

A fluorescence microscopy image showing several cardiomyocytes. The nuclei are stained blue, the sarcomeric actinin is green, and the connexin-43 is red. The cells are arranged in a structured, aligned pattern, likely due to the underlying patterned MeTro substrate.

# ADVANCED FUNCTIONAL MATERIALS

## FUNCTIONAL BIOMATERIALS

Tropoelastin is crosslinked with methacrylation and light to make MeTro. MeTro enables encapsulation and surface interactions with cells, as shown by A. Khademhosseini, A. S. Weiss, and co-workers on page 4950. Patterned MeTro is elastic and supports the organized growth of functionally active, beating cardiomyocytes. Immunostaining shows  $\alpha$ -sarcomeric actinin (green), connexin-43 (red), and nuclei (blue).