

**Glowinski, R.; Pironneau, O.****Numerical methods for the first biharmonic equation and for the two-dimensional Stokes problem.** (English) Zbl 0427.65073

SIAM Rev. 21, 167-212 (1979).

For a scan of this review see the [web version](#).**MSC:****65N30** Finite element, Rayleigh-Ritz and Galerkin methods for boundary value problems involving PDEs**31A30** Biharmonic, polyharmonic functions and equations, Poisson's equation in two dimensions**35Q30** Navier-Stokes equations**35J40** Boundary value problems for higher-order elliptic equations**65N22** Numerical solution of discretized equations for boundary value problems involving PDEs**65F10** Iterative numerical methods for linear systemsCited in **5** Reviews  
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first biharmonic problem; coupled system of harmonic problems; mixed finite element approximation; trace of the discrete vorticity; iterative methods; conjugate gradient algorithm; Stokes problem

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