

Contents

Preface vii

I History 1

1 Scholars and Scripts, Spooks and Scores 3

Blaise Cronin

2 History and Evolution of (Biblio)Metrics 23

Nicola De Bellis

II Critiques 45

3 The Citation: From Culture to Infrastructure 47

Paul Wouters

4 “The Data—It Is *Me!*” (“Les données—c’est *Moi!*”) 67

Ronald E. Day

5 The Ethics of Evaluative Bibliometrics 85

Jonathan Furner

6 Criteria for Evaluating Indicators 109

Yves Gingras

III Methods and Tools 127

7 Obliteration by Incorporation 129

Katherine W. McCain

8 A Network Approach to Scholarly Evaluation 151

Jevin D. West and Daril A. Vilhena

9 Science Visualization and Discursive Knowledge 167

Loet Leydesdorff

10 Measuring Interdisciplinarity	187
Vincent Larivière and Yves Gingras	
11 Bibliometric Standards for Evaluating Research Institutes in the Natural Sciences	201
Lutz Bornmann, Benjamin F. Bowman, Johann Bauer, Werner Marx, Hermann Schier, and Margit Palzenberger	
12 Identifying and Quantifying Research Strengths Using Market Segmentation	225
Kevin W. Boyack and Richard Klavans	
13 Finding and Recommending Scholarly Articles	243
Michael J. Kurtz and Edwin A. Henneken	
IV Alternative Metrics	261
14 Altmetrics	263
Jason Priem	
15 Web Impact Metrics for Research Assessment	289
Kayvan Kousha and Mike Thelwall	
16 Bibliographic References in Web 2.0	307
Judith Bar-Ilan, Hadas Shema, and Mike Thelwall	
17 Readership Metrics	327
Stefanie Haustein	
18 Evaluating the Work of Judges	345
Peter A. Hook	
19 Academic Genealogy	365
Cassidy R. Sugimoto	
V Perspectives	383
20 A Publishing Perspective on Bibliometrics	385
Judith Kamalski, Andrew Plume, and Mayur Amin	
21 Science Metrics and Science Policy	397
Julia Lane, Mark Largent, and Rebecca Rosen	
List of Contributors	413
Index	423