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Abstract for an Invited Paper
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Surface-Mounted Artificial Dipolar Molecular Rotors[1]

JOSEF MICHL, University of Colorado

We describe the synthesis, surface mounting, characterization, and operation of artificial molecular rotors of 1 - 3 nm size, attached to surfaces through one post (azimuthal rotors, axle normal to surface) or two posts (altitudinal rotors, axle parallel to surface). Rotor response to driving fields (electric and mechanical) has been simulated by molecular dynamics.

[1]In collaboration with Thomas Magnera, Dominik Horinek, Jaroslav Vacek, Xudong Chen, Deborah Casher, Mary Mulcahy, and Douglas Caskey, University of Colorado.