

## Most highly cited papers [ $n \geq 20$ ]

Web of Knowledge data base

2. ["Contributions to NonEquilibrium Thermodynamics. I. Theory of Hydro-dynamical Fluctuations"](#), R. F. Fox and G. E. Uhlenbeck, Physics of Fluids **13**, 1893 (1970).  
[284]
3. ["Contributions to NonEquilibrium Thermodynamics. II. Fluctuation Theory for the Boltzmann Equation"](#), R. F. Fox and G. E. Uhlenbeck, Physics of Fluids **13**, 2881 (1970).  
[139]
5. ["Contributions to the Theory of Multiplicative Stochastic Processes"](#), R. F. Fox, Journal of Mathematical Physics **13**, 1196 (1972).  
[74]
9. "Qualms Regarding the Range of Validity of the GlansdorffPrigogine Criterion for Stability of NonEquilibrium States", J. Keizer and R. F. Fox, Proceedings of the National Academy of Sciences **71**, 192 (1974).  
[44]
13. "A Generalized Theory of Multiplicative Stochastic Processes Using Cumulant Techniques", R. F. Fox, Journal of Mathematical Physics **16**, 289 (1975).  
[33]
16. "Critique of the Generalized Cumulant Expansion Method", R. F. Fox, Journal of Mathematical Physics **17**, 1148 (1976).  
[67]
18. "Analysis of Nonstationary, Gaussian and NonGaussian, Generalized Langevin Equations Using Methods of Multiplicative Stochastic Processes", R. F. Fox, Journal of Statistical Physics **16**, 259 (1977).  
[47]
20. ["The Generalized Langevin Equation with Gaussian Fluctuations"](#), R. F. Fox, Journal of Mathematical Physics **18**, 2331 (1977).  
[71]
23. "Hydrodynamic Fluctuation Theories", R. F. Fox, Journal of Mathematical Physics **19**, 1993 (1978).  
[25]

25. ["Gaussian Stochastic Processes in Physics"](#), R. F. Fox, Physics Reports C. **48**, 179283 (1978).  
**[351]**
27. "Irreversible Processes at Non-equilibrium Steady States", R. F. Fox, Proceedings of the National Academy of Sciences, USA **76**, 2114-2117 (1979).  
**[21]**
33. ["Coupled Translational and Rotational Diffusion in Liquids"](#), U. Steiger and R.F. Fox, Journal of Mathematical Physics **23**, 296 (1982).  
**[27]**
36. "Testing Theories of Nonequilibrium Processes with Light Scattering Techniques", R.F. Fox, Journal of Physical Chemistry **86**, 2812-2818 (1982).  
**[20]**
39. "Correlation Time Expansion for NonMarkovian, Gaussian, Stochastic Processes", R. F. Fox, Physics Letters **94A**, 281 (1983).  
**[47]**
40. "Long Time Tails and Diffusion", R. F. Fox, Physical Review **A27**, 32163233 (1983).  
**[45]**
41. "Laser with a Fluctuating Pump: Intensity Correlations", R. F. Fox, G. E. James, and R. Roy, Physical Review Letters **52**, 17781781 (1984).  
**[24]**
43. "Stochastic Pump Effects in Lasers", R. F. Fox, G. E. James, and R. Roy, Physical Review **A30**, 24822492, (1984).  
**[32]**
45. ["Functional Calculus Approach to Stochastic Differential Equations"](#), R. F. Fox, Physical Review **A33**, 467476 (1986).  
**[225]**
47. "Quantum Chaos and a Periodically Perturbed EberlyChirikov Pendulum", R. F. Fox and John Eidson, Physical Review **A34**, 482492 (1986).  
**[66]**
48. "Laser Noise Analysis By First Passage Time Techniques", R. F. Fox, Physical Review **A34**, 3405-3408 (1986).  
**[23]**

