

1. Record Nr.	UNINA9910457214003321
Autore	Schaub Hanspeter
Titolo	Analytical mechanics of space systems [[electronic resource] /] / Hanspeter Schaub, John L. Junkins
Pubbl/distr/stampa	Reston, Va., : American Institute of Aeronautics and Astronautics, c2009
ISBN	1-60086-722-7
Edizione	[2nd ed.]
Descrizione fisica	xxi, 793 p. : ill
Collana	AIAA education series
Altri autori (Persone)	JunkinsJohn L
Disciplina	521
Soggetti	Celestial mechanics Differentiable dynamical systems Orbital mechanics Space vehicles - Control systems Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Particle kinematics -- Newtonian mechanics -- Rigid body kinematics -- Eulerian mechanics -- Generalized methods of analytical dynamics -- Variational methods in analytical dynamics -- Hamilton's generalized formulations of analytical dynamics -- Nonlinear spacecraft stability and control -- Classical two-body problem -- Restricted three-body problem -- Gravitational potential field models -- Perturbation methods -- Transfer orbits -- Spacecraft formation flying -- Appendix A. Transport theorem derivation using linear algebra -- Appendix B. Various Euler angle transformations -- Appendix C. MRP identity proof -- Appendix D. Conic section transformations -- Appendix E. Numerical subroutines library -- Appendix F. First-order mapping between mean and osculating orbit elements -- Appendix G. Direct linear mapping between Cartesian Hill frame coordinates and orbit element differences -- Appendix H. Hamel coefficients for the rotational motion of a rigid body.