

[本期目录](#) | [下期目录](#) | [过刊浏览](#) | [高级检索](#)

[\[打印本页\]](#) [\[关闭\]](#)

论文

求解任意样本集的综合鉴别函数的两步伪逆法

陈自宽

南开大学现代化学研究所

摘要:

求解任意样本集的综合鉴别函数的两步伪逆法陈自宽(南开大学现代化学研究所) FINDING THE SDF FOR ANY SAMPLE SET BY MEANS OF TWO-STEP PSEUDO INVERSE Y Chen Zikuan (Institute of Modern Optics, Nankai University)

关键词:

FINDING THE SDF FOR ANY SAMPLE SET BY MEANS OF TWO-STEP PSEUDO INVERSE

Chen Zikuan (Institute of Modern Optics, Nankai University)

Abstract:

Abstract The first step pseudoinverse is to find the optimal solution for the underdeterministic linear equations related to a sample set with the constraint of least-mean-square criterion. The second step pseudoinverse is to find the pseudoinverse of the correlation matrix of the sample set. Finally, the expression of the optimal SDF for any sample set is obtained, which is regardless of whether the set is linearly dependent or not. The two-step pseudoinverse approach presented in this paper is powerful when a sample set is linearly dependent. An example by fingerprint identification is given, and the discriminant performance of the resultant SDF by the two-step pseudoinverse approach is compared with that by Gram-Schmidt orthogonalization for the same sample set. The reason why the former gets better performance is discussed.

Keywords:

[收稿日期](#) [修回日期](#) [网络版发布日期](#)

DOI:

基金项目:

通讯作者:

作者简介:

本刊中的类似文章

Copyright 2008 by 数值计算与计算机应用

扩展功能

本文信息

Supporting info

PDF (354KB)

[HTML全文]

[\({article.html_WenJianDaXiao} KB\)](#)

参考文献[PDF]

参考文献

服务与反馈

[把本文推荐给朋友](#)

[加入我的书架](#)

[加入引用管理器](#)

[引用本文](#)

Email Alert

[文章反馈](#)

[浏览反馈信息](#)

[本文关键词相关文章](#)

[本文作者相关文章](#)

PubMed