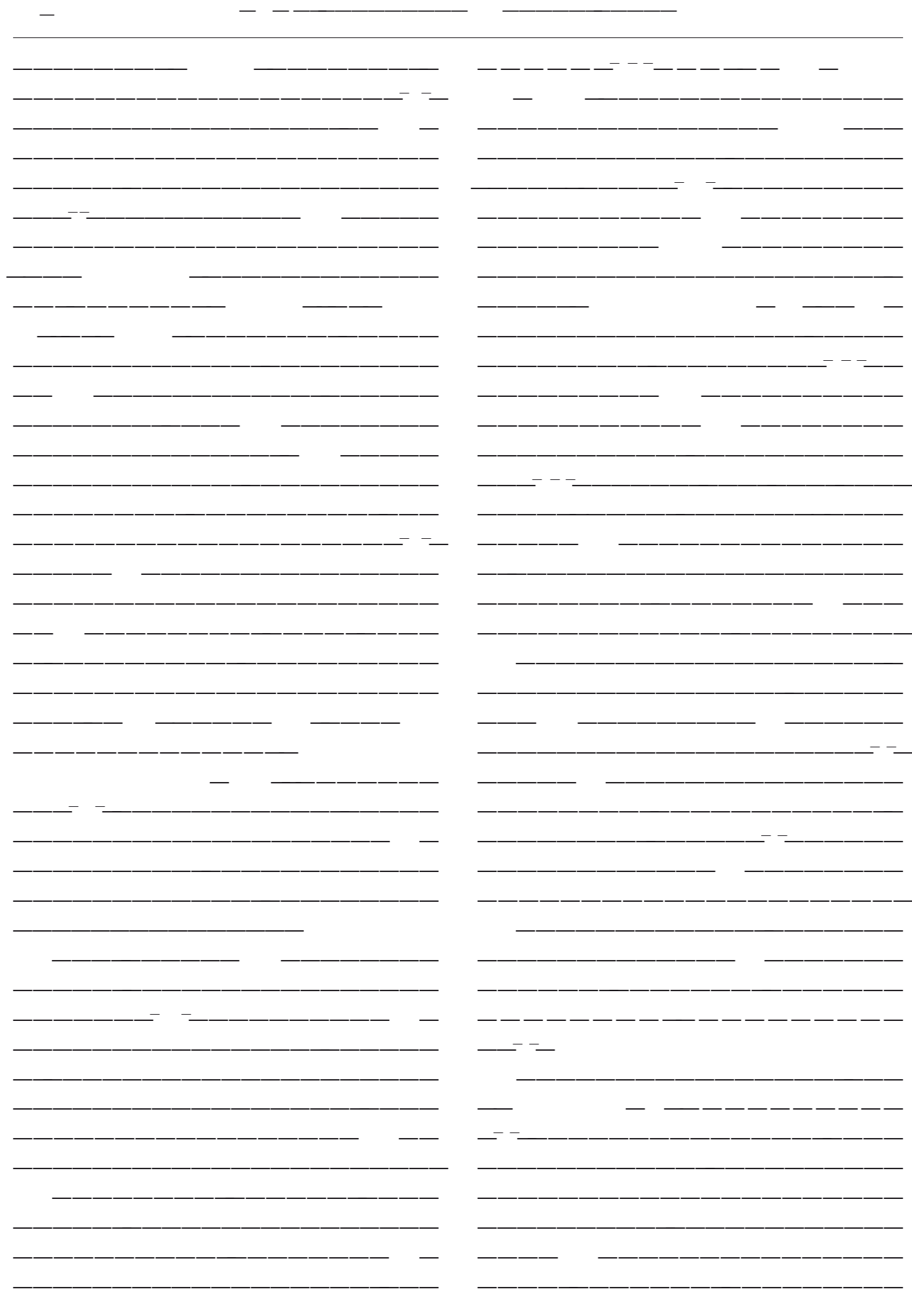
