

Електронски часописи и књиге: доступност и проналажење



Универзитет у Београду - Универзитетска библиотека "Светозар Марковић"

Александра Поповић
Универзитетска библиотека "Светозар Марковић"
porovic@unilib.bg.ac.rs

ШИРИ ТЕКСТ КУРСА СЛОБОДНО ДОСТУПАН НА САЈТУ УНИВЕРЗИТЕТСКЕ БИБЛИОТЕКЕ

http://www.unilib.bg.ac.rs/edukacija/Tekst_za_kurs_za_doktorante_2011.pdf

и на сајту КоБСОН-а

Београду

[О нама](#) | [Услуге](#) | [Електронска издања](#) | [Препоручени линкови](#) | [Пројекти](#) | [Заједница библиотека](#) | [Едукација](#)

ВЕСТИ

КоБСОН за све, библиометријски индикатори и Publish or Perish

Драги библиотекари, чланови Заједнице библиотека универзитета у Србији, у току је одржавање радионица КоБСОН за све, библиометријски индикатори и Publish or Perish. Више информација можете видети у презентацији...

ОБУКА КОРИСНИКА СРЕДОМ ОД 12 ДО 13 ЧАСОВА

Библиотека сваке среде, на спрату у главном холу, организује обуку корисника. Заинтересовани могу да се пријаве Одељењу за научне информације и едукацију путем електронске поште edukacija@unilib.bg.ac.rs. Обуку могу да прате и корисници који нису пријављени. Циљ обуке је упознавање са услугама Библиотеке и са могућностима претраживања доступних извора информација (садржај обуке).
Добродошле су све сугестије корисника!



Архива

Др Стела Филипи-Матутиновић : "Научне информације у Србији"

Универзитетска библиотека "Светозар Марковић" организује едукацију докторанада и млађих истраживача у области евалуације, приступа и коришћења електронских извора научних информација. Вишегодишње искуство стечено у интерактивном раду са полазницима ових курсева сабрано је у приручнику

Др Стела Филипи-Матутиновић : "Електронски извори информација у науци: значај, врсте, доступност, процена вредности"

Lynne Christine Alice - превела Србислава Маја Шаховић "Како написати предлог квалитативног истраживања"

Превод текста објављујемо уз сагласност издавача, Београдске отворене школе

Ashworth, Lucian M. - превела Србислава Маја Шаховић "Плагијаризам!"

Превод текста објављујемо уз сагласност издавача, Београдске отворене школе

Комбинација кључних речи

- Обавезно је коришћење логичких оператора између појмова
- Размислите о кључним речима
- Комбинујте прво мањи број појмова, а после додајте још појмова

Синтагма

- Уколико не укуцате логичке операторе, база ће то да схвати као синтагму. У неким базама су обавезни наводници за синтагму
- Ако нисте сигурни да је ваш појам синтагма, убаците између речи логичке операторе



IP: 147.91.1.44, RCUB



Početak / SERVISI / **Elektronski časopisi** /

- CPI
- SRL
- KoBSON
- INFORMACIJE
- NAUKA U SRBIJI
- SERVISI
- Pretraživanje časopisa
- Elektronski časopisi
- American Chemical Society
- American Physical Society
- ASME Transaction Journals
- EBSCO
- Calm.info
- Cambridge University Press
- Emerald
- Free medical Journals
- HeinOnline
- HINARI
- HighWire Press
- IEEE Computer
- Institute of Physics
- JSTOR
- Ovid
- Oxford Journals
- Project MUSE
- ProQuest
- Royal Society of Chemistry
- SAGE
- ScienceDirect
- Springer-Link
- TEAL

- EleČas
- Elektrjige
- Naši u WOS
- Pomoć

- @
- ☎

Impresum

Elektronski časopisi

Kod većine izdavača KoBSON pretplađuje časopise u punom tekstu od 1997. godine, dok su ranija godišta dostupna do nivoa apstrakta. Predmetna, ili autorska, pretraživanja po člancima, moguće je obaviti:

- (1) na veb stranici izdavača izabranog iz menija, korišćenjem opcije brzo pretraživanje
- (2) na veb stranici izdavača
- (3) na veb stranicama agregatora (EBSCO, ProQuest)
- (4) indeksne baze (Web of Science, Scopus, Scindeks)

Elektronski časopisi:
Skup pretplaćenih izdavača čiji su naslovi dostupni u formi punog teksta.

Izdavači:

AC	American Chemical Society
AP	American Institute of Physics
ME	ASME Transaction Journals
CU	Cambridge University Press
EM	Emerald Publishing
IE	IEEE Digital Library
IO	Institute of Physics Publishing
OX	Oxford University Press
RC	Royal Society of Chemistry
SG	SAGE Pubishing
SD	Science Direct
SP	Springer/Kluwer
WI	Wiley Interscience

- NOVI KORISNICI
- Ko ima pravo pristupa
- Kome je KoBSON dostupan
- KAKO KORISTITI KoBSON
- Pretraživanje časopisa
- Pretraživanje Naši u WoS
- Kako 'od kuće' do KoBSON-a
- KoBSON na Facebook-u
- KoBSON ZA POČETNIKE
- ČESTA PITANJA O:
- Dostupnosti KoBSON-a
- Naši u WoS
- Našim časopisima
- Citiranosti autora
- SKRAĆENICE NA KoBSONU
- DoiSerbia
- Scindeks
- Google Scholar
- Brza stranica



- HINARI
- HighWire Press
- IEEE Computer
- Institute of Physics
- JSTOR
- Ovid
- Oxford Journals
- Project MUSE
- ProQuest
- Royal Society of Chemistry
- SAGE
- ScienceDirect
- Springer-Link
- TEEAL
- Wiley InterScience
- Svetske novine

- Pretraživanje knjiga
- Elektronske knjige
- Indeksne baze
- Strane doktorske disertacije
- Časopisi u papiru

MOŽDA VAM ZATREBA ▶

SUGESTIJE I ZAMERKE ▶

Прешли сте на режим целог екрана. [Изађи из режима пуног екрана \(F11\)](#)

AP	ASME Transaction Journals
ME	Cambridge University Press
CU	Emerald Publishing
EM	IEEE Digital Library
IE	Institute of Physics Publishing
IO	Oxford University Press
OX	Royal Society of Chemistry
RC	SAGE Pubishing
SG	Science Direct
SD	Springer/Kluwer
SP	Wiley InterScience
WI	

Агрегатори (dostupni sa embargom ili periodom zakašnjenja od tri meseca do godinu dana):

CI	Cairn.info
EB	EBSCO
HE	Hein On Line
HW	High Wire
FM	Free Medical
HI	HINARI Helth Interent Work
JS	JSTORE
OA	Open Access (DOAJ)
oa	Open Access Archives (dostupna samo starija godišta)
OV	Ovid
MU	Project MUSE
PQ	ProQuest
TE	TEEAL
sc	Scindeks

- SKRAĆENICE NA KoBSONu ▶
- DoiSerbia ▶
- Scindeks ▶
- Google Schollar ▶
- Brza stranica ▶

Articles All fields Author
Images Journal/Book title Volume Issue Page



Agriculture, Ecosystems & Environment

Copyright © 2012 Elsevier B.V. All rights reserved

Publication History: Incorporating [Agriculture and Environment](#) and [Agro-Ecosystems](#);

[Sample Issue Online](#) | [About this Journal](#) | [Submit your Article](#) | [Shortcut link to this Title](#)

[New Article Feed](#)

[Alert me about new articles](#)

[Add to Favorites](#)

[< Previous vol/iss](#) | [Next vol/iss >](#)

Font Size: A⁺ A⁻

[Add to my Quick Links](#)

Volume 162, [In Progress](#) (1 November 2012)

articles **1 - 15**

= Full-text available

= Abstract only

[Articles in Press](#)

[Volumes 161 - 162 \(2012\)](#)

[Volume 162](#)

[In Progress](#) (1 November 2012)

[Volume 161](#)

pp. 1-174 (15 October 2012)

[Volumes 151 - 160 \(2012\)](#)

[Volumes 141 - 150 \(2011 - 2012\)](#)

[Volumes 131 - 140 \(2009 - 2011\)](#)

[Volumes 121 - 130 \(2007 - 2009\)](#)

[Purchase](#) | [E-mail articles](#) | [Export citations](#) | [PDF downloader](#) | [Open all previews](#)

This issue is In Progress but contains articles that are final and fully citable. For recently accepted articles, see [Articles in Press](#).

