

# Stanford

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## David Kilian

Postdoctoral Scholar, Materials Science and Engineering

### Bio

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#### INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Technische Universitat Dresden (2022)
- Master of Science, Technische Universitat Dresden (2016)
- Bachelor of Science, Unlisted School (2014)
- PhD, TU Dresden, Germany , Biomedical Engineering (2022)
- MSc, CMCB / TU Dresden, Germany , Regenerative Biology and Medicine (2016)
- BSc, Hochschule Kaiserslautern, Germany , Applied Life Sciences (2014)

#### STANFORD ADVISORS

- Sarah Heilshorn, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Diffusion-Based 3D Bioprinting Strategies.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*  
Cai, B., Kilian, D., Ramos Mejia, D., Rios, R. J., Ali, A., Heilshorn, S. C.  
2023: e2306470
- **Embedded 3d Bioprinting of Collagen Inks into Microgel Baths to control hydrogel Microstructure and Cell Spreading.** *Advanced healthcare materials*  
Brunel, L. G., Christakopoulos, F., Kilian, D., Cai, B., Hull, S. M., Myung, D., Heilshorn, S. C.  
2023: e2303325
- **Gelation of Uniform Interfacial Diffusant in Embedded 3D Printing.** *Advanced functional materials*  
Shin, S., Brunel, L. G., Cai, B., Kilian, D., Roth, J. G., Seymour, A. J., Heilshorn, S. C.  
2023; 33 (50)
- **3D printing microporous scaffolds from modular bioinks containing sacrificial, cell-encapsulating microgels.** *Biomaterials science*  
Seymour, A. J., Kilian, D., Navarro, R. S., Hull, S. M., Heilshorn, S. C.  
2023
- **3D printing microporous scaffolds from modular bioinks containing sacrificial, cell-encapsulating microgels** *BIOMATERIALS SCIENCE*  
Seymour, A. J., Kilian, D., Navarro, R. S., Hull, S. M., Heilshorn, S. C.  
2023

- **Gelation of Uniform Interfacial Diffusant in Embedded 3D Printing** *ADVANCED FUNCTIONAL MATERIALS*

Shin, S., Brunel, L. G., Cai, B., Kilian, D., Roth, J. G., Seymour, A. J., Heilshorn, S. C.

2023

- **Synergy of inorganic and organic inks in bioprinted tissue substitutes: Construct stability and cell response during long-term cultivation *in vitro*** *COMPOSITES PART B-ENGINEERING*

Liu, S., Bernhardt, A., Wirsig, K., Lode, A., Hu, Q., Gelinsky, M., Kilian, D.

2023; 261