Record Nr. UNINA9911020416403321 Autore Ding Yao Titolo Graph Neural Network for Hyperspectral Image Clustering / / by Yao Ding, Zhili Zhang, Haojie Hu, Renxiang Guan, Jie Feng, Zhiyong Lv Singapore:,: Springer Nature Singapore:,: Imprint: Springer., 2025 Pubbl/distr/stampa 981-9677-10-6 **ISBN** Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (259 pages) Collana Intelligent Perception and Information Processing, , 3059-3816 Altri autori (Persone) ZhangZhili HuHaojie GuanRenxiang FengJie LvZhiyong Disciplina 621.382 Soggetti Image processing Medicine - Research Biology - Research Neural networks (Computer science) Machine learning Image Processing Biomedical Research Mathematical Models of Cognitive Processes and Neural Networks Machine Learning Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Self-supervised Efficient Low-pass Contrastive Graph Nota di contenuto Clustering for Hyperspectral Images -- Self-Supervised Locality Preserving Low-Pass Graph Convolutional Embedding for Large-Scale Hyperspectral Image Clustering -- Adaptive Homophily Clustering: A Structure Homophily Graph Learning with Adaptive Filter for Hyperspectral Image -- Pixel-superpixel Contrastive Learning And Pseudo-label correction For Hyperspectral Image Clustering --Contrastive Multiview Subspace Clustering of Hyperspectral Images Based on Graph Convolutional Networks.

This book investigates detailed hyperspectral image clustering using

Sommario/riassunto

graph neural network (graph learning) methods, focusing on the overall construction of the model, design of self-supervised methods, image pre-processing, and feature extraction of graph information. Multiple graph neural network-based clustering methods for hyperspectral images are proposed, effectively improving the clustering accuracy of hyperspectral images and taking an important step towards the practical application of hyperspectral images. This book is innovative in content and emphasizes the integration of theory with practice, which can be used as a reference book for graduate students, senior undergraduate students, researchers, and engineering technicians in related majors such as electronic information engineering, computer application technology, automation, instrument science and technology, remote sensing.