

Category 2014

A. Cellular and Molecular Mechanisms of Excitability and Neural Functions

1. Ion Channels and Excitable Membranes
2. Neurotransmitters, Gliotransmitters, and Modulators
3. Receptors and Transporters
4. Synapse
5. Synaptic Plasticity
6. Signal Transduction and Modulation
7. Axonal Transport and Cytoskeleton
8. Glia and Glia-Neuron Interaction
9. Myelination and Myelin-Axon Interaction
10. Blood-Brain Barrier
11. Gene Regulation and Epigenetics
12. Regulation and Function of RNA, Translational Regulation
13. Posttranslational Modulation and Proteolysis
14. Drug Development
15. Others

B. Development and Regeneration

16. Induction and Pattern Formation
17. Stem Cells, Neuronal and Glial Production/Differentiation
18. Cell Migration and Layer/Nuclear Formation
19. Axonal/Dendritic Growth and Circuit Formation
20. Trophic Factors and Cytokines
21. Axonal Regeneration and Tissue Repair
22. Neuronal Death and Apoptosis
23. Adult Neurogenesis
24. Evolution
25. Tissue Engineering and Transplantation
26. Others

C. Sensory and Motor Systems

27. Kinematics and EMG
28. Spinal cord Motor Neurons and Muscle

29. Posture and Gait
30. Rhythmic Motor Pattern Generation
31. Cerebellum
32. Basal Ganglia
33. Voluntary movements
34. Oculomotor System
35. Sensorimotor control
36. Sensorimotor Learning/Plasticity
37. Visual System
38. Auditory and Vestibular Systems
39. Olfaction, Taste, Chemical Senses
40. Somatosensory System
41. Viscerosensory System
42. Pain, Itch and Their Disorders
43. Multisensory
44. Others

D. Homeostatic and Neuroendocrine Systems

45. Autonomic Nervous System
46. Neuroendocrine System
47. Neuroimmunology
48. Stress
49. Reproduction
50. Metabolism and Regulation of Food Intake
51. Others

E. Behavior and Cognition

52. Instinctive Behavior
53. Sleep and Biological Rhythms
54. Motivation and Emotion
55. Reward and Decision Making
56. Attention and Perceptual Integration
57. Spatial and Temporal Cognition
58. Learning and Long-term Memory
59. Working Memory and Executive Function
60. Social Behavior

61. Language
62. Development of Cognition
63. Aging of Cognition
64. Others

F. Disorders of the Nervous System

65. Alzheimer's Disease, Other Dementia, Aging
66. Parkinson's Disease and Related Disorders
67. Polyglutamine Diseases, ALS, SCD, Other Neurodegenerative Disorder
68. Myopathy, Neuromuscular Disorder, Neuropathy, Spinal Disease
69. Demyelinating Disorders
70. Neuroprotection, Neurotoxicity and Neuroinflammation
71. Epilepsy, Headache, Vertigo
72. Schizophrenia
73. Mood Disorders
74. Anxiety Disorders
75. Drug Addiction and Abuse
76. Neurodevelopmental Disorders
77. Other Psychiatric Disorders
78. Cerebrovascular Disease and Ischemia
79. Injury
80. Neuro-oncology
81. Behavioral Pharmacology
82. Others

G. Modeling, Hardware Implementation, and Applications

83. Neural Network Modeling
84. Neuroinformatics
85. Learning Theory
86. Neuronal Data Analysis
87. Neuroengineering
88. Hardware Implementation
89. BMI/BCI
90. Image/Sound Processing
91. Robotics
92. Large Scale Simulation

93. Other Applications

H. Methodology

94. Molecular, Biochemical, and Genetic Techniques

95. Genome Informatics, Proteomics, and Systems Biology

96. Staining, Tracing, and Imaging Techniques

97. Optical methods

98. Optogenetics

99. Electrophysiology

100. Others

I. Others

101. Neuroethics

102. Social and Legal Issues of Neuroscience

103. History, Education and Outreach

104. Industrial Application

105. Others