

PUBLICATIONS:

Kenneth K. Tanji

1. Tanji, K. K. 1961. Leaching effects with high sodium waters on chloride and bicarbonate salinized soil columns. Master's thesis, University of California, Davis. 42 pages. (unpublished)
2. Dutt, G. R. and K. K. Tanji. 1962. Predicting concentrations of solutes in water percolated through a column of soil. *Journal of Geophysical Research* 67(9):3437-3439.
3. Dutt, G. R. and K. K. Tanji. 1963. Interactions of chloride salts with calcium- and magnesium-saturated soils. *Soil Science* 95(6):418-422.
4. Tanji, K. K. and L. D. Doneen. 1966. A computer technique for prediction of CaCO₃ precipitation in - salt solutions. *Soil Science Society of America Proceedings* 30(1):53-56.
5. Paul, J. L., K. K. Tanji and W. D. Anderson. 1966. Estimating soil and saturation extract composition by a computer method. *Soil Science Society of America Proceedings* 30(1):15-17.
6. Tanji, K. K. and L. D. Doneen. 1966. Predictions on the solubility of gypsum in aqueous salt solutions. *Water Resources Research* 2(3):543-548.
7. Biggar, J. W., D. R. Nielsen and K. K. Tanji. 1966. Comparison of computed and experimentally measured ion concentrations in soil column effluents. *Transactions of the American Society of Agricultural Engineers* 9(6):784-787.
8. Tanji, K. K., G. R. Dutt, J. L. Paul and L. D. Doneen. 1967. Quality of percolating waters. II. A computer method for predicting salt concentrations in soils at variable moisture contents. *Hilgardia* 38(9):307-318.
9. Tanji, K. K., L. D. Doneen and J. L. Paul. 1967. Quality of percolating waters. III. The quality of waters percolating through stratified substrata, as predicted by computer analyses. *Hilgardia* 38(9):319-353.
10. Tanji, K. K., L. D. Doneen, J. V. Kubes and L. R. Simmons. 1968. Field techniques for sealing leaky concrete pipelines with ammoniated irrigation waters♦open and closed conduit research program. Report No. ChE-79, USDI, Bureau of Reclamation, Chemical Engineering Branch Division of Research. 63 pages. May.

11. Tanji, K. K., L. D. Doneen, J. V. Kubes and L. R. Simmons. 1969. Sealing leaks in pipelines with ammoniated waters. *Journal of the Irrigation and Drainage Division, American Society of Civil Engineers* 95(IR1):171-184. Paper No. 6473.
12. Doneen, L. D. and K. K. Tanji. 1969. Chemistry of lime in ammoniated waters for sealing concrete pipelines. *California Agricultural Experiment Station Bulletin No. 841*. 51 pages. June.
13. Tanji, K. K. 1969. Solubility of gypsum in aqueous electrolytes as affected by ion association and ionic strengths up to 0.15M and at 25_C. *Environmental Science and Technology* 3:656-661. July.
14. Tanji, K. K. 1969. Predicting specific conductance from electrolytic properties and ion association in some aqueous solutions. *Soil Science Society of America Proceedings* 33(6):887-890.
15. Tanji, K. K. 1970. A computer analysis on the leaching of boron from stratified soil columns. *Soil Science* 110(1):44-51. July.
16. Tanji, K. K. and J. W. Biggar. 1972. Specific conductance model for natural waters and soil solutions of limited salinity levels. *Water Resources Research* 8(1):145-153. February.
17. Tanji, K. K., L. D. Doneen, G. V. Ferry and R. S. Ayers. 1972. Computer simulation analysis on reclamation of salt-affected soils in San Joaquin Valley, California. *Soil Science Society of America Proceedings* 36(1):127-133. January-February.
18. Tanji, K. K. and J. W. Biggar. 1973. REPLY to Specific conductance model for natural waters and soil solutions of limited salinity levels. *Water Resources Research* 9(2):501-502. April.
19. Tanji, K. K. (one of 18 authors). Ayers, R. S. and R. L. Branson (eds.). 1973. Nitrates in the Upper Santa Anna River Basin in relation to groundwater pollution. University of California, Division of Agricultural Sciences, *California Agricultural Experiment Station Bulletin* 861:1-60. May.
20. Tanji, K. K., J. W. Biggar, M. Mehran and D. W. Henderson. 1973. Flood and seepage water sampling techniques in rice fields under different water management practices. *Soil Science Society of America Proceedings* 37(3):483-484. May-June.
21. Tanji, K. K., M. Mehran, J. W. Biggar and D. W. Henderson. 1973. Dye tracers aid rice chemical residue studies. *California Agriculture* 27(7):10-13.

July.

22. Tanji, K. K., J. W. Biggar, Mohsen Mehran, M. W. Cheung and D. W. Henderson. 1974. Herbicide persistence and movement studies with molinate in rice irrigation management. California Agriculture 28(5):10-12. May.
23. Mehran, Mohsen and Kenneth K. Tanji. 1974. Computer modeling of nitrogen transformations in soils. Journal of Environmental Quality 3(4):391-396.
24. Tanji, K. K. 1974. Book Review, J. Beek and M. J. Frissel. 1973. Simulation of Nitrogen Behavior in Soils. Centre for Agricultural Publishing and Documentation, Wageningen, 67 pages." Earth-Science Reviews 10(4):344-345. Elsevier Scientific Publishing Company.
25. Tanji, K. K., D. W. Henderson, S. K. Gupta, M. Iqbal and A. F. Quek. 1975. Water and salt transfers in Sutter Basin, California. Transactions, American Society of Agricultural Engineers 18(1):111-115, 121. January-February.
26. Gupta, Sumant K., Kenneth K. Tanji and James N. Luthin. 1975. A three-dimensional finite element ground water model. California Water Resources Center Contribution No. 152, University of California, Davis. 119 pages. November.
27. Tanji, K. K., D. W. Henderson and S. K. Gupta. 1975. Irrigation return flow in Sutter Basin, California. Proceedings Second World Congress, International Water Resources Association, New Delhi, India IV:311-319. December.
28. Fried, M., K. K. Tanji and R. M. Van De Pol. 1976. Simplified long term concept for evaluating leaching of nitrogen from agricultural land. Journal of Environmental Quality 5(2):197-200. April-June.
29. Gupta, S. K. and K. K. Tanji. 1976. A three-dimensional Galerkin finite element solution of flow through multiaquifers in Sutter Basin, California. Water Resources Research 12(2):155-162. April.
30. Gupta, S. K., Michael W. Morrissey, John Lonczak and K. K. Tanji. 1976. Conversion of irregular finite element grid data to regular grid for three-dimensional computer plotting. Water Resources Research 12(4):809-811. August.
31. Robinson, Frank E., J. N. Luthin, Rudy J. Schnagl, Wayne Padgett, Kenneth K. Tanji, William F. Lehman and Keith S. Mayberry. 1976. Adaptation to

