Vegetables are an important part of the human diet due to their nutrient density and, at the same time, low calorie content. Producers of vegetable crops mainly aim at achieving high yields with good external quality. However, there is an increasing demand of consumers for vegetables that provide good sensory properties and are rich in secondary compounds that can be valuable for human health. Sub- or supra-optimal abiotic conditions, like high temperatures, drought, excess light, salinity or nutrient deficiency, may alter the composition of vegetable crops and at the same time, result in yield loss. Thus, producers need to adapt their horticultural practices such as through the choice of variety, irrigation regime, light management, fruit thinning, or fertilizer application to improve the yield and quality of the vegetable product. In the future, altered climate conditions such as elevated atmospheric CO2 concentrations, rising temperatures, or altered precipitation patterns may become additional challenges for producers of vegetable crops, especially those that cultivate in the open field. This raises the need for optimized horticultural practices in order to minimize abiotic stresses. As well, specific storage conditions can have large impacts on the quality of vegetables. This Special Issue compiles research that deals with the optimization of vegetable product quality (e.g. sensory aspects, composition) under sub- or supra-optimal abiotic conditions.
MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.

**Open Access**
Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.

**Author Focus**
Authors and editors profit from MDPI’s over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.

**High Quality & Rapid Publication**
MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.

**High Visibility**
Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), the Verzeichnis lieferbarer Bücher (VLB).

**Print on Demand and Multiple Formats**
MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.