

[Li, Wei; Liu, Yong](#)

**The singular-leaf criterion on the circle ring domain.** (Chinese. English summary)

[Zbl 0713.30014](#)

*Acta Sci. Nat. Univ. Pekin.* 25, No. 5, 527-536 (1989).

It is proved in this paper that the ring domain  $A_r = \{z : 1 < |z| < r\}$  is a  $(\alpha, \beta)$ -uniform domain with explicit upper bounds for  $\alpha$  and  $\beta$ . A sufficient condition that a locally univalent analytic function is univalent in the whole domain  $A_r$  is given. These results are related to the work by *K. Astala* and *F. W. Gehring* [*Complex Variables, Theory Appl.* 3, 45-54 (1984; [Zbl 0588.30022](#))].

Reviewer: Li Zhong

**MSC:**

[30C62](#) Quasiconformal mappings in the complex plane

**Keywords:**

[uniform domain](#)