1. Record Nr. UNINA9910410013803321

Autore Hu Xiaolong

Titolo Smoothing a Critical Transition [[electronic resource]]: Nontechnical

Knowledge and Techniques for Student Researchers / / by Xiaolong Hu

Pubbl/distr/stampa Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020

ISBN 981-15-4035-7

Edizione [1st ed. 2020.]

Descrizione fisica 1 online resource (143 pages)

Disciplina 378.101

Soggetti Study skills

Technical education Higher education Research Skills

Engineering/Technology Education

Higher Education

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references.

Nota di contenuto Introduction -- Advice to graduate students -- Understand research --

Engage literature -- Writing -- Publish papers -- Present research results -- Interact with advisors -- Collaborate with other researchers -- Work in a laboratory -- File patents -- Handle difficult time in research -- Research ethics and responsibilities -- What can we learn

from the history of science -- Concluding remarks.

Sommario/riassunto This textbook equips students interested in becoming researchers with

the essential nontechnical skills. After an introduction to graduate schools, it discusses preparing for research, reading and organizing literature, writing research articles and other documents, publishing papers, presenting research findings at conferences, collaboration with advisors and other researchers, patent applications, research ethics, and how to improve research by learning about the history of science. These nontechnical skills are just as important as technical ones in terms of becoming a successful graduate student, yet they have seldom been taught systematically in courses. Further, they can bridge the gap

from the classroom to the lab, making one of the most critical

transition periods—from student to researcher—smoother and more

enjoyable. The book features a wealth of real-life examples and exercises, which readers can easily apply in their own research. Intended mainly for graduate and upper-undergraduate students just embarking on lab research, it can also be used as a textbook or reference guide for courses on research methodology and related topics.