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**Optimal Rellich-Sobolev constants and their extremals.** (English) Zbl 1340.46028  
[Differ. Integral Equ. 27, No. 5-6, 579-600 \(2014\)](#).

Summary: We prove that extremals for second order Rellich-Sobolev inequalities have a constant sign. Then, we show that the optimal constants in Rellich-Sobolev inequalities on a bounded domain  $\Omega$  and under Navier boundary conditions do not depend on  $\Omega$ .

**MSC:**

- [46E35](#) Sobolev spaces and other spaces of “smooth” functions, embedding theorems, trace theorems Cited in **10** Documents
- [26D10](#) Inequalities involving derivatives and differential and integral operators
- [35J57](#) Boundary value problems for second-order elliptic systems

**Keywords:**

[optimal Rellich-Sobolev constant](#); [weighted Sobolev space](#)

**Full Text:** [arXiv](#)