200240 上海市闵行区东川路800号
电话：021-54743839
E-Mail：TDLee.Lib@lib.sjtu.edu.cn
网址：http://tdlee.sjtu.edu.cn

超材料

Metamaterials

大自然馈赠人类许多有用的材料，这些材料被用于人类生活方方面面：用于制造在显微镜和显微镜中引导光线的透镜，用于建筑中的支撑结构，用于制造电子器件或烹饪工具等。但人类并不满足于此，靠着极富创造力的大脑，根据科学原理设计出的人工“超材料”正在开辟工程和研究的新前沿。最有效的超材料通常有以下特征，由简单构建块按照一定规律组成复杂图案，并将对称性和复杂性结合在一起，具有与众不同的美感。

Nature produces many useful materials. We use them to make lenses that guide light in microscopes and microscopes, to support structures in architecture, to make tools for electronics or for cooking, and so forth. But human creativity is not content to be satisfied with the materials Nature presents to us. Artificial “metamaterials” designed according to scientific principles are opening new frontiers in engineering and research. The most effective metamaterials often feature intricate patterning of simple building-blocks, combining symmetry and complexity and producing a strange kind of beauty.

作者简介：Frank Wilczek，2004 年诺贝尔物理学奖得主、李政道研究所创始所长

Author: FRANK WILCZEK

Winner of the Nobel Prize in Physics 2004

Founding Director of Tsung-Dao Lee Institute

翻译：李政道图书馆