increasing salinity of the Colorado River. California Water Resources Center Contribution No. 160, University of California, Davis. 59 pages. October.

32. Biggar, J. W. and K. K. Tanji. 1977. Soil-salt interactions in relation to salt control. *Transactions of the American Society of Agricultural Engineers* 20(1):68-75. January-February.
33. Tanji, K. K. 1977. A conceptual hydrosalinity model for predicting salt load in irrigation return flows. pages 49-70. In: Proceedings of the International Salinity Conference, Texas Tech University, Lubbock, Texas, 16-20 August, 1976.
34. Biggar, J. W., K. K. Tanji, C. S. Simmons, S. K. Gupta, J. L. MacIntyre and D. R. Nielsen. 1977. Theoretical and experimental observations of water and nitrate movement below a crop root zone. pages 71-77. In: J. P. Law, Jr. and G. V. Skogerboe (eds.), *Proceedings, National Conference on Irrigation Return Flow Quality Management*, Fort Collins, Colorado, May 16-19. Sponsored by U.S. Environmental Protection Agency and Colorado State University.
35. Tanji, K. K., J. W. Biggar, R. J. Miller, W. O. Pruitt and G. L. Horner. 1977. Evaluation of surface irrigation return flows in the Central Valley of California. pages 167-173. In: J. P. Law, Jr. and G. V. Skogerboe (eds.), *Proceedings, National Conference on Irrigation Return Flow Quality Management*, Fort Collins, Colorado, May 16-19. Sponsored by U.S. Environmental Protection Agency and Colorado State University.
36. Kinney, W., G. L. Horner and K. K. Tanji. 1977. An economic analysis of irrigation return flow recycle systems in the Central Valley of California. pages 175-182. In: J. P. Law, Jr. and G. V. Skogerboe (eds.), *Proceedings, National Conference on Irrigation Return Flow Quality Management*, Fort Collins, Colorado, May 16-19. Sponsored by U.S. Environmental Protection Agency and Colorado State University.
37. Tanji, K. K., M. Fried and R. M. Van de Pol. 1977. A steady-state conceptual nitrogen model for estimating nitrogen emissions from cropped lands. *Journal of Environmental Quality* 6(2):155-159. April-June.
38. Gupta, S. K., W. O. Pruitt, J. Lonczak and K. K. Tanji. 1977. Computer programme for estimation of reference crop evapotranspiration. Appendix III, pages 120-133. In: J. Doorenbos and W. O. Pruitt (eds.), *Guidelines for Predicting Crop Water Requirements*, FAO Irrigation and Drainage Paper No. 20 Revised. 144 pages.
39. Gupta, Sumant K. and K. K. Tanji. 1977. A new approach to reduce core

- storage and computational time in finite element solution and its applications. pages 2.179-2.94. In: W. G. Gray, G. F. Pinder, and C. A. Brebbia (eds.), Finite Elements in Water Resources. Pentech Press Ltd., London.
40. Gupta, S. K. and K. K. Tanji. 1977. Computer program for solution of sparse, unsymmetric systems of linear equations. pages 1251-1259. In: International Journal for Numerical Methods in Engineering, Volume 11.
 41. Tanji, K. K., Muhammad M. Iqbal, Ann F. Quek, Ronald M. Van De Pol, Linda P. Wagenet, Roger Fujii, Rudy J. Schnagl and Dave A. Prewitt. 1977. Surface irrigation return flows vary. California Agriculture 31(5):30-31. May.
 42. Miller, Robert J. and Kenneth K. Tanji. 1977. Sources and fate of nitrogen in the southern San Joaquin Valley floor. California Agriculture 31(5):27. May.
 43. Tanji, K. K. 1978. Monitoring water for nitrogen losses from croplands. pages 251-263. In: P. Pratt (ed.), Proceedings, National Conference on Management of Nitrogen in Irrigated Agriculture, Sacramento, California, May 15-18. Sponsored by U.S. Environmental Protection Agency, National Science Foundation, and University of California.
 44. Tanji, K. K. and Sumant K. Gupta. 1978. Computer simulation modeling for nitrogen in irrigated croplands. pages 79-131. In: Donald R. Nielsen and J. G. MacDonald (eds.), Nitrogen in the Environment, Volume 1, Nitrogen Behavior in Field Soil. Academic Press, New York.
 45. Tanji, K. K., J. W. Biggar, R. J. Miller, W. O. Pruitt and G. L. Horner. 1978. Evaluation of surface irrigation return flows in the Central Valley of California. pages 35-41. In: Conference on Improving Management Practices for Irrigated Agriculture, Davis, California, April 3-4. Sponsored by U.S. Environmental Protection Agency, Water Resources Center and Cooperative Extension Service, University of California, in cooperation with Arizona Department of Health Services, California State Water Resources Control Board, Hawaii Department of Health and Nevada Division of Environmental Protection.
 46. Tanji, K. K., F. E. Broadbent, M. Mehran and M. Fried. 1979. An extended version of a conceptual model for evaluating annual nitrogen leaching losses from croplands. Journal of Environmental Quality 8(1):114-120. January-February.
 47. Bilal, I. M., D. W. Henderson and K. K. Tanji. 1979. N losses in irrigation return flows from flooded rice plots fertilized with ammonium sulfate. Agronomy Journal 71(2):279-284. March-April.

