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Sommario/riassunto	Phenomena associated with the adhesion interaction of surfaces have been a critical aspect of micro- and nanosystem development and performance since the first MicroElectroMechanicalSystems(MEMS) were fabricated. These phenomena are ubiquitous in nature and are present in all systems, however MEMS devices are particularly sensitive to their effects owing to their small size and limited actuation force that can be generated. Extension of MEMS technology concepts to the nanoscale and development of NanoElectroMechanicalSystems(NEMS) will result in systems even more strongly influenced by surface