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Titolo	The invisible power of mathematics : the pervasive impact of mathematical engineering in everyday life / / Giovanni Samaey and Joos P. L. Vandewalle
Pubbl/distr/stampa	New York, NY : , : Springer, , [2022] ©2022
ISBN	1-0716-2776-7
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (176 pages)
Collana	Copernicus imprint
Disciplina	780
Soggetti	Mathematics - Social aspects Matemàtica Aplicacions industrials Condicions socials Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword -- Preface -- Introduction -- 1. Worry-Free Online Shopping - 2. Reach Everyone, Everywhere in Just Six Steps -- 3. Are the Polls Right? -- 4. Cochlear Implants Help the Deaf Hear Again -- 5. Google PageRank, or the Needle in the Haystack -- 6. Fun and Game Theory -- 7. High Winds on High Mills -- 8. Reducing Factory Noise -- 9. Virtual Architecture and Engineering -- 10. The Art of Forgery -- 11. The Right Bike in the Right Place -- 12. 1. Can Computers Detect Fraud? (And Do We Want Them To?) -- 13. How to Predict the Future -- 14. Do Smart Girls Stay Single Longer? -- 15. What if There's More Data than Storage? -- 16. Driving Without a Driver -- 17. How Vulnerable Are Our Banking Systems? -- 18. Can We Predict Climate Change? -- 19. War and Peace -- 20. Pandemics: From Ebola and HIV to Bioterrorism and the Coronavirus -- Bibliography -- Glossary -- Translator's Note.
Sommario/riassunto	How does homebanking work? How are board games developed? How reliable can wind energy get? How do we discover forged paintings? Do smart girls stay single? How dangerous can a bioterrorist get? In all these questions (and many others), mathematics plays a crucial role in

the search for an answer. This book tells the story behind twenty of these questions. This is explicitly not a mathematics book, but a book about the crucial role that mathematics plays in devising the creative solutions the world needs. The questions are divided into three categories: mathematics in everyday life, mathematics for the workplace, and mathematics for tomorrow's society. The themes illustrate not only the incredibly broad applicability of mathematics in the world around us, but also the great diversity of useful mathematical techniques.

2. Record Nr.

Titolo

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Modern techniques for circular dichroism and synchrotron radiation circular dichroism spectroscopy [[electronic resource] /] / edited by Bonnie Ann Wallace and Robert William Janes

Amsterdam, : IOS Press, 2009

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Descrizione fisica

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Collana

Advances in biomedical spectroscopy ; ; . 1

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Soggetti

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Nota di bibliografia

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Nota di contenuto

Title page; Series Editor's Preface; Preface; Addresses of Contributors; Contents; An Introduction to Circular Dichroism and Synchrotron Radiation Circular Dichroism Spectroscopy; Measurement of Circular Dichroism and Related Spectroscopies with Conventional and Synchrotron Light Sources: Theory and Instrumentation; Calibration

Techniques for Circular Dichroism and Synchrotron Radiation Circular Dichroism Spectroscopy; Sample Preparation and Good Practice in Circular Dichroism Spectroscopy; Sample Preparation and Good Practice in Synchrotron Radiation Circular Dichroism Spectroscopy
Reproducible Circular Dichroism Measurements for Biopharmaceutical Applications Synchrotron Radiation Circular Dichroism Spectroscopy: Applications in the Biosciences; Linear Dichroism Spectroscopy: Techniques and Applications; Methods of Analysis for Circular Dichroism Spectroscopy of Proteins and the DichroWeb Server; Reference Datasets for Protein Circular Dichroism and Synchrotron Radiation Circular Dichroism Spectroscopic Analyses; Ab Initio Calculations for Circular Dichroism and Synchrotron Radiation Circular Dichroism Spectroscopy of Proteins
The Protein Circular Dichroism Data Bank (PCDDB): A Resource for Data Archiving, Sharing, Validation and Analysis Appendix: Selected Website and Monograph References for CD and SRCD of Biomolecules; Author Index

Sommario/riassunto

Presents an account of circular dichroism (CD) spectroscopy and its application to structural biology. This book covers the methods of synchrotron radiation circular dichroism (SRCD) and linear dichroism (LD).