1 [Diversity influences forage yield and stability in perennial prairie plant mixtures](#) Original Research Article

Pages 1-7

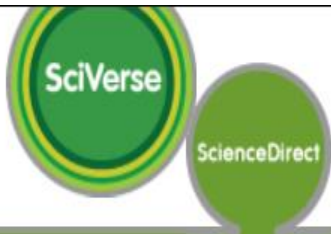
Catherine L. Bonin, Benjamin F. Tracy

[Show preview](#) | [PDF \(349 K\)](#) | [Related articles](#) | [Related reference work articles](#)

Highlights

- ▶ Mixture yield exceeded 16 t ha⁻¹ after four years with no fertilization or irrigation.
- ▶ A majority of multi-species plots exhibited overyielding.
- ▶ Moderately diverse prairie plant mixtures can improve forage productivity with minimal inputs.

Create Your Own Booklet is a great way to celebrate publishing




Articles All fields Author

Images Journal/Book title Volume Issue Page

Search ScienceDirect

Advanced search

? Search tips



Find the relevant review articles you need
Add the **Top Reviews** App today to enter a
chance to win an iPad2.

All Sources

Journals

Books

Images

Advanced search | Expert search

? Search tips

Search

biomarkers in Abstract, Title, Keywords

AND

in

Include

Journals All Books

Source

All sources

Subject (select one or more)

- Abstract, Title, Keywords
- All Fields
- Abstract, Title, Keywords
- Authors
- Specific Author
- Source Title
- Title
- Keywords
- Abstract
- References
- ISSN
- ISBN
- Affiliation
- Full Text

? [Search tips](#)

Search

biomarkers in Title

AND

HPLC in Abstract, Title, Keywords

Include

Journals All Books

Source

All sources

Subject (select one or more)

- All Sciences -
- Agricultural and Biological Sciences
- Arts and Humanities
- Biochemistry, Genetics and Molecular Biology

Hold down the Ctrl key (or Apple Key) to select multiple entries.

Date Range

All Years 2000 to: Present

Search

| [Recall search](#)

Articles All fields Author [Advanced search](#)
 Images Journal/Book title Volume Issue Page [? Search tips](#)

12,896 articles found for: pub-date > 1999 and TITLE-ABSTR-KEY(biomarkers) [Edit this search](#) | [Save this search](#) | [Save as search alert](#) | [RSS Feed](#) Font Size: A⁻ A⁺

= Full-text available = Abstract only Go to page: of 129 | [Next >](#)

Search within results

Refine results

- Content Type**
- Journal (12,729)
 - Book (268)
 - Reference Work (56)

- Journal/Book Title**
- Alzheimer's & Dementia (298)
 - Organic Geochemistry (284)
 - Toxicology Letters (231)
 - Aquatic Toxicology (224)

- Sort by: **Relevance** | Date
- 1 **Application of biomarkers in the development of drugs intended for the treatment of osteoarthritis** Original Research Article
Osteoarthritis and Cartilage, Volume 19, Issue 5, May 2011, Pages 515-542
 V.B. Kraus, B. Burnett, J. Coindreau, S. Cottrell, D. Eyre, M. Gendreau, J. Gardiner, P. Garnero, J. Hardin, Y. Henrotin, D. Heinegård, A. Ko, L.S. Lohmander, G. Matthews, J. Menetski, R. Moskowitz, S. Persiani, A.R. Poole, J.-C. Rousseau, M. Todman, *et al.*
[Show preview](#) | [PDF \(468 K\)](#) | [Related articles](#) | [Related reference work articles](#)
 - 2 **Classification of osteoarthritis biomarkers: a proposed approach** Review Article
Osteoarthritis and Cartilage, Volume 14, Issue 8, August 2006, Pages 723-727
 D.C. Bauer, D.J. Hunter, S.B. Abramson, M. Attur, M. Corr, D. Felson, D. Heinegård, J.M. Jordan, T.B. Kepler, N.E. Lane, T. Saxne, B. Tyree, V.B. Kraus, For the Osteoarthritis Biomarkers Network (V. Kraus, Chair)
[Show preview](#) | [PDF \(117 K\)](#) | [Related articles](#) | [Related reference work articles](#)
 - 3 **Biomarkers of semen in the vagina: applications in clinical trials of contraception and prevention of sexually transmitted pathogens including HIV** Review Article
Contraception, Volume 75, Issue 6, June 2007, Pages 407-419
 Christine K. Mauck, Gustavo F. Doncel, Biomarkers of Semen Exposure Clinical Working Group
[Show preview](#) | [PDF \(328 K\)](#) | [Related articles](#) | [Related reference work articles](#)



Table data delivered straight to Excel

Add the Table App today to enter a chance to win an iPad?

Search

Refine results

Limit to

Exclude

Content Type

- Journal (12,729)
- Book (268)
- Reference Work (56)

Journal/Book Title

- Alzheimer's & Dementia (298)
- Organic Geochemistry (284)
- Toxicology Letters (231)
- Aquatic Toxicology (224)
- Ecotoxicology and Environmental Safety (210)
- Chemosphere (192)
- Journal of the American College of Cardiology (183)
- Clinica Chimica Acta (164)
- Journal of Chromatography B (154)
- Marine Environmental Research (151)
- European Journal of Cancer Supplements (149)
- Science of The Total Environment (142)
- Marine Pollution Bulletin (133)
- Osteoarthritis and Cartilage (130)
- Clinical Biochemistry (126)
- Journal of Proteomics (121)
- Comparative Biochemistry and Physiology Part C... (119)
- European Journal of Cancer (117)

