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David G Costa* (costa@unlv.nevada.edu), 4505 Maryland Parkway, Department of Mathematical Sciences/UNLV, Box 454020, Las Vegas, NV 89154-4020. *On a Class of Biharmonic Equations with Critical Growth and Singular Potential.*

We consider a class of nonlinear perturbations $f(u)$ of the biharmonic operator $\Delta^2 + V(x)$ with a singular potential $V(x)$. After proving a compactness result for a critical Sobolev embedding, we show existence of a nonzero solution when $f(u)$ has critical growth. This is joint work with Guoqing Zhang. (Received September 14, 2014)