

1. Record Nr.	UNICAMPANIASUN0053233
Autore	Kuipers, Jack B.
Titolo	Quaternions and rotation sequences : a primer with applications to orbits, aerospace, and virtual reality / Jack B. Kuipers
Pubbl/distr/stampa	Princeton, : Princeton University, 1999
ISBN	06-910587-2-5
Descrizione fisica	XXII, 371 p. : ill. ; 26 cm.
Soggetti	68U05 - Computer graphics; computational geometry (digital and algorithmic aspects) [MSC 2020] 70-XX - Mechanics of particles and systems [MSC 2020] 70B15 - Kinematics of mechanisms and robots [MSC 2020] 70E15 - Free motion of a rigid body [MSC 2020] 70Mxx - Orbital mechanics [MSC 2020] 15B33 - Matrices over special rings (quaternions, finite fields, etc.) [MSC 2020]
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9910787955003321
Autore	Robinson Paul <1966->
Titolo	Grand Duke Nikolai Nikolaevich : Supreme Commander of the Russian Army // Paul Robinson ; Shaun Allshouse, design
Pubbl/distr/stampa	DeKalb, Illinois : , : NIU Press, , 2014 ©2014
ISBN	1-60909-163-9
Descrizione fisica	1 online resource (445 p.)
Disciplina	940.4/1247092
Soggetti	Generals - Russia World War, 1914-1918 - Campaigns - Russia World War, 1914-1918 - Campaigns - Eastern Front Nobility - Russia
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	Preface -- Romanov family tree -- Introduction -- Education of a soldier, 1856-1873 -- First shots, 1873-1878 -- Hunting and riding, 1878-1895 -- Inspector general : reforming the cavalry, 1895-1904 -- The October Manifesto, 1905 -- Restoring order, 1905-1906 -- The Council of State Defense, 1906-1907 -- Fall from favor, 1907-1908 -- The calm before the storm, 1908-1913 -- Supreme Commander, summer 1914 -- Stavka -- Opening salvoes, August 1914 -- The Warsaw-Ivangorod Operation, September-October 1914 -- The Battle of Lodz, November 1914 -- Winter, December 1914-January 1915 -- Behind the lines -- The Carpathian Offensive, February-April 1915 -- The Battle of Gorlice-Tarnow, May-June 1915 -- The Great Retreat, July-August 1915 -- Victory in the Caucasus, September 1915-April 1916 -- Governing the Caucasus, May 1916-February 1917 -- Revolution, March 1917 -- Crimea, April 1917-April 1919 -- Exile, May 1919-December 1924 -- The Emigre Congress, January 1925-June 1926 -- Thoughts of god, July 1926-January 1929 -- Epilogue -- Cast of characters.
Sommario/riassunto	"This biography covers the private life and professional career of Grand Duke Nikolai Nikolaevich, Supreme Commander of the Russian Army

during World War I. Discusses his reputation in the Romanov family and his rise in the Russian military"--

3. Record Nr.	UNINA9911006654003321
Autore	Thomas Philip
Titolo	Simulation of industrial processes for control engineers // Philip Thomas
Pubbl/distr/stampa	Oxford ; ; Boston, : Butterworth-Heinemann, 1999
ISBN	1-281-03489-4 9786611034894 0-08-051724-2
Descrizione fisica	1 online resource (415 p.)
Disciplina	621.4021
Soggetti	Process control - Computer simulation Manufacturing processes - Computer simulation Process control - Mathematical models Manufacturing processes - Mathematical models
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	Front Cover; Simulation of Industrial Processes for Control Engineers; Copyright Page; Contents; Foreword; Notation; Chapter 1. Introduction; Chapter 2. Fundamental concepts of dynamic simulation; 2.1 Introduction; 2.2 Building up a model of a simple process-plant unit: tank liquid level; 2.3 The general form of the simulation problem; 2.4 The state vector; 2.5 Model complexity; 2.6 Distributed systems: partial differential equations; 2.7 The problem of stiffness; 2.8 Tackling stiffness in process simulations: the properties of a stiff integration algorithm 2.9 Tackling stiffness in process simulations by modifications to the model 2.10 Solving nonlinear simultaneous equations in a process model: iterative method; 2.11 Solving nonlinear simultaneous equations in a process model: the Method of Referred Derivatives; 2.12 Bibliography; Chapter 3. Thermodynamics and the conservation

equations; 3.1 Introduction; 3.2 Thermodynamic variables; 3.3 Specific heats of gases; 3.4 Conservation of mass in a bounded volume; 3.5 Conservation of energy in a fixed volume; 3.6 Effect of volume change on the equation for the conservation of energy
3.7 Conservation of energy equation for a rotating component
3.8 Conservation of mass in a pipe; 3.9 Conservation of energy in a pipe; 3.10 Conservation of momentum in a pipe; 3.11 Bibliography; Chapter 4. Steady-state incompressible flow; 4.1 Introduction; 4.2 The energy equation for general steady-state flow; 4.3 Incompressible flow; 4.4 Magnitude of the Fanning friction factor, f ; 4.5 Frictionally resisted, incompressible flow through a real pipe; 4.6 Pressure drop due to level difference; 4.7 Frictional pressure drop; 4.8 Pressure drop due to bends and fittings
4.9 Pressure drop at pipe outlet
4.10 Pressure drop at pipe inlet; 4.11 Overall relationship between mass flow and pressure difference; 4.12 Bibliography; Chapter 5. Flow through ideal nozzles; 5.1 Introduction; 5.2 Steady-state flow in a nozzle; 5.3 Maximum mass flow for a polytropic expansion; 5.4 Sonic flow; 5.5 Comparison between flow formulae; 5.6 Bibliography; Chapter 6. Steady-state compressible flow; 6.1 Introduction; 6.2 General overview of compressible pipe-flow; 6.3 Frictionally resisted, adiabatic flow inside the pipe; 6.4 Solution sequence for compressible flow through a pipe
6.5 Determination of the friction factor, f
6.6 Determination of the effective length of the pipe; 6.7 Sample calculation; 6.8 Explicit calculation of compressible flow; 6.9 Example using the long-pipe approximation; 6.10 Bibliography; Chapter 7. Control valve liquid flow; 7.1 Introduction; 7.2 Types of control valve; 7.3 Pressure distribution through the valve; 7.4 Liquid flow through the valve; 7.5 Cavitation and choking in liquid flow; 7.6 Relationship between valve capacity at part open and capacity at full open; 7.7 The valve characteristic; 7.8 Velocity-head loss across the valve
7.9 Bibliography

Sommario/riassunto

Computer simulation is the key to comprehending and controlling the full-scale industrial plant used in the chemical, oil, gas and electrical power industries. Simulation of Industrial Processes for Control Engineers shows how to use the laws of physics and chemistry to produce the equations to simulate dynamically all the most important unit operations found in process and power plant. The book explains how to model chemical reactors, nuclear reactors, distillation columns, boilers, deaerators, refrigeration vessels, storage vessels for liquids and gases, liquid and gas flow t