all previews

Date








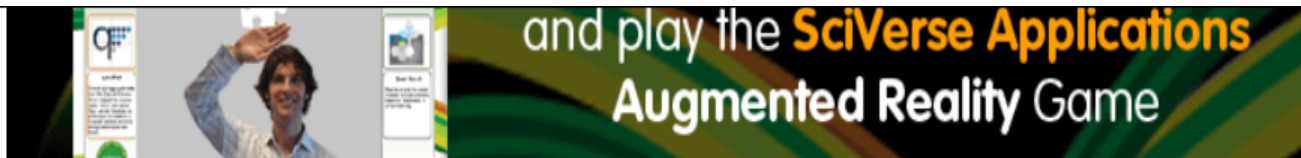
-  **Application of biomarkers in the development of drugs intended for the treatment of osteoarthritis** Original Research Article
Osteoarthritis and Cartilage, Volume 19, Issue 5, May 2011, Pages 515-542
V.B. Kraus, B. Burnett, J. Coindreau, S. Cottrell, D. Eyre, M. Gendreau, J. Gardiner, P. Garnero, J. Hardin, Y. Henrotin, D. Heinegård, A. Ko, L.S. Lohmander, G. Matthews, J. Menetski, R. Moskowitz, S. Persiani, A.R. Poole, J.-C. Rousseau, M. Todman, *et al.*
[Show preview](#) | [PDF \(468 K\)](#) | [Related articles](#) | [Related reference work articles](#)
-  **Classification of osteoarthritis biomarkers: a proposed approach** Review Article
Osteoarthritis and Cartilage, Volume 14, Issue 8, August 2006, Pages 723-727
D.C. Bauer, D.J. Hunter, S.B. Abramson, M. Attur, M. Corr, D. Felson, D. Heinegård, J.M. Jordan, T.B. Kepler, N.E. Lane, T. Saxne, B. Tyree, V.B. Kraus, For the Osteoarthritis Biomarkers Network (V. Kraus, Chair)
[Show preview](#) | [PDF \(117 K\)](#) | [Related articles](#) | [Related reference work articles](#)
-  **Biomarkers of semen in the vagina: applications in clinical trials of contraception and prevention of sexually transmitted pathogens including HIV** Review Article
Contraception, Volume 75, Issue 6, June 2007, Pages 407-419
Christine K. Mauck, Gustavo F. Doncel, Biomarkers of Semen Exposure Clinical Working Group
[Show preview](#) | [PDF \(328 K\)](#) | [Related articles](#) | [Related reference work articles](#)
-  **The impact of hs C-reactive protein and other inflammatory biomarkers on long-term cardiovascular mortality in patients with acute coronary syndromes** Original Research Article
Atherosclerosis, Volume 194, Issue 2, October 2007, Pages 397-402
Michael N. Zairis, Evdokia N. Adamopoulou, Stavros J. Manousakis, Anastassios G. Lyras, George P. Bibis, Olga S. Ampartzidou, Charalambos S. Apostolatos, Filippos A. Anastassiadis, John J. Hatzisavvas, Spyros K. Argyrakis, Stefanos G. Foussas, for the Biomarkers of Inflammation and Outcome in Acute Coronary Syndromes (BIAS) Investigators
[Show preview](#) | [PDF \(139 K\)](#) | [Related articles](#) | [Related reference work articles](#)
-  **Biomarkers and environmental risk assessment: Guiding principles from the human health field** Original Research Article
Marine Pollution Bulletin, Volume 56, Issue 4, April 2008, Pages 613-619
Richard Owen, Tamara S. Galloway, Josephine A. Hagger, Malcolm B. Jones, Michael H. Depledge
[Show preview](#) | [PDF \(138 K\)](#) | [Related articles](#) | [Related reference work articles](#)
-  **Soluble and Tissue Biomarkers in Ankylosing Spondylitis** Review Article
Best Practice & Research Clinical Rheumatology, Volume 24, Issue 5, October 2010, Pages 671-682
Kurt de Vlam
[Show preview](#) | [PDF \(163 K\)](#) | [Related articles](#) | [Related reference work articles](#)
-  **Biomarkers in lower respiratory tract infections** Original Research Article



Table data
delivered
straight to
Excel

Add the
Table App
today to enter
a chance to
win an iPad2.





154 articles found for: pub-date > 1999 and TITLE-ABSTR-KEY(biomarkers) AND LIMIT-TO(cid, "272247", "Journal of Chromatography B")

[Edit this search](#) | [Save this search](#) | [Save as search alert](#) | [RSS Feed](#)

Font Size: [A](#) [A](#)

= Full-text available = Abstract only

Go to page: of 2 [Go](#) | [Next >](#)

Search within results

[Search](#)

Refine results

[Limit to](#) [Exclude](#)

Content Type

Journal (154)

Journal/Book Title

Journal of Chromatography B (154)

Topic

- tandem mass (12)
- mass spectrometry (9)
- human plasma (7)
- human urine (6)
- biomarker discovery (5)

[view more](#)

Year

[Purchase](#) | [E-mail articles](#) | [Export citations](#) | [Download multiple PDFs](#) | [Open all previews](#) | [Sort by: Relevance](#) | [Date](#)

1 [Method validation of protein biomarkers in support of drug development or clinical diagnosis/prognosis](#) Review Article

Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1259-1271

Jean W. Lee, Michael Hall

[Show preview](#) | [PDF \(921 K\)](#) | [Related articles](#) | [Related reference work articles](#)

2 [Investigation of volatile biomarkers in lung cancer blood using solid-phase microextraction and capillary gas chromatography-mass spectrometry](#) Original Research Article

Journal of Chromatography B, Volume 808, Issue 2, 5 September 2004, Pages 269-277

Chunhui Deng, Xiangmin Zhang, Ning Li

[Show preview](#) | [PDF \(204 K\)](#) | [Related articles](#) | [Related reference work articles](#)

3 [Quantitative analysis of biomarkers, drugs and toxins in biological samples by immunoaffinity chromatography coupled to mass spectrometry or tandem mass spectrometry: A focused review of recent applications](#) Review Article

Journal of Chromatography B, Volume 878, Issue 2, 15 January 2010, Pages 133-148

Dimitrios Tsikas

[Show preview](#) | [PDF \(2052 K\)](#) | [Related articles](#) | [Related reference work articles](#)

4 [Determination of volatile biomarkers for apoptosis and necrosis by solid-phase microextraction, gas chromatography/mass spectrometry: A pharmacometabolomic](#)



Table data delivered straight to Excel


Add the **Table App** today to enter a chance to win an iPad2.

Articles All fields Author
 Images Journal/Book title Volume Issue Page

Search ScienceDirect

Advanced search

? Search tips



Find the relevant review articles you need
 Add the **Top Reviews App** today to enter a chance to win an iPad2.

9 articles found for: pub-date > 1999 and TITLE-ABSTR-KEY(**biomarkers**) AND LIMIT-TO(**cid, "272247"; "Journal of Chromatography B"**) AND LIMIT-TO(**topics, "mass spectrometry"**)

Edit this search | Save this search | Save as search alert | RSS Feed

Font Size: A⁺ A⁻

= Full-text available = Abstract only

Page 1 of 1

Search within results

Refine results

Content Type

Journal (9)

Journal/Book Title

Journal of Chromatography B (9)

Topic

mass spectrometry (9)

tandem mass (3)

hplc (2)

clinical proteomics (1)

crnbn (1)

Purchase | E-mail articles | Export citations | Download multiple PDFs | Open | Sort by: **Relevance** | Date

1 **Proteomic approaches in the search for disease biomarkers** Review Article
Journal of Chromatography B, Volume 814, Issue 1, 5 January 2005, Pages 11-19
 A. Vlahou, M. Fountoulakis

Show preview | PDF (235 K) | [Related articles](#) | Related reference work articles

2 **Electrophoresis and liquid chromatography/tandem mass spectrometry in disease biomarker discovery** Review Article
Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1222-1228
 Haleem J. Issaq, Josip Blonder

Show preview | PDF (158 K) | [Related articles](#) | Related reference work articles

3 **Technical, bioinformatical and statistical aspects of liquid chromatography-mass spectrometry (LC-MS) and capillary electrophoresis-mass spectrometry (CE-MS) based clinical proteomics: A critical assessment** Review Article
Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1250-1258
 Mohammed Dakna, Zengyou He, Wei Chuan Yu, Harald Mischak, Walter Kolch

Show preview | PDF (840 K) | [Related articles](#) | Related reference work articles

4 **Biomarker discovery for kidney diseases by mass spectrometry** Review Article
Journal of Chromatography B, Volume 870, Issue 2, 15 July 2008, Pages 148-153



Table data delivered straight to Excel

Add the **Table App** today to enter a chance to win an iPad2.