48. Singer, M. J., K. K. Tanji and J. H. Snyder. 1979. Planning uses of cultivated cropland and pastureland. Chapter 10, pages 225-271. In: Marvin T. Beatty, C. Petersen and L. D. Swindale (eds.), *Planning the Uses and Management of Land*, American Society of Agronomy, Madison, Wisconsin, Agronomy Series No. 21.
49. Tanji, K. K. 1980. Problems of modeling nonpoint sources of nitrogen in agricultural systems. pages 165-186. In: Michael R. Overcash and J. M. Davidson (eds.), *Environmental Impact on Nonpoint Source Pollution*, Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan.
50. Robinson, F. E., K. K. Tanji, J. N. Luthin, W. F. Lehman, K. S. Mayberry, R. J. Schnagl and W. Padgett. 1980. Irrigation management of Colorado River water with increase in salinity. *Transactions, American Society of Agricultural Engineers* 23(4):859-865.
51. Nielsen, D. R., J. W. Biggar, J. MacIntyre and K. K. Tanji. 1980. Field investigation of water and nitrate-nitrogen movement in Yolo soil. pages 145-168. In: *Soil Nitrogen as Fertilizer or Pollutant*, International Atomic Energy Agency, Vienna.
52. Tanji, K. K., M. Mehran and S. K. Gupta. 1981. Water and nitrogen fluxes in the root zone of irrigated maize. pages 51-66. In: M. J. Frissel and J. A. van Veen (eds.), *Simulation of Nitrogen Behaviour of Soil-Plant Systems*. Papers of a workshop◆Models for the behaviour of nitrogen in soil and uptake by plant. Comparison between different approaches, Wageningen, The Netherlands. January 28-February 1, 1980.
53. Bosatta, E., I. K. Iskandar, N. G. Juma, G. Kruh, J. O. Reuss, K. K. Tanji and J. A. van Veen. 1981. Soil microbiology. pages 38-44. In: M. J. Frissel and J. A. van Veen (eds.), *Simulation of Nitrogen Behaviour of Soil-Plant Systems*. Papers of a workshop◆Models for the behaviour of nitrogen in soil and uptake by plant. Comparison between different approaches, Wageningen, The Netherlands. January 28-February 1, 1980.
54. Tanji, K. K. 1981. California irrigation return flow case studies. *Journal of the Irrigation and Drainage Division, Proceedings of the American Society of Civil Engineers* 107(IR2):209-220. June.
55. Tanji, K. K. 1981. Approaches and philosophy of modeling. pages 20-41, Chapter 2. In: I. K. Iskandar (ed.), *Modeling of Wastewater Renovation: Land Treatment*. John Wiley & Sons, New York.
56. Mehran, M., K. K. Tanji and I. K. Iskandar. 1981. Conceptual modeling for

- prediction of nitrate leaching losses. pages 444-477, Chapter 11. In: I. K. Iskandar (ed.), Modeling Wastewater Renovation: Land Treatment. John Wiley & Sons, New York.
57. Iskandar, I. K., K. K. Tanji, D. R. Nielsen and D. R. Keeney. 1981. Concluding remarks and research needs. pages 767-772, Section Six. In: I. K. Iskandar (Ed.), Modeling Wastewater Renovation: Land Treatment. John Wiley & Sons, New York.
58. Tanji, K. K. 1981. River basin hydrosalinity modeling. Agricultural Water Management 4:207-225. (Also appeared in Land and Stream Salinity. pages 207-225. J. W. Holmes and T. Talsma (eds.), Elsevier Scientific Publishing Company, Amsterdam.)
59. Tanji, K. K., J. W. Biggar, R. J. Miller, W. O. Pruitt and J. L. Horner. 1981. Irrigation tailwater management. Project Summary. U.S. Environmental Protection Agency, EPA-600/52-81-034a, Robert S. Kerr Environmental Research Lab, Ada, OK. 5 pages.
60. Tanji, K. K. 1982. Modeling of the soil nitrogen cycle. pages 721-772, Chapter 19. In: F. J. Stevenson (Ed.), Nitrogen in Agricultural Soils, Agronomy Monograph No. 22. American Society of Agronomy, Madison, Wisconsin. 940 pages.
61. Hauck, R. D. and K. K. Tanji. 1982. Nitrogen transfers and mass balances. pages 891-925, Chapter 23. In: F. J. Stevenson (Ed.), Nitrogen in Agricultural Soils, Agronomy Monograph No. 22. 940 pages.
62. Levy, R., L. D. Whittig and K. K. Tanji. 1982. Ionic activity products and crystal forms of calcium and magnesium carbonates precipitated from calcium-magnesium bentonites. Soil Science Society of America Journal 46(3): 497-502.
63. Whittig, L. D., A. E. Deyo and K. K. Tanji. 1982. Evaporite mineral species in Mancos Shale and salt efflorescence, Upper Colorado River Basin. Soil Science Society of America Journal 46(3):645-651. May-June.
64. Tanji, K., M. Singer, J. Biggar, L. Whittig and D. Henderson. 1983. Nonpoint sediment production in the Colusa Basin Drainage Area, California. Project Summary. U.S. Environmental Protection Agency, EPA-600/S2-83-025, Robert S. Kerr Environmental Research Laboratory, Ada, Oklahoma. 3 pages.
65. Selim, H. M., M. Mehran, K. K. Tanji and I. K. Iskander. 1983. Mathematical simulation of nitrogen interactions in soils. Mathematics and Computers in

Simulation XXV:241-248.

