

عنوان مقاله:

Title: Second Order Nonsingular Terminal Sliding Mode Guidance Law for Intercepting with Desired Impact Angle

محل انتشار:

همایش یافته های نوین در هوافضا و علوم وابسته (سال: 1394)

تعداد صفحات اصل مقاله: 14

نویسندگان:

.Reza Fattahian - MSc Student, Islamic Azad University Damavand Branch, Damavand

,Ahmadreza Vali - Associate Professor, Islamic Azad University Damavand Branch, Damavand

خلاصه مقاله:

Second order non-singular terminal sliding mode guidance for intercepting with desired impact angle in terminal phase is proposed in this paper. In order to satisfy the predefined impact angle and interception into target, a non-singular terminal sliding variable is introduced using line of sight angle error and line of sight angular rate. In reaching phase in the presence of uncertainties such as target maneuvers, second order sliding mode guidance law and sliding mode observer is designed in order to zeroing the sliding variable. Then in sliding phase, due to introducing non-singular terminal sliding variable, finite time stability of line of sight angle and line of sight angular rate is granted without singularity in commanded acceleration as control signal. Numerical simulations are presented to illustrate the potential of the proposed guidance law.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/441296>

