Alsulami, S.M.

Pseudo almost automorphic solutions of nonautonomous semilinear differential equations in Banach spaces

Department of Mathematics, King Abdulaziz University, P.O. Box 138381, Jeddah 21323, Saudi Arabia

Abstract
We consider the existence and uniqueness of the Pseudo almost automorphic solutions to the nonautonomous semilinear differential equation: $u'(t) = A(t)u(t) + f(t, u(t))$, $t \in$ R{stroke} where $A(t)$, $t \in$ R{stroke} generates an exponentially stable evolution family $\{U(t, s)\}$ and f: R{stroke}$\times X \to X$ satisfies a Lipschitz condition with respect to the second argument.

Document Type: Article