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**Local growth envelopes of spaces of generalized smoothness: the critical case.** (English)

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The concept of local growth envelope of a quasi-normed function space is applied to the spaces of Besov and Triebel-Lizorkin type of generalized smoothness  $(s, \Psi)$  in the critical case  $s = n/p$ , where  $s$  stands for the main smoothness,  $\Psi$  is a perturbation and  $p$  stands for integrability. The expression obtained for the behaviour of the local growth envelope functions shows the possibility to be generalized to a form unifying both the critical ( $s = n/p$ ) and the subcritical ( $s < n/p$ ) case.

Reviewer: [Meng Wang \(Hangzhou\)](#)

**MSC:**

**46E35** Sobolev spaces and other spaces of “smooth” functions, embedding theorems, trace theorems

Cited in **1** Review  
Cited in **18** Documents

**Keywords:**

Besov space; Triebel-Lizorkin space; critical case; local growth envelope

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