chem. Phys. Lett.* **120**, 388-392 (1985).

109. "Relative Importance of Lattice Valency versus System Dimensionality in Markovian Models of Diffusion-Controlled Processes."  
Philip A. Politowicz and John J. Kozak  
Chem. Phys. Lett. **127**, 257-262 (1986).
110. "Simulated Dynamics of Photochemical Water Splitting."  
Pierre M. Lenoir, John J. Kozak and Thomas W. Ebbesen  
Aust. J. Chem. **39**, 1865-1875 (1986).
111. "Computer Simulations of Photochemical Water Cleavage Systems.  
1. A Kinetic Model for the Production of Hydrogen on a Colloidal Catalyst."  
Richard E. Sassoon, Pierre M. Lenoir and John J. Kozak  
J. Phys. Chem. **90**, 4654-4663 (1986).
112. "Theoretical Investigation of Fluorescence Concentration Quenching in Two-Dimensional Disordered Systems. Application to Chlorophyll a in Monolayers of Dioleoylphosphidylcholine."  
Laurent G. Boulou, Larry K. Patterson, J.P. Chauvet and John J. Kozak  
J. Chem. Phys. **86**, 503-507 (1987).
113. "Calculation of the Tortuosity Factor in Single-Phase Transport through a Structured Medium."  
Pil H. Lee and John J. Kozak  
J. Chem. Phys. **86**, 4617-4627 (1987).
114. "Surface Site Diffusion and Reaction on Molecular Organizates and Colloidal Catalysts: A Geometrical Perspective."  
Philip A. Politowicz and John J. Kozak  
Proc. Nati. Acad. Sci. (U.S.A.) **84**, 8175-8179 (1987).
115. "Simulations of Energy Transfer and Trapping in Two-Dimensional Disordered Systems."  
Laurent G. Boulou and John J. Kozak  
Mol. Phys. **62**, 1449-1465 (1987).
116. "Influence of Channel Geometry on Sorption in Zeolites."  
Philip A. Politowicz and John J. Kozak  
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