



**ISSN:** 1750-9823

**Vol.1 (2007) No.2**

**June**

England, UK

[www.SSCI.org.uk](http://www.SSCI.org.uk)

# International Journal of Sports Science and Engineering

Edited by *International Committee of Sports Science & Engineering, WAU*

Published by *World Academic Union (World Academic Press)*

Academic House, 113 Mill Lane, Wavertree Technology Park, Liverpool, L13 4AH, UK

[www.WorldAcademicUnion.com](http://www.WorldAcademicUnion.com); [www.WorldAcademicPress.com](http://www.WorldAcademicPress.com)

## CONTENTS

75. **A Triple Pendulum Robotic Model and a Set Of Simple Parametric Functions for the Analysis of the Golf Swing**  
*Michele Aicardi*
87. **Use of Artificial Neural Networks for Predicting the Outcome of Cricket Tournaments**  
*D. Roy Choudhury, Preeti Bhargava, Reena, Samta Kain*
97. **Multi-factor Statistical Analysis of Influencing Factors for Elite Sports Development**  
*Yong Jiang, Jianliang Li, Fengyou Hua and Jiefu Wang*
105. **Effects of Aerobic Exercises on the Serum Paraoxonase 1/Arylesterase Activity and Lipid Profile in Non-Active Healthy Men**  
*Reza Gharakhanlou, M. Esmaeil Afzalpour, Abbas Ali Gaeini and Nader Rahnama*
113. **Trends and Challenges in Sport Science and Engineering Related Technology Education at Surf Science and Technology: Researching Surfboard Making Activity**  
*J. Audy*
125. **Multiple Analysis on Speed Distribution of World Elite Women 400m Athletes**  
*Qin'er Xu and Loucheng Yu*
129. **Clustering and display of elite swimmers' race patterns across various comparable criteria at the same time**  
*Ilene Chen, Hiroto Homma, Craig Jin, Hong Yan*
137. **Abstracts of proceedings of UK-China Sports Engineering Workshop**  
*JianLiang Li. et at*

## Bibliographic

**ISSN:** 1750-9823 (print), 1750-9831 (online), Quarterly

**Edited:** International Committee of Sports Science & Engineering, WAU

**Published** by World Academic Union (World Academic Press)

**Publisher Contact:** Academic House, 113 Mill Lane

Wavertree Technology Park

Liverpool L13 4AH, England, UK

Email: [publishing@wau.org.uk](mailto:publishing@wau.org.uk)

[publishermail@gmail.com](mailto:publishermail@gmail.com)

U R L: [www.WorldAcademicUnion.com](http://www.WorldAcademicUnion.com)

# INTERNATIONAL JOURNAL OF **S-SCI** SPORTS SCIENCE AND ENGINEERING

**Editorial office:**  
**S-SCI** Editorial office  
 Academic House, 113 Mill Lane, Wavertree Technology Park  
 Liverpool L13 4AH, England, UK  
 Email: editor@SSCI.org.uk

**China editorial office:**  
**S-SCI**, Faculty of Physical Education Science  
 Qufu Normal University  
 Qufu, 273165, P. R. CHINA  
 Email: china@SSCI.org.uk

## Editorial Board (Contact email: editor@SSCI.org.uk)

Martin P Ansell  
 Sports & Materials Group  
 Department of Mechanical Engineering  
 University of Bath, ENGLAND

Arnold Baca  
 Department of Biomechanics, Kinesiology and  
 Applied Computer Science  
 Faculty of Sport Science  
 University of Vienna, AUSTRIA

Mike Caine  
 Sports Technology  
 Loughborough University, UK

James J. Cochran  
 Department of Marketing and Analysis  
 College of Administration and Business  
 Louisiana Tech University, USA

Stephen Dobson  
 Department of Economics (Sport)  
 University of Otago, NEW ZEALAND

Clement Fasan  
 Physical and Health Education Dept  
 Faculty of Education  
 University of Lagos, NIGERIA

Terry R. Haggerty  
 Faculty of Kinesiology, UNB  
 University of New Brunswick, CANADA

John Hammond  
 Sport, Health and Physical Education  
 School of Education  
 Southern Cross University, AUSTRALIA

Youlian Hong  
 Department of Sports Science and Physical  
 Education  
 The Chinese University of Hong Kong

Shatin, HONG KONG

Mont Hubbard  
 Sports Biomechanics Laboratory  
 Mechanical and Aeronautical Engineering  
 University of California, Davis, USA

Mike Hughes  
 School of Sport  
 University of Wales Institute, WALES

Yong Jiang  
 Centre of Sports Mathematics and Engineering  
 Faculty of Science  
 Nanjing University of Science and Technology  
 P. R. CHINA

JiChun Jin  
 Department of Sports Biomechanics  
 Beijing Sport University, P. R. CHINA

Larry Katz  
 Faculty of Kinesiology  
 University of Calgary, CANADA

Mark King  
 School of Sport and Exercise Sciences  
 Loughborough University, UK

Ruud H. Koning  
 Department of Economics  
 University of Groningen, NETHERLANDS

Neville de Mestre  
 School of Information Technology  
 Bond University, AUSTRALIA

Kieran Moran  
 Sports Science and Health Department  
 Dublin City University, IRELAND

R Hugh Morton

Centre for Studies in Sport and Exercise,  
 Institute of Food, Nutrition and Human Health,  
 Massey University, NEW ZEALAND.

Jürgen Perl  
 Institute of Computer Science  
 University of Mainz, GERMANY

Nader Rahnama  
 Faculty of PE and Sports Science  
 Isfahan University  
 Isfahan, IRAN

Philip Scarf  
 Centre for Operational Research and Applied  
 Statistics  
 University of Salford, UK

Elmer Sterken  
 Department of Economics (Sports)  
 University of Groningen  
 The NETHERLANDS

JinHai Sun  
 School of Physical Education Science  
 Qufu University, P. R. CHINA

QingZhu Sun  
 School of Sports Science  
 Nanjing Normal University, P. R. CHINA

Jiuping Xu  
 School of Business and Administration  
 Sichuan University, P.R. CHINA

ZhongPing Wang  
 Dept. Physical Education  
 Nanjing University of Science and Technology  
 P. R. CHINA

## Contact Address of Editorial Committee

**S-SCI**, Faculty of Sports Science  
 Nanjing University of Science and Technology  
 Nanjing, 210094, P. R. CHINA  
 Email: editor@SSCI.org.uk

**Secretaries**  
 Mr. Qi Chen, Mr. Xiangchen Li  
 China Institute of Sports Science  
 11 Tiyyuguan Road, Beijing, 100061, P. R. CHINA

## Contribution enquiries and submitting

Please send the file of Word, PDF format of the manuscript to the editorial office at **editor@SSCI.org.uk** or contact editors above directly.

For more detail to submit papers please visit **www.SSCI.org.uk**

## Subscription

For printed-journal (GBP 272 for one year): please contact publisher by mail or email at the address on the first page.

For free e-journal: please visit **www.SSCI.org.uk**