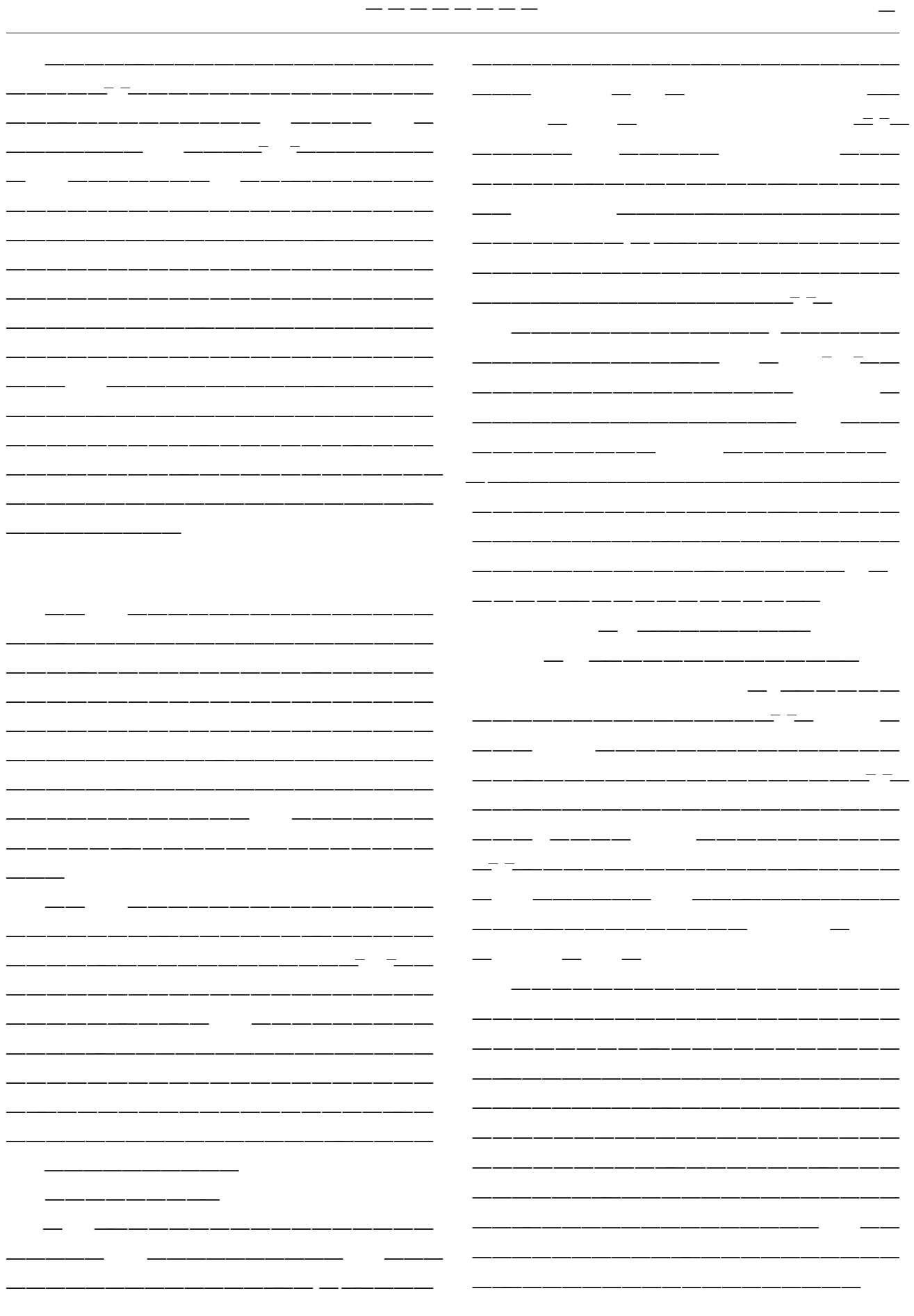


