# Lab on a Chip

Micro- & nano- fluidic research for chemistry, physics, biology, & bioengineering

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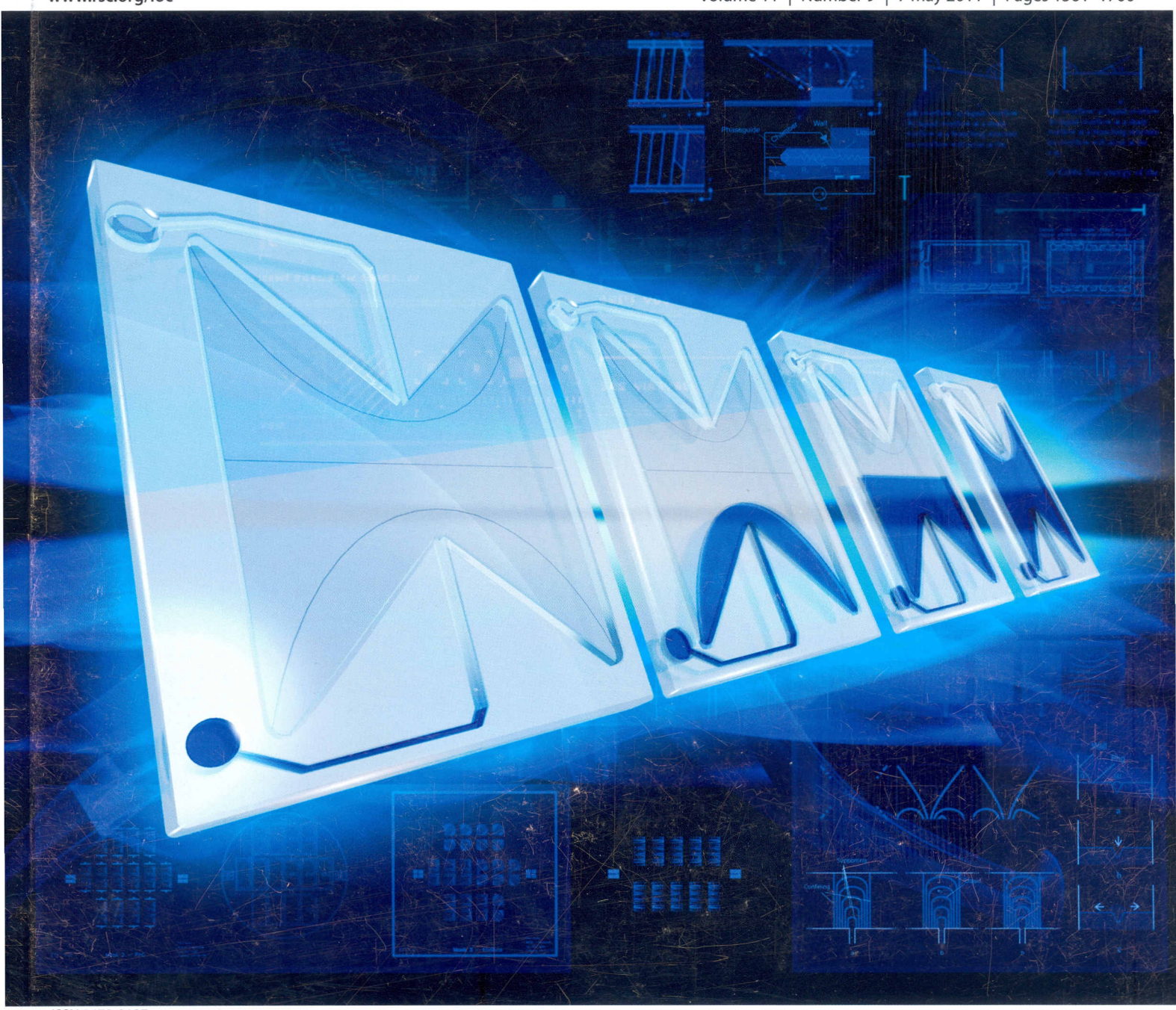

