1. Record Nr. UNINA990002068830403321

Autore	Dade, Harry A.
Titolo	The laboratory diagnosis of honey-bee diseases / H.A. Dade
Pubbl/distr/stampa	London : Williams & Norgate Ltd., 1949
Descrizione fisica	19 pp. ; 23 cm
Collana	Monographs of the Queckett Microscopical Club ; 4
Disciplina	638
Locazione	DAGEN
Collocazione	61 XIV D.6/122
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910807769303321

Titolo	Mercury's wings : exploring modes of communication in the classical world / / edited by Fred S. Naiden and Richard J. A. Talbert
Pubbl/distr/stampa	New York, NY : , : Oxford University Press, , 2017
ISBN	0-19-998341-0 0-19-060404-2
Descrizione fisica	1 online resource (457 pages) : illustrations, tables, maps
Disciplina	302.2/09
Soggetti	Communication - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previously issued in print: 2017.
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	'Mercury's Wings' is a volume of essays devoted to ancient communications. Comparable previous work has been mainly confined

		to articles on aspects of communication in the Roman empire. This set of 18 essays with an introduction by the co-editors marks a milestone, therefore, that demonstrates the importance and rich further potential of the topic.

3.	Record Nr.	UNINA9910806108203321
	Autore	Epperlein Peter W
	Titolo	Semiconductor laser engineering, reliability and diagnostics : a practical approach to high power and single mode devices / / Peter W. Epperlein
	Pubbl/distr/stampa	Chichester, West Sussex, U.K., : John Wiley & Sons Inc., 2013
	ISBN	9781118481882 1118481887 9781118481875 1118481879 9781118481868 1118481860
	Edizione	[1st edition]
	Descrizione fisica	1 online resource (522 p.)
	Disciplina	621.36/61
	Soggetti	Semiconductor lasers
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Machine generated contents note: Dedication Preface About the Author PART I: DIODE LASER ENGINEERING Overview 1. Basic Diode Laser Engineering Principles Introduction 1.1. Brief Recapitulation 1.1.1. Key Features of a Diode Laser 1.1.2. Homo-Junction Diode Laser 1.1.3. Double-Heterostructure Diode Laser 1.1.4. Quantum Well Diode Laser 1.1.5. Common Compounds for Semiconductor Lasers 1.2. Optical Output Power - Diverse Aspects 1.2.1. Approaches to High Power Diode Lasers 1.2.2. High Optical Power Considerations 1.2.3. Power Limitations 1.2.4. High Power versus Reliability Trade-Offs 1.2.5. Typical and Record-High CW Optical Output Powers 1.3. Selected Relevant Basic Diode Laser Characteristics 1.3.1. Threshold Gain 1.3.2. Material Gain Spectra 1.3.3. Optical Confinement 1.3.4. Threshold

