
Nonlinear Noninteger Order Systems

oscillator with non-integer order nonlinearity and time ... - where α is the order of nonlinearity (an integer or non-integer), w is the time variable parameter, $\tau = \epsilon t$ is the slow time, $\epsilon \ll 1$ is a small parameter, and ϵf is the additional small nonlinear function. **differential equations of non-integer order with integral ...** - of the differential equation of non-integer order with integral boundary conditions. keywords: fractional differential equation, integral boundary conditions, lower and upper solutions, existence and uniqueness.

some new results on iterative learning control of ... - some new results on iterative learning control of noninteger order mihailo lazarević 1) iterative learning control (ilc) is one of the recent topics in control theories and it is a powerful control concept that iteratively improves the behavior of processes repetitive in their nature. ilc is suitable for controlling a wider class of mechatronic systems - it is especially suitable for the ... **iterative learning control of integer and noninteger order ...** - control (ilc) based on and integer and fractional order. ilc is one of the recent topics in control theories and it is a powerful ul ilc is one of the recent topics in control theories and it is a ... **limit cycles in nonlinear systems with fractional order plants** - fractional order calculus is a generalization of the ordinary differentiations by noninteger - derivatives. many mathematicians like liouville and riemann contributed to the field of fractional **solution of non-integer order differential equations via ...** - of both linear and nonlinear, ordinary, partial and integro-differential equations (e.g., see [2,3]). the purpose of this paper is to develop further the applicability of the decomposition method to **oscillator with a sum of noninteger-order nonlinearities** - nonlinearity of polynomial type, whose terms are of integer and/or noninteger order. for the case for the case when only one nonlinear term exists, the exact analytical solution of the differential equation is **fractional-order sliding mode control for a class of ...** - integer-order sliding mode control, the high-frequency chattering of the control input is drastically depressed. keywords fractional control, sliding mode control, linear-quadratic regulator, uncertain nonlinear system. **nonlinear integer programming - optimization online** - nonlinear integer programming raymond hemmecke, matthias koppe, jon lee and robert weismantel" abstract. research efforts of the past fifty years have led to a development of linear **nonlinear dynamics and control of a variable order ...** - nonlinear dynamics and control of a variable order oscillator with application 147 the operator defined above returns the correct value of the zeroth order derivative ($x(0)$) when **some analytical properties of solutions of differential ...** - the analytical properties of solutions of the nonlinear differential equations $x(\alpha)(t) = f(t, x)$, $\alpha \in r, 0$