Accepted Manuscript

Event-Based Control of Depth of Hypnosis in Anesthesia

Luca Merigo, Manuel Beschi, Fabrizio Padula, Nicola Latronico, Massimiliano Paltenghi, Antonio Visioli

PII: S0169-2607(16)30698-8
DOI: 10.1016/j.cmpb.2017.06.007
Reference: COMM 4436

To appear in: *Computer Methods and Programs in Biomedicine*

Received date: 6 July 2016
Revised date: 10 June 2017
Accepted date: 20 June 2017

Please cite this article as: Luca Merigo, Manuel Beschi, Fabrizio Padula, Nicola Latronico, Massimiliano Paltenghi, Antonio Visioli, Event-Based Control of Depth of Hypnosis in Anesthesia, *Computer Methods and Programs in Biomedicine* (2017), doi: 10.1016/j.cmpb.2017.06.007

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- The use of an event-based control strategy is applied to the closed-loop control of the depth of hypnosis in anesthesia by using propofol administration and the bispectral index as a controlled variable.
- A new event generator with high noise-filtering properties is employed in addition to a PIDPlus controller.
- The effectiveness and robustness of the method is verified in simulation by considering a set of patients representative of a large population to address the inter-patient variability and by implementing a Monte Carlo method to address the intra-patient variability.

ACCEPTED MANUSCRIPT

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
✓ امکان دانلود نسخه ترجمه شده مقالات
✓ پذیرش سفارش ترجمه تخصصی
✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
✓ دانلود فوری مقاله پس از پرداخت آنلاین
✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات