1. Record Nr. UNINA9910298401003321

Autore	Yao Li
Titolo	Glial Cell Engineering in Neural Regeneration / / by Li Yao
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-030-02104-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (138 pages)
Disciplina	611.0188
Soggetti	Biomedical engineering Neurobiology Regenerative medicine Tissue engineering Biomedical Engineering/Biotechnology Regenerative Medicine/Tissue Engineering Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Advances in the research of astrocyte function in neural regeneration -- Enhancement of axonal myelination in wounded spinal cord using oligodendrocyte precursor cell transplantation -- Application of Schwann cells in neural tissue engineering -- Stem cell- and biomaterial-based neural repair for enhancing spinal axonal regeneration -- Electric field-guided cell migration, polarization, and division: An emerging therapy in neural regeneration -- Vascularization in the spinal cord: the pathological process and therapeutic approach -- Index.
Sommario/riassunto	This book focuses on current applications of glial cells in neural regeneration, especially in spinal cord repair. It introduces the application of a few types of glial cells including oligodendrocyte, astrocyte, Schwann cells, and stem cell derived glial cells in neural regeneration. The latest glial cell research with biomaterials, gene modification, and electrical signals is also summarized. This is an ideal book for undergraduate and research students in tissue engineering, neurobiology, and regenerative medicine as well as researchers in the

field. This book also: Illustrates the application of glial cells including oligodendrocyte, astrocyte, Schwann cells, and stem cell derived glial cells in neural regeneration Broadens reader understanding of the current applications of glial cells in neural regeneration, especially in spinal cord repair Demonstrates the engineering of glial cells with biomaterials, gene modification, and electrical signals for neural regeneration.