—Optical Coherence Tomography—OCT—provides high-resolution images of skin tissue structure and pathological features. Automated image analysis methods—such as segmentation and classification—are important for assisting skin disease diagnosis and treatment evaluation. These methods provide quantitative support for medical decisions. Compared with traditional methods and early machine learning—ML—techniques—deep learning—DL—improved analysis efficiency and reproducibility. It also reduced manual processing time significantly. This paper systematically reviewed the application progress of DL in skin OCT image analysis. It focused on technical approaches for image denoising—skin layer segmentation—and skin cancer diagnosis. The study identified key challenges including model generalization and data heterogeneity. The findings provide theoretical references and technical guidance for future research directions.

—optical coherence tomography—deep learning—skin cancer diagnosis—skin segmentation—image denoising





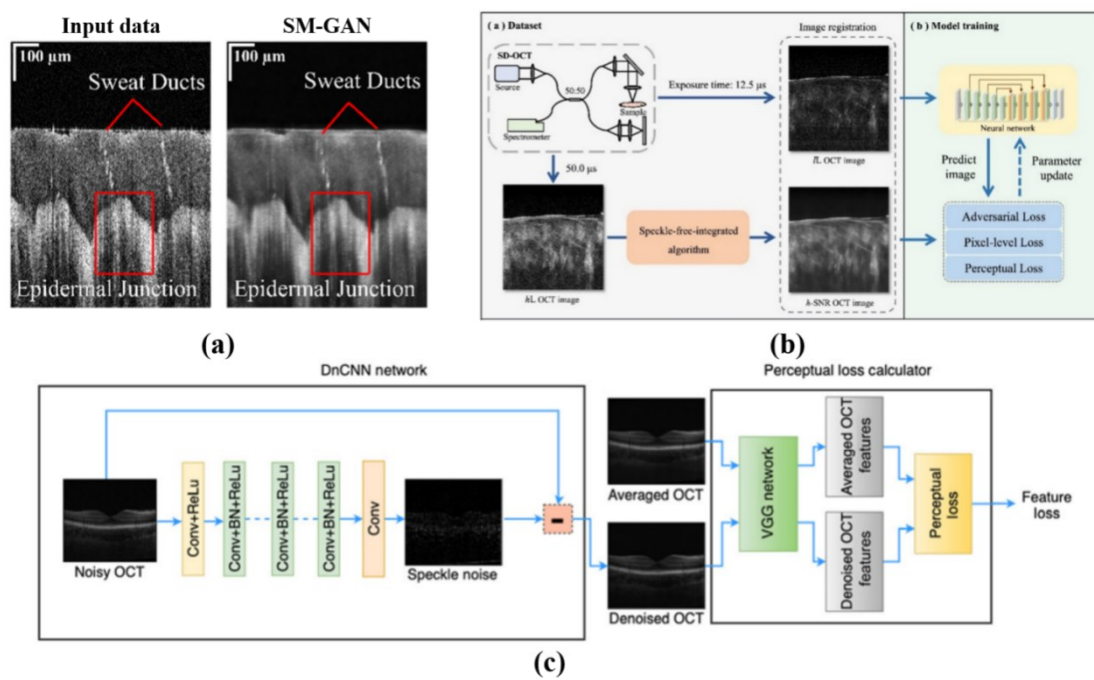


Fig. 1—Deep learning-based methods/strategies for image denoising—

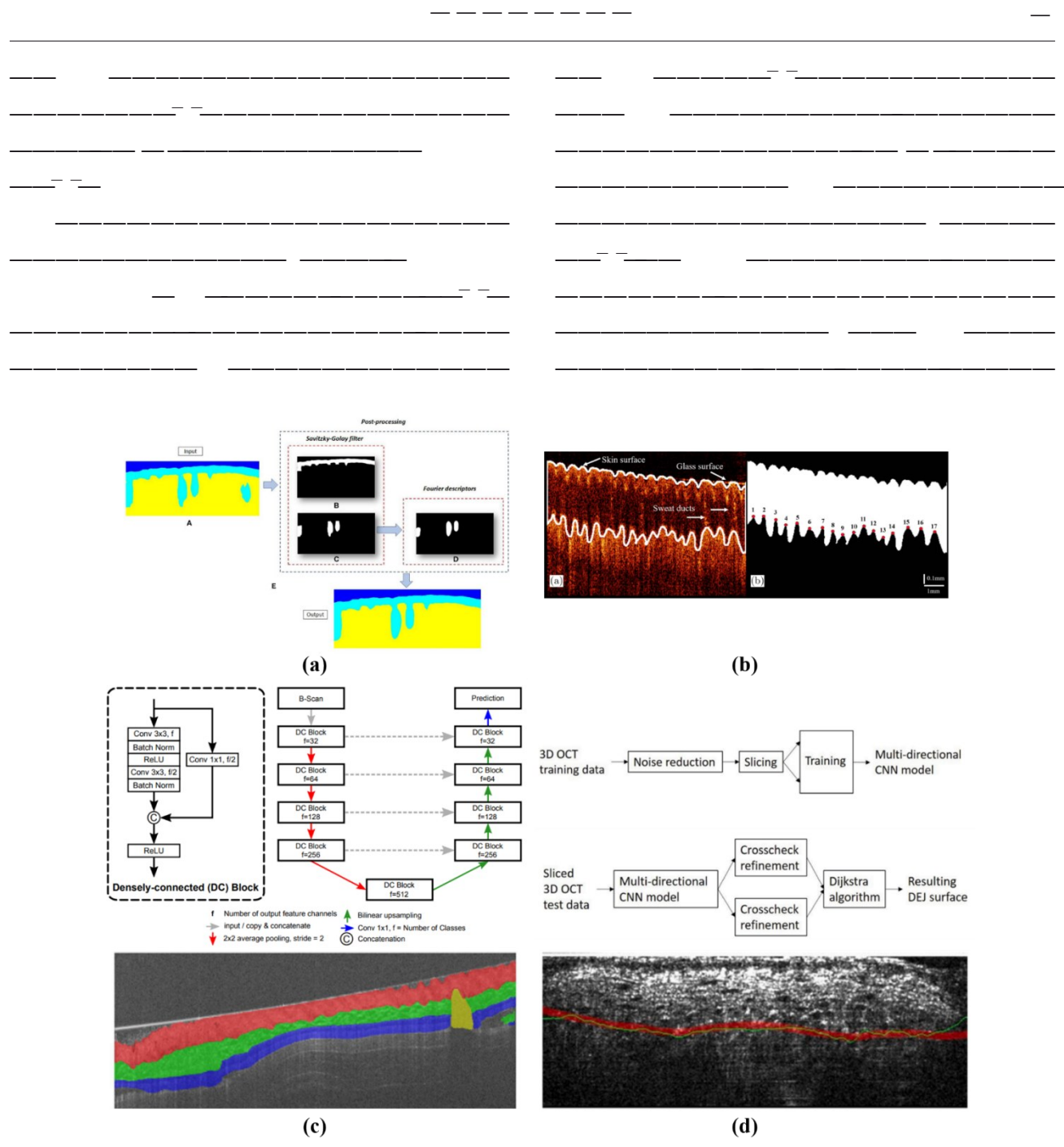
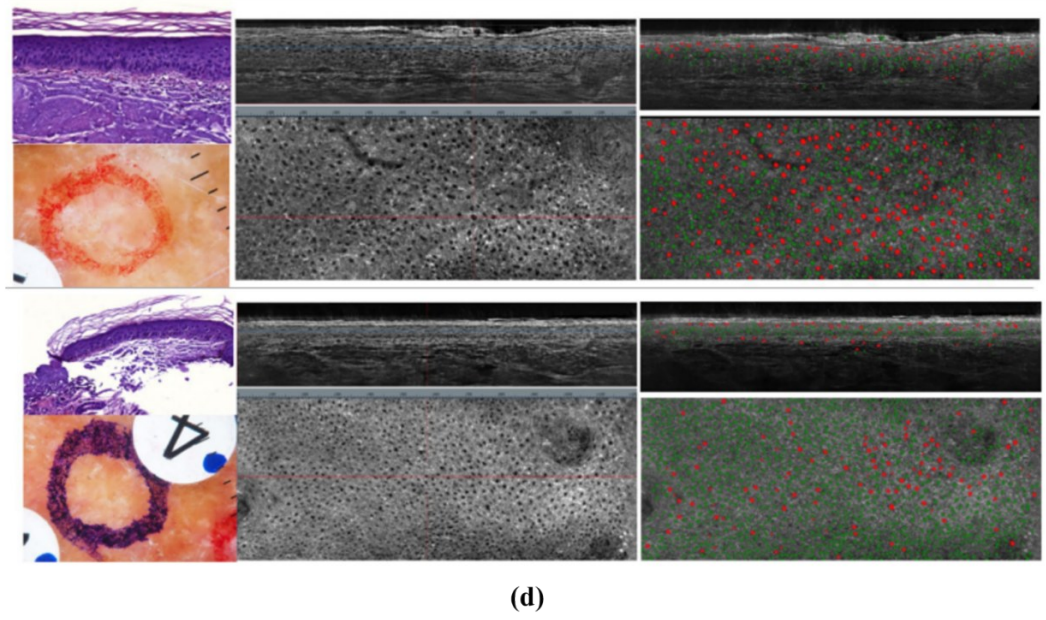
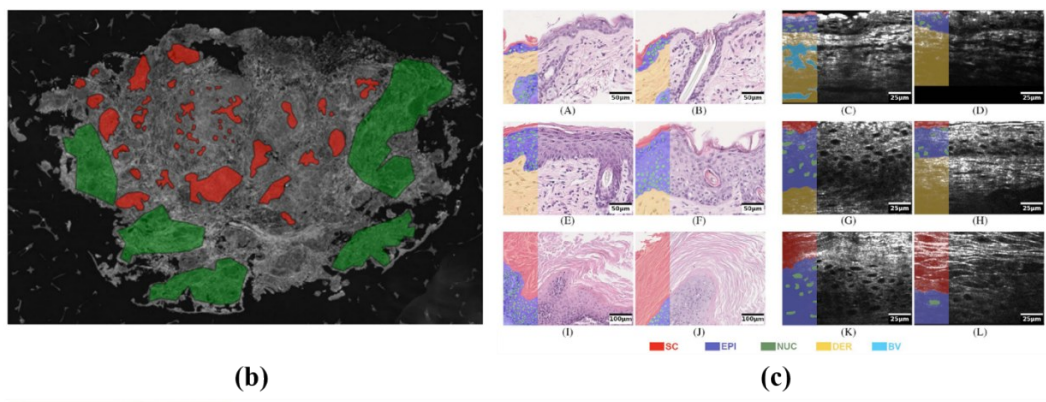
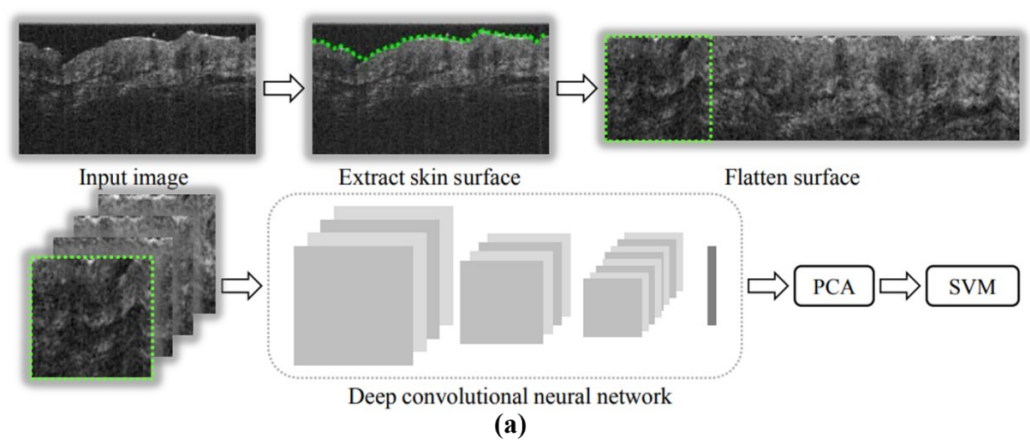