66. Levy, R., K. K. Tanji and L. D. Whittig. 1983. Effect of precipitation of alkaline earth carbonates and magnesium hydroxide on Na-Ca-Mg exchange in Wyoming bentonite. *Soil Science Society of America* 47(5):906-912. September-October.
- 67.
68. Evangelou, V. P., L. D. Whittig, and K. K. Tanji. 1984. Dissolved mineral salts derived from Mancos shale. *Journal of Environmental Quality* 13(1):146-150. January-March.
69. Mehran, M., J. Noorishad, and K. K. Tanji. 1984. A numerical technique for simulation of the effect of soil nitrogen transport and transformations on groundwater contamination. *Environmental Geology* 5(4):213-218.
70. Evangelou, V. P., L. D. Whittig, and K. K. Tanji. 1984. An automated manometric method for quantitative determination of calcite and dolomite. *Soil Science Society of America Journal* 48(6):1236-1239. November-December.
71. Tanji, K. K., L. D. Doneen, G. V. Ferry and R. S. Ayers. 1984. Computer simulation analysis on reclamation of salt-affected soils in San Joaquin Valley, California. *Soil Science Society of America Proceedings* 36:127-133, 1972. Reprinted in Benchmark Papers in Soil Science Series, Chemistry of Irrigated Soils, Rachel Levy, (ed.). Van Nostrand Reinhold Co. pp. 369-375.
72. Tanji, K. K. and S. J. Deverel. 1984. Simulation modelling for reclamation of sodic soils. Chapter 7.2, pp. 238-257. In: I. Shainberg and J. Shalheveth (eds.), *Soil Salinity Under Irrigation, Processes and Management*, Springer-Verlag.
73. Evangelou, V. P., L. D. Whittig and K. K. Tanji. 1985. Dissolution and desorption rates of calcium and magnesium from Mancos shale. *Soil Science* 139(1):55-61. January.
74. Oster, J. D. and K. K. Tanji. 1985. Chemical reactions within root zone of arid zone soils. *American Society of Civil Engineering, Journal of Irrigation and Drainage Engineering* 111(3):207-217. September.
75. Tanji, K. K., M. E. Grismer and B. R. Hanson. 1985. Subsurface drainage evaporation ponds. *California Agriculture* 39(9-10):10-12. September-October.

76. Aragues, R., K. K. Tanji, D. Quilez, F. Alberto, J. Faci, J. Machin and J. L. Arrue. 1985. Calibration and verification of an irrigation return flow hydrosalinity model. *Irrigation Science* 6:85-94.
77. Davidson, J. M., A. D. Hanson, D. R. Nielsen, et al. (submitted on behalf of the group, K. K. Tanji, member). 1986. Environmental constraints. pages 196-215. In: *Crop Productivity & Research Imperatives Revisited*, Proceedings International Conference, Harbor Springs, Michigan. Drafted Research Imperatives, III. Determine Impacts of Agricultural Practices on the Environment. pp. 204-207.
78. Tanji, K., A. L. Luchli and J. Meyer. 1986. Selenium in the San Joaquin Valley. *Environment* 28(6):6-11, 34-39.
79. Deverel, S. J., L. D. Whittig and K. K. Tanji. 1986. Sulfate reduction and calcium carbonate equilibria in a central California Histosol. *Soil Science Society of America Journal* 50(5):1189-1193.
80. Tanji, K. K., L. D. Doneen, G. V. Ferry and R. S. Ayers. 1986. Computer simulation analysis on reclamation of salt-affected soils in San Joaquin Valley, California. pages 346-352. In: Adel M. Elprince (ed.), *Chemistry of Soil Solutions*. Van Nostrand Reinhold Company, New York. (Originally printed in *Soil Science Society Proceedings* 36:127-133 [1972]).
81. Quilez, D., R. Aragues and K. K. Tanji. 1987. Description de un models conceptual hidrosalino del sistema <>. *Investigacion Agraria, Producion Vegetales* 2(2):149-164.
82. Nour el-Din, M. M., I. P. King and K. K. Tanji. 1987. Salinity management model: I. Development. American Society of Civil Engineering, *Journal of Irrigation and Drainage Engineering* 113(4):440-453.
83. Nour el-Din, M. M., I. P. King and K. K. Tanji. 1987. Salinity management model: II. 1- and 2-D applications. American Society of Civil Engineering, *Journal of Irrigation and Drainage Engineering* 113(4):454-468.
84. Tanji, K., L. Valoppi and C. Woodring, (eds). 1988. *Selenium Contents in Animal and Human Food Crops Grown in California*. Division of Agricultural and Natural Resources Special Publication 3330, University of California. 102 pages. September.
85. Valoppi, L. and K. Tanji. 1988. Are the selenium levels in food crops and waters of concern? Section IV, Summary, Conclusions and Recommendations, pages 97-102. In: *Selenium Contents in Animal and*

Human Food Crops Grown in California. Division of Agriculture and Natural Resources Special Publication 3330, University of California.

86. Mirbagheri, S. A., K. K. Tanji and R. B. Krone. 1988. Sediment characterization and transport in Colusa Basin Drain. American Society of Civil Engineers, *Journal of Environmental Engineering* 114(6):1257-1273.
87. Mirbagheri, S. A., K. K. Tanji and R. B. Krone. 1988. Simulation of suspended sediment in Colusa Basin Drain. American Society of Civil Engineers, *Journal of Environmental Engineering* 114(6):1275-1294.
88. Tanji, K. and L. Valoppi. 1989. Groundwater contamination by trace elements. *Agriculture Ecosystems and Environment* 21:229-274.
89. Tanji, K. K. and B. R. Hanson. 1990. Drainage and return flows in relation to irrigation management. Chapter 35, pages 1057-1088. In: B. A. Stewart and D. R. Nielsen (eds.), *Irrigation of Agricultural Crops*, Agronomy Monograph No. 30, American Society of Agronomy, Madison, WI.
90. Tanji, K. K. (ed.). 1990. *Agricultural Salinity Assessment and Management*. American Society of Civil Engineers Manuals and Reports on Engineering Practice No. 71, American Society of Civil Engineers, New York, NY. 619 pages.
91. Tanji, K. K. 1990. The nature of extent of agricultural salinity problems. Chapter 1, pages 1-17. In: K. K. Tanji (ed.), *Agricultural Salinity Assessment and Management*, American Society of Civil Engineers Manuals and Reports on Engineering Practice No. 71, American Society of Civil Engineers, New York, NY. 619 pages.
92. Aragones, R., K. K. Tanji, D. Quilez and J. Faci. 1990. Conceptual irrigation project hydrosalinity model. Chapter 24, pages 504-529. In: K. K. Tanji (ed.), *Agricultural Salinity Assessment and Management*, American Society of Civil Engineers Manuals and Reports on Engineering Practice No. 71, American Society of Civil Engineers, New York, NY. 619 pages.
93. Gupta, Raj K., R. R. Singh and K. K. Tanji. 1990. Phosphorus release in sodium ion dominated soils. *Soil Science Society of America Journal* 54:1254-1260.
94. Tanji, K. K. 1990. Accumulation of salts and trace elements in agricultural evaporation ponds. Transaction, 14th International Congress of Soil Science VII:180-185.
95. Tanji, K. K. and M. Nour El Din. 1991. Nitrogen solute transport. Chapter 15.

