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ΔΙΑΛΕΞΗ

"Artificial Nanomachines: A Theoretical Perspective"

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Artificial Nanomachines: A Theoretical Perspective

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Artificial nanomachines are synthesized structures which can be used for the production of useful work. A certain amount of input energy and a spatial asymmetry are necessary conditions to make possible their operation. Such systems are activated by an external stimulus and start to operate out of equilibrium. Properties of the system like exerted force and efficiency are under investigation. Some examples based on rotaxanes (translational motion), catenanes (rotational motion) and a short note on SWCNT's (artificial muscles) will be presented from a theoretical point of view.