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Feature Extraction from Histopathological Images Based on Nucleus-Guided Convolutional Neural Network for Breast Lesion Classification

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**Highlights**

- A feature extraction framework based on convolutional neural network is proposed.
- A convolutional neural network is designed under the constraint of nuclei locations.
- Features including the pattern and spatial distribution of the nuclei are extracted.
- The proposed algorithm achieves a good classification performance with fast speed.

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