1. Record Nr. UNINA9910337758503321

Autore	Rowan Leonie
Titolo	Higher Education and Social Justice : The Transformative Potential of University Teaching and the Power of Educational Paradox / / by Leonie Rowan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Palgrave Pivot, , 2019
ISBN	9783030052461 303005246X
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (151 pages)
Disciplina	344.730798 379.26
Soggetti	Teachers - Training of Education, Higher Education - Philosophy Learning, Psychology of Teaching and Teacher Education Higher Education Educational Philosophy Instructional Psychology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. The transformative potential of higher education: engaging with educational philosophy to labour for justice and freedom -- Chapter 2. Influences on academic decision-making in university teaching: perspectives from policy, literature, and student-centred research -- Chapter 3. Purposeful decision-making for relationship-centred education: productive paradox in university teaching -- Chapter 4. Purposeful decision-making for relationship-centred education: engaging with speech and with silence in university classrooms -- Chapter 5. University teaching as situated work: imagining, experimenting, and working for change.
Sommario/riassunto	This book demonstrates how the pedagogical decision making of university academics can be shaped by engagement with an educational

	philosophy known as “relationship-centred education”. Beginning with critical analysis of concepts such as student engagement, student satisfaction, and student-centred learning, the author goes on to investigate how literature relating to social justice challenges educators to consider these terms in particular ways. From this basis, the book explores the factors featuring in inclusive, respectful, diverse and student-centred environments. In analysing these factors, the author illuminates the perspectives of university teachers who struggle with the unique challenges of working in the academy; including an increasingly broad set of employment demands and narrower criteria for determining ‘impact’, all while retaining focus on the transformative potential of higher education. This book will be of interest to students and scholars of transformative learning, as well as social justice within higher education. Leonie Rowan is Associate Professor in the School of Education and Professional Studies at Griffith University, Australia. .

2.	Record Nr.	UNINA9911018933303321
	Autore	Maier Joachim
	Titolo	Physical chemistry of ionic materials [[electronic resource]] : ions and electrons in solids / / Joachim Maier
	Pubbl/distr/stampa	Chichester ; ; Hoboken, NJ, : Wiley, c2004
	ISBN	9786610274871 0-470-02022-9 1-280-27487-5 0-470-02021-0
	Descrizione fisica	1 online resource (539 p.)
	Disciplina	541.0421 541.3723
	Soggetti	Solids - Electric properties Solid state chemistry Solids - Defects
	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 (p. [500]-526) and index.

Nota di contenuto

Contents; 1 Introduction; 1.1 Motivation; 1.2 The defect concept: Point defects as the main actors; 2 Bonding aspects: From atoms to solid state; 2.1 Chemical bonding in simple molecules; 2.1.1 Ideal covalent bonding; 2.1.2 Polar covalent bonding; 2.1.3 The ionic bonding; 2.1.4 Metallic bonding; 2.1.5 Further intermediate forms of chemical bonding; 2.1.6 Two-body potential functions; 2.2 Many atoms in contact: The solid state as a giant molecule; 2.2.1 The band model; 2.2.2 Ionic crystals; 2.2.3 Molecular crystals; 2.2.4 Covalent crystals; 2.2.5 Metallic crystals
2.2.6 Mixed forms of bonding in solids 2.2.7 Crystal structure and solid state structure; 3 Phonons; 3.1 Einstein and Debye models; 3.2 Complications; 4 Equilibrium thermodynamics of the perfect solid; 4.1 Preliminary remarks; 4.2 The formalism of equilibrium thermodynamics; 4.3 Examples of equilibrium thermodynamics; 4.3.1 Solid-solid phase transition; 4.3.2 Melting and evaporation; 4.3.3 Solid-solid reaction; 4.3.4 Solid-gas reaction; 4.3.5 Phase equilibria and mixing reactions; 4.3.6 Spatial equilibria in inhomogeneous systems; 4.3.7 Thermodynamics of elastically deformed solids
4.3.8 The thermodynamic functions of state of the perfect solid 5 Equilibrium thermodynamics of the real solid; 5.1 Preliminary remarks; 5.2 Equilibrium thermodynamics of point defect formation; 5.3 Equilibrium thermodynamics of electronic defects; 5.4 Higher-dimensional defects; 5.4.1 Equilibrium concentration; 5.4.2 Dislocations: Structure and energetics; 5.4.3 Interfaces: Structure and energetics; 5.4.4 Interfacial thermodynamics and local mechanical equilibria; 5.5 Point defect reactions; 5.5.1 Simple internal defect equilibria; 5.5.2 External defect equilibria; 5.6 Doping effects
5.7 Interactions between defects 5.7.1 Associates; 5.7.2 Activity coefficients; 5.8 Boundary layers and size effects; 5.8.1 General; 5.8.2 Concentration profiles in the space charge zones; 5.8.3 Conductivity effects; 5.8.4 Defect thermodynamics of the interface; 5.8.5 Examples and supplementary comments; 6 Kinetics and irreversible thermodynamics; 6.1 Transport and reaction; 6.1.1 Transport and reaction in the light of irreversible thermodynamics; 6.1.2 Transport and reaction in the light of chemical kinetics; 6.2 Electrical mobility; 6.2.1 Ion mobility; 6.2.2 Electron mobility
6.3 Phenomenological diffusion coefficients 6.3.1 Ion conduction and self-diffusion; 6.3.2 Tracer diffusion; 6.3.3 Chemical diffusion; 6.3.4 A comparison of the phenomenological diffusion coefficients; 6.4 Concentration profiles; 6.5 Diffusion kinetics of stoichiometry change; 6.6 Complications of matter transport; 6.6.1 Internal interactions; 6.6.2 Boundary layers and grain boundaries; 6.7 Surface reactions; 6.7.1 Elementary processes; 6.7.2 Coupled reactions; 6.7.3 Phenomenological rate constants; 6.7.4 Reactivity, chemical resistance and chemical capacitance; 6.8 Catalysis
6.9 Solid state reactions

Sommario/riassunto

Defects play an important role in determining the properties of solids. This book provides an introduction to chemical bond, phonons, and thermodynamics; treatment of point defect formation and reaction, equilibria, mechanisms, and kinetics; kinetics chapters on solid state processes; and electrochemical techniques and applications.Offers a coherent description of fundamental defect chemistry and the most common applications.Up-to-date trends and developments within this field.Combines electrochemical concepts with aspects of semiconductor physics.