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| 课程代码（Coursenumber） CHEM 271  课程对象（Audience） Primarily for Graduates  开课教师（Teacher） Fayer, M.  学期（Semester） Terms: Aut  课程描述（Description）） The principles of quantum mechanics. General formulation, mathematical methods, and applications of quantum theory. Exactly solvable problems and approximate methods including time independent perturbation theory and the variational method. Time dependent methods including exactly solvable problems, time dependent perturbation theory, and density matrix formalism. Different representations of quantum theory including the Schrödinger, matrix, and density matrix methods. Absorption and emission of radiation Angular momentum. Atomic structure calculations and simple molecular structure methods. Prerequisite: 175.  课时信息（Totalhours） Units: 3  教参信息（Textbookinfo） 1 Advanced Organic Chemistry: Part A: Structure and Mechanisms (Advanced Organic Chemistry / Part A: Structure and Mechanisms) by Francis A. Carey and Richard J. Sundberg (Paperback - June 13, 2007) ISBN-13: 978-0387683461 世界各地拥有馆藏的图书馆（OCLC）:228 2 Modern Trends In Chemical Reaction Dynamics: Experiment And Theory (Advanced Series in Physical Chemistry) (Pt. 2) by Xueming Yang and Kopin Liu (Hardcover - Nov. 28, 2004) ISBN-13: 978-9812389237 世界各地拥有馆藏的图书馆（OCLC）:121 3 Overview's of Recent Research on Energetic Materials (Advanced Series in Physical Chemistry) by Robert W. Shaw; Thomas B Brill; Donald L Thompson (Hardcover - Aug. 30, 2005) ISBN-13: 978-9812561718 世界各地拥有馆藏的图书馆（OCLC）:100 4 Conical Intersections: Electronic Structure, Dynamics & Spectroscopy (Advanced Series in Physical Chemistry) by Wolfgang Domcke, David R. Yarkony, and Horst Koppel (Hardcover - Oct. 2004) ISBN-13: 978-9812386724 世界各地拥有馆藏的图书馆（OCLC）:118 5 Carbon Nanotubes: Advanced Topics in the Synthesis, Structure, Properties and Applications (Topics in Applied Physics) by Ado Jorio, Gene Dresselhaus, and Mildred S. Dresselhaus (Hardcover - Mar. 11, 2008) ISBN-13: 978-3540728641 世界各地拥有馆藏的图书馆（OCLC）:114 6 Sol-Gel Materials: Chemistry and Applications (Advanced Chemistry Texts) by John D. Wright and Nico A.J.M. Sommerdijk (Hardcover - Dec. 21, 2000) ISBN-13: 978-9056993269 7 Advanced Batteries: Materials Science Aspects by Robert A. Huggins (Hardcover - Dec. 10, 2008) ISBN-13: 978-0387764238 世界各地拥有馆藏的图书馆（OCLC）:117 8 Photo-Excited Processes, Diagnostics and Applications: Fundamentals and Advanced Topics by A. Peled (Hardcover - Dec. 31, 2003) ISBN-13: 978-1402075278 世界各地拥有馆藏的图书馆（OCLC）:75 9 Transition Metal Carbonyl Cluster Chemistry (Advanced Chemistry Texts, Volume 2) (v. 2) by Paul J. Dyson and J. Scott McIndoe (Hardcover - Nov. 17, 2000) ISBN-13: 978-9056992897  10 Chemical Thermodynamics: Advanced Applications by J. Bevan Ott and Juliana Boerio-Goates (Hardcover - July 11, 2000) ISBN-13: 978-0125309851 |