课程代码（Coursenumber）  
CHM 504  
  
课程对象（Audience）  
Primarily for Graduates  
  
开课教师（Teacher）  
  
学期（Semester）  
  
课程描述（Description））  
A survey of atomic and molecular energy levels and the Hamiltonians that describe them. The interaction of radiation with matter, including multiphoton effects. Examples include electronic and nuclear spectroscopy of molecules and crystals, electron spin resonance, microwave spectroscopy, and the uses of lasers in modern spectroscopic research.  
  
课时信息（Totalhours）  
  
教参信息（Textbookinfo）  
1 Molecular Spectroscopy by Jeanne L. McHale (Paperback - May 11, 1998)  
ISBN-13: 978-0132290630  
2 Modern Spectroscopy by J. Michael Hollas (Paperback - Jan. 16, 2004)  
ISBN-13: 978-0470844168  
世界各地拥有馆藏的图书馆（OCLC）:407  
3 Frontiers of Molecular Spectroscopy by Jaan Laane (Hardcover - Oct. 24, 2008)  
ISBN-13: 978-0444531759  
世界各地拥有馆藏的图书馆（OCLC）:127  
4 Symmetry and Spectroscopy: An Introduction to Vibrational and Electronic Spectroscopy by Daniel C. Harris and Michael D. Bertolucci (Paperback - Nov. 1, 1989)  
ISBN-13: 978-0486661445  
5 Molecular Spectroscopy (Oxford Chemistry Primers) by John M. Brown (Paperback - Nov. 12, 1998)  
ISBN-13: 978-0198557852  
6 Atomic and Molecular Spectroscopy: Basic Aspects and Practical Applications (Advanced Texts in Physics) by S. Svanberg (Paperback - Feb. 12, 2004)  
ISBN-13: 978-3540203827  
世界各地拥有馆藏的图书馆（OCLC）:157  
7 Molecular Spectroscopy by Ira N. Levine (Hardcover - Apr. 1975)  
ISBN-13: 978-0471531289  
8 Molecules and Radiation: An Introduction to Modern Molecular Spectroscopy. Second Edition by Jeffrey I. Steinfeld (Paperback - June 10, 2005)  
ISBN-13: 978-0486441528  
世界各地拥有馆藏的图书馆（OCLC）:37  
9 Molecular Symmetry by David J. Willock (Paperback - Apr. 6, 2009)  
ISBN-13: 978-0470853481  
世界各地拥有馆藏的图书馆（OCLC）:252  
10 Surface-Enhanced Vibrational Spectroscopy by Ricardo Aroca (Hardcover - May 23, 2006)  
ISBN-13: 978-0471607311  
世界各地拥有馆藏的图书馆（OCLC）:219  
11 Astronomical Spectroscopy: An Introduction to the Atomic and Molecular Physics of Astronomical Spectroscopy by Jonathan Tennyson (Hardcover - Dec. 31, 2010)  
ISBN-13: 978-9814291965  
世界各地拥有馆藏的图书馆（OCLC）:1