

LIST OF PUBLICATIONS

(644 TOTAL PUBLICATIONS)

Garrison Sposito

BOOKS

1. Sposito, G. 1970. *An Introduction to Quantum Physics*. John Wiley and Sons, New York. 426 p.
2. U.S./IHD Work Group on Education and Training (several co-authors). 1972. *Hydrology and Water Resources*. U.S. National Academy of Sciences, Washington, D.C. 73 p.
3. Sposito, G., and J. R. Dunning, Jr. 1973. *Power from the Earth*. National Science Foundation, Washington, D.C. (30-minute video)
4. Sposito, G. 1976. *An Introduction to Classical Dynamics*. John Wiley and Sons, New York. 337 p.
5. Sposito, G. 1981. *The Thermodynamics of Soil Solutions*. Clarendon Press, Oxford. 223 p.
6. Sposito, G. 1984. *Termodinamika Pochvennych Rastvorov*. Gidrometeoizdat, St. Petersburg. 240 p. (Authorized translation of *The Thermodynamics of Soil Solutions*, corrected and revised)
7. Sposito, G. 1984. *The Surface Chemistry of Soils*. Oxford University Press, New York and Oxford. 234 p.
8. Huang, P. M., M. Schnitzer, R. S. Adams, G. Sposito, and J. L. White. (editorial committee). 1986. *Interactions of Soil Minerals with Natural Organics and Microbes*. Soil Science Society of America, Madison, Wisconsin. 606 p.
9. Sposito, G. (editor). 1989. *The Environmental Chemistry of Aluminum*. CRC Press, Boca Raton, Florida. 301 p.
10. Sposito, G. 1989. *The Chemistry of Soils*. Oxford University Press, New York and Oxford. 277 p.
11. Committee on Opportunities in the Hydrologic Sciences (several co-authors). 1991. *Opportunities in the Hydrologic Sciences*. U.S. National Academy of Sciences, Washington, D.C. 348 p.
12. Committee on Women in Science and Engineering (several co-authors). 1991. *Women in Science and Engineering: Increasing their Numbers in the 1990s*. U.S. National Academy of Sciences, Washington, D.C. 152 p.

13. Sposito, G., and R.J. Reginato (editors). 1992. *Opportunities in Basic Soil Science Research*. Soil Science Society of America, Madison, Wisconsin. 109 p.
14. Sposito, G. 1993. *Water in the Valley and the Art of the Possible*. California Council for the Humanities/Modesto Junior College Series, "The Other California: Defining the Great Valley for the 21st Century". Modesto Junior College, Modesto, California. (60-minute video)
15. Sposito, G. 1994. *Chemical Equilibria and Kinetics in Soils*. Oxford University Press, New York. 272 p.
16. Sposito, G. (editor). 1996. *The Environmental Chemistry of Aluminum*. 2nd Ed. Lewis Publishers, Boca Raton, Florida. 464 p.
17. Dietrich, W.E., and G. Sposito (editors). 1997. *Hydrologic Processes from Catchment to Continental Scales*. Annual Reviews, Inc., Palo Alto, California. 337 p.
18. Sposito, G. (editor). 1998. *Scale Dependence and Scale Invariance in Hydrology*. Cambridge University Press, New York. 423 p.
19. Sposito, G., and A. Zabel (editors). 1998. *Soil Quality in the California Environment*. Annual Report of Research Projects 1996-1997. Kearney Foundation of Soil Science, University of California, Berkeley, California. 148 p.
20. Sposito, G. 1998. *Bodenchemie*. Ferdinand Enke Verlag, Stuttgart. 230 p. (Authorized translation of *The Chemistry of Soils*, corrected and revised)
21. Zabel, A., and G. Sposito (editors). 1999. *Soil Quality in the California Environment*. Annual Report of Research Projects 1997-1998. Kearney Foundation of Soil Science, University of California, Berkeley, California. 171 p.
22. Sposito, G. (editor). 1999. *The Environmental Chemistry of Aluminum*. 2nd Ed. National Institute for Compilation and Translation, Taipei. 562 p. (Authorized translation into Chinese by arrangement with Bardou-Chinese Media Agency)
23. Zabel, A., and G. Sposito (editors). 2000. *Soil Quality in the California Environment*. Annual Report of Research Projects 1998-1999. Kearney Foundation of Soil Science, University of California, Berkeley, California. 194 p.
24. Zabel, A., and G. Sposito (editors). 2001. *Soil Quality in the California Environment*. Annual Report of Research Projects 1999-2000. Kearney Foundation of Soil Science, University of California, Berkeley, California. 256 p.
25. Zabel, A., and G. Sposito (editors). 2002. *Soil Quality in the California Environment*. Annual Report of Research Projects 2000-2001. Kearney Foundation of Soil Science, University of California, Berkeley, California. 206 p.

