Zbl 686.05029
Erdős, Paul; Pach, János; Pollack, Richard; Tuza, Zsolt
Radius, diameter, and minimum degree. (In English)
J. Comb. Theory, Ser. B 47, No.1, 73-79 (1989). [0095-8956]

The authors prove that the diameter of a connected graph G with n vertices and minimum degree $\delta \geq 2$ is bounded from above by $[3n/(\delta + 1)] - 1$, and that this bound is asymptotically sharp where δ is fixed and n tends to infinity. They show an analogous result for the radius of G, and also give upper bounds for triangle-free and C^4-free connected graphs.

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Classification:
05C35 Extremal problems (graph theory)
05C38 Paths and cycles

Keywords:
diameter; minimum degree; radius