Limit to Exclude

Content Type

Journal (9)

Journal/Book Title

Journal of Chromatography B (9)

Topic

mass spectrometry (9)

tandem mass (3)

hplc (2)

clinical proteomics (1)

crohn (1)

[view more](#)

Year

2009 (4)

2008 (3)

2005 (1)

2004 (1)

- 2009, Pages 117-119
- A. Vlahou, M. Fountoulakis
- Show preview | PDF (235 K) | Related articles | Related reference work articles
-
- 2 **Electrophoresis and liquid chromatography/tandem mass spectrometry in disease biomarker discovery** Review Article
Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1222-1228
 Haleem J. Issaq, Josip Blonder
- Show preview | PDF (158 K) | Related articles | Related reference work articles
-
- 3 **Technical, bioinformatical and statistical aspects of liquid chromatography-mass spectrometry (LC-MS) and capillary electrophoresis-mass spectrometry (CE-MS) based clinical proteomics: A critical assessment** Review Article
Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1250-1258
 Mohammed Dakna, Zengyou He, Wei Chuan Yu, Harald Mischak, Walter Kolch
- Show preview | PDF (84 K) | **Related articles** | Related reference work articles
-
- 4 **Biomarker discovery for kidney diseases by mass**

Table data delivered straight to Excel

Add the Table App today to enter a chance to win an iPad2.



Journal of Chromatography B

Volume 877, Issue 13, 1 May 2009, Pages 1250-1258

QUANTITATIVE ANALYSIS OF BIOMARKERS BY LC-MS/MS

doi:10.1016/j.jchromb.2008.10.048 | How to Cite or Link Using DOI

Permissions & Reprints

Review

Technical, bioinformatical and statistical aspects of liquid chromatography–mass spectrometry (LC–MS) and capillary electrophoresis-mass spectrometry (CE-MS) based clinical proteomics: A critical assessment

Mohammed Dakna^a, Zengyou He^b, Wei Chuan Yu^b, Harald Mischak^a, Walter Kolch^c

^a Mosaiques Diagnostics & Therapeutics, Hannover, Germany

^b Department of Electronic and Computer Engineering, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, China

^c The Beatson Institute for Cancer Research & Sir Henry Wellcome Functional Genomics Facility, University of Glasgow, Glasgow, UK

Received 9 July 2008; Accepted 28 October 2008. Available online 6 November 2008.

Abstract

The search for **biomarkers** in biological fluids that can be used for disease diagnosis and prognosis using mass spectrometry has emerged to become a state-of-the-art methodology for clinical proteomics. Poor cross platform comparison of the findings, however, makes the need for comparison studies probably as urgent as the need for new ones. It is now increasingly recognized that standardized statistical and bioinformatics approaches during data processing are of utmost importance for such comparisons. This paper reviews two of the currently most promising methods, namely LC–MS and CE-MS techniques, and software tools used to analyze the huge amount of data they generate. We further review the statistical issues of feature selection and sample classification.

Keywords: LC–MS; CE-MS; **biomarkers**; Clinical proteomics; Statistical data analysis

Article Outline

1. Introduction
2. LC-MS

Related Articles

- Clinical proteomics: Current techniques and potential a...
Matrices
- Detection of noncovalent FKBP-FK506 and FKBP-Rapamycin ...
Journal of the American Society for Mass Spectrometry
- Urine profiling using capillary electrophoresis-mass sp...
Journal of Chromatography A
- Capillary electrophoresis-mass spectrometry
Journal of Chromatography A
- Urinary Proteomics Based on Capillary Electrophoresis-C...
Advances in Chronic Kidney Disease

View more related articles

My Applications

Add | Manage Applications

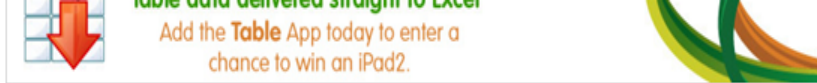
Hide Applications

Cited by (24)

- Algorithms and tools for the preprocessing of LC-MS met...
Chemometrics and Intelligent Laboratory Systems
- Exploring liquid chromatography-mass spectrometry finge...
Chemometrics and Intelligent Laboratory Systems
- Preparation and evaluation of long chain alkyl methacry...
Chromatographia

View details of all 24 citing articles in Scopus

Provided by Scopus



145 articles related to:

Font Size: **A⁺** **A⁻**

Technical, bioinformatical and statistical aspects of liquid chromatography–mass spectrometry (LC–MS) and capillary electrophoresis-mass spectrometry (CE-MS) based clinical proteomics: A critical assessment Review Article

Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1250-1258

Mohammed Dakna, Zengyou He, Wei Chuan Yu, Harald Mischak, Walter Kolch

[View This Article](#)

= Full-text available = Abstract only

Go to page: of 2 | [Next >](#)

Search within results

Refine results

Content Type

- Journal (142)
- Book (9)

Journal/Book Title

- Journal of Chromatography A (35)
- Journal of Proteomics (13)
- Journal of the American Society for Mass Spectr... (5)
- Journal of Chromatography B (5)
- Clinica Chimica Acta (4)

[view more](#)

Topic

- mass spectrometry (20)
- capillary electrophoresis (11)
- clinical proteomics (10)
- proteomics (7)
- biomarker discovery (6)

[view more](#)

Purchase | E-mail articles | Export citations | PDF downloader | Open all previews

- 1 **Clinical proteomics: Current techniques and potential applications in the elderly** Review Article

Maturitas, Volume 68, Issue 3, March 2011, Pages 233-244

J. Siwy, A. Vlahou, L.U. Zimmerli, P. Züribig, E. Schiffer

Show preview | PDF (390 K) | [Related articles](#) | [Related reference work articles](#)

- 2 **Detection of noncovalent FKBP-FK506 and FKBP-Rapamycin complexes by capillary electrophoresis-mass spectrometry and capillary electrophoresis-tandem mass spectrometry** Original Research Article

Journal of the American Society for Mass Spectrometry, Volume 6, Issue 2, February 1995, Pages 85-90

Yin-Liang Hsieh, Jianyi Cai, Yu-Tsyr Li, Jack D. Henion, Bruce Ganem

Show preview | PDF (435 K) | [Related articles](#) | [Related reference work articles](#)

- 3 **Urine profiling using capillary electrophoresis-mass spectrometry and multivariate data analysis** Original Research Article

Journal of Chromatography A, Volume 1117, Issue 1, 2 June 2006, Pages 87-93

Sara Ullsten, Rolf Danielsson, Daniel Bäckström, Per Sjöberg, Jonas Bergquist

Show preview | PDF (291 K) | [Related articles](#) | [Related reference work articles](#)

- 4 **Capillary electrophoresis-mass spectrometry** Review Article

Journal of Chromatography A, Volume 703, Issues 1-2, 26 June 1995, Pages 667-692

Jianyi Cai, Jack Henion

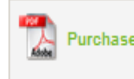
Show preview | PDF (2348 K) | [Related articles](#) | [Related reference work articles](#)

- 5 **Urinary Proteomics Based on Capillary Electrophoresis-Coupled Mass Spectrometry in Kidney Disease: Discovery and Validation of Biomarkers, and Clinical Application** Review Article

Advances in Chronic Kidney Disease, Volume 17, Issue 6, November 2010, Pages 493-506

Harald Mischak, Christian Delles, Julie Klein, Joost P. Schanstra

Show preview | [Related articles](#) | [Related reference work articles](#)



Purchase

- 6 **Capillary electrophoresis—mass spectrometry** Original Research Article

Journal of Chromatography A, Volume 636, Issue 1, 23 April 1993, Pages 3-19



Purchase



Table data delivered straight to Excel

Add the Table App today to enter a chance to win an iPad2.



