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Nota di contenuto	Intro -- Preface -- Contents -- A Lived History of Early Calcium Channel Discoveries Over the Past Half-Century -- Ca ²⁺ as Central Ion for Muscle Contraction -- The "Ca-Spikes" of Crustacean Skeletal Muscles -- "Ca-Spikes" in Heart and Neurons -- How to Look at Ca ²⁺ Currents Through Voltage-Clamp Recordings -- Ca ²⁺ Currents in the Heart and Mollusc Neurons: The Problem of Blocking K ⁺ Currents -- A Convergent View on the Existence of "a" Ca ²⁺ Channel in Excitable Cells -- The "Patch-Clamp" Technique and the Explosive Interest on Ca ²⁺ Channels -- The Discovery of the "Low-Voltage Activated" T-Type Channel -- The Unique Properties of T-Type (LVA) Channels -- The Explosive Interest on T-Type Channels -- The Ca ²⁺ Channel Family Growths -- The N-Type Channel -- The P/Q-Type Channel -- The R-Type Channel -- From Ionic Currents to the Molecular Structure of Ca ²⁺ Channels -- The cAMP-Mediated Enhancement of Cardiac L-Type Channels as First Example of Ca ²⁺ Channel Modulation -- Early Observations on the GPCR-Mediated Inhibition of Neuronal Ca ²⁺ Channels -- Towards a Full Understanding of the GPCR-Induced Delayed Activation of HVA Channels -- Looking Deeper to the Structure and Function of Cav2 Channels Modulation by G proteins -- Take-Home Message -- References -- Part I: Structural and Molecular Aspects of VGCCs -- Subunit Architecture and Atomic

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Regulation of VGCCs -- Ca²⁺/CaM-Dependent Regulation Responds Differentially to Spatially Distinct Ca²⁺ Sources -- Molecular Mechanism of Calmodulation -- Ca²⁺ Regulation of VGCCs in Disease -- References -- Cav3 Calcium Channel Interactions with Potassium Channels -- Introduction -- Cav3-Kv4 Complex -- Cav3.2-IK Complex -- Cav3.2-BK Complex -- Perspectives and Conclusions -- References -- Part III: (Patho)physiology of VGCCs -- Voltage-Gated Ca²⁺ Channels. Lessons from Knockout and Knock-in Mice -- Introduction -- CaV1. CaV1.1.

2. Record Nr.	UNIORUON00412904
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