

1. Record Nr.	UNINA9910785903303321
Titolo	Adhesion aspects in MEMS-NEMS // edited by S. H. Kim, M. T. Dugger and K. L. Mittal
Pubbl/distr/stampa	Leiden ; ; Boston : , : Brill Biggleswade : , : Extenza Turpin [distributor], , 2010
ISBN	0-429-08792-6 1-61583-947-X 90-04-19095-3
Descrizione fisica	1 online resource (424 p.)
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Disciplina	621.381
Soggetti	Microelectromechanical systems Nanoelectromechanical systems Adhesion Surfaces (Technology)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	pt. 1. Understanding through continuum theory -- pt. 2. Computer simulation of interfaces -- pt. 3. Adhesion and friction measurements -- pt. 4. Adhesion in practical applications -- pt. 5. Adhesion mitigation strategies.
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