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**PAPER**

Vulto *et al.*

Phaseguides: a paradigm shift in microfluidic priming and emptying

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## IN THIS ISSUE


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**Cover**
See Vulto *et al.*, pp. 1596–1602.
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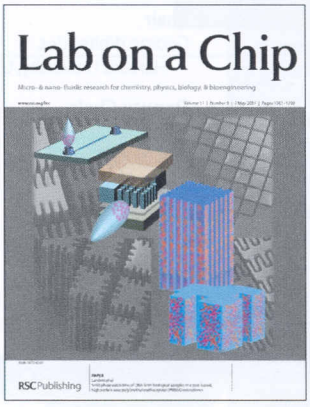


**Inside cover**
See Landers *et al.*, pp. 1603–1611.
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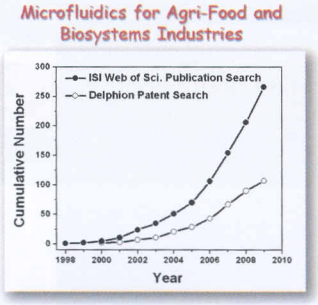
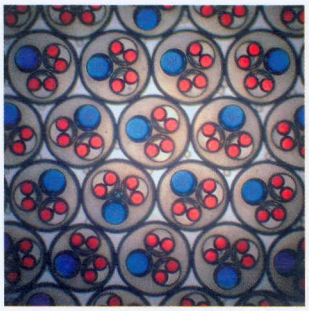
## FOCUS