Article Figures/Tables (7) References (94)

Thumbnails | Full-Size image

Journal of Chromatography B

Volume 877, Issue 13, 1 May 2009, Pages 1250-1258

QUANTITATIVE ANALYSIS OF BIOMARKERS BY LC-MS/MS

doi:10.1016/j.jchromb.2008.10.048 | How to Cite or Link Using DOI

Permissions & Reprints

Review

Technical, bioinformatical and statistical aspects of liquid chromatography–mass spectrometry (LC–MS) and capillary electrophoresis–mass spectrometry (CE-MS) based clinical proteomics: A critical assessment

Mohammed Dakna^a, Zengyou He^b, Wei Chuan Yu^b, Harald Mischak^a, Walter Kolch^c

^a Mosaiques Diagnostics & Therapeutics, Hannover, Germany

^b Department of Electronic and Computer Engineering, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, China

^c The Beatson Institute for Cancer Research & Sir Henry Wellcome Functional Genomics Facility, University of Glasgow, Glasgow, UK

Received 9 July 2008; Accepted 28 October 2008. Available online 6 November 2008.

Abstract

The search for **biomarkers** in biological fluids that can be used for disease diagnosis and prognosis using mass spectrometry has emerged to become a state-of-the-art methodology for clinical proteomics. Poor cross platform comparison of the findings, however, makes the need for comparison studies probably as urgent as the need for new ones. It is now increasingly recognized that standardized statistical and bioinformatics approaches during data processing are of utmost importance for such comparisons. This paper reviews two of the currently most promising methods, namely LC–MS and CE-MS techniques, and software tools used to analyze the huge amount of data they generate. We further review the statistical issues of feature selection and sample classification.

Keywords: LC–MS; CE-MS; **biomarkers**; Clinical proteomics; Statistical data analysis

Article Outline

1. Introduction
2. LC-MS

Related Articles

- Clinical proteomics: Current techniques and potential applications
Journal of Chromatography B
- Detection of noncovalent FKBP-FK506 and FKBP-Rapamycin ...
Journal of the American Society for Mass Spectrometry
- Urine profiling using capillary electrophoresis-mass spectrometry
Journal of Chromatography A
- Capillary electrophoresis-mass spectrometry
Journal of Chromatography A
- Urinary Proteomics Based on Capillary Electrophoresis-C...
Advances in Chronic Kidney Disease

View more related articles

My Applications

Add | Manage Applications

Hide Applications

Cited by (24)


- Algorithms and tools for the preprocessing of LC-MS met...
Chemometrics and Intelligent Laboratory Systems
- Exploring liquid chromatography-mass spectrometry finger...
Chemometrics and Intelligent Laboratory Systems
- Preparation and evaluation of long chain alkyl methacry...
Chromatographia

View details of all 24 citing articles in Scopus

Provided by Scopus

Quick Search

Scopus: 24

24 Documents that cite:  Set feed

Dakna M., He Z., Yu W.C., Mischak H., Kolch W.

Technical, bioinformatical and statistical aspects of liquid chromatography-mass spectrometry (LC-MS) and capillary electrophoresis-mass spectrometry (CE-MS) based clinical proteomics: A critical assessment

(2009) *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, 877 (13), pp. 1250-1258.

Search within results

Refine results










My Applications

 Add |  Manage
Applications













 Hide Applications 

Document results: 24 | [Show all abstracts](#)

Go to page: of 2

All With selected: Page  Download PDF |  Export |  Print |  Email |  Create bibliography |  Add to My List |  View citation overview |  View citations |  View references

Sort by

	Document title	Author(s)	Date	Source title	Citations
<input type="checkbox"/>	Exploring liquid chromatography-mass spectrometry fingerprints of urine samples from patients with prostate or urinary bladder cancer	Danielsson, R., Allard, E., Sjöberg, P.J.R., Bergquist, J.	2011	<i>Chemometrics and Intelligent Laboratory Systems</i> 108 (1), pp. 33-48	0
	View at publisher  				
<input type="checkbox"/>	Algorithms and tools for the preprocessing of LC-MS metabolomics data	Castillo, S., Gopalacharyulu, P., Yetukuri, L., Orešič, M.	2011	<i>Chemometrics and Intelligent Laboratory Systems</i> 108 (1), pp. 23-32	3
	View at publisher  				
<input type="checkbox"/>	Preparation and evaluation of long chain alkyl methacrylate monoliths for capillary chromatography	Alothman, Z.A., Aqel, A., Al Abdelmoneim, H.A., Yacine Badjah-Hadj-Ahmed, A., Al-Warthan, A.A.	2011	<i>Chromatographia</i> 74 (1-2), pp. 1-8	0
	View at publisher  				
<input type="checkbox"/>	Diagnosis of subclinical and clinical acute T-cell-mediated rejection in renal transplant patients by urinary proteome analysis	Metzger, J., Chatzikyrkou, C., Broecker, V., Schiffer, E., Jaensch, L., Iphoefer, A., Mengel, M., (...), Gwinner, W.	2011	<i>Proteomics - Clinical Applications</i> 5 (5-6), pp. 322-333	6
	View at publisher  				
<input type="checkbox"/>	Urinary proteomics in cardiovascular disease: Achievements, limits and hopes	Delles, C., Diez, J., Dominiczak, A.F.	2011	<i>Proteomics - Clinical Applications</i> 5 (5-6), pp. 222-232	0
	View at publisher  				
<input type="checkbox"/>	I-RUBY: A novel software for quantitative analysis of highly accurate shotgun-proteomics liquid chromatography/tandem mass spectrometry data obtained without stable-isotope labeling of proteins	Wada, K., Ogiwara, A., Nagasaka, K., Tanaka, N., Komatsu, Y.	2011	<i>Rapid Communications in Mass Spectrometry</i> 25 (7), pp. 960-968	0
	View at publisher  				

Fields: Author:
Images Journal/Book title:

Volume: Issue: Page:

Search ScienceDirect

Search tips

Find the relevant review articles you need
Add the **Top Reviews** App today to enter a chance to win an iPad2.

