Scopus

Search   Sources   Alerts   Lists   Help ⌄   SciVal ↗   **Register >**   Login ⌄   ☰

Document details

‹ Back to results | 1 of 1

⬦ Export   ⬇ Download   🖶 Print   ✉ E-mail   📄 Save to PDF   ☆ Add to List   More... ›

☐ Full Text   View at Publisher

IOP Conference Series: Materials Science and Engineering
Volume 260, Issue 1, 7 November 2017, Article number 012027
6th International Conference on Mechatronics 2017, ICOM 2017; International Islamic University Malaysia (IIUM) Gombak CampusKuala Lumpur; Malaysia;
8 August 2017 through 9 August 2017; Code 131673

Assistive-as-Needed Strategy for Upper-Limb Robotic Systems: An Initial Survey (Conference Paper)

Khairuddin, I.M.[a,b] ✉   Sidek, S.N.[a],   Md Yusof, H.[a],   Baarath, K.[b],   Majeed, A.P.P.A.[b]

[a]Department of Mechatronics Engineering, International Islamic University Malaysia, Kuala Lumpur, Malaysia
[b]Innovative Manufacturing, Mechatronics and Sports (IMAMS) Laboratory, Faculty of Manufacturing Engineering, Universiti Malaysia Pahang, Malaysia

Abstract   ⌄ View references (29)

Stroke is amongst the leading causes of deprivation of one's ability in carrying out activities of daily living. It has been reported from literature that, the functional recovery of stroke patients are rather poor, unless frequent rehabilitative therapy is assumed on the affected limb. Recent trends of rehabilitation therapy have also shifted towards allowing more participation of the patient in the therapy session rather than simple passive treatments as it has been demonstrated to be non-trivial in promoting neural plasticity to expedite motor recovery process. Therefore, the employment of rehabilitation robotics is seen as a means of mitigating the limitations of conventional rehabilitation therapy. It enables unique methods for promoting patient engagement by providing patients assistance only as needed basis. This paper attempts on reviewing assist-as-needed control strategy applied on upper-limb robotic rehabilitation devices. © Published under licence by IOP Publishing Ltd.

Indexed keywords

Engineering controlled terms: Neuromuscular rehabilitation   Patient treatment   Robotics

Compendex keywords   Activities of Daily Living   Control strategies   Functional recovery   Needed - strategies   Passive treatment
Rehabilitation robotics   Rehabilitation therapy   Robotic rehabilitation

Engineering main heading: Patient rehabilitation

Funding details

Funding number	Funding sponsor	Acronym
SF15-015-0065	International Islamic University Malaysia	IIUM

References (29)

View in search results format ›

☐ All   Export   🖶 Print   ✉ E-mail   📄 Save to PDF   Create bibliography

☐ 1   Organization, W.H.
        The World Health Report 2013: Research for universal health coverage
        (2013) *Sci. Transl. Med.*, 5, p. 146.

☐ 2   (2011) *Annual Report Ministry of Health 2011*, p. 351.

Metrics ⓘ

0 ❝ Citations in Scopus

0 ⌁ Field-Weighted Citation Impact

✳ PlumX Metrics   ⌄
Usage, Captures, Mentions,
Social Media and Citations
beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:
[Set citation alert ›]   [Set citation feed ›]

Related documents

strategies
(2016) Springer Tracts in Advanced Robotics

Multimodal adaptive interfaces for 3D robot-mediated upper limb neuro-rehabilitation: An overview of bio-cooperative systems
Simonetti, D. , Zollo, L. , Papaleo, E.
(2016) Robotics and Autonomous Systems

Robot therapy for severely impaired stroke survivors: Toward a concurrent regulation of task difficulty and degree of assistance
Squeri, V. , Sterpi, I. , Basteris, A.
(2012) Proceedings of the IEEE RAS and EMBS International Conference on Biomedical Robotics and Biomechatronics

View all related documents based on references

Find more related documents in Scopus based on:

Authors ›   Keywords ›