

Lawson, Charles L.; Hanson, Richard J.

Solving least squares problems. (English) [Zbl 0860.65028](#)

Prentice-Hall Series in Automatic Computation. Englewood Cliffs, NJ: Prentice-Hall. xii, 340 p. (1974).

See the review of the second edition from 1995 in [[Zbl 0860.65029](#)].

MSC:

- [65F20](#) Numerical solutions to overdetermined systems, pseudoinverses
- [65C99](#) Probabilistic methods, stochastic differential equations
- [90C20](#) Quadratic programming
- [62J05](#) Linear regression; mixed models
- [15A09](#) Theory of matrix inversion and generalized inverses
- [65-01](#) Introductory exposition (textbooks, tutorial papers, etc.) pertaining to numerical analysis
- [65K05](#) Numerical mathematical programming methods
- [65D10](#) Numerical smoothing, curve fitting

Cited in **5** Reviews
Cited in **369** Documents

Keywords:

linear least squares problems; orthogonal decomposition; singular value decomposition; Householder transformations; QR-decomposition; error analysis; Gram-Schmidt-orthogonalization; Cholesky decomposition; textbook; pseudoinverse; FORTRAN codes