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[Cited by SciVerse Scopus \(15\)](#)

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*Medical Engineering & Physics*, Volume 20, Issue 2, March 1998, Pages 92-102

Rho, J.-Y.; Kuhn-Spearing, L.; Zioupos, P.

[Cited by SciVerse Scopus \(358\)](#)

### 3. A complete finite element model of a mandibular implant-retained overdenture with two implants: Comparison between rigid and resilient attachment configurations

*Medical Engineering & Physics*, Volume 30, Issue 2, March 2008, Pages 218-225

Daas, M.; Dubois, G.; Bonnet, A.S.; Lipinski, P.; Rignon-Bret, C.

[Cited by SciVerse Scopus \(18\)](#)

### 4. A brief history of total ankle replacement and a review of the current status

*Medical Engineering & Physics*, Volume 29, Issue 10, December 2007, Pages 1056-1064

Vickerstaff, J.A.; Miles, A.W.; Cunningham, J.L.

[Cited by SciVerse Scopus \(12\)](#)

### 5. Three-phase CFD analytical modeling of blood flow

*Medical Engineering & Physics*, Volume 30, Issue 1, January 2008, Pages 91-103

Jung, J.; Hassanein, A.

[Cited by SciVerse Scopus \(7\)](#)

### 6. Manual wheelchairs: Research and innovation in rehabilitation, sports, daily life and health • Short communication

*Medical Engineering & Physics*, Volume 28, Issue 9, November 2006, Pages 905-915

van der Woude, L.H.V.; de Groot, S.; Janssen, T.W.J.

[Cited by SciVerse Scopus \(23\)](#)

### 7. Materials for urinary catheters: a review of their history and development in the UK • Review article

*Medical Engineering & Physics*, Volume 27, Issue 6, July 2005, Pages 443-453

Lawrence, E.L.; Turner, I.G.

[Cited by SciVerse Scopus \(22\)](#)

### 8. Parametric design of pressure-relieving foot orthosis using statistics-based finite element method

*Medical Engineering & Physics*

Cheung, J.T.M.; Zhang, M.

### 9. Assessment and comparison of different methods for heartbeat classification

*Medical Engineering & Physics*, Volume 30, Issue 2, March 2008, Pages 248-257

Jekova, I.; Bortolan, G.; Christov, I.

[Cited by SciVerse Scopus \(18\)](#)

### 10. Prediction of mechanical properties of cortical bone by quantitative computed tomography

*Medical Engineering & Physics*

Duchemin, L.; Bousson, V.; Raoussanly, C.; Bergot, C.; Laredo, J.D.; Skalli, W.; Mitton, D.

11. **Needle insertion into soft tissue: A survey**  
*Medical Engineering & Physics, Volume 29, Issue 4, May 2007, Pages 413-431*  
Abolhassani, N.; Patel, R.; Moallem, M.  
[Cited by SciVerse Scopus \(74\)](#)
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MacNeil, J.A.; Boyd, S.K.  
[Cited by SciVerse Scopus \(77\)](#)
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*Medical Engineering & Physics, Volume 30, Issue 2, March 2008, Pages 182-189*  
Li, L.P.; Korhonen, R.K.; Iivarinen, J.; Jurvelin, J.S.; Herzog, W.  
[Cited by SciVerse Scopus \(7\)](#)
14. **Micro- and nanoscale structures for tissue engineering constructs • Short survey**  
*Medical Engineering & Physics, Volume 22, Issue 9, November 2000, Pages 595-606*  
Desai, T.A.  
[Cited by SciVerse Scopus \(142\)](#)
15. **Biomechanics and physiology in active manual wheelchair propulsion**  
*Medical Engineering & Physics, Volume 23, Issue 10, December 2001, Pages 713-733*  
van der Woude, L.H.V.; Veeger, H.E.J.; Dallmeijer, A.J.; Janssen, T.W.J.; Rozendaal, L.A.  
[Cited by SciVerse Scopus \(57\)](#)
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*Medical Engineering & Physics*  
Valencia, A.; Morales, H.; Rivera, R.; Bravo, E.; Galvez, M.
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*Medical Engineering & Physics, Volume 23, Issue 5, June 2001, Pages 329-346*  
Sul, Y.-T.; Johansson, C.B.; Jeong, Y.; Albrektsson, T.  
[Cited by SciVerse Scopus \(189\)](#)
18. **Validation of numerical simulation with PIV measurements for two anastomosis models**  
*Medical Engineering & Physics, Volume 30, Issue 2, March 2008, Pages 226-247*  
Zhang, J.M.; Chua, L.P.; Ghista, D.N.; Zhou, T.M.; Tan, Y.S.  
[Cited by SciVerse Scopus \(7\)](#)
19. **Soft tissue elastometer**  
*Medical Engineering & Physics, Volume 30, Issue 2, March 2008, Pages 206-212*  
Egorov, V.; Tsyuryupa, S.; Kanilo, S.; Kogit, M.; Sarvazyan, A.  
[Cited by SciVerse Scopus \(18\)](#)
20. **Numerical analysis of temperature and thermal dose response of biological tissues to thermal non-equilibrium during hyperthermia therapy**  
*Medical Engineering & Physics, Volume 30, Issue 2, March 2008, Pages 135-143*  
Yuan, P.  
[Cited by SciVerse Scopus \(2\)](#)
21. **Lumbar spine curvature during office chair sitting**  
*Medical Engineering & Physics, Volume 22, Issue 9, November 2000, Pages 665-669*  
Lengsfeld, M.; Frank, A.; van Deursen, D.L.; Griss, P.  
[Cited by SciVerse Scopus \(21\)](#)
22. **Fibre optic Bragg grating sensors: An alternative method to strain gauges for measuring deformation in bone • Short communication**  
*Medical Engineering & Physics, Volume 30, Issue 1, January 2008, Pages 104-108*  
Fresvig, T.; Ludvigsen, P.; Steen, H.; Reikeras, O.  
[Cited by SciVerse Scopus \(8\)](#)
23. **Finite element modelling of the pelvis: Inclusion of muscular and ligamentous boundary conditions**  
*Medical Engineering & Physics, Volume 29, Issue 7, September 2007, Pages 739-748*  
Phillips, A.T.M.; Pankaj, P.; Howie, C.R.; Usmani, A.S.; Simpson, A.H.R.W.  
[Cited by SciVerse Scopus \(26\)](#)
24. **Prediction of bone mechanical properties using QUS and pQCT: Study of the human distal radius**  
*Medical Engineering & Physics*  
Muller, M.; Mitton, D.; Moilanen, P.; Bousson, V.; Talmant, M.; Laugier, P.
25. **Influence of femoral head size on impingement, dislocation and stress distribution in total hip replacement**  
*Medical Engineering & Physics, Volume 29, Issue 4, May 2007, Pages 465-471*  
Kluess, D.; Martin, H.; Mittelmeier, W.; Schmitz, K.P.; Bader, R.  
[Cited by SciVerse Scopus \(26\)](#)