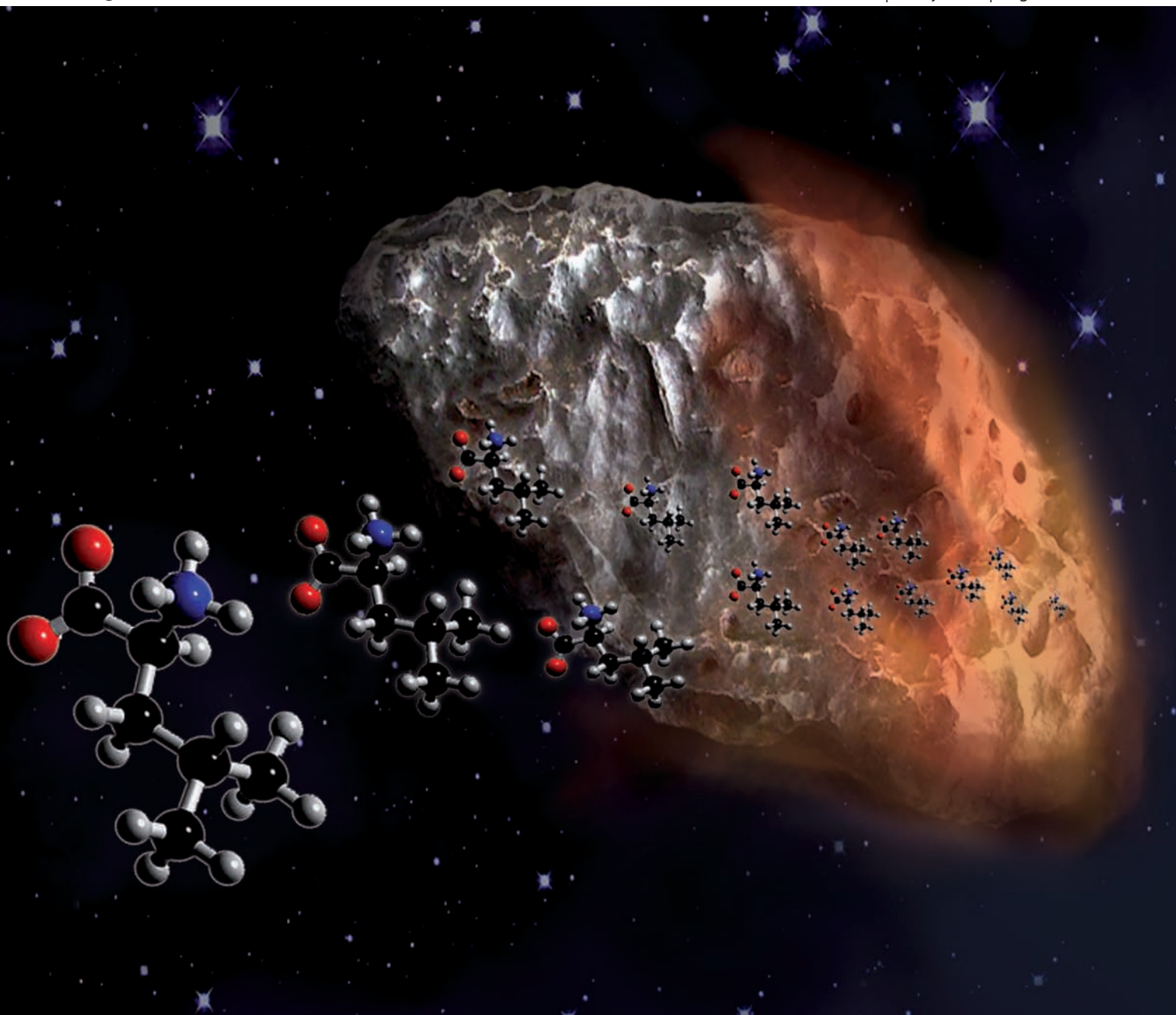


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COMMUNICATION

Stephen P. Fletcher, Richard B. C. Jagt
and Ben L. Feringa
An astrophysically-relevant mechanism
for amino acid enantiomer enrichment

FEATURE ARTICLE

Marius Andruh
Oligonuclear complexes as tectons in
crystal engineering



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RSC Publishing

Tissue Engineering in Microsystems

Lab on a Chip has gathered together a series of articles highlighting the very best research on cell and tissue engineering in microsystems.

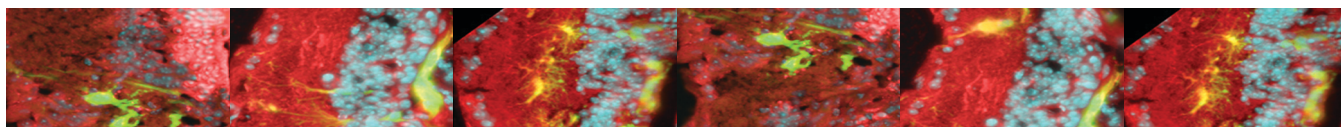
Guest editors Sangeeta Bhatia (MIT) and Christopher Chen (University of Pennsylvania) have commissioned articles from leading researchers to contribute to this *Lab on a Chip* issue, dedicated to state-of-the-art research on tissue engineering in microsystems.

The issue includes a critical review of cell micropatterning techniques; a tutorial review of perfusion culture of mammalian cells; and several high quality full papers on topics covering cell culture, patterning of biomaterials, stem cell differentiation, biocompatible implants, 3D tissue culture, embryoid bodies, cell cytotoxicity analysis and cell-cell communication.



“Tissue engineering is probably the most promising area of biology and biotechnology, this is an excellent issue featuring the best authors at the leading-edge of on-chip tissue engineering, — congratulations to Chris and Sangeeta”

Andreas Manz, ISAS, Dortmund



PAPERS INCLUDE:

A chip-based platform for the *in vitro* generation of tissues in three-dimensional organization

Eric Gottwald, Stefan Giselbrecht, Caroline Augspurger, Brigitte Lahni, Nina Dambrowsky, Roman Truckenmüller, Volker Piotter, Thomas Gietzelt, Oliver Wendt, Wilhelm Pflöging, Alex Welle, Alexandra Rolletschek, Anna M. Wobus and Karl-Friedrich Weibezahn, *Lab Chip* 2007, **7** (6)

Understanding microchannel culture: parameters involved in soluble factor signaling

Hongmei Yu, Caroline M. Alexander and David J. Beebe, *Lab Chip* 2007, **7** (6)

Efficient formation of uniform-sized embryoid bodies using a compartmentalized microchannel device

Yu-suke Torisawa, Bor-han Chueh, Dongeun Huh, Poornapriya Ramamurthy, Therese M. Roth, Kate F. Barald and Shuichi Takayama, *Lab Chip* 2007, **7** (6)

Micro-bioreactor array for controllable differentiation of human embryonic stem cells

Elisa Figallo, Christopher Cannizzaro, Sharon Gerech, Jason A. Burdick, Robert Langer, Nicola Elvassore and Gordana Vunjak-Novakovic, *Lab Chip* 2007, **7** (6)

Survival, migration and differentiation of retinal progenitor cells transplanted on micro-machined poly(methylmethacrylate) scaffolds to the subretinal space

Sarah Tao, Conan Young, Stephen Redenti, Yiqin Zhang, Henry Klassen, Tejal Desai, Michael J. Young, *Lab Chip* 2007, **7** (6)

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