Implantable microdevices, providing accurate measurement of target analytes in animals and humans, have always been important in biological science, medical diagnostics, clinical therapy, and personal healthcare. Recently, there have been increasing unmet needs for developing high-performance implants that are small, minimally-invasive, biocompatible, long-term stable, and cost-effective. Therefore, the aim of this Special Issue is to bring together state-of-the-art research and development contributions that address key challenges and topics related to implantable microdevices. Applications of primary interest include, but are not limited to, miniaturized optical sensing and imaging tools, implantable sensors for detecting biochemical species and/or metabolites, transducers for measuring biophysical quantities (e.g., pressure and/or strain), and neural prosthetic devices.
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