1. Record Nr. UNINA9910781415903321

Titolo	Emergence of pico- and nanosatellites for atmospheric research and technology testing [[electronic resource] /] / edited by Purvesh Thakker, Wayne A. Shiroma
Pubbl/distr/stampa	Reston, Va., : American Institute of Aeronautics and Astronautics, c2010
ISBN	1-60086-769-3 1-60086-770-7
Descrizione fisica	1 online resource (410 p.)
Collana	Progress in astronautics and aeronautics ; ; v. 234
Altri autori (Persone)	ThakkerPurvesh ShiromaWayne A
Soggetti	Microspacecraft Nanosatellites Atmosphere - Research Nanosatellites - Research - United States Microspacecraft - Research - United States
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 and index.
Nota di contenuto	Introduction / Purvesh Thakker and Gary Swenson -- Management and implementation of a cubesat interdisciplinary senior design course / Purvesh Thakker and Gary Swenson -- Small satellites 101: University of Hawaii small-satellite program / Justin M. Akagi, Tyler N. Tamashiro, Wade G. Tonaki, and Wayne A. Shiroma -- Survey of atmospheric and other research projects employing small university satellites / Purvesh Thakker and Gary Swenson -- ION-1 and 2-cubesat optical remote sensing instruments / Purvesh Thakker, Gary Swenson, and Lara Waldrop -- Cubesats for GPS scintillation science / Bryan Doyle ... [et al.] -- PowerSphere Development: an example in using Gossamer technology on picosatellites / E.J. Simburger, J.L.Lin and S.E. Scarborough -- Multi-application survivable tether (MAST) experiment / Nestor Voronka, Robert Hoyt, and Tyrel Newton -- Attitude determination, control, and related operation of the Illinois observing nanosatellite / Andrew Pukniel -- Microthruster propulsion / Lance K.

Yoneshige, Lynnette E.S. Ramirez, and Carlos F.M. Coimbra -- Novel propulsion system for nanosatellites / Filip Rysanek -- Power systems for cubesat-class satellites / Purvesh Thakker and Jonathan W. Kimball -- Picosatellite power system design / E.J. Simburger -- Evolution of the ION cubesat software architecture / Leon Arber -- Cubesat radio communication systems / Alex Rein -- Ground station design: mobile approach / Dylan J. Ichikawa ... [et al.] -- Retrodirective antenna systems for cubesats / Monte K. Watanabe, Justin M. Akagi, and Wayne A. Shiroma -- Appendix. Case study: overview of ION as applied to atmospheric research and technology testing problems / Purvesh Thakker ... [et al.].