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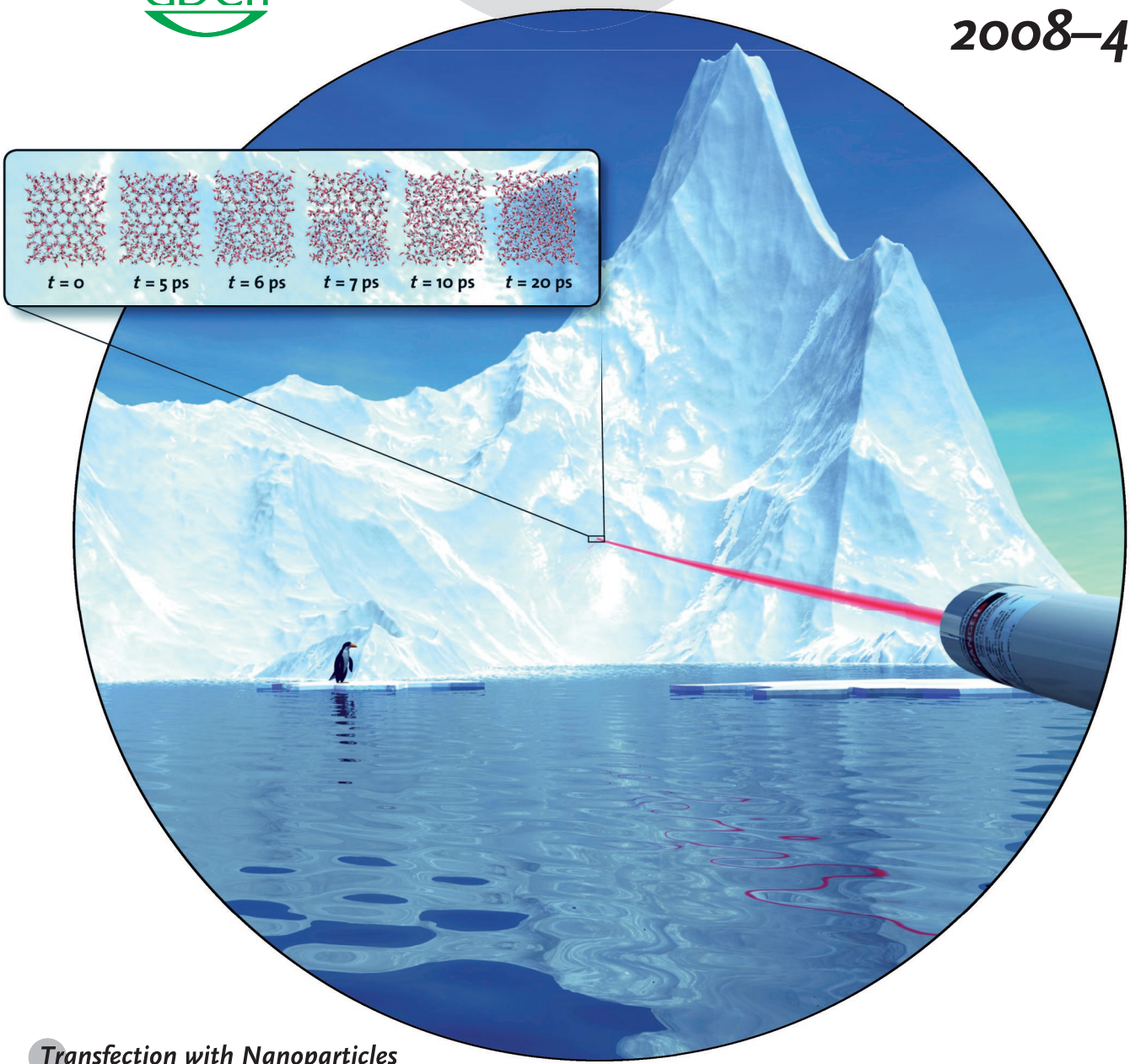

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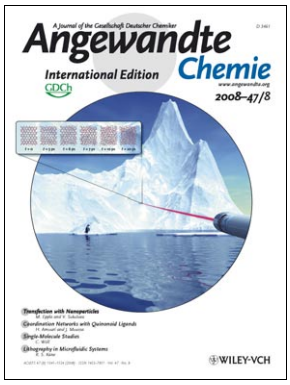
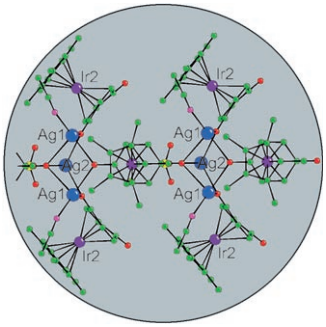
Cover Picture

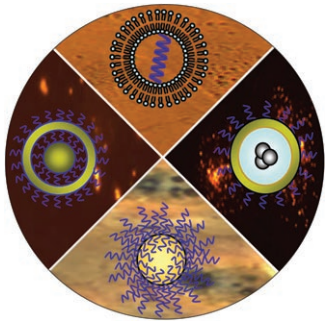


Carl Caleman and David van der Spoel*

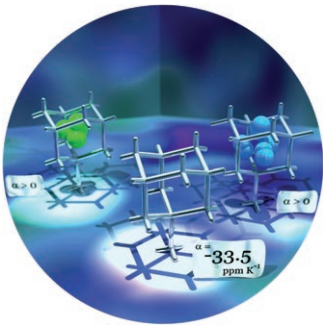
Ultrafast heating of ice by laser pulses, and subsequent melting, is described using simulations by van der Spoel and C. Caleman in their Communication on page 1417 ff. Heating is induced by a femtosecond laser with frequency corresponding to the OH bond vibration. Melting, like freezing, is demonstrated to start through nucleation. The laser pulse induces a short deviation from equilibrium: about 1 ps after the pulse, the OH vibrational energy is transferred to rotational (libration) modes, and after another 3–6 ps, the energy is equally distributed over all degrees of freedom.



Coordination Networks
Quinonoid and thioquinonoid metal complexes serve as linkers for coordination polymers with useful photophysical properties. An overview of the synthesis of component and their self-assembly into supramolecular structures is given by H. Amouri and J. Moussa in the Minireview on page 1372 ff.



Nanoparticles
Inorganic nanoparticles can function as carriers to transport nucleic acids into cells. In their Review on page 1382 ff., M. Epple and V. Sokolova discuss the current state of the art and the advantages and disadvantages of the methods available.



Negative Thermal Expansion
Solid single-network $Cd(CN)_2$ contracts upon heating, as described by C. J. Kepert et al. in the Communication on page 1396 ff. As the pores are filled with guest molecules, the value of the linear coefficient of thermal expansion increases.