26. Sposito, G., and A. Zabel (editors). 2003. The Assessment of Soil Quality. Special Issue. *Geoderma* 114:143-414.
27. Sposito, G. 2004. *The Surface Chemistry of Natural Particles*. Oxford University Press, New York. 242 p. eBook edition published August 2005.
28. Sposito, G. 2008. *The Chemistry of Soils*. 2nd Ed. Oxford University Press, New York. 330 p. eBook edition published August 2008.
29. Sposito, G. (editor). 2008. *Scale Dependence and Scale Invariance in Hydrology*. Paperback Ed. Cambridge University Press, New York. 423 p.
30. Intergovernmental Technical Panel on Soils (numerous co-authors). 2015. *Status of the World's Soil Resources*. Food and Agriculture Organization of the United Nations, Rome, Italy. 648 p.
31. Sposito, G. 2016. *The Chemistry of Soils*. 3rd Ed. Oxford University Press, New York. 255p.

TECHNICAL JOURNAL ARTICLES

1. Fuller, W. H., G. Johnson, and G. Sposito. 1960. Influence of municipal refuse compost on plant growth. *Compost Sci.* 1:16
2. Anderson, D. M., G. Sposito, and A. Linville. 1963. Temperature fluctuations at a wetting front: II. The effect of initial water content of the medium on the magnitude of the temperature fluctuations. *Soil Sci. Soc. Am. Proc.* 27:367.
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4. Anderson, D. M., G. M. Leaming, and G. Sposito. 1963. Volume changes of a thixotropic, sodium bentonite suspension during sol-gel-sol transition. *Science* 141:1040.
5. Anderson, D. M., and G. Sposito. 1963. Rate of adsorption of water vapor by degassed Arizona bentonite. *Nature* 199:1085.
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8. Sposito, G., and K. L. Babcock. 1967. Charge-dipole model of cation hydration. *J. Chem. Physics* 47:153.
9. Sposito, G. 1967. Classical limit of the canonical partition function. *Am. J. Physics* 35:888.
10. Sposito, G. 1968. Quantum-ergodic problem. *J. Math. Physics* 9:1452.
11. Sposito, G. 1969. Proof of a conjecture, for large wave numbers, in Mihara and Puff's theory of the structure factor of liquid helium. *Physical Rev.* 182:284.
12. Sposito, G. 1969. Does a generalized Heisenberg principle operate in the social sciences? *Inquiry* 12:356.
13. Sposito, G. 1970. Equilibrium theory of liquid helium-four at absolute zero. *Physical Rev.* A2:948.
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21. Sposito, G. 1974. Foundations of the quantum statistics of systems in equilibrium: A measure-theoretic approach. *J. Statistical Physics* 10:321.
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24. Sposito, G. 1975. A thermodynamic integral equation for the equilibrium moisture profile in swelling soil. *Water Resour. Res.* 11:499.
25. Sposito, G. 1975. Steady vertical flows in swelling soils. *Water Resour. Res.* 11:461.
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27. Sposito, G., and D. M. Anderson. 1975. Infrared study of exchangeable cation hydration in montmorillonite. *Soil Sci. Soc. Am. Proc.* 39:1095.
28. Johnston, G. L., and G. Sposito. 1976. On the Stark effect of the plane rotator. *Am. J. Physics* 44:723.
29. Bhattacharya, R. N., V. K. Gupta, and G. Sposito. 1976. On the stochastic foundations of the theory of water flow through unsaturated soil. *Water Resour. Res.* 12:503.
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36. Gupta, V. K., G. Sposito, and R. N. Bhattacharya. 1977. Toward an analytical theory of water flow through inhomogeneous porous media. *Water Resour. Res.* 12:208.
37. Sposito, G., and S. V. Mattigod. 1977. On the chemical foundation of the sodium adsorption ratio. *Soil Sci. Soc. Am. J.* 41:323.
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39. Sposito, G., P. J. Sullivan, and V. K. Gupta. 1977. Experimental test of the Langevin Equation as a model for water flow through unsaturated soil. *Soil Sci. Soc. Am. J.* 41:820.
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49. Sposito, G., G. D. Schaumberg, T. G. Perkins, and K. M. Holtzclaw. 1978. Investigation of fulvic acid extracted from sewage sludge using carbon-13 and proton NMR spectroscopy. *Environ. Sci. Technol.* 12:931.
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55. Mattigod, S. V., and G. Sposito. 1978. Improved method for estimating the standard free energies of formation ($\Delta G_f^{\circ,298.15}$) of smectite. *Geochim. Cosmochim. Acta* 42:1753.
56. Sullivan, P. J., G. Sposito, S. M. Strathouse, and C. L. Hansen. 1979. Geologic nitrogen and the occurrence of high nitrate soils in the western San Joaquin Valley, California. *Hilgardia* 47:15.
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63. Sposito, G., V. K. Gupta, and R. N. Bhattacharya. 1979. Foundational theories of solute transport in porous media: A critical review. *Adv. Water Resour.* 2:59.
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69. Chu, S.-Y., and G. Sposito. 1980, 1981. A derivation of the macroscopic solute transport equation for homogeneous, saturated porous media. *Water Resour. Res.* 16:542; 17:440.
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