49. "A Stochastic Theory of Line Shape and Relaxation", K. Faïd and R.F. Fox, Physical Review **A34**, 4286-4302 (1986).  
[34]
50. ["Quantum Chaos in a Two Level System in a Semi-Classical Radiation Field"](#), J. C. Eidson and R. F. Fox, Physical Review **A34**, 3288-3292 (1986)  
[27]
51. ["Uniform Convergence to an Effective FokkerPlanck Equation for Weakly Colored Noise"](#), R. F. Fox, Physical Review **A34**, 4525-4527 (1986).  
[205]
52. ["Steady State Analysis of Strongly Colored Multiplicative Noise in a Dye Laser"](#), R. F. Fox and Rajarshi Roy, Physical Review **A35**, 1838-1842 (1987).  
[130]
53. "Stochastic Theory of Relaxation and Approach to Thermal Equilibrium for Phonon Reservoirs", Karim Faïd and R. F. Fox, Physical Review **A35**, 2684-2689 (1987).  
[21]
54. ["Stochastic Calculus in Physics"](#), by R. F. Fox, Journal of Statistical Physics **46**, 1145-1157 (1987).  
[24]
56. "Systematic Corrections to the Rotating Wave Approximation and Quantum Chaos.", R. F. Fox and J. C. Eidson, Physical Review **A36**, 4321-4329 (1987)  
[30]
57. "Mean First Passage Times and Colored Noise", R. F. Fox, Physical Review **A37**, 911-917 (1988).  
[61]
59. ["A Fast, Accurate, Algorithm for Numerical Simulation of Exponentially Correlated Colored Noise"](#), R. F. Fox, I. R. Gatland, R. Roy, and G. Vemuri, Physical Review **A38**, 5938-5940 (1988).  
[313]
60. ["Numerical Simulation of Stochastic Differential Equations."](#) R. F. Fox, Journal of Statistical Physics **54**, 1353-1366 (1989)  
[31]
61. ["Stochastic Resonance in a Double Well"](#), R. F. Fox, Physical Review **A39**, 4148-4153 (1989).  
[147]

64. ["Effect of Molecular Fluctuations on the Description of Chaos by Macrovariable Equations"](#), R. F. Fox and J. E. Keizer, Physical Review Letters **64**, 249-251 (1990).  
[32]
66. ["Chaos, Molecular Fluctuations, and the Correspondence Limit"](#), R. F. Fox, Physical Review **A41**, 2969-2976 (1990).  
[35]
67. ["A Master Equation for the Logistic Map."](#), R. F. Fox, Physical Review **A42**, 1946-1953 (1990)  
[22]
68. "Temperature and Field Dependence of Magnetic Relaxation in a Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>x</sub> Single Crystal", Donglu Shi, Ming Xu, A. Umezawa, and R. F. Fox, Physical Review **B42**, 2062-2065 (1990).  
[69]
69. "A Generalized Critical-State Model of Hard Superconductors", Ming Xu, Donglu Shi, and R. F. Fox, Physical Review **B42**, 10773-10776 (1990).  
[102]
72. ["Amplification of Intrinsic Fluctuations by Chaotic Dynamics"](#), R. F. Fox and J. Keizer, Physical Review **A43**, 1709-1720 (1991).  
[75]
73. ["Second Order Algorithm for the Numerical Integration of Colored Noise Problems"](#), R. F. Fox, Physical Review **A43**, 2649-2654 (1991).  
[63] [Equation \(59\) correction.](#)
80. "Analytic and Numerical Study of Stochastic Resonance", R. F. Fox and Y.-N. Lu, Physical Review **E48**, 3390-3398 (1993).  
[45]
82. ["Emergent Collective Behavior in Large Numbers of Globally Coupled Independently Stochastic Ion Channels"](#), by R. F. Fox and Yannan Lu, Physical Review **E49**, 3421-3431 (1994).  
[209]
83. ["Chaos and Quantum-Classical Correspondence in the Kicked Pendulum"](#), R. F. Fox and T. C. Elston, Physical Review **E49**, 3683-3696 (1994).  
[35]
84. ["Chaos and Quantum-Classical Correspondence in the Kicked Top."](#), R. F. Fox and T. C. Elston, Physical Review **E50**, 2553-2563 (1994).  
[28]

88. ["Stochastic Versions of the Hodgkin-Huxley Equations"](#), R. F. Fox, Biophysical Journal **72**, 2068-2074 (1997).  
[147]
90. "Rectified Brownian Movement in Molecular and Cell Biology", R. F. Fox, Physical Review **E57**, 2177-2203 (1998).  
[39]
92. "Quantifying Stochastic Resonance in Bistable Systems: Response vs. Residence Time Distribution Functions", M. H. Choi, R. F. Fox, and P. Jung, Physical Review **E57**, 6335-6344 (1998).  
[85]
95. "Quantum Hysteresis and Resonant Tunneling in Bistable Systems", M. Thorwart, P. Reimann, P. Jung, and R. F. Fox, Chemical Physics **235**, 61-80 (1998).  
[53]
98. ["Rectified Brownian Motion and Kinesin Motion Along Microtubules"](#), R. F. Fox and M. H. Choi, Physical Review **E63**, 051901 (2001), 12 pages.  
[55]
108. ["Kinesin's Biased Stepping Mechanism: Amplification of Neck Linker Zippering"](#), William Mather and R.F. Fox, Biophysical Journal, **91** 2416-2426 (2006).  
[28]

**Books**  
Google Scholar

*Biological Energy Transduction: The Uroboros*, R. F. Fox (WileyInterscience, New York, 1982).  
[32]

[Energy and the Evolution of Life](#), R. F. Fox, (W. H. Freeman and Co., New York, 1988).  
[101]

**h-factor = 40**

February 2, 2019