9 articles found for: pub-date > 1999 and TITLE-ABSTR-KEY(**biomarkers**) AND LIMIT-TO(cid, "272247", "Journal of Chromatography B") AND LIMIT-TO(topics, "mass spectrometry")

[Edit this search](#) | [Save this search](#) | [Save as search alert](#) | [RSS Feed](#)
Font Size: A⁺ A⁻

= Full-text available = Abstract only

Page 1 of 1

Search within results

Refine results

Content Type

Journal (9)

Journal/Book Title

Journal of Chromatography B (9)

Topic

- mass spectrometry (9)
- tandem mass (3)
- hplc (2)
- clinical proteomics (1)

- [Purchase](#) | [E-mail articles](#) | [Export citations](#) | [Download multiple PDFs](#) | [Sort by: Relevance | Date](#)
- [Open all previews](#)
- Proteomic approaches in the search for disease biomarkers** Review Article
Journal of Chromatography B, Volume 814, Issue 1, 5 January 2005, Pages 11-19
A. Vlahou, M. Fountoulakis
[Show preview](#) | [PDF \(235 K\)](#) | [Related articles](#) | [Related reference work articles](#)
 - Electrophoresis and liquid chromatography/tandem mass spectrometry in disease biomarker discovery** Review Article
Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1222-1228
Haleem J. Issaq, Josip Blonder
[Show preview](#) | [PDF \(158 K\)](#) | [Related articles](#) | [Related reference work articles](#)
 - Technical, bioinformatical and statistical aspects of liquid chromatography–mass spectrometry (LC–MS) and capillary electrophoresis-mass spectrometry (CE-MS) based clinical proteomics: A critical assessment** Review Article
Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1250-1258
Mohammed Dakna, Zengyou He, Wei Chuan Yu, Harald Mischak, Walter Kolch
[Show preview](#) | [PDF \(840 K\)](#) | [Related articles](#) | [Related reference work articles](#)



Find methods you need for your research

Add the **Methods Search** App today to enter a chance to win an iPad2.

Search alert

You will receive an e-mail with a link into ScienceDirect to access these new articles.

Search: pub-date > 1999 and TITLE-ABSTR-KEY(biomarkers) AND LIMIT-TO(cid, "272247","Journal of Chromatography B") AND LIMIT-TO(topics, "mass spectrometry")

Name of alert:

E-mail address:

Frequency:

| [Cancel](#)



Find methods
you need for
your research

Add the
**Methods
Search App**
today to enter
a chance to
win an iPad2.



Note: Search alerts will be set to inactive if they are not used for an extended period of time. You can activate inactive alerts on Modify Alerts page.

Search history (1)



Hub | **ScienceDirect** | Scopus | Applications

Sanja Antonic | [Logout](#) | [Go to SciVal Suite](#)

Brought to you by:
KoBSON - Konzorcijum
biblioteka Srbije za objedinjenu

Home + Recent Actions | Browse | Search | My settings | My alerts | Shopping cart

Help

Articles All fields Author

Images Journal/Book title Volume Issue Page

Search ScienceDirect

[Advanced search](#)

[? Search tips](#)



Table data delivered straight to Excel

Add the **Table** App today to enter a chance to win an iPad2.



Browse 11,196,386 Articles

Browse by title

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | 0-9

Browse by subject

Physical Sciences and Engineering

- Chemical Engineering
- Chemistry
- Computer Science
- Earth and Planetary Sciences
- Energy
- Engineering
- Materials Science
- Mathematics
- Physics and Astronomy

Life Sciences

- Agricultural and Biological Sciences
- Biochemistry Genetics

Recent Actions [Turn off](#)

All (52) | [Searches \(34\)](#) | [Full text \(18\)](#) | [Journals/Books \(0\)](#)

[View less](#) | [Clear all](#)

(11 results) "Chi b"	23 Dec
(119 results) "Chi b"	23 Dec
(7 results) Chi-b 3P	23 Dec
(7 results) Chi-b 3P	23 Dec
(2,006 results) boson	23 Dec
(2,006 results) boson	23 Dec
(6,408 results) boson	23 Dec
(34,543 results) boson	23 Dec
(8 results) "hexagonal tubules" AND spectroscopy	22 Dec
(8 results) "hexagonal tubules" AND spectroscopy	22 Dec
(20 results) "hexagonal tubules"	22 Dec

Latest News on ScienceDirect

- [Find out more](#) about the latest enhancements to SciVerse ScienceDirect
- We are aware of some RSS issues on ScienceDirect. We are working hard to get them resolved. Our apologies for any inconvenience.
- [Join our Design Partner Program](#) to help us evaluate new features and improve ScienceDirect.

About ScienceDirect

Want to know more?

The [SciVerse](#)



Table data delivered straight to Excel

Add the **Table** App today to enter a chance to win an iPad2.

Search history (2)

- Agricultural and Biological Sciences
 - Biochemistry, Genetics and Molecular Biology
 - Environmental Science
 - Immunology and Microbiology
 - Neuroscience
- Health Sciences**
 - Medicine and Dentistry
 - Nursing and Health Professions
 - Pharmacology, Toxicology and Pharmaceutical Science
 - Veterinary Science and Veterinary Medicine
- Social Sciences and Humanities**
 - Arts and Humanities
 - Business, Management and Accounting
 - Decision Sciences
 - Economics, Econometrics and Finance
 - Psychology
 - Social Sciences

(20 results) "hexagonal tubules"	22 Dec
(4,185 results) biomarkers AND NOT medic*	22 Dec
(4,152 results) biomarkers AND NOT medic*	22 Dec
(4,014 results) biomarkers AND NOT medic*	22 Dec
(63 results) biomarkers AND HPLC	22 Dec
(63 results) biomarkers AND HPLC	22 Dec
(12,897 results) biomarkers	22 Dec
(113 results) pub-date > 1999 and TITLE-ABSTR-KEY(biomarkers) AND LIMIT-TO(cid, "272247", "Journal of Chromatography B") and hplc	22 Dec
(154 results) pub-date > 1999 and TITLE-ABSTR-KEY(biomarkers) AND LIMIT-TO(cid, "272247", "Journal of Chromatography B")	22 Dec
(12,897 results) biomarkers	22 Dec
(12,897 results) biomarkers	22 Dec
(9 results) pub-date > 1999 and TITLE-ABSTR-KEY(biomarkers) AND LIMIT-TO(cid, "272247", "Journal of Chromatography B") AND LIMIT-TO(topics, "mass spect...	22 Dec
(154 results) pub-date > 1999 and TITLE-ABSTR-KEY(biomarkers) AND LIMIT-TO(cid, "272247", "Journal of Chromatography B")	22 Dec
(12,896 results) biomarkers	22 Dec
(99 results) hippocampus	01 Apr
(203 results) applied forestry	10 Mar
(2 results) applied forestry	10 Mar
Morphological Changes of the In Vitro Cervical Vertebral Canal and Its Cast Form During Flexion, Extension, and Lateral Bending	08 Mar
Risk Factors Associated With Back Pain: A Cross-Sectional Study of 963 College Students	08 Mar

The Sciverse ScienceDirect Info site has all the information you need to help you make the most of ScienceDirect.

Find out more about:

- Switching on Recent Actions
- Setting up Quick Links
- Setting up Alerts ... and Customize ScienceDirect now!

Content on ScienceDirect:

- Journals > 2,500
- Books > 11,000

Online tutorials in multiple languages are also available.



Articles All fields Author
 Images Journal/Book title Volume Issue Page [Search ScienceDirect](#) Advanced search
 ? Search tips

154 articles found for: pub-date > 1999 and TITLE-ABSTR-KEY(**biomarkers**) AND LIMIT-TO(cid, "272247","Journal of Chromatography B")

[Edit this search](#) | [Save this search](#) | [Save as search alert](#) | [RSS Feed](#)

Font Size: A⁺ A⁻

= Full-text available = Abstract only

Go to page: of 2 [Go](#) | [Next >](#)

Search within results

[Search](#)

Refine results

[Limit to](#) [Exclude](#)

Content Type

Journal (154)

Journal/Book Title

Journal of Chromatography B (154)

Topic

- [Purchase](#) | [E-mail articles](#) | [Export citations](#) | [Download multiple PDFs](#) | [Open](#) | Sort by: **Relevance** | [Date](#)
- [all previews](#)
- Method validation of protein biomarkers in support of drug development or clinical diagnosis/prognosis** Review Article
Journal of Chromatography B, Volume 877, Issue 13, 1 May 2009, Pages 1259-1271
 Jean W. Lee, Michael Hall
[Show preview](#) | [PDF \(921 K\)](#) | [Related articles](#) | [Related reference work articles](#)
 - Investigation of volatile biomarkers in lung cancer blood using solid-phase microextraction and capillary gas chromatography-mass spectrometry** Original Research Article
Journal of Chromatography B, Volume 808, Issue 2, 5 September 2004, Pages 269-277
 Chunhui Deng, Xiangmin Zhang, Ning Li
[Show preview](#) | [PDF \(204 K\)](#) | [Related articles](#) | [Related reference work articles](#)
 - Quantitative analysis of biomarkers, drugs and toxins in biological samples by immunoaffinity chromatography coupled to mass spectrometry or tandem mass spectrometry: A focused review of recent applications** Review Article



Find methods you need for your research

Add the **Methods Search** App today to enter a chance to win an iPad2.



