

视觉科学



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著者:吕忠林 (主编)

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本书收纳了中科大校友的25篇关于视觉科学的代表性文章。书的内容主要分为两大部分：I，视觉神经科学；II，视觉感知与认知。其中，第一部分中的IA部分（皮层前的处理过程）总共包含六章，分别涉及光感受器退化疾病的恢复、视皮层-顶盖系统的改变、视网膜神经节细胞与外膝体细胞的感受野特性以及视皮层对外膝体的反馈作用；IB部分（皮层中的处理过程）用九章的篇幅涵盖了视皮层对图像和运动的处理、视皮层中视空间的映射和皮层反应特性的关系、注意的作用、知觉学习以及衰老对视皮层处理的影响等内容；IC部分（眼动系统）中的三章内容重点介绍了眼动神经元的反应特性和眼动指令信号的可靠性。第二部分包括七章，介绍了基本的视觉感知过程，如早期视觉通路中的分辨能力、对距离的感知、对等亮度条件下彩色运动图形的感知、对拓扑结构的感知以及特征分类等。此外，还涉及计算视觉、视觉工作记忆和蜜蜂的决策制定等主题。

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