Fig. 2—Methods and strategies of skin structure segmentation based on deep learning—

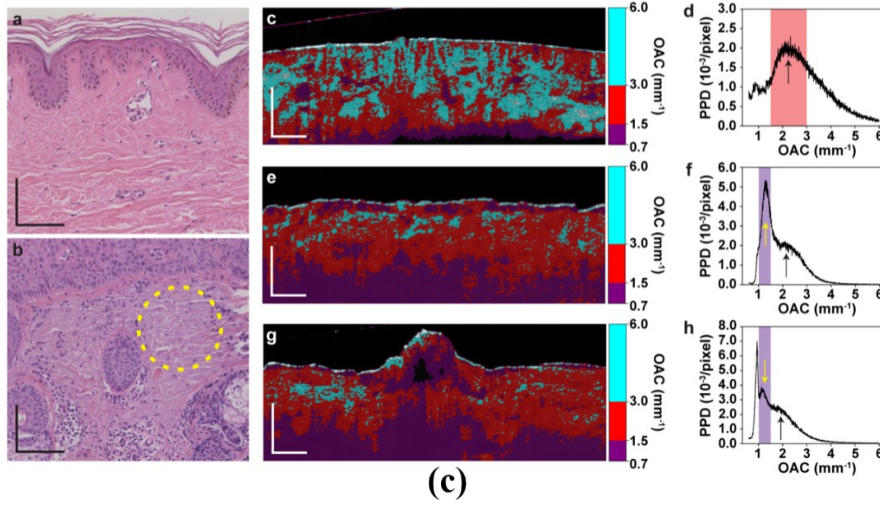
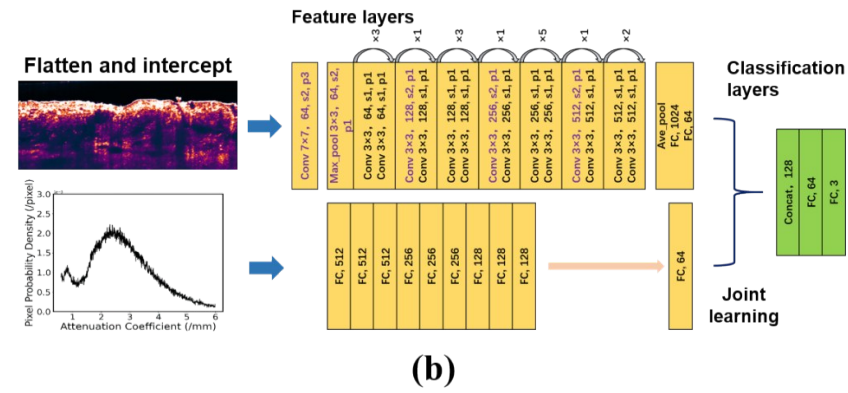
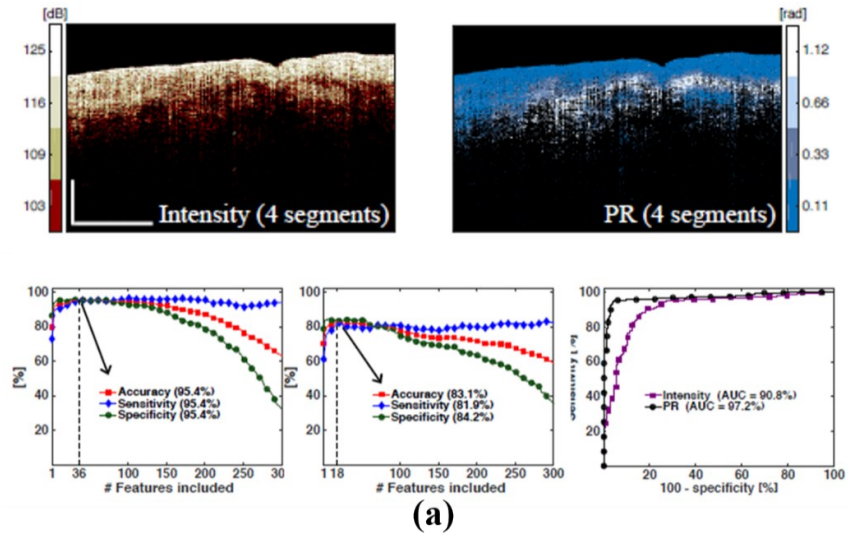




