عنوان مقاله:
On Hilbert Golab-Schinzel type functional equation

محل انتشار:
مجله آنالیز غیر خطی و کاربردها, دوره 6, شماره 2 (سال: 1394)

تعداد صفحات اصل مقاله: 11

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خلاصه مقاله:
Let X be a vector space over a field K of real or complex numbers. We will prove the superstability of the following Go{\l}\c{a}b-Schinzel type equationf(x+g(x)y)=f(x)f(y), x,y\in X,where f,g:X\rightarrow K are unknown functions (satisfying some assumptions). Then we generalize the superstability result for this equation with values in the field of complex numbers to the case of an arbitrary Hilbert space with the Hadamard product. Our result refers to papers by Chudziak and Tabor [J. Math. Anal. Appl. ۳۰۲ (۲۰۰۵) ۱۹۶-۲۰۰], Jab\l o\'{n}ska [Bull. Aust. Math. Soc. ۸۷ (۲۰۱۳), ۱۰-۱۷] and Rezaei [Math. Ineq. Appl., ۱۷ (۲۰۱۴), ۲۴۹-۲۵۸].

کلمات کلیدی:
Golab-Schinzel equation, Superstability, Hilbert valued function, Hadamard product