

Cite this as: Bo YUAN, Sheng-yuan ZHOU, Xiong-sheng CHEN, 2017. Rapid prototyping technology and its application in bone tissue engineering. *Journal of Zhejiang University-Science B (Biomedicine & Biotechnology)*, 18(4):303-315.
<http://dx.doi.org/10.1631/jzus.B1600118>

Rapid Prototyping Technology and Its Application in Bone Tissue Engineering

Key words: Rapid prototyping, Bone tissue engineering, Scaffolds



Summary



This review focused on the research progress of application of Rapid Prototyping (RP) technology in bone tissue engineering.

- Basic principles of different RP technologies
- Advantages and disadvantages of different RP technologies
- Application status and trends of RP technologies in bone tissue engineering





Innovation points



- **Introduction** the basic knowledge of RP technology, including principle, process and characteristics
- **Summary** of the most updated research progress about RP technology and its application in bone tissue engineering
- **Emphasis** of the characteristics of different RP technologies and their application status and trends



3D printing
unique objects
three-dimensional
customization
polymers
machine
build
assembly
layers
virtual
solid
flexible
replicating
making
future
manufacturing
process
engineering
modeling