63 articles found for: pub-date > 1999 and TITLE(biomarkers) and TITLE-ABSTR-KEY(HPLC)

[Edit this search](#)

[Save this search](#)

[Save as search alert](#)

[RSS Feed](#)

Font Size: **A⁺** **A**

= Full-text available = Abstract only

Page 1 of 1

Search within results

Refine results

Content Type

- Journal (62)
- Book (1)
- Reference Work (1)

Journal/Book Title

- Journal of Chromatography B (9)
- Cancer Letters (3)
- Food and Chemical Toxicology (3)
- Toxicology Letters (3)
- Biochemical and Biophysical Research Communicat... (2)

[view more](#)

Topic

- dna damage (4)
- oxidative stress (4)
- dna adduct (3)
- dna (2)
- igg (2)

[view more](#)

Purchase | E-mail articles | Export citations | Download multiple PDFs | Open all previews

Sort by: **Relevance** | Date

- 1 **Identification of biomarkers for melamine-induced nephrolithiasis in young children based on ultra high performance liquid chromatography coupled to time-of-flight mass spectrometry (U-HPLC-Q-TOF/MS)** Original Research Article

Journal of Chromatography B, Volume 879, Issue 30, 15 November 2011, Pages 3544-3550

Hejun Duan, Na Guan, Yongning Wu, Jing Zhang, Jie Ding, Bing Shao

Show preview | PDF (1035 K) | [Supplementary content](#) | [Related articles](#) | [Related reference work articles](#)

Highlights

- ▶ We applied the metabolomics approach to assess the mechanisms of melamine-induced nephrolithiasis in young children. ▶ Using the nephrolithiasis patients with no history of melamine exposure to filter out biomarkers unique to the melamine-induced nephrolithiasis group. ▶ Examining hypoxanthine and proline significantly distinguishing the controls/melamine exposure groups. ▶ The predictive model showed the good performance to identify the markers.

- 2 **Detection of chlorinated DNA and RNA nucleosides by HPLC coupled to tandem mass spectrometry as potential biomarkers of inflammation** Original Research Article

Journal of Chromatography B, Volume 827, Issue 1, 15 November 2005, Pages 26-31

Carine Badouard, Mitsuharu Masuda, Hoyoku Nishino, Jean Cadet, Alain Favier, Jean-Luc Ravanat

Show preview | PDF (147 K) | [Related articles](#) | [Related reference work articles](#)

- 3 **Rapid isocratic HPLC quantification of metallothionein-like proteins as biomarkers for cadmium exposure in the earthworm *Eisenia andrei*** Original Research Article

Soil Biology and Biochemistry, Volume 39, Issue 1, January 2007, Pages 194-201

Aristocle Ndayibagira, Geoffrey I. Sunahara, Pierre Yves Robidoux

Show preview | PDF (321 K) | [Related articles](#) | [Related reference work articles](#)

- 4 **Metabolomics tools for identifying biomarkers for neuropsychiatric diseases** Review Article

Neurobiology of Disease, Volume 35, Issue 2, August 2009, Pages 166-176

Marlon P. Quinones, Rima Kaddurah-Daouk

Show preview | PDF (1035 K) | [Related articles](#) | [Related reference work articles](#)



Find methods you need for your research

Add the **Methods Search** App today to enter a chance to win an iPad2.



Articles All fields

Author

[Advanced search](#)

Images Journal/Book title

Volume Issue Page

Search ScienceDirect

[? Search tips](#)



All Sources

Journals

Books

Images

Advanced search | [Expert search](#)

[? Search tips](#)

Search

biomarkers in

AND NOT

medic* in

Include

Journals All Books

Source

Subject (select one or more)

- All Sciences -
- Agricultural and Biological Sciences
- Arts and Humanities
- Biochemistry, Genetics and Molecular Biology

Hold down the Ctrl key (or Apple Key) to select multiple entries.

Date Range

All Years to:

All Sources

Journals

Books

Images

Advanced search | Expert search

? Search tips

Search (Enter terms using Boolean connectors e.g. "heart attack" AND stress)

"hexagonal tubules" AND spectroscopy

Include

Journals All Books

Source

All sources

Subject (select one or more)

- All Sciences -
- Agricultural and Biological Sciences
- Arts and Humanities
- Biochemistry, Genetics and Molecular Biology

Hold down the Ctrl key (or Apple Key) to select multiple entries.

Date Range

All Years 2001 to: Present

Search | Recall search

Click here to benefit and register

8 articles found for: "hexagonal tubules" AND spectroscopy

Edit this search

Save this search

Save as search alert

RSS Feed

Font Size: A⁺ A⁻

= Full-text available = Abstract only

Page 1 of 1

Search within results

Refine results

Content Type

Journal (8)

Journal/Book Title

Biochimica et Biophysica Acta (BBA) - Biomembra... (2)

Annales de l'Institut Pasteur / Microbiologie (1)

Biophysical Journal (1)

Carbon (1)

Chemical Physics Letters (1)

[view more](#)

Topic

ballroom (1)

basidiobolus haptosporus (1)

chemical physics (1)

civic plaza (1)

Purchase | E-mail articles | Export citations | Download multiple PDFs | Open | Sort by: **Relevance** | [Date](#)

- 1 **Tubular aggregate myopathy: A rare form of myopathy** Original Research Article
Journal of Clinical Neuroscience, Volume 15, Issue 11, November 2008, Pages 1222-1226
Deepali Jain, Mehar Chand Sharma, Chitra Sarkar, Vaishali Suri, Surinder Kumar Sharma, Surnit Singh, Taposh Kumar Das
 Show preview | PDF (228 K) | [Related articles](#) | [Related reference work articles](#)

- 2 **Interactions of a *Rhodococcus* sp. biosurfactant trehalose lipid with phosphatidylethanolamine membranes** Original Research Article
Biochimica et Biophysica Acta (BBA) - Biomembranes, Volume 1778, Issue 12, December 2008, Pages 2806-2813
Antonio Ortiz, José A. Teruel, María J. Espuny, Ana Marqués, Ángeles Manresa, Francisco J. Aranda
 Show preview | PDF (926 K) | [Related articles](#) | [Related reference work articles](#)

- 3 **Remarkable hexagonal carbon tubes transformed from zinc tetrapyrroldiporphine**
Carbon, Volume 47, Issue 2, February 2009, Pages 534-538
Naien Shi, Gui Yin, Xianwen Wei, Zheng Xu
 Show preview | PDF (462 K) | [Related articles](#) | [Related reference work articles](#)

- 4 **Metal particle catalysed production of nanoscale BN structures** Original Research Article
Chemical Physics Letters, Volume 259, Issues 5-6, 13 September 1996, Pages 568-573
M. Terrones, W.K. Hsu, H. Terrones, J.P. Zhang, S. Ramos, J.P. Hare, R. Castillo, K. Prassides, A.K. Cheetham, H.W. Kroto, D.R.M. Walton
 Show preview | PDF (445 K) | [Related articles](#) | [Related reference work articles](#)

- 5 **Effects of the anti-neoplastic agent ET-18-OCH₃ and some analogs on the biophysical properties of model membranes** Original Research Article
International Journal of Pharmaceutics, Volume 318, Issues 1-2, 2 August 2006, Pages 28-40
Alejandro Torrecillas... Daniel Arca-Aguilar, Francisco J. Aranda, Consuelo Gajate, Faustino Mollinedo, Senena



Find methods
you need for
your research

Add the
Methods
Search App
today to enter
a chance to
win an iPad2.

