# JOURNAL OF NEURAL ENGINEERING

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#### REVIEW

A review of classification algorithms for EEG-based brain-computer interfaces: a 10 year update F Lotte, L Bougrain, A Cichocki, M Clerc, M Congedo, A Rakotomamonjy and F Yger

2018 J. Neural Eng. 15 031005 | Cited by 254

### Brain-machine interfaces for controlling lower-limb powered robotic systems

Yongtian He, David Eguren, José M Azorín, Robert G Grossman, Trieu Phat Luu and Jose L Contreras-Vidal 2018 *J. Neural Eng.* **15** 021004 | Cited by **38** 

### Deep learning-based electroencephalography analysis: a systematic review

Yannick Roy, Hubert Banville, Isabela Albuquerque, Alexandre Gramfort, Tiago H Falk and Jocelyn Faubert 2019 *J. Neural Eng.* **16** 051001 | Cited by **37** 

#### A review on mechanical considerations for chronically-implanted neural probes

Aziliz Lecomte, Emeline Descamps and Christian Bergaud 2018 J. Neural Eng. **15** 031001 | Cited by **34** 

#### RESEARCH

### EEGNet: a compact convolutional neural network for EEG-based brain-computer interfaces

Vernon J Lawhern, Amelia J Solon, Nicholas R Waytowich, Stephen M Gordon, Chou P Hung and Brent J Lance 2018 *J. Neural Eng.* **15** 056013 | Cited by **194** 

### Adaptive deep brain stimulation for Parkinson's disease using motor cortex sensing

Nicole C Swann, Coralie de Hemptinne, Margaret C Thompson, Svjetlana Miocinovic, Andrew M Miller, Ro'ee Gilron, Jill L Ostrem, Howard J Chizeck and Philip A Starr 2018 *J. Neural Eng.* **15** 046006 | Cited by **51** 

#### 3D printing nano conductive multi-walled carbon nanotube scaffolds for nerve regeneration

Se-Jun Lee, Wei Zhu, Margaret Nowicki, Grace Lee, Dong Nyoung Heo, Junghoon Kim, Yi Y Zuo and Lijie Grace Zhang 2018 *J. Neural Eng.* **15** 016018 | Cited by **48**  Realistic volumetric-approach to simulate transcranial electric stimulation—ROAST—a fully automated open-source pipeline Yu Huang, Abhishek Datta, Marom Bikson and Lucas C Parra 2019 J. Neural Eng. **16** 056006 | Cited by **34** 

### Decoding natural reach-and-grasp actions from human EEG

Andreas Schwarz, Patrick Ofner, Joana Pereira, Andreea Ioana Sburlea and Gernot R Müller-Putz 2018 J. Neural Eng. **15** 016005 Cited by **32** 

## A generic EEG artifact removal algorithm based on the multi-channel Wiener filter

Ben Somers, Tom Francart and Alexander Bertrand 2018 J. Neural Eng. 15 036007 | Cited by 30

#### Deep learning for hybrid EEG-fNIRS

brain-computer interface: application to motor imagery classification Antonio Maria Chiarelli, Pierpaolo Croce, Arcangelo Merla and Filippo Zappasodi 2018 J. Neural Eng. **15** 036028 Cited by **28** 

### Developing a hippocampal neural prosthetic to facilitate human memory encoding and recall

Robert E Hampson, Dong Song, Brian S Robinson, Dustin Fetterhoff, Alexander S Dakos, Brent M Roeder, Xiwei She, Robert T Wicks, Mark R Witcher, Daniel E Couture, Adrian W Laxton, Heidi Munger-Clary, Gautam Popli, Myriam J Sollman, Christopher T Whitlow, Vasilis Z Marmarelis, Theodore W Berger and Sam A Deadwyler 2018 J. Neural Eng. **15** 036014 | Cited by **28** 

#### PERSPECTIVE

#### Multi-scale, multi-modal analysis uncovers complex relationship at the brain tissue-implant neural interface: new emphasis on the biological interface

Nicholas J Michelson, Alberto L Vazquez, James R Eles, Joseph W Salatino, Erin K Purcell, Jordan J Williams, X Tracy Cui and Takashi D Y Kozai 2018 *J. Neural Eng.* **15** 033001 | Cited by **35**