1. Record Nr. UNINA9910695279203321

Titolo	Postsecondary institutions in the United States [[electronic resource]] : fall 2004 and degrees and other awards conferred : 2003-04 / / Laura G. Knapp, ... [and others]
Pubbl/distr/stampa	Washington, D.C. : , : National Center for Education Statistics, U.S. Dept. of Education, Institute of Education Sciences, , [2005]
Altri autori (Persone)	KnappLaura G
Soggetti	Degrees, Academic - United States Education, Higher - United States - Finance Statistics.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed on Aug. 3, 2006) "E.D. TAB." "September 2005." "NCES 2005-182."

2. Record Nr. UNINA9910254321303321

Autore	Mahjoubfar Ata
Titolo	Artificial Intelligence in Label-free Microscopy : Biological Cell Classification by Time Stretch / / by Ata Mahjoubfar, Claire Lifan Chen, Bahram Jalali
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-51448-2
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXXIII, 134 p. 52 illus. in color.)
Disciplina	610.28
Soggetti	Biomedical engineering Electronics Microelectronics Optical data processing Bioinformatics Biomedical Engineering and Bioengineering Electronics and Microelectronics, Instrumentation Image Processing and Computer Vision
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Background -- Nanometer-resolved imaging vibrometer -- Three-dimensional ultrafast laser scanner -- Label-free High-throughput Phenotypic Screening -- Time Stretch Quantitative Phase Imaging -- Big data acquisition and processing in real-time -- Deep Learning and Classification -- Optical Data Compression in Time Stretch Imaging -- Design of Warped Stretch Transform -- Concluding Remarks and Future Work -- References.
Sommario/riassunto	This book introduces time-stretch quantitative phase imaging (TS-QPI), a high-throughput label-free imaging flow cytometer developed for big data acquisition and analysis in phenotypic screening. TS-QPI is able to capture quantitative optical phase and intensity images simultaneously, enabling high-content cell analysis, cancer diagnostics, personalized genomics, and drug development. The authors also demonstrate a complete machine learning pipeline that performs optical phase

measurement, image processing, feature extraction, and classification, enabling high-throughput quantitative imaging that achieves record high accuracy in label -free cellular phenotypic screening and opens up a new path to data-driven diagnosis. • Demonstrates how machine learning is used in high-speed microscopy imaging to facilitate medical diagnosis; • Provides a systematic and comprehensive illustration of time stretch technology; • Enables multidisciplinary application, including industrial, biomedical, and artificial intelligence.