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This paper provides the foundation for the iterative polar decomposition on page 604 here in our book. The B&B algorithm has stretch convergence limits, but our scaling in STEP 3 (which was *not* mentioned by B&B, but is proved in Ref. [15]) makes the algorithm converge for *all* invertible [F] matrices, no matter how large the stretch. When the cost of computing a convergence test is taken into consideration, we find B&B's method to be faster and equally accurate as Higham's [50] Newton solver (we have not tested Dubrille's [34] recent refinements of the convergence test for Higham's method, which might make Higham's iterator equally fast).

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This paper illustrates pathological attributes in commonly used yield functions, and it provides three simple verification problems for verification testing classical nonhardening plasticity models.

[14] BRANNON, R. M., http://www.mech.utah.edu/~brannon/public/curvilinear.pdf
This is an appropriate choice for follow-up reading to learn how tensor algebra formulas change in structure (not meaning) when a non-orthogonal, non-normalized, and/or non-right-handed basis system is used. This book explains the generalizations that must be included in calculus formulas whenever the basis vectors change with position (as in cylindrical or spherical coordinates).

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http://www.mech.utah.edu/~brannon/public/Rotation.pdf
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[17] BRANNON, R. M., http://www.mech.utah.edu/~brannon/public/MohrsCircle.pdf
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This small hand-out defines the basic formulas used in gas dynamics, and provides recursion tables that you may use to convert any thermodynamic derivative into a form involving only tabulated material properties and measurable state variables.

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