- pages 341-354. In: R. J. Hanks and J. T. Ritchie (eds.), *Modeling Plant and Soil Systems*, Agronomy Monograph No. 31, American Society of Agronomy, Madison, WI.
96. Tanji, K. K. 1991. Irrigation-induced water quality problems. 1990. 157 pages. National Academy Press. *Journal of Environmental Quality* 20(1):313 (an extended book review).
 97. Hanson, B. R., W. Bowers, S. R. Grattan, D. W. Grimes and K. K. Tanji. 1991. Trace elements limit potential for blending San Joaquin drainwater with canal water. *California Agriculture* 45(2):17-19.
 98. Tanji, K. K. 1991. Pollution prevention in natural resources management with a focus on nitrates and pesticides in agricultural production systems. pages 271-288. In: J. Deason (ed.), *Proceedings, International Conference and Exhibition, Global Pollution Prevention '91*, U.S. Environmental Protection Agency, April 3-5, 1991, Washington, D.C.
 99. Vaux, H. J., Jr. and K. K. Tanji. 1991. Future research on salinity and drainage. Chapter 45. pages 893-992. In: A. Dinar and D. Zilberman (eds.), *The Economics and Management of Water and Drainage in Agriculture*. Kluwer Academic Publishers, Boston, MA.
 100. Tanji, K. K., M. E. Grismer, L. D. Whittig and R. G. Bureau. 1991. Evaluation of evaporation ponds for saline drainage water. *Water Resources Center Contribution*, University of California, Riverside, California. 127 pages.
 101. Tanji, K. K. 1991. Water: Stretching the limits. Chapter 2. pages 9-22. In: H. C. Carter, R. Coppock and L. Kennedy (eds.), *Resource Pressures: California's Central Valley*. Agricultural Issues Center, University of California, Davis, California.
 102. Kachanowski, R. G., K. K. Tanji, L. T. Rollins, L. D. Whittig and R. Fujii. 1992. Dissolution kinetics of CaCO₃: CARKIN-1, A conceptual model. *Soil Science* 153:113-24.
 103. Tanji, K. K. and F. F. Karajeh. 1992. Feasibility of agroforestry systems to reduce problem drain waters. pages 385-392. In: L. Vermes (ed.), *Proceedings, 16th European Regional Conference. International Commission on Irrigation and Drainage*, Budapest, Hungary, June 21-27, 1992.
 104. Ong, C. G., R. A. Dahlgren and K. K. Tanji. 1992. X-ray diffraction pattern reduction and computer-rendered line peak spectra for mineral analyses. *Computers and Geosciences* 18:517-529.

105. Tanji, K.K., C.G.H. Ong, R.A. Dahlgren and M.J. Herbel. 1992. Salt Deposits in Evaporation Ponds: An Environmental Hazard. California Agriculture 46(6): 18-21.
106. Tanji, K.K. and F.F. Karajeh. 1993. Saline Drainwater Reuse in Agroforestry Systems. ASCE Journal of Irrigation and Drainage Engineering 119(1): 170-180.
107. Tanji, K.K. 1993. Prognosis on Managing Trace Elements. In: A series of eight papers on Management Options for Trace Elements in Agricultural Drainage Waters. ASCE Journal of Irrigation and Drainage Engineering 119(3): 577-583.
108. Tanji, K.K. 1993. Salinity, Drainage and Trace Element Problems in California's San Joaquin Valley West Side. pp. 125-133. In: K. Foster (editor), Proceedings Collaborative Research and Development Applications for Arid Lands, Engineering Foundation Conferences, Santa Barbara, August 7, 1991.
109. Quilez, D., R. Aragues and K.K. Tanji. 1992. Salinity of Rivers: Transfer Function-Noise Approach. ASCE Journal of Irrigation and Drainage Engineering 118(3): 343-359.
110. Wu, L., A. Engberg and K.K. Tanji. 1993. Natural Establishment and Selenium Accumulation of Herbaceous Plant Species in Soils with Elevated Concentrations of Selenium and Salinity Under Irrigation and Tillage Practices. Ecotoxicology and Environmental Safety 25: 127-140.
111. Jurinak, J.J. and K.K. Tanji. 1993. Geochemical Factors Affecting Trace Element Mobility. In: A series of eight papers on Management Options for Trace Elements in Agricultural Drainage Waters, ASCE Journal of Irrigation and Drainage Engineering 119(5): 848-867.
112. Tanji, K.K. 1993. Opportunities for Reuse of Saline Drainage Waters by Eucalyptus Trees. pp. 121-130. In: S. Arunin (Ed), Proceedings, International Symposium on Strategies for Utilizing Salt-Affected Lands, International Soil Science Society, Bangkok, Thailand, February 17-25, 1992.
113. Ong, C.G. and K.K. Tanji. 1993. Evaporative Concentration of Trace Elements in a Multi-Cell Agricultural Evaporation Pond. Journal of Agricultural and Food Chemistry 41: 1507-1510.
114. Koluvek, P.K., K.K. Tanji and T.J. Trout. 1993. Overview of Soil Erosion from Irrigation. ASCE Journal of Irrigation and Drainage Engineering 119(6):

929-946.

