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**Jaffar Ali, Mythily Ramaswamy and Ratnasingham Shivaji\*** (shivaji@ra.msstate.edu),  
Department of Mathematics, P.O.Drawer MA, Mississippi State, MS 39762. *Multiple positive solutions for classes of elliptic systems with combined nonlinear effects.*

We study the existence of multiple positive solutions to systems of the form

$$\begin{aligned} -\Delta u &= \lambda f(v), \Omega, \\ -\Delta v &= \lambda g(u), \Omega, \\ u &= 0 = v, \partial\Omega. \end{aligned}$$

Here  $\Delta$  is the Laplacian operator,  $\lambda$  is a positive parameter,  $\Omega$  is a bounded domain in  $R^n$  with smooth boundary and  $f, g$  belongs to a class of positive functions that have a combined sublinear effect at  $\infty$ . Our results also easily extend to the corresponding p-Laplacian systems. We prove our results by the method of sub and super solutions.

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