MDPI Bioengineering 帕金森疾病诊疗领域文献精选

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MDPI Bioengineering 帕金森疾病诊疗领域文献精选。期刊名：Bioengineering

期刊主页：https://www.mdpi.com/journal/bioengineering

为了集中展示生物医学工程在帕金森病诊疗领域的创新应用，我们精选了发表于 Bioengineering 期刊的一系列高质量研究，涵盖人工智能辅助语音诊断、可穿戴设备监测运动症状，以及深部脑刺激和经颅脉冲刺激等前沿方向，旨在从工程技术与临床需求结合的视角，为早期筛查、日常管理和治疗优化提供新思路。

1.Voice-Based Detection of Parkinson ’s Disease Using Machine and Deep Learning Approaches: A Systematic Review

基于机器学习和深度学习方法的声音帕金森病检测：系统综述

https://www.mdpi.com/2306-5354/12/11/1279

Sedigh Malekroodi, H.; Lee, B.-i.; Yi, M. Voice-Based Detection of Parkinson ’s Disease Using Machine and Deep Learning Approaches: A Systematic Review. Bioengineering 2025, 12, 1279. https://doi.org/10.3390/bioengineering12111279

2.Stimulus-Evoked Brain Signals for Parkinson ’s Detection: A Comprehensive Benchmark Performance Analysis on Cross-Stimulation and Channel-Wise Experiments

刺激诱发脑信号用于帕金森病检测：跨刺激与通道实验的综合基准性能分析

https://www.mdpi.com/2306-5354/12/11/1185

Patel, K.; Gad, R.; Lourdes de Ataide, M.; Vetrekar, N.; Ferreira, T.; Ramachandra, R. Stimulus-Evoked Brain Signals for Parkinson ’s Detection: A Comprehensive Benchmark Performance Analysis on Cross-Stimulation and Channel-Wise Experiments. Bioengineering 2025, 12, 1185. https://doi.org/10.3390/bioengineering12111185

3.Voice-Based Early Diagnosis of Parkinson ’s Disease Using Spectrogram Features and AI Models

基于语谱图特征和人工智能模型的声音帕金森病早期诊断

https://www.mdpi.com/2306-5354/12/10/1052

Quamar, D.; Ambeth Kumar, V.D.; Rizwan, M.; Bagdasar, O.; Kadar, M. Voice-Based Early Diagnosis of Parkinson’s Disease Using Spectrogram Features and AI Models. Bioengineering 2025, 12, 1052. https://doi.org/10.3390/bioengineering12101052

4.Study Protocol: Investigating the Effects of Transcranial Pulse Stimulation in Parkinson’s Disease

研究方案：探究经颅脉冲刺激对帕金森病的影响

https://www.mdpi.com/2306-5354/12/7/773

Gianloren ç o, A.C.; Camargo, L.; Fernandes, E.B.; Pichardo, E.; Yeh, H.J.; Hazer-Rau, D.; Storz, R.; Fregni, F. Study Protocol: Investigating the Effects of Transcranial Pulse Stimulation in Parkinson’s Disease. Bioengineering 2025, 12, 773. https://doi.org/10.3390/bioengineering12070773

5.Speech-Based Parkinson’s Detection Using Pre-Trained Self-Supervised Automatic Speech Recognition (ASR) Models and Supervised Contrastive Learning

基于预训练自监督自动语音识别模型和监督对比学习的语音帕金森病检测

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6.PARKA AI: A Sensor-Integrated Mobile Application for Parkinson’s Disease Monitoring and Self-Management

PARKA AI：一种集成传感器的帕金森病监测与自我管理移动应用程序

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7.Evaluation of Parkinson’s Disease Motor Symptoms via Wearable Inertial Measurements Units and Surface Electromyography Sensors

通过可穿戴惯性测量单元和表面肌电传感器评估帕金森病运动症状

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8.Constructing Artificial Features with Grammatical Evolution for the Motor Symptoms of Parkinson’s Disease

利用语法进化为帕金森病运动症状构建人工特征

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9.The Effect of Data Leakage and Feature Selection on Machine Learning Performance for Early Parkinson’s Disease Detection

数据泄露和特征选择对早期帕金森病检测机器学习性能的影响

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10.Unveiling the Unpredictable in Parkinson’s Disease: Sensor-Based Monitoring of Dyskinesias and Freezing of Gait in Daily Life

揭示帕金森病中的不可预测性：日常生活中基于传感器的运动障碍和冻结步态监测

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11.Adaptive vs. Conventional Deep Brain Stimulation: One-Year Subthalamic Recordings and Clinical Monitoring in a Patient with Parkinson’s Disease

自适应与常规脑深部电刺激：一例帕金森病患者的一年丘脑底核记录和临床监测

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12.Automatic Transcranial Sonography-Based Classification of Parkinson’s Disease Using a Novel Dual-Channel CNXV2-DANet

基于新型双通道CNXV2-DANet的经颅超声自动分类帕金森病

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13.Leveraging Deep Learning for Fine-Grained Categorization of Parkinson’s Disease Progression Levels through Analysis of Vocal Acoustic Patterns

利用深度学习通过分析语音声学模式对帕金森病进展程度进行细粒度分类

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14.Hidden Markov Model for Parkinson’s Disease Patients Using Balance Control Data

基于平衡控制数据的帕金森病患者隐马尔可夫模型

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Bioengineering期刊介绍

主编：Anthony Guiseppi-Elie, Texas AM University, USA

期刊专注于发表生物医学工程及应用，生物分子、细胞和组织工程及其应用，生物工艺和生物系统工程及应用，生物化学工程与应用，生物信号处理与分析，仿生学与生物控制论，生物电子学和转化生物工程等相关的最新科学技术及应用等相关的研究成果。刊载研究论文、综述及短讯，鼓励学者发表详细的实验和理论结果。期刊已被PubMed、Scopus、SCIE (Web of Sciences) 等数据库收录。

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