Kwon, Hyun-Kyoung; Netyanun, Anupan; Trent, Tavan T.
An estimate for the degree bound of a matrix of polynomials. (English) Zbl 1382.15006

Summary: We present a constructive method for finding a right inverse matrix of a matrix of polynomials that satisfies the corona condition. The right inverse matrix is also a matrix of polynomials and our method gives an upper bound for the degree of its entries. This is a generalization of the authors' previous result that offers a degree bound for the polynomials that arise as a result of the Nullstellensatz.

MSC:
15A09 Theory of matrix inversion and generalized inverses
15A54 Matrices over function rings in one or more variables

Keywords:
right inverse matrix; matrix of polynomials; corona condition

Full Text: DOI

References:

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.