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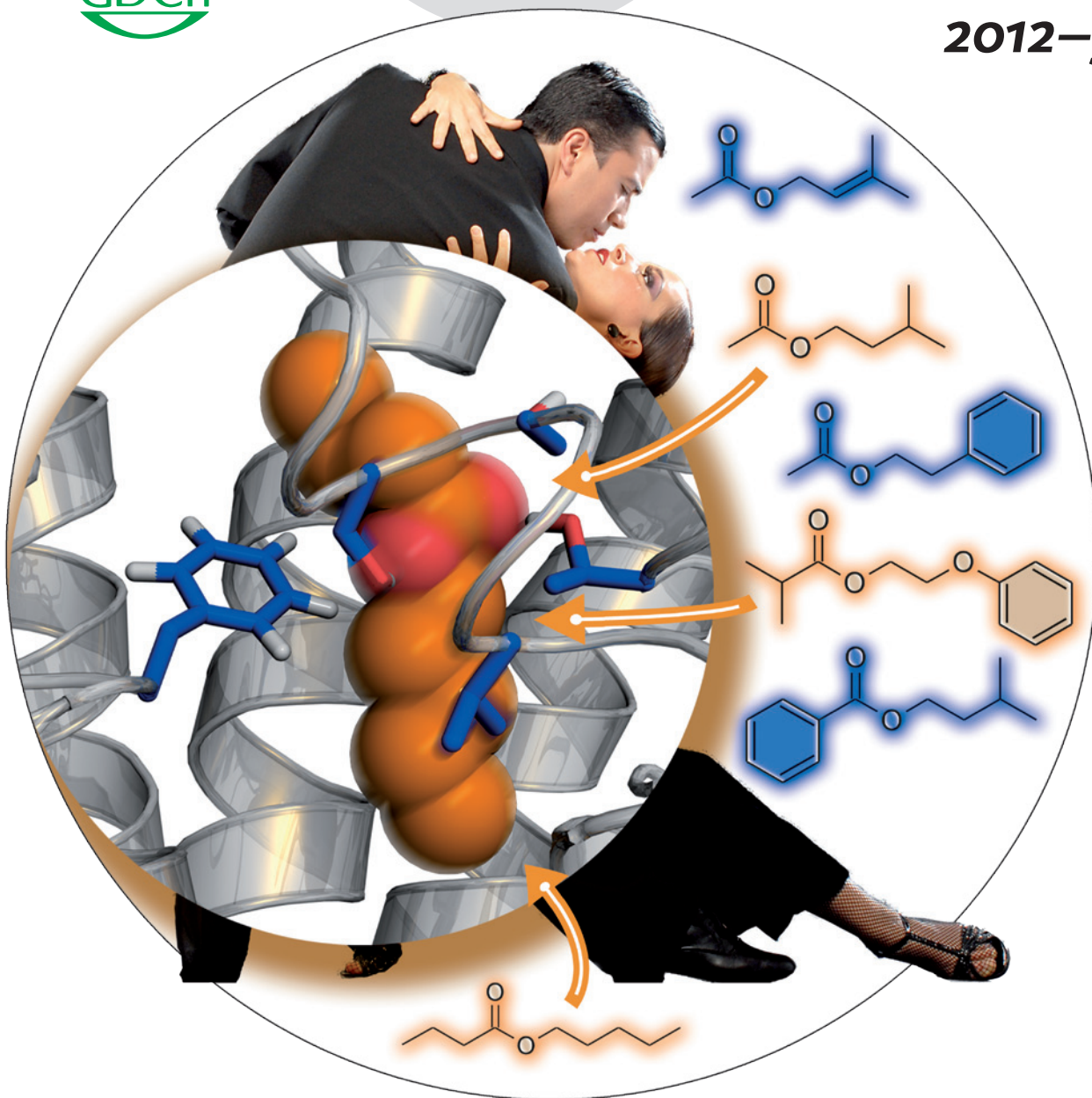
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Terpene Biosynthesis

Review by E. Oldfield and F.-Y. Lin

Lead-Oriented Synthesis

Minireview by Ian Churcher et al.

Highlights: ^{18}F Radiochemistry • Archimedean Bodies

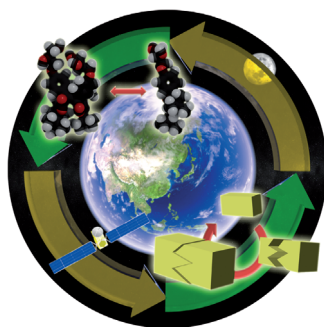
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Cover Picture

Lian Gelis, Steffen Wolf, Hanns Hatt, Eva M. Neuhaus, and Klaus Gerwert*

Ligand recognition in olfaction depends on the formation of a defined dynamic receptor–ligand hydrogen-bond pattern. Like two dancers, the odorant moves steadily within the binding site, while the receptor offers changing side chains for bonding. In their Communication on page 1274 ff., K. Gerwert and co-workers elucidate this dynamic pattern for the human olfactory receptor hOR2AG1 through a combination of dynamic homology modeling, site-directed mutagenesis, and Ca^{2+} imaging. Dancers: Laila and Leandro Oliver.

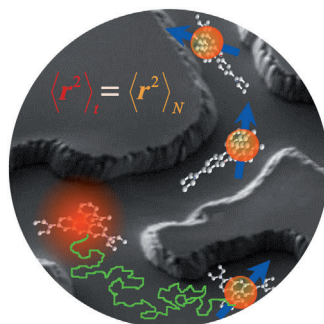
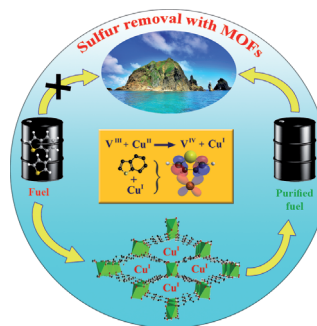


Cross-Linked Gels

Chemical gels cross-linked by diarylbibenzofuranone-based trigger-free dynamic covalent bonds are presented in the Communication by H. Otsuka, A. Takahara et al. on page 1138 ff.

Metal–Organic Frameworks

In their Communication on page 1195 ff., S. H. Jhung and N. A. Khan report a modified metal–organic framework that can be used for the desulfurization of liquid fuels.



Diffusion

C. Bräuchle et al. confirm in their Communication on page 1152 ff. the ergodic theorem by measuring the diffusivities of molecules inside a glass.