Motivation 7.1.2. Experimental Details 7.1.3. Discussion of Wafer Photoluminescence Maps 7.2. Integrity of Laser Active Layers 7.2.1. Motivation 7.2.2. Experimental Details 7.2.3. Discussion of Quantum Well PL Spectra 7.3. Deep-Level Defects at Interfaces of Active Regions 7.3.1. Motivation 7.3.2. Experimental Details 7.3.3. Discussion of Deep-Level Transient Spectroscopy Results 7.4. Micro-Raman Spectroscopy for Diode Laser Diagnostics 7.4.1. Motivation 7.4.2. Basics of Raman Inelastic Light Scattering 7.4.3. Experimental Details 7.4.4. Raman on Standard Diode Laser Facets 7.4.5. Raman for Facet Temperature Measurements 7.4.6. Various Dependences of Diode Laser Mirror Temperatures References 8. Novel Diagnostic Laser Data for Mirror Facet Disorder Effects, Mechanical Stress Effects and Facet Coating Instability Introduction 8.1. Diode Laser Mirror Facet Studies by Raman 8.1.1. Motivation 8.1.2. Raman Microprobe Spectra 8.1.3. Possible Origins of the 193 cm-1 Mode in (Al)GaAs 8.1.4. Facet Disorder - Facet Temperature - Catastrophic Optical Mirror Damage Robustness Correlations 8.2. Local Mechanical Strain in Ridge-Waveguide Diode Lasers 8.2.1. Motivation 8.2.2. Measurements - Raman Shifts and Stress Profiles 8.2.3. Detection of "Weak Spots" 8.2.4. Stress Model Experiments 8.3. Diode Laser Mirror Facet Coating Structural Instability 8.3.1. Motivation 8.3.2. Experimental Details 8.3.3. Silicon Recrystallization by Internal Power Exposure 8.3.4. Silicon Recrystallization by External Power Exposure - Control Experiments References 9. Novel Diagnostic Data for Diverse Laser Temperature Effects, Dynamic Laser Degradation Effects and Mirror Temperature Maps Introduction 9.1. Thermoreflectance Microscopy for Diode Laser Diagnostics 9.1.1. Motivation 9.1.2. Concept and Signal Interpretation 9.1.3. Reflectance - Temperature Change Relationship 9.1.4. Experimental Details 9.1.5. Potential Perturbation Effects on Reflectance 9.2. Thermoreflectance versus Optical Spectroscopies 9.2.1. General 9.2.2. Comparison 9.3. Lowest Detectable Temperature Rise 9.4. Diode Laser Mirror Temperatures by Micro-Thermoreflectance 9.4.1. Motivation 9.4.2. Dependence on Number of Active Quantum Wells 9.4.3. Dependence on Heat Spreader 9.4.4. Dependence on Mirror Treatment and Coating 9.4.5. Bent-Waveguide Non-Absorbing Mirror 9.5. Diode Laser Mirror Studies by Micro-Thermoreflectance 9.5.1. Motivation 9.5.2. Real-Time Temperature-Monitored Laser Degradation 9.5.3. Local Optical Probe 9.5.3.1. Threshold and heating distribution within near-field spot 9.6. Diode Laser Cavity Temperatures by Micro-Electroluminescence 9.6.1. Motivation 9.6.2. Experimental Details - Sample and Setup 9.6.3. Temperature Profiles along Laser Cavity 9.7. Diode Laser Facet Temperature - Two-Dimensional Mapping 9.7.1. Motivation 9.7.2. Experimental Concept 9.7.3. First Temperature Maps Ever 9.7.4. Independent Temperature Line Scans Perpendicular Active Layer 9.7.5. Temperature Modelling References Index.

Sommario/riassunto

"This reference book provides a fully integrated novel approach to the development of high power, single transverse mode, edge-emitting diode lasers by addressing the complementary topics of device engineering (Part 1), reliability engineering (Part 2) and device diagnostics (Part 3) in the same book in altogether nine comprehensive chapters, and thus closes the gap in the current book literature.Diode laser fundamentals are discussed, followed by an elaborate discussion of problem-oriented design guidelines and techniques, and by a systematic treatment of the origins of laser degradation and a thorough exploration of the engineering means to address for effective remedies and enhanced optical strength. The discussion covers also stability criteria of critical laser characteristics and key laser robustness factors. Clear design considerations are discussed in the context of reliability

engineering concepts and models, along with typical programs for reliability tests and laser product qualifications. A final extended part of novel, advanced diagnostic methods covers in detail, for the first time in book literature, performance- and reliability-impacting factors such as temperature, stress and material instabilities.Further key features include: Furnishes comprehensive practical design guidelines by considering also reliability related effects and key laser robustness factors, and discusses basic laser fabrication and packaging issues. Discusses in detail diagnostic investigations of diode lasers, the fundamentals of the applied approaches and techniques, many of them pioneered by the author to be fit-for-purpose and novel in the application. Provides a systematic insight into laser degradation modes such as catastrophic optical damage, and covers a wide range of technologies to increase the optical strength of diode lasers. Discusses basic concepts and techniques of laser reliability engineering, and provides for the first time in a book details on a standard commercial program for testing the reliabity of high power diode laser. Semiconductor Laser Engineering, Reliability and Diagnostics reflects the extensive expertise of the author in the diode laser field both as a top scientific researcher as well as a key developer of highly reliable devices. It features two hundred figures and tables illustrating numerous aspects of diode laser engineering, fabrication, packaging, reliability, performance, diagnostics and applications, and an extensive list of references to all addressed technical topics at the end of each chapter. With invaluable practical advice, this novel reference book is suited to practising researchers in diode laser technologies, and to postgraduate engineering students. "--