[13] Lorenz, E. N., Deterministic non-periodic flow, *J. Atmos. Sci.* **20**, 130–141, 1961.

[14] Sell, G. R., Topological Dynamics and Ordinary Differential Equations, Van Nostrand Reinhold Company, London, 1971.

[15] Shi, Y. & Chen, G., Chaos of discrete dynamical systems in complete metric spaces, *Chaos Soliton. Fract.* **22**, 555–571, 2004.

[16] Shi, Y. & Yu, P., On chaos of the logistic maps, *Dynam. Contin. Discrete Impuls. Syst. Ser. B* **14**, 175–195, 2007.

[17] Wiggins, S., *Global Bifurcation and Chaos: Analytical Methods*, Springer-Verlag, New York, Berlin, 1988.