

1. Record Nr.	UNINA9910760254403321
Autore	Albers Szafir Danielle
Titolo	Visualization Psychology // edited by Danielle Albers Szafir, Rita Borgo, Min Chen, Darren J. Edwards, Brian Fisher, Lace Padilla
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	9783031347382 3031347382
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (403 pages)
Collana	Behavioral Science and Psychology Series
Altri autori (Persone)	BorgoRita ChenMin EdwardsDarren J FisherBrian PadillaLace
Disciplina	153.32
Soggetti	User interfaces (Computer systems) Human-computer interaction Cognitive psychology Information visualization User Interfaces and Human Computer Interaction Cognitive Psychology Data and Information Visualization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Foreword -- Preface -- Part I: Visualization Psychology from a Psychology Perspective -- 1 Color Semantics for Visual Communication -- 2 Theories and Models in Graph Comprehension -- 3 Mental Models and Visualization -- 4 Improving Evaluation using Visualization Decision-Making Models: A practical Guide -- 5 Supporting Diverse Research Methods for Observing Huge Variable Space in Empirical Studies for Visualization -- Part II: Visualization Psychology from a Visualization Perspective -- 6 Visualization Onboarding Grounded in Educational Theories -- 7 Adaptive Visualization of Health Information Based on Cognitive Psychology - Scenarios, Concepts and Research

Opportunities -- 8 Design Cognition in Data Visualization -- 9  
Visualization Psychology: Foundations for an Interdisciplinary -- 10  
Visualization Psychology for Eye Tracking Evaluation -- 11 Task  
Matters When Scanning Data Visualizations -- 12 Perceptual Biases in  
Scatterplot Interpretation -- 13 Leveraging Conscientiousness-Based  
Preferences in Information Visualization Design -- 14 Visualizing  
Uncertainty in Different Domains: Commonalities and Potential Impacts  
on Human Decision Making -- 15 Analysis of Sensemaking Strategies:  
Psychological Theories in Practice.

---

### Sommario/riassunto

This book designates Visualization Psychology as an interdisciplinary subject. The book contains literature reviews and experimental works that exemplify a range of open questions at this critical intersection. It also includes discourses that envision how the subject may be developed in the coming years and decades. The field of visualization is a rich playground for discovering new knowledge in both visualization and psychology. As visualization techniques augment human cognition, these techniques must be developed and improved by building on theoretical, empirical and methodological knowledge from psychology. At the same time, visualization processes surface numerous phenomena about interactions between the human mind and digital entities, such as data, visual imagery, algorithms, and computer-generated predictions and recommendations. Visualization psychology is a new type of science in the making.

---