

1. Record Nr.	UNINA9910373930403321
Autore	Munro Deborah
Titolo	DIY MEMS : Fabricating Microelectromechanical Systems in Open Use Labs // by Deborah Munro
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-33073-7
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (xvi, 188 pages) : illustrations
Disciplina	620.5
Soggetti	Electronic circuits Electronics Biotechnology Microtechnology Microelectromechanical systems Industrial engineering Production engineering Electronic Circuits and Systems Electronics and Microelectronics, Instrumentation Microsystems and MEMS Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- National Nanotechnology Coordinated Infrastructure (NNCI) -- Working in a Cleanroom -- MEMS Fabrication Process -- Equipment -- Tools and Supplies -- Designing for MEMS -- Soft Materials -- Imaging & Metrology -- Testing -- Transporting -- Regulatory Approval Pathways -- Locations of the Facilities -- Meet the Lab Directors -- Collaborating with a Facility -- International Options -- Intellectual Property -- Getting Project Assistance -- Costs -- Taking the First Steps.
Sommario/riassunto	This book describes the future of microscopically small medical devices and how to locate a lab to start conducting your own do-it-yourself microelectromechanical systems (MEMS) research in one of the many

national, international, government, and other regional open use facilities, where you can quickly begin designing and fabricating devices for your applications. You will learn specific, tangible information on what MEMS are and how a device is fabricated, including what the main types of equipment are in these facilities. The book provides advice on working in a cleanroom, soft materials, collaboration, intellectual property and privacy issues, regulatory compliance, and how to navigate other issues that may arise. This book is primarily aimed at researchers and students who work at universities without MEMS facilities, and small companies who need access to MEMS resources. Introduces the MEMS fabrication processes and equipment Explains how totake the first steps - where to start and get initial advice and further assistance Includes a global list of MEMS facilities and resources with contact information.