115. Carter, D.L., C.E. Brockway and K.K. Tanji. 1993. Controlling Erosion and Sediment Loss from Furrow-Irrigated Cropland. ASCE Journal of Irrigation and Drainage Engineering 119(6): 975-988.
116. Tanji, K.K. 1993. Ground Water Contamination Concerns from Horticultural Crop Production Systems. J. Lopez-Galvez (editor), International Symposium on Irrigation of Horticultural Crops, November 23-27, 1992, Acta Horticulturae Number 335: 37-42. (An invited keynote paper).
117. Tanji, K.K. and F.F. Karajeh. 1993. Modeling Saline Drainwater Reuse in Agroforestry Systems. Technical Completion Report, Project Number W-WP-1, Water Resources Center, University of California, 94 pages (peer reviewed).
118. Tanji, K.K. 1993. Fate and Transport of Pesticides in Agroecosystems. Chapter 8, pages 313-335. In: Soil and Water Quality: An Agenda for Agriculture, Committee on Long-Range Soil and water Conservation, Board on Agriculture, Sandra Batie, Chair, National Academy Press.
119. Tanji, K.K. and J. Van Schilfgaarde. 1993. Salts and Trace Elements. Chapter 10, pp 361-397. In: Soil and Water Quality: An Agenda for Agriculture, Committee on Long-Range Soil and water Conservation, Board on Agriculture, Sandra Batie, Chair, National Academy Press.
120. Tanji, K.K. and B. Yaron, Editors. 1994. Management of Water Use in Agriculture. Springer-Verlag, Heidelberg, Germany, 320 pages.
121. Tanji, K.K. and C.A. Enos. 1994. Global Water Resources and Agricultural Use. Chapter 1, pp. 3-24. In: Management of Water Use in Agriculture, K.K. Tanji and B. Yaron (editors), Springer-Verlag, Heidelberg, Germany.
122. Karajeh, F.F., K.K. Tanji and I.P. King. 1994. Agroforestry Drainage Management Model I. Theory and Validation. ASCE Journal of Irrigation and Drainage Engineering 120(2): 363-381.
123. Karajeh, F.F. and K.K. Tanji. 1994. Agroforestry Drainage Management Model. II. Field Water Flow. ASCE Journal of Irrigation and Drainage Engineering 120(2): 382-396.
124. Karajeh, F.F. and K.K. Tanji. 1994. Agroforestry Drainage Management Model. III. Field Salt Flow. ASCE Journal of Irrigation and Drainage Engineering 120(2): 397-413.

125. Oster, J.D., H.J. Vaux, Jr. and L.T. Wallace. Project Co-Chairs. 1994. Ground Water Quality and its Contamination from Non-Point Sources in California. Tanji one of 12 contributing authors. UC Centers for Water and Wildland Resources, Water Resources Center Report No. 83, ISSN 0575-4968, 38 pages.
126. Jackson, L.E., L.J. Stivers, B.T. Warden and K.K. Tanji. 1994. Crop Nitrogen Utilization and Soil Nitrate Loss in a Lettuce Field. Fertilizer Research 37:93-105 127. Tanji,K., and R. Dahlgren. 1994. Accumulation of Toxic trace elements in evaporites in agricultural evaporation ponds. Technical completion report to UC Water Resources Center, 84 p., peer-reviewed.
127. Tanji, K., and R. Dahlgren. 1994. Accumulation of Toxic trace elements in evaporites in agricultural evaporation ponds. Technical completion report to UC Water Resources Center, 84 p., peer-reviewed.
128. Tanji, K.K. 1994. Impacts on Human Health and Agricultural and Natural Systems, Chapter 2, pages 23-37, IN Proceedings, Animal Agriculture Impacts on Water Quality in California, Ray Coppock, and Stephanie Weber, Editors, co-sponsored by Animal Agriculture Research Center and Agricultural Issues center, University of California, Davis, Pub. No. AA-1, Oct. 29, 1994, Sacramento, CA, ISBN 1-885976-00-3.
129. Jackson, L.E., L.J. Stivers, B.T. Warden and K.K. Tanji. 1994. Crop Nitrogen Utilization and Soil Nitrate Loss in a Lettuce Field. Fertilizer Research 37:93-105.
130. Gao, Suduan and K.K. Tanji. 1995. Modeling the Biomethylation and Volatilization of Selenium from Agricultural Evaporation Ponds. Journal of Environmental Quality 24(1): 191-197.
131. Smith, G. R., K. K. Tanji, J. J. Jurinak and R. G. Burau. 1995. Applications of a Pitzer Equations-based Model for Hypersaline Solutions. Chapter 7, pages 113-141, In R. H. Loeppert, A. P. Schwab, and S. Goldberg (editorial committee), Chemical Equilibrium and Reaction Models. SSSA Special Publication No. 42, Soil Science Society of America , Madison, WI.
132. Smith, G. R., K. K. Tanji, J. J. Jurinak and R. G. Burau. 1995. C SALT-A Chemical Equilibrium Model for Multicomponent Solutions. Chapter 15, pages 289-324, In R. H.Loeppert, A. P. Schwab, and S. Goldberg (editorial committee), Chemical Equilibrium and Reaction Models. SSSA Special Publication No. 42, Soil Science Society of America, Madison, WI.
133. Ong, C.G., K.K. Tanji, R.A. Dahlgren, G.R. Smith and A.F. Quek. 1995.

Water Quality and Trace Element Evapoconcentration in Evaporation Ponds for Agricultural Waste Water Disposal. *Journal of Agricultural and Food Chemistry* 43: 1941-1947.

