T-periodic solutions for a second order system with singular nonlinearity

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We consider a system of the form u?' + au? = Hv(u, v)-h(t) v?' + bv? = Hu(u, v)-k(t), where h, k are locally integrable and T-periodic, and H is a C1 function defined on (0,?)x(0,?), for which a good model is given by H(u, v) =-(1/u? + 1/v?),?,?, > 0. We state conditions under which existence of positive, T-periodic solutions for this system is ensured. We also study the problems of uniqueness and existence of multiple solutions in some special cases.