1. Record Nr. UNINA9910309345003321

Autore	Mignone, Lisa
Titolo	The Republican Aventine and Rome's social order / / Lisa Marie Mignone
Pubbl/distr/stampa	Ann Arbor : University of Michigan Press, , [2016]
ISBN	9780472119882 (hardcover : acid-free paper)
Descrizione fisica	XI, 243 p. ; 24 cm
Disciplina	937.63
Locazione	FGBC
Collocazione	IV H 227
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910830175103321

Autore	Erickson Martin J. <1963->
Titolo	Introduction to combinatorics / / Martin J. Erickson
Pubbl/distr/stampa	New York, New York : , : John Wiley & Sons, Inc., , 1996 ©1996
ISBN	1-283-33199-3 9786613331991 1-118-03264-0 1-118-03089-3
Descrizione fisica	1 online resource (210 p.)
Collana	Wiley Series in Discrete Mathematics and Optimization
Disciplina	511.6
Soggetti	Combinatorial analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley-Interscience Publication."
Nota di bibliografia	Includes bibliographical references and index.

Nota di contenuto	Introduction to Combinatorics; Contents; Notation; 1 Preliminaries: Set Theory, Algebra, and Number Theory; 1.1 Sets; 1.2 Relations and Functions; 1.3 Binomial Coefficients; 1.4 Group Theory; 1.5 Number Theory; 1.6 Fields; 1.7 Linear Algebra; Notes; Exercises; I Existence; 2 The Pigeonhole Principle; 2.1 Versions of the Pigeonhole Principle; 2.2 Graph Theory; 2.3 Extremal Graphs; 2.4 Colorings of the Plane; Notes; Exercises; 3 Sequences and Partial Orders; 3.1 The Erdos-Szekeres Theorem; 3.2 Dilworth's Lemma; 3.3 Sperner's Theorem; Notes; Exercises; 4 Ramsey Theory; 4.1 Ramsey's Theorem 4.2 Generalizations of Ramsey's Theorem4.3 Ramsey Numbers, Bounds, and Asymptotics; 4.4 The Probabilistic Method; 4.5 Schur's Lemma; 4.6 Van der Waerden's Theorem; Notes; Exercises; II Enumeration; 5 The Fundamental Counting Problem; 5.1 Labeled and Unlabeled Sets; 5.2 The Sixteen Cases; Notes; Exercises; 6 Recurrence Relations and Explicit Formulas; 6.1 The Inclusion-Exclusion Principle; 6.2 Stirling Numbers; 6.3 Linear Recurrence Relations; 6.4 Generating Functions; 6.5 Special Generating Functions; 6.6 Partition Numbers; Notes; Exercises; 7 Permutations and Tableaux 7.1 Algorithm: Listing Permutations7.2 Young Tableaux; 7.3 The Robinson-Schensted Correspondence; Notes; Exercises; 8 The Polya Theory of Counting; 8.1 Burnside's Lemma; 8.2 Labelings; 8.3 Cycle Indexes; 8.4 Polya's Theorem; 8.5 De Bruijn's Formula; Notes; Exercises; III Construction; 9 Codes; 9.1 The Geometry of GF(2)n; 9.2 Binary Codes; 9.3 Perfect Codes; 9.4 Hamming Codes; 9.5 The Fano Configuration; Notes; Exercises; 10 Designs; 10.1 t-Designs; 10.2 Block Designs; 10.3 Projective Planes; 10.4 Latin Squares; 10.5 MOLS and OODs; 10.6 Hadamard Matrices; Notes; Exercises; 11 Big Designs 11.1 The Golay Codes and S(5, 8, 24)11.2 Lattices and Sphere Packings; 11.3 Leech's Lattice; Notes; Exercises; Bibliography; Index
Sommario/riassunto	This gradual, systematic introduction to the main concepts of combinatorics is the ideal text for advanced undergraduate and early graduate courses in this subject. Each of the book's three sections--Existence, Enumeration, and Construction--begins with a simply stated first principle, which is then developed step by step until it leads to one of the three major achievements of combinatorics: Van der Waerden's theorem on arithmetic progressions, Polya's graph enumeration formula, and Leech's 24-dimensional lattice.Along the way, Professor Martin J. Erickson introduces fundamental resul

3. Record Nr. UNINA9910383818703321

Autore	Wang Yunkun
Titolo	Development of Novel Bioelectrochemical Membrane Separation Technologies for Wastewater Treatment and Resource Recovery / / by Yunkun Wang
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-3078-5
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIV, 157 p. 69 illus., 49 illus. in color.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	628.35
Soggetti	Environmental sciences Environmental engineering Biotechnology Water - Pollution Environmental chemistry Environmental Science and Engineering Environmental Engineering/Biotechnology Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution Environmental Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Research background -- Intermittently aerated membrane bioreactor technologies for nutrients removal and phosphate recovery -- Anaerobic hybrid membrane bioreactor technology for refractory organic pollutant removal -- Electrochemical membrane bioreactor technologies for sustainable wastewater treatment -- In-situ utilization of generated electricity to mitigate membrane fouling -- In-situ utilization of generated electricity for nutrient recovery -- Conclusion -- acknowledgement -- Academic papers and patents during doctoral studies.
Sommario/riassunto	The most commonly used biological wastewater treatment technologies still have serious technical-economical and sustainability-related limitations, due to their high energy requirements, poor effluent

quality, and lack of energy and resource recovery processes. In this thesis, novel electrochemical membrane bioreactors (EMBRs), which take advantage of membrane separation and bioelectrochemical techniques, are developed for wastewater treatment and the simultaneous recovery of energy and resources. Above all, this innovative system holds great promise for the ecient wastewater treatment and energy recovery. It can potentially recover net energy from wastewater while at the same time harvesting high-quality effluent. The book also provides a proof-of-concept study showing that electrochemical control might offer a promising in-situ means of suppressing membrane fouling. Lastly, by integrating electrodialysis into EMBRs, phosphate separation and recovery are achieved. Hence, these new EMBR techniques provide viable alternatives for sustainable wastewater treatment and resource recovery. .