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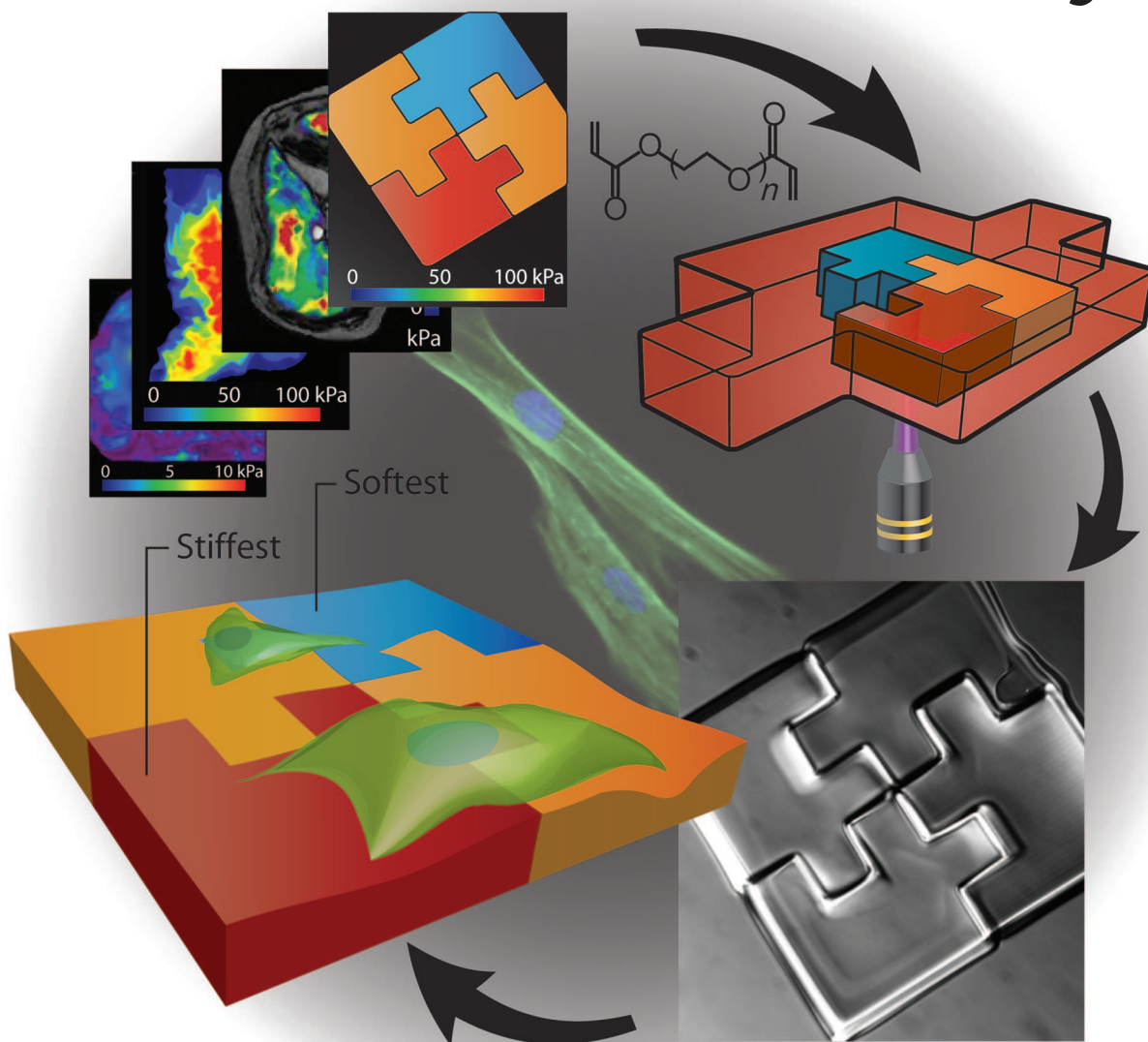
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Samarium Diiodide

K. C. Nicolaou et al.

Ultraviolet Photodissociation

R. R. Julian and T. Ly

Asymmetric Catalysis

M. Klussmann

C–H Activation

Y. Zhou, J. Zhao, and L. Liu

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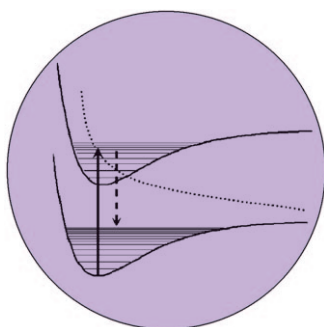


 **WILEY-VCH**

Cover Picture

Yuk Kee Cheung, Evren U. Azeloglu, David A. Shiovitz, Kevin D. Costa, Dror Seliktar, and Samuel K. Sia*

Microfluidics-based lithography is used to pattern a cell-adhesive hydrogel substrate with microscale variations in stiffness that can mimic those of native tissues. As shown by S. K. Sia and co-workers in their Communication on page 7188 ff., the micropatterns are fabricated by delivering PEG-fibrinogen and various amounts of poly(ethylene glycol) diacrylate (PEGDA) into a microfluidic chamber. Cells are then placed on top of the micropatterns to study their interactions with the extracellular matrix.

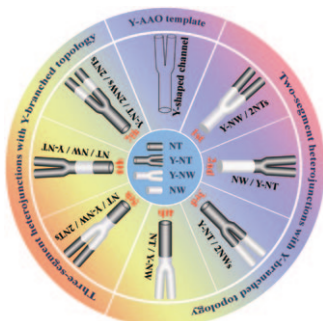
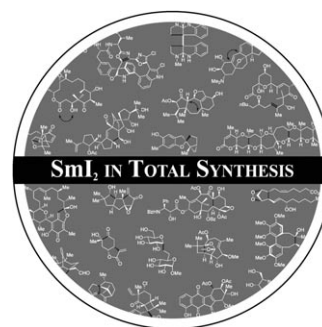


Ultraviolet Photodissociation

Ultraviolet light can be used to initiate unique fragmentations in peptides and proteins. In their Minireview on page 7130 ff., T. Ly and R. R. Julian describe the advantages for proteomics of ultraviolet photodissociation mass spectrometry.

Samarium Diiodide

K. C. Nicolaou et al. show examples of the application of SmI_2 in total synthesis in their Review on page 7140 ff. This single-electron reducing agent has proven useful in the synthesis of complex compounds and should inspire the development of new synthetic strategies.



Nanomaterials

A generic method for creating hybrid nanostructures is described by G. W. Meng et al. in their Communication on page 7166 ff. Branched hetero-nanostructures can be built into the branched channels of anodic aluminum oxide templates.