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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. Tissue Energy Metabolism and Mitochondrial Function -- 3. Spectroscopic monitoring of NADH – Historical Overview -- 4. Technological aspects of NADH monitoring In Vivo -- 5. Monitoring of NADH together with other tissue physiological parameters -- 6. Multisite Monitoring of NADH -- 7. Responses of NADH to physiological and pathophysiological conditions -- 8. Monitoring of various organs in various animal models -- 9. Monitoring of NADH in Human brain and body organs -- 10. Discussion -- Index.
Sommario/riassunto	This book covers both the technological development and biomedical

applications of NADH fluorescence. Topics covered include perspectives on the history of monitoring NADH fluorescence, the relationship between mitochondrial function and other functions at the tissue level, responses of NADH to physiological and pathophysiological conditions, monitoring of NADH in the human brain and other organs, and metabolism. It also includes an in-depth look at flavoprotein (Fp) fluorescence and NADH in relation to redox state. This is an ideal book for biomedical engineers, researchers, and graduate students interested in learning the biomedical applications of NADH fluorescence. This book also: Covers multisite monitoring of NADH, as well as multiparametric responses of NADH to physiological and pathophysiological conditions, and monitoring of various organs in various animal models Describes the relationship between brain activation (i.e. epileptic activity and cortical spreading depression) and NADH redox state Presents the effects of hypoxia, hyperbaric hyperoxia, and ischemia on brain NADH fluorescence and other tissue physiological parameters About the Author Avraham Mayevsky, Ph.D. is a Professor Emeritus in the Faculty of Life Sciences and the Brain Research Center at Bar Ilan University, Israel. He has published more than two hundred papers in the field of mitochondrial function and tissue physiology in vivo under pathophysiological conditions.
