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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Contents -- Preface -- Chapter 1 -- Nicotine Addiction and Treatment: Recent Advances -- Abstract -- Introduction -- Nicotine Addiction -- Involvement of Nicotinic Acetylcholine Receptors -- Involvement of Neurotransmitters -- Dopamine -- Glutamate -- GABA -- Endocannabinoid System -- Endogenous Opioid System -- 5-HT -- Norepinephrine -- Involvement of Monoamine Oxidase -- Neuronal Function -- Health Effects -- Prevention -- Therapeutic Option -- Nicotine Therapy -- Non-Nicotine Therapy -- Bupropion -- Varenicline -- Nicotine Vaccine -- Research Advances -- Conclusion -- Acknowledgment -- References -- Chapter 2 -- Serotonin-Dopamine Interaction in Nicotine Addiction: Focus on 5-HT2C Receptors -- Abstract -- Introduction -- Dopamine Systems -- Serotonin Systems -- 5-HT Receptors Localization -- The 5-HT2 Receptor Family -- Effects of Nicotine on Central Dopaminergic Function -- Effects of Nicotine on Central Serotonergic Function -- Serotonin 2C (5-HT2C) and Nicotine Rewarding Properties -- Serotonergic Drug Treatment for Smoking Cessation -- Conclusion -- Acknowledgments -- References -- Chapter 3 -- Defining the Role of the Hippocampus in Nicotine Addiction -- Abstract -- Introduction -- Canonical View of Reward and Addiction -- Connectivity between the Hippocampus and the Reward Circuitry -- Nicotine-Associated Contexts and Cues -- Hippocampal Nicotinic Acetylcholine Receptors, Plasticity and Addiction -- Hippocampus, Stress and Withdrawal -- Towards a Hippocampus Model

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Novel Materials Efficient For Reducing Nicotine, Tar and CO Contents -- Preparation of Cigarette Samples -- Composite Filter -- Chemical Composition of the Mainstream Tobacco Smoke -- Efficiency of the Sorption Removal -- The Factor of Selectivity -- Specific Sorption Capacity of Investigated Material -- The Effects of a Hydrophilic Type Zeolite on the Degree of Reduction of Nicotine, Tar and CO in Tobacco Smoke -- The Effects Associated with the Degree of Hydrophobicity of the Zeolite on the Degree of Reduction of Tobacco Smoke Components -- The Effects Associated With the Type of Amorphous Material on the Degree of Reduction of Tobacco Smoke Components -- Conclusion -- Acknowledgment -- References -- Chapter 11 -- Kinetics of Nicotine Bonding Onto and Release from Poly (Acrylic -co-Methacrylic Acid) Hydrogel -- Abstract -- Introduction -- Poly(Acrylic Acid-Cco-Methacrylic Acid) Hydrogel Synthesis -- Nicotine Bonding and Release -- Poly(Acrylic Acid-co-methacrylic Acid) Hydrogel Synthesis -- Nicotine Bonding -- Nicotine Release -- Isothermal Kinetics of Nicotine Bonding and Release -- Models of Kinetic Nicotine Bonding to the Hydrogel -- The Kinetics Model of Nicotine Release from the Hydrogel -- Conclusion -- Acknowledgment -- References -- Index -- Blank Page.

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#### Sommario/riassunto

Smoking tobacco presents serious social problems with major impacts on public health. It is estimated that 25-30% of the general population in western countries are currently smoking. Tobacco use is the major preventable cause of death in the United States, responsible for more than 400,000 deaths annually. Within the USA and Europe, 70% of all smokers have tried to quit smoking at least once, but only about 6% of these succeeded in maintaining abstinence. This book covers the latest nicotine-related research. The selection of chapters has a certain unity as physiologic, pathologic and psychological themes run through the book and supply the logical connections between the various authors. This work is intended as a contribution to the reversal of the current tobacco epidemic and thereby to preventing many of the deaths attributable to tobacco predicted in this century.

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