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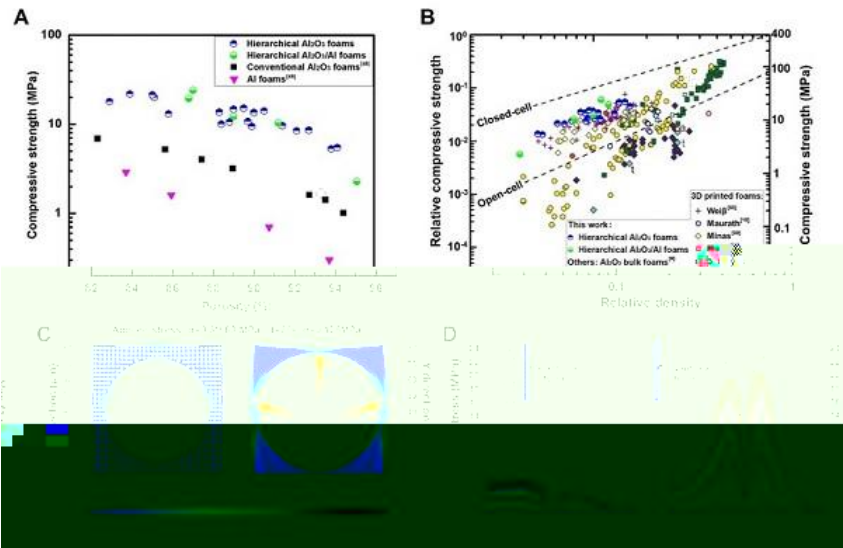
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2020 8 10  
Prof. André Studart ETH Zürich

Al<sub>2</sub>O<sub>3</sub> Al<sub>2</sub>O<sub>3</sub>/Al Al / Al<sub>2</sub>O<sub>3</sub>

2~10 90% 14.8MPa 3D



Ultra-strong hierarchical porous materials via colloidal assembly and oxidation of metal particles (Advanced Functional Materials)

<https://onlinelibrary.wiley.com/doi/10.1002/adfm.202003550>

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/ (NbS<sub>2</sub>-Nb<sub>2</sub>O<sub>5</sub>-NbS<sub>2</sub>)

NbS<sub>2</sub>

NbS<sub>2</sub>

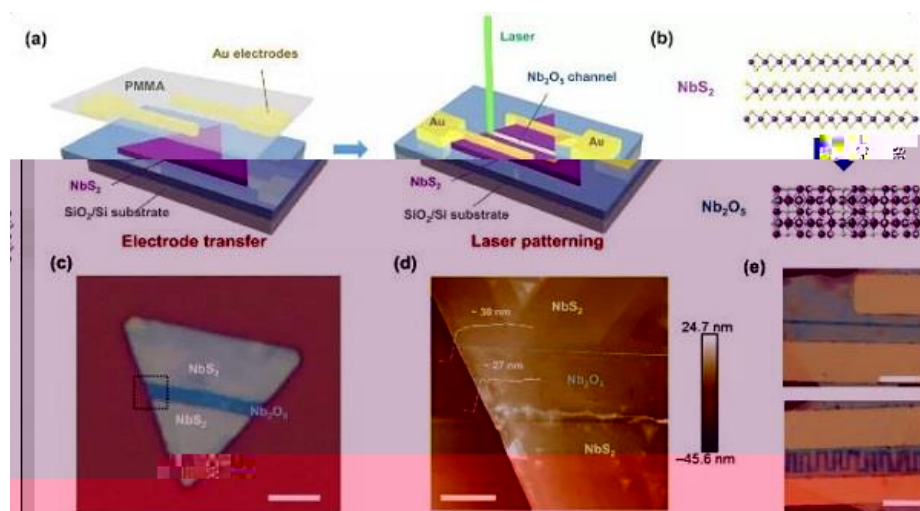
Nb<sub>2</sub>O<sub>5</sub>

OH-  
= 80%, 50 ppm)

15% 20%/ °C

-dimensional lateral

transition metal disulfide-oxide-disulf  
Nano Research



NbS<sub>2</sub>-Nb<sub>2</sub>O<sub>5</sub>-NbS<sub>2</sub>

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PLGA@

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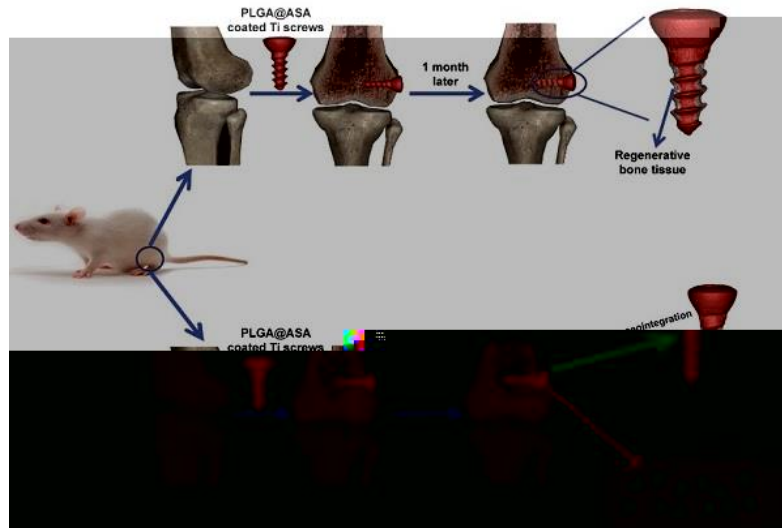
PDA

60

BMSCs

M1

RANKL



Biomaterials

PLGA@

Dual directions to address the  
problem of aseptic loosening via electrospun PLGA @ aspirin nanofiber coatings on titanium

<https://doi.org/10.1016/j.biomaterials.2020.120237>

10-18mol/L
 1.09×10<sup>14</sup>
SERS
SERS
RSD=11.7 %

Atto-Molar Raman detection on patterned  
 superhydrophilic-superhydrophobic platform via localizable evaporation enrichment  
 B. (Sensors and Actuators: B.  
 Chemical)

<https://doi.org/10.1016/j.snb.2020.128826>

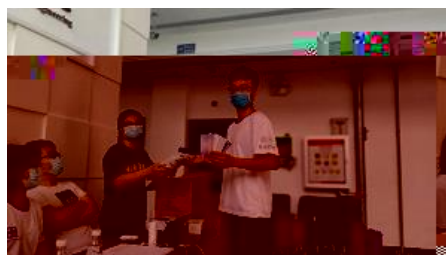
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