134. Tanji, K., I. Endo and T. Kojima. 1995. Guest Editorial. *Journal of Arid Land Studies* 4(2): 144-146.
135. Endo, I. et al. (Tanji one of 11 co-authors). 1995. Principle Scientific and Technological Problems and Issues in Desert Environments. *Journal of Arid Studies* 4(2):147-151.
136. Tanji, K.K. 1995. Saline Drainwater Reuse in Agroforestry Systems. *Journal of Arid Land Studies* 4(2):251-256.
137. Wu, L., J. Chen, K. Tanji and G. Banuelos. 1995. Distribution and biomagnification of selenium in a restored upland grassland contaminated by selenium from agricultural drainwater. *Environmental Toxicology and Chemistry* 14(4): 733-742.
138. Tanji, K.K. and J.J. Sullivan. 1995. QSAR Analysis of the Chemical Hydrolysis of Organophosphorus Pesticides in Natural Waters. Technical Completion report, Project No. W 843, University of California Water Resources Center, 35 pages (peer-reviewed).
139. Tayfur, G., K. Tanji, B. House, F. Robinson, L. Teuber, and G. Kruse. 1995. Modeling Deficit Irrigation in Alfalfa Production with Salinity and Economic Considerations. *ASCE Journal of Irrigation and Drainage Engineering* 121(6):442-451.
140. Tanji, K.K. 1995. Foreword to book, Salinisation of Land Water Resources. Human Causes, Extent, Management & Case Studies, F. Ghassemi, A.J. Jakeman, and H.A. Nix. University of New South Wales Press, Ltd., Sydney, Australia, 526 pages. p.xiii.
141. Kojima, T., K.K. Tanji and I. Endo, Editors. 1995. Special Edition on Desert Technology III. *Journal of Arid Land Studies* 5S; 357 pages.
142. Tanji, K.K. 1995. Fate and Transport of Pesticides into Ground Waters. *Journal of Arid Land Studies*. 5S: 235-238
143. Tanji, K.K. 1995. A Brine Chemistry Model to Simulate the Formation of Evaporites in Waters Undergoing Desiccation. *Journal of Arid Land Studies* 5S: 267-270.
144. Ayers, J.E. and K.K. Tanji. 1999. Effects of Drainage on Water Quality in

Arid and Semi-arid Irrigated Lands. Chapter 25, pages 831-867, IN Drainage Monograph, W. Skaggs and J. van Schilfgaarde, editors, American Society of Agronomy.

145. Gao, S., K. Tanji and S. Goldberg. 1998. Reactivity and transformations of arsenic. Pages 17-38, IN Symposium on Sources, Control and Remediation of Oxyanions in Agroecosystems, L. Dudley and J. Guitjens, editors, Pacific Division, AAAS Annual Meeting, San Francisco, June 19-22, 1994.
146. National Research Council. 1996. Review of the Department of Interior's National Irrigation Water Quality Program: Planning and Remediation. Committee on Planning and Remediation for Irrigation-Induced Water Quality Problems, R. Hartung, Chair (and 11 coauthors including Tanji), Water Science and Technology Board. National Research Council, 68 p. (peer reviewed).
147. Tanji, K. 1996. Remediation and Studies Undertaken at Kesterson National Wildlife Refuge and in the San Joaquin Valley, Appendix A, pages 57-63, IN Review of the Department of Interior's National Irrigation Water Quality Program: Planning and Remediation. Committee on Planning and Remediation for Irrigation-Induced Water Quality Problems, R. Hartung, Chair, Water Science and Technology Board. National Research Council. (peer reviewed).
148. Herbel, M., K. Tanji, R. Dahlgren, G. Smith, and A. Quek. 1996. Acidification of Agricultural Evaporation Ponds: Effects on Trace Element Chemistry in Sediment/Water Core Microcosms, Journal of Environmental Quality 25(4):732-742.
149. Tanji, K.K. 1996. Modeling saline drainwater reuse in a eucalyptus plantation. Pages 11-19, IN Proceedings, International Symposium on Development of Basic Technology for Sustainable Agriculture under Saline Conditions, Arid Land Research Center, Tottori University, Japan, Dec 12, 1996.
150. Zhang, M., S. Geng, S. Ustin and K. Tanji. 1997. Pesticide Impact on Groundwater in Tulare County, California. Environmental Monitoring and Assessment 45:101-127.
151. Tanji, K.K. 1997. Irrigation with marginal quality waters : Issues. ASCE Journal of Irrigation and Drainage Engineering 123(3): 165-169.
152. Tanji , K.K. 1997. Disposal to Evaporation Ponds, Chapter 3, pages 53-57, In Management of Agricultural Drainage Water Quality, C.A. Madramootoo, W.R. Johnston, and L.S. Willardson, editors, International Committee on

Irrigation and Drainage. FAO Water Report 13.

153. Kiely, G., G. Tayfur, C. Dolan and K.K. Tanji. 1997. Physical and mathematical modeling of anaerobic digestion of organic wastes. *Water Resources* 31(3): 534-540.
154. Herbel, M.J., R.A. Dahlgren, K.K. Tanji and Suduan Gao. 1997. Acidification Effects on Trace Element Chemistry in Agricultural Evaporation Pond Sediments. *Journal of Environmental Quality* 26(3): 815-829.
155. Ong, C.G., R.A. Dahlgren, M.J. Herbel and K.K. Tanji. 1997 Trace Element Contamination of Evaporites in Hypersaline Agricultural Evaporation Ponds. *Environmental Science and Technology* 31(3):831-836.
156. Maruyama, T. and K.K. Tanji. 1997. Physical and Chemical Processes in Relation to Paddy Drainage. *Shinzansha Science and Technology* Pub. Co., Inc. (in English), Tokyo, 229 pages.
157. Tanji, K.K. 1998. Agricultural Evaporation Ponds: Hydrology, Chemistry, and Toxicity. Pages xx-xx, IN Proc Asian Conference on Water and Wastewater Management, March 2-4, 1998, Tehran, Islamic Republic of Iran, 7 pages.
158. Watanabe, T. and K.K. Tanji. 1998. Eco-environmental constraints to rice irrigation, IN CD-ROM Proceedings, ASCE's 1998 International Water Resources Engineering Conference, Memphis, TN, Aug. 3-7, 1998.
159. Tanji, K.K. 1999. Drainwater reuse in agroforestry: Case study. In CD-ROM Proceedings ASCE's 1999 International Water Resources Engineering Conference, Seattle, WA, Aug. 8-11, 1999.
160. Tanji, K.K., A.T. Chow and S. Gao. 1999. Dissolved organic carbon (DOC) production from cultivated organic soils on Twitchell Island, Sacramento-San Joaquin Delta, California. Technical Completion Report to UC Water and Wildlands Resources Center, Aug. 1999, 144 pages.
161. Technical Committee on Evaporation Ponds. 1999. Final report on evaporation ponds for the San Joaquin Valley Drainage Implementation Program, K.K. Tanji, chair, Submitted to the San Joaquin Valley Drainage Implementation Program, Feb. 2, 1999, 84 pages.
162. Kotb, T.H.S., T. Watanabe, Y. Ogino and K.K. Tanji. 2000. Soil salinization in the Nile Delta and related policy issues in Egypt. *Agricultural Water Management* 43: 239-261.

