

# Plasma Polishing as a New Polishing Option to Reduce the Surface Roughness of Porous Titanium Alloy for 3D Printing

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jove.com/video/65108

## Materials

| Name                                                                | Company                                                  | Catalog Number   | Comments |
|---------------------------------------------------------------------|----------------------------------------------------------|------------------|----------|
| Confocal microscope: Smartproof-5                                   | ZEISS                                                    | 4702000198       |          |
| ConfoMap ST 8.0                                                     | ZEISS                                                    | 4702000198       |          |
| Electrical discharge machining (EDM) machine: MV1200S               | Mitsubishi Electric Automation (China) Ltd.              | 92U3038          |          |
| Heat treatment furnace: HSQ1-644                                    | Jiangsu Huasu Industrial Furnace Manufacturing CO., LTD. | HSD20190812403   |          |
| Metal 3D printer: Renishaw AM400                                    | Renishaw plc                                             | 1HGW89           |          |
| Middle speed wire-cut machine: HQ-400EZ                             | Suzhou Hanqi CNC Equipment CO., LTD.                     | W40ES20005       |          |
| Permanent magnet frequency conversion screw air compressor M7-Y75AZ | KUNJI MACHINERY(SHANGHAI) MANUFACTURING CO.,LTD.         | 19055065         |          |
| Refrigeration compressed air dryer SY-230FG                         | Shanghai TaiLin Compressor Co., Ltd.                     | S190826698       |          |
| Scanning electron microscope (SEM): JSM-IT100                       | JEOL (BEIJING) CO., LTD.                                 | MP1030004260426  |          |
| Titanium alloy powder                                               | Renishaw plc                                             | H-5800-1086-01-A |          |
| Ultrasonic cleaning machine: AK-030S                                | Shenzhen Yujie Cleaning Equipment Co., Ltd               | 30820004         |          |
| ZEN core v3.0                                                       | ZEISS                                                    | 4702000198       |          |