— 3 — OCT —

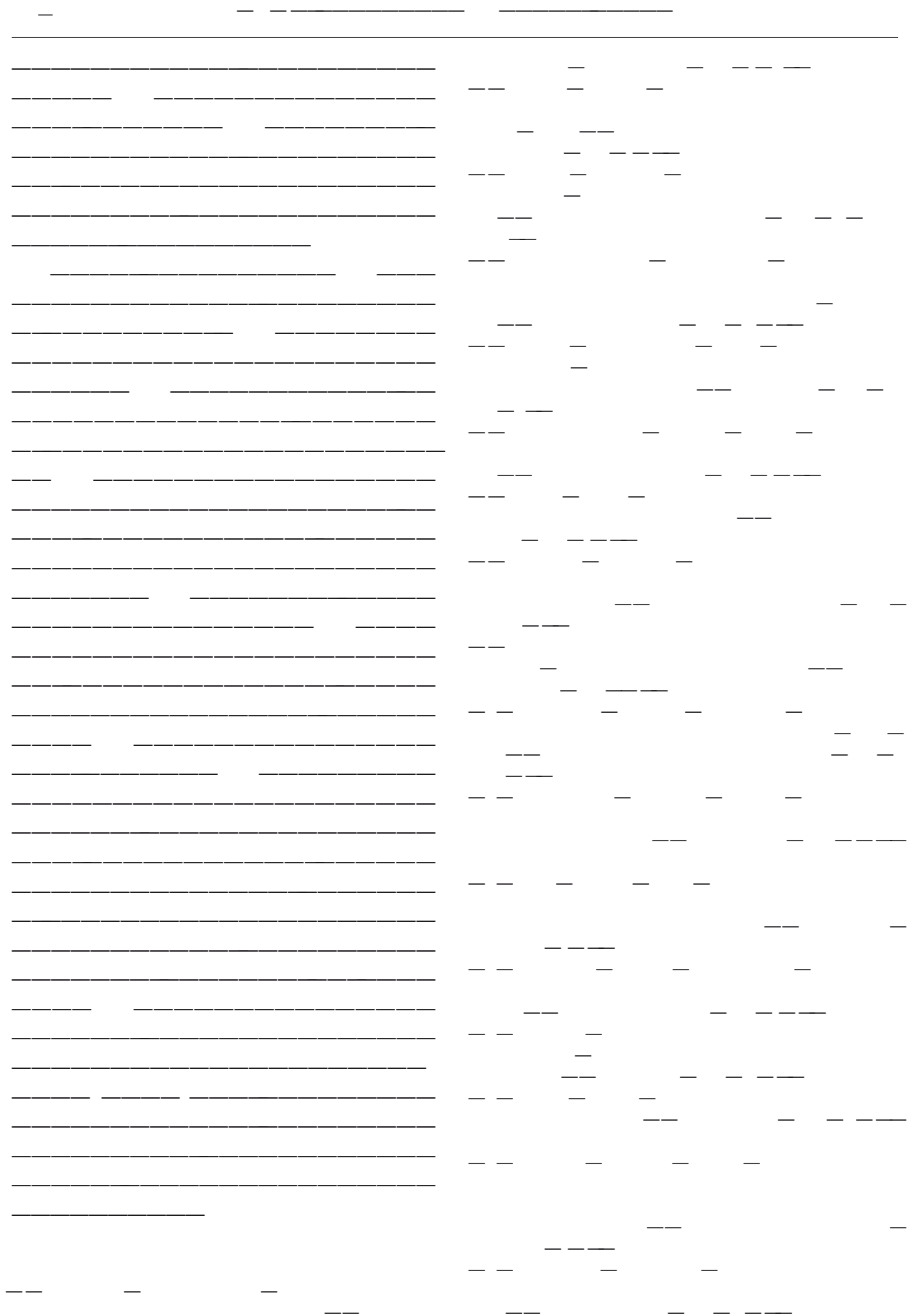
Fig. 3—OCT skin cancer diagnosis based on deep learning—





4 OCT

Fig. 4—Deep learning-based multimodal OCT method for skin cancer diagnosis—



GENERAL INFORMATION										DETAILED ANALYSIS									
Project Name					Project ID					Phase 1 Data					Phase 2 Data				
Client Name					Client ID					Metric A					Metric B				
Start Date					End Date					Value 1					Value 2				
Status					Priority					Score 1					Score 2				
Manager					Team Lead					Error Rate					Success Rate				
Budget					Actual Cost					Defect Count					Feature Count				
Risk Level					Impact					Uptime %					Latency ms				
Compliance					Security					Throughput					Availability				
Feedback					Reviews					Load Time					Crash Rate				
Notes					Comments					Performance					Stability				
Contact					Support					Reliability					Scalability				
Version					Build					Test Pass					Test Fail				
Release					Deploy					Rollback					Monitor				
Update					Patch					Hotfix					Emergency				
Log					Error					Warning					Info				
Alert					Notification					Status					Action				
Report					Summary					Conclusion					Recommendation				
Appendix					References					Bibliography					Index				
Glossary					Acronyms					Footnote					Page Number				
Index					Table of Contents					Page Count					Page Size				
Footer					Page Number					Page Count					Page Size				

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