图形、图像、模式识别

优化重构图像求解算法的新思路—四像元法

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摘要　用投影重构图像技术，从医学CT到非破坏性工业测试的众多领域中都得到应用。常见的代数解法，卷积算法及滤波——逆投影法，计算相当繁琐。该文提出的方法，仅需做加（减）和除2运算，就可以在平行和聚焦的投影中，逐个得到像素的值。

关键词　重构　图像　算法
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New algorithm of digitally reconstructing image from its projections

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Abstract

The method of digitally reconstructing an image from its projections has been applied in many areas from CT to nondestructive test of industry.But the algorithms of algebraic reconstruction techniques are too complicated.Using some additions（subtractions） and divided by 2 the gray levels of pixels can be got easily one by one，from their parallel and focused projections，by the method presented here.

Key words　reconstruct　image　algorithm

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