

| | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Record Nr. | UNINA9910785911503321 |
| Titolo | Discipline-based education research [[electronic resource]] : understanding and improving learning in undergraduate science and engineering / / Susan R. Singer, Natalie R. Nielsen, and Heidi A. Schweingruber, editors. ; Committee on the Status, Contributions, and Future Directions of Discipline-Based Education Research, Board on Science Education, Division of Behavioral and Social Sciences and Education, National Research Council of the Naitonal Academies |
| Pubbl/distr/stampa | Washington, D.C., : National Academies Press, 2012 |
| ISBN | 0-309-25414-0 1-283-63631-X 0-309-25412-4 |
| Descrizione fisica | 1 online resource (282 p.) |
| Altri autori (Persone) | SingerSusan R NielsenNatalie R SchweingruberHeidi A |
| Disciplina | 507.11 |
| Soggetti | Science - Study and teaching (Higher) - United States Engineering - Study and teaching (Higher) - United States |
| 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 Matter""; ""Acknowledgments""; ""Contents""; ""In Memoriam, Michael Edward Martinez""; ""Executive Summary""; ""Section I: Status of Discipline-Based Education Research""; ""1 Introduction""; ""2 The Emergence and Current State of Discipline-Based Education Research""; ""Section II: Contributions of Discipline-Based Education Research""; ""3 Overview of Discipline-Based Education Research""; ""4 Identifying and Improving Students Conceptual Understanding in Science and Engineering""; ""5 Problem Solving, Spatial Thinking, and the Use of Representations in Science and Engineering""; ""6 Instructional Strategies""""7 Some Emerging Areas of Discipline-Based Education Research""; ""Section III: Future Directions for Discipline-Based Education Research""; ""8 Translating Research into Teaching Practice: The Influence of Discipline-Based Education |