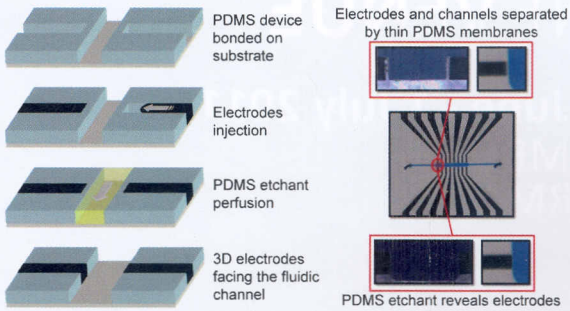
## CRITICAL REVIEW



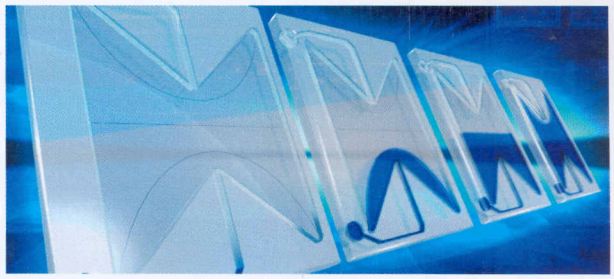




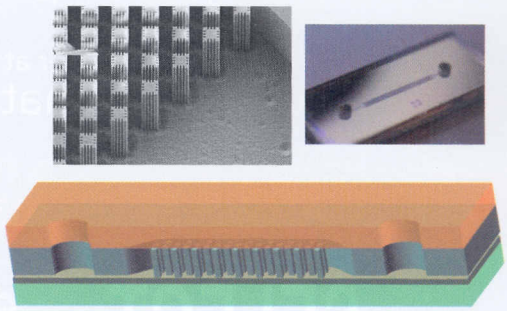


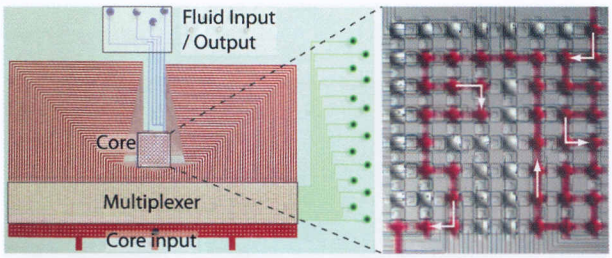




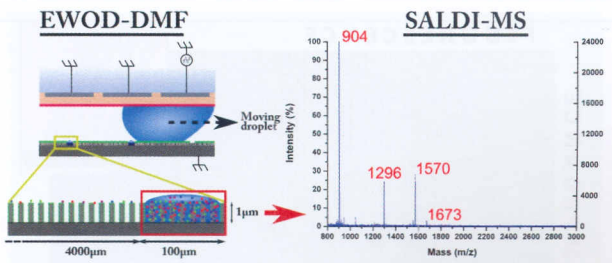





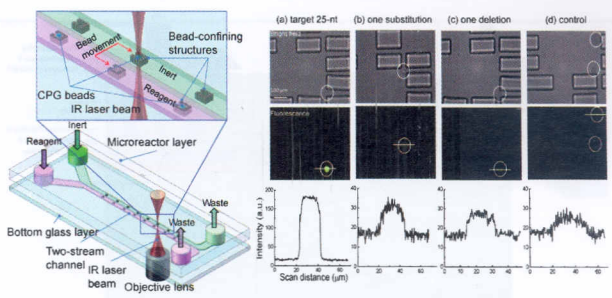




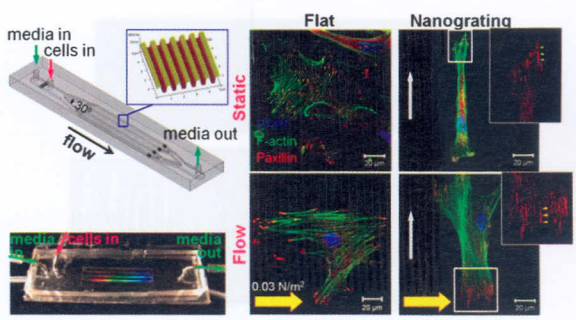






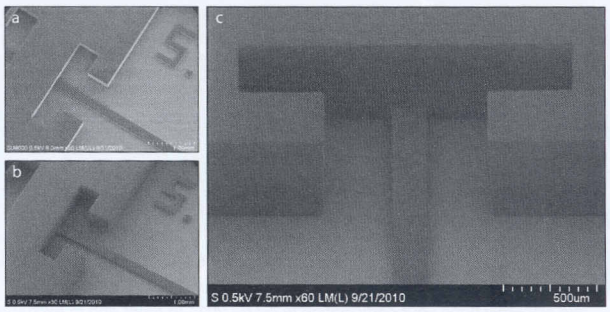
## METHOD

1679

### Flexible casting of modular self-aligning microfluidic assembly blocks

Sean M. Langelier, Eric Livak-Dahl, Anthony J. Manzo, Brian N. Johnson, Nils G. Walter and Mark A. Burns*

An advanced modular assembly block platform aimed at bringing do-it-yourself microfluidics to researchers not skilled in fabrication.



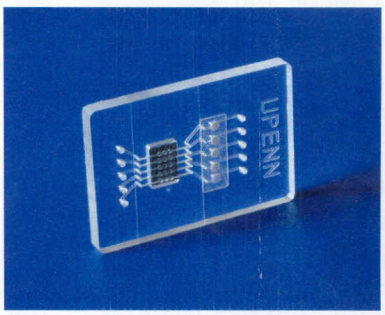

## TECHNICAL NOTES

1688

### A membrane-based, high-efficiency, microfluidic debubbler

Changchun Liu, Jason A. Thompson and Haim H. Bau*

A novel, efficient, reliable debubbler for microfluidic systems is described.




1694

### Lithographic patterning on polydimethylsiloxane surfaces using polydimethylglutarimide

Roger M. Diebold* and David R. Clarke

A new processing technique is presented which permits high fidelity lithography directly on untreated polydimethylsiloxane surfaces using polydimethylglutarimide.