163. Tanji, K.K. 2000. Modeling constituents of concern in drainwater reuse by Eucalyptus trees. *Journal of Arid Land Studies* 10S: 57-60.
164. Gao, S., K.K. Tanji, D.W. Peters and M.J. Herbel. 2000. Water selenium speciation and sediment fraction in a California flow-through wetland system. *Journal of environmental Quality* 29(4): 1275-1283.
165. Sullivan, J.J., Jones, A.D. and K.K. Tanji. 2000. QSAR treatment of electronic substituent effects using frontier orbital theory and topological parameters. *Journal of Chemical Information and Computer Science* 40(5):1113-1127).
166. Tanji, K.K. and T. Watanabe. 2000. Environmental and ecological constraints on rice irrigation in California, USA. Pages 91-96, IN Proceedings, Asian Regional Workshop on Sustainable Development of Irrigation and Drainage for Rice Paddy Field, Japanese National Committee of International Commission on Irrigation and Drainage, July 24-28, 2000, Tokyo, Japan.
167. Tanji, K.K. 2000. Alternative irrigation management options to meet waste discharge requirements into the San Joaquin River, California, USA. Pages 57-66, IN Proceedings International Symposium on Salinity Problems and Water Management in Arid Areas, Kinki University, Nara, Japan, July 31, 2000.
168. Ad hoc Coordination Committee. 2000. Evaluation of the 1990 Drainage Management Plan for the Westside Dan Joaquin Valley, California. Final Report to Management Group, San Joaquin Valley Drainage Implementation Group, 87 pages. (Tanji principal author on Chapter 8, Discussion of Interaction of Options and a Case Study.)
169. Tanji, K. and T. Watanabe. 2001. Environmental and ecological constraints on rice irrigation in California, USA. IN CD-ROM Proceedings, First Asian Regional Conference, International Commission on Irrigation and Drainage, Seoul, Korea, September 16-21, 2001.
170. National Research Council. 2002. Opportunities to Improve the U.S. Geological Survey National Water Quality Assessment Program. G.R. Hallberg, chair (Tanji one of 12 co-authors), National Academy Press, Wash. D.C., 238 pages.
171. Tanji, K.K. 2002. Salinity in the Soil Environment. Chapter 2, pages 21-51, IN Salinity: Environment-Plants-Molecules, A Lauchli and U. Luttge, editors, Kluwer Academic Publishers.

172. Gao, S., K.K. Tanji, S.C. Scardaci and A.T. Chow. 2002 Comparison of redox indicators in a paddy soil during rice-growing season. *Soil Science Society of America Journal* 66(3): 805-817.
173. Tanji, K.K. and C.G. Keyes, Jr. 2002. Water quality aspects of Irrigation and Drainage Division: Past history and future challenges for civil engineers. ASCE 150-year invited paper. *ASCE Journal of Irrigation and Drainage Engineering* 128(6): 332-340.
174. Keyes, Jr., C.G. and K.K. Tanji. 2002. History and heritage of the Irrigation and Drainage Division. IN Environmental and Water Resources History, Proceedings and Invited Papers for the 150th ASCE Anniversary (1852-2002), J.R. Rogers and A.J. Fredrich, editors, November 3-7, 2002, Wash. D.C.
175. Herbel, M.J., T.M. Johnson, K.K. Tanji, S. Gao and T.D. Bullen. 2002. Selenium stable isotope ratios in California agricultural drainage water management systems. *Journal of Environmental Quality* 31: 1146-1156.
176. Tanji, K.K., W.W. Wallender and L.T. Rollins. 2002. San Joaquin Valley Case Study: Irrigation drainage water management options. In, Proceedings 17th World Congress, International Union of Soil Science, Bangkok, Thailand, August, 2002.
177. Tanji, K., D. Davis, C. Hanson, A. Toto, R. Higashi and C. Amrhein. 2002. Evaporation ponds as a drainwater disposal management plan. *Irrigation and Drainage Systems* 16(4): 1-17.
178. Tanji, K.K. 2002. Case study on the reuse and disposal of drainage water in California's San Joaquin Valley westside. Appendix I, IN Guidelines for Reuse and Disposal of Drainage Water, FAO Irrigation and Drainage Paper 61, K. K. Tanji and N.C. Kienlen, (in press)
179. Tanji, K.K. and N. C. Kienlen. 2002. Guidelines for Reuse and Disposal of Drainage Water, FAO Irrigation and Drainage Paper 61, 202 pages (in press).
180. Tanji, K.K., S. Gao, S.C. Scardaci and A.T. Chow. 200x Characterizing redox status of paddy soils with incorporated rice straw. *Geoderma* (in press).
181. Gao, S., K.K. Tanji and S.C. Scardaci. 200x Does incorporating straw enhance sulfide toxicity to paddy rice? *California Agriculture* (in press).
182. Gao, S., K. K. Tanji, Z. Lin, N. Terry, and D.W. Peters. 200x Selenium

removal and mass balance in a constructed flow-through wetland system.
Journal of Environmental Quality (in press).