

|    |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Record Nr.              | UNISALENTO991000882789707536                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|    | Titolo                  | Regimen sanitatis salernitanum / a cura di G. Barbensi                                                                                                                                                                                                                                                                                                                                                                                                              |
|    | Pubbl/distr/stampa      | Firenze : Olschki, stampa 1947                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|    | Descrizione fisica      | X, 27 p. ; 22 cm                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|    | Altri autori (Persone)  | Barbensi, Gustavo                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|    | Disciplina              | 613                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|    | Lingua di pubblicazione | Latino                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|    | Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2. | Record Nr.              | UNINA9910800195703321                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|    | Autore                  | Nakamura Hiroki                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|    | Titolo                  | Quantum mechanical tunneling in chemical physics / / Hiroki Nakamura, Gennady Mil'nikov                                                                                                                                                                                                                                                                                                                                                                             |
|    | Pubbl/distr/stampa      | Boca Raton : , : CRC Press, Taylor & Francis Group, , 2013                                                                                                                                                                                                                                                                                                                                                                                                          |
|    | ISBN                    | 0-429-08645-8<br>1-4665-0731-4                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|    | Descrizione fisica      | 1 online resource (225 p.)                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    | Classificazione         | SCI013050SCI078000                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|    | Disciplina              | 537.6/226                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|    | Soggetti                | Tunneling (Physics)                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|    | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                |
|    | Nota di contenuto       | Front Cover; Quantum Mechanical Tunneling in Chemical Physics; Copyright; Table of Contents; Preface; 1. Introduction; 2. One-Dimensional Theory; 3. Two-Dimensional Theory; 4. Multidimensional Effects: Peculiar Phenomena; 5. Nonadiabatic Tunneling; 6. Multidimensional Theory of Tunneling Splitting; 7. Numerical Applications to Polyatomic Molecules; 8. Decay of Metastable States; 9. Tunneling in Chemical Reactions; 10. Concluding Remarks and Future |

Perspectives; Appendix A: Proofs of Equation (2.95) and Equation (2.110); Appendix B: Derivation of Equation (6.80)  
Appendix C: Herring Formula in Curved SpaceAppendix D: Derivation of Equation (6.97); Appendix E: Computer Code to Calculate Instanton Trajectory; Appendix F: Derivation of Some Equations in Section 6.4.2; Bibliography; Back Cover

---

## Sommario/riassunto

This text explores methodologies that can be usefully applied to various realistic problems in molecular spectroscopy and chemical dynamics. It covers the direct evaluation of reaction rate constants for both electronically adiabatic chemical reactions on a single adiabatic potential energy surface and non-adiabatic chemical reactions in which two or more adiabatic potential energy surfaces are involved. It also discusses the non-adiabatic tunneling phenomenon that represents one class of non-adiabatic transitions on which the authors have made an extensive research so far--

---