

1. Record Nr.	UNINA9910557112103321
Autore	Matese Alessandro
Titolo	Forestry Applications of Unmanned Aerial Vehicles (UAVs) 2019
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 online resource (184 p.)
Soggetti	Biology, life sciences Forestry & related industries Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Unmanned aerial vehicles (UAVs) are new platforms that have been increasingly used in the last few years for forestry applications that benefit from the added value of flexibility, low cost, reliability, autonomy, and capability of timely provision of high-resolution data. The main adopted image-based technologies are RGB, multispectral, and thermal infrared. LiDAR sensors are becoming commonly used to improve the estimation of relevant plant traits. In comparison with other permanent ecosystems, forests are particularly affected by climatic changes due to the longevity of the trees, and the primary objective is the conservation and protection of forests. Nevertheless, forestry and agriculture involve the cultivation of renewable raw materials, with the difference that forestry is less tied to economic aspects and this is reflected by the delay in using new monitoring technologies. The main forestry applications are aimed toward inventory of resources, map diseases, species classification, fire monitoring, and spatial gap estimation. This Special Issue focuses on new technologies (UAV and sensors) and innovative data elaboration methodologies (object recognition and machine vision) for applications in forestry.</p>

