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| Autore                  | Strasser Andrea   |
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| ISBN                    | 1-283-63384-1<br>9786613946294<br>94-007-4596-6   |
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| Descrizione fisica      | 1 online resource (218 p.)  |
| Altri autori (Persone)  | WittmannHans-Joachim  |
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| Soggetti                | G proteins - Receptors  |
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| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | Preface -- 1. Introduction -- 2. G Protein Coupled Receptors -- 3. Sequence alignment and homology modelling -- 4. Construction of ligands -- 5. Lipids -- 6. Minimization and molecular dynamics. - 7. Calculation of Gibbs energy of salvation -- 8. Special topics in GPCR research -- 9. Force fields -- 10. Thermodynamics of ligand-receptor interaction -- 11. Important LINUX commands -- Literature -- Appendix -- Index.  |
| Sommario/riassunto      | G protein coupled receptors (GPCRs) comprise an important protein family, which is involved in signal transduction in the cell. Besides that a large number of drugs, available on market, address GPCRs. For an efficient and improved development of appropriate drugs, molecular modelling of GPCRs is – in order to understand the ligand-receptor interactions and functionality of GPCRs on molecular level - an important tool. The book “Modelling of GPCRs – a practical handbook” is focussed onto a practical introduction into molecular modelling of GPCRs. This book is very useful for beginners in GPCR modelling, but also addresses the advanced GPCR modeller: On the one hand, the book introduces principles of GPCR modelling, including extensive examples. On the other hand, detailed outlooks onto advanced GPCR modelling techniques are presented. Furthermore, the book includes important data, like information about crystal structures in a summarized manner or amino acid sequences, which are essential for |

GPCR modelling in general. Due to an increase in efficacy and data handling most modellers use LINUX as operating system. To address this, a summary of most important LINUX commands with examples is presented within the book.

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