

Some cases of the solvability in a closed form of singular integral equations and two-dimensional characteristic systems

Kiyasov S.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

We consider the characteristic system of singular integral equations for two unknown functions. We obtain certain correlations connecting coefficients of the system which allow one to solve the latter in a closed form. Based on the obtained results, we consider cases of the solvability in a closed form for one class of singular integral equations. © Allerton Press, Inc., 2011.

<http://dx.doi.org/10.3103/S1066369X11040062>

Keywords

Factorization, Linear conjugation problem, Matrix function, Singular integral equations