

综述

半导体可饱和吸收镜作为被动调Q吸收体的发展状况

李德刚<sup>1</sup>, 王勇刚<sup>2</sup>, 马晓宇<sup>2</sup>, 肖军<sup>2</sup>, 吕卉<sup>2</sup>

1. 乌鲁木齐市69072部队训练处, 新疆 乌鲁木齐 830002; 2. 中国科学院半导体研究所, 北京100083

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摘要 简介了近年来发展起来的若干种新型固体激光器被动调Q用吸收体:掺Cr<sup>4+</sup>系列, Cr, Nd:YAG自调Q激光晶体, 人眼安全激光器被动调Q用吸收体, GaAs吸收体, 半导体可饱和吸收镜。着重介绍了固体激光器和光纤激光器调Q用半导体可饱和吸收镜的原理、研制方法及应用状况。

关键词 [半导体可饱和吸收镜](#) [固体激光器](#) [调Q用吸收体](#)

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The Development of Semiconductor Saturable Absorption Mirror as Passive Q-switching Absorber

LI De-gang<sup>1</sup>, WANG Yong-gang<sup>2</sup>, MA Xiao-yu<sup>2</sup>, XIAO Jun<sup>2</sup>, LV Hui<sup>2</sup>

1. Training Department of 69072 Unit, Urumqi 830002 China; 2. Institute of Semiconductors, CAS, Beijing 100083 China

**Abstract** Some types of novel absorbers for solid state laser passive Q-switching developed in recent years are introduced, such as Cr<sup>4+</sup> doped series, Cr, Nd:YAG self Q-switching laser crystal, absorption mirror for Q-switching eye safe lasers, GaAs absorber, semiconductor saturable absorption mirror. The principle, application and exploratory development of semiconductor saturable absorption mirrors for passive Q-switching lasers and fiber lasers are emphasized.

**Key words** [semiconductor saturable absorption mirror](#) [solid-state laser](#) [Q-switching absorber](#)

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通讯作者 王勇刚