Електронске књиге

- ✓ Електронске књиге су дигитализоване, виртуелизоване верзије књига које се могу читати преко рачунара или посебних уређаја – читача електронских књига.
- ✓ Многи програми и уређаји који се користе за приказивање садржаја електронских књига омогућавају читаоцу функционалност на коју је он навикао приликом читања књига штампаних на папиру: обележавање текста подвлачењем, дописивање коментара и обележавање страница.

Електронске књиге

Електронске књиге се најчешће презентују у PDF формату и могуће их је на рачунару читати помоћу апликације Acrobat Reader, а овај формат препознаје и већина читача електронских књига

Данас у свету постоје многобројни модели ових уређаја од којих се тренутно два издвајају својим квалитетом и распрострањеношћу: Sony eBook Reader и Amazon Kindle.

Оба уређаја нуде већ поменуте функције карактеристичне за већину читача електронских књига

За кориснике у Србији препоручујемо коришћење уређаја Amazon Kindle пошто се Србија налази у систему продаје везаном за овај уређај.

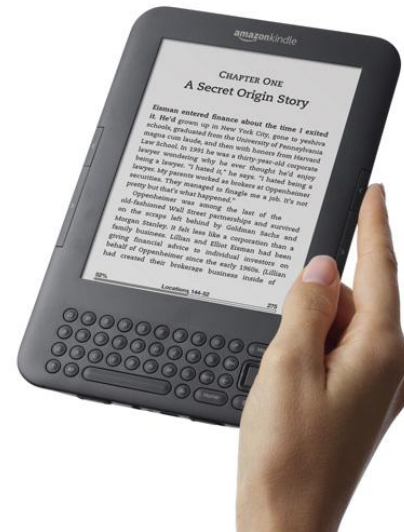
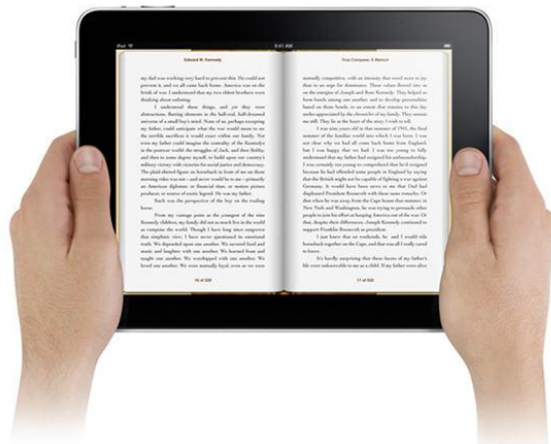
Електронске књиге

Електронске књиге могуће је читати и на таблет рачунарима и мобилним телефонима. Физичке димензије ових уређаја отварају нове просторе и нове временске периоде за читање.



Електронске књиге

Да би читање било ефикасно и продуктивно потребно је користити уређаје примерене датим околностима и окружењу. Читачи електронских књига са екранима на бази технологије електронског мастила (Amazon Kindle) погодни су за “дуго читање”, док су таблет рачунари предвиђени за “кратко читање”.



Електронске књиге

- Springer
- eBrary

MU	Project MUSE
TE	TEEAL
	Scindeks

Elektronske knjige:

U ovom servisu moguće je pretraživati elektronske knjige (preko 60 000 naslova) po ISBN broju, naslovu, autoru ili izdavaču. U zavisnosti od izdavača, mogu se skinuti kompletni tekstovi, ili samo određeni broj strana, bilo kao celo poglavlje ili stranica po stranica, kao pojedinačan PDF.

CL	Cleveland Medicine Index
eB	eBRARY
EV	Engineering Village 2 - Referex
GB	Google Books
HE	Hein On Line
OX	Oxford Scholarship Online
PM	PubMed knjige
SP	Springer

KoBSON projekat je podržan od strane **Ministarstva nauke Republike Srbije**



Search Within This Book

Browse This Book

■ Front matter	i-xviii
■ Part 1 / Biomedical Polymers and Polymer Therapeutics	3-265
■ Molecular Design of Biodegradable Dextran Hydrogels for the Controlled Release of Proteins	3-18
■ Biodegradable Nanospheres: Therapeutic Applications	19-31
■ Application to Cancer Chemotherapy of	33-36

Biomedical Polymers and Polymer Therapeutics

Emo Chiellini, Junzo Sunamoto, Claudio Migliaresi, Raphael M. Ottenbrite and Daniel Cohn

Contents

Viewing all 31 chapters

■ Front matter	i-xviii	
Download PDF (120.4 KB)		
■ Part 1 / Biomedical Polymers and Polymer Therapeutics		
■ Molecular Design of Biodegradable Dextran Hydrogels for the Controlled Release of Proteins	3-18	
W.E. Hennink, J.A. Cadée, S.J. de Jong, O. Franssen and R.J.H. Stenekes, <i>et al.</i>		
Download PDF (1.3 MB)		Show Summary
■ Biodegradable Nanospheres: Therapeutic Applications	19-31	
Jasmine Davda, Sinjan De, Wenzhong Zhou and Vinod Labhasetwar		
Download PDF (538.1 KB)		Show Summary
■ Application to Cancer Chemotherapy of Supramolecular System	33-36	
Ichinose Katsuro, Yamamoto Masayuki, Taniguchi Ikuo, Akiyoshi Kazunari and Sunamoto Junzo, <i>et al.</i>		
Download PDF (281.2 KB)		Show Summary
■ DDS in Cancer Chemotherapy	37-52	

Submit your
research article

PHARMACEUTICAL ASPECTS OF GENE THERAPY

Philip R. Dash and Leonard W. Seymour
CRC Institute for Cancer Studies, University of Birmingham, B15 2TA, U.K.

1. INTRODUCTION

The concept of gene therapy as a treatment for human disease is almost as old as molecular biology itself. One of the first proposals for the use of genes in the treatment of human diseases was made by Tatum in his 1958 Nobel Prize acceptance speech, while the term gene therapy was coined by Szybalski in the early 1960s¹. However, it wasn't until the early 1990s that the science of gene therapy had progressed enough to enter clinical trials².

The idea underlying gene therapy is that human disease might be treated by the transfer of genetic material into specific cells of a patient in order either to replace a defective gene or to introduce a new function to the cell^{3,4}. The potential of gene therapy to treat a wide range of diseases has led to very rapid advances in the science of gene transfer and in

Simple Search: [Search ebrary](#) [Advanced](#) [All Subjects](#)



Need *Authoritative* Information?
















Your library offers e-books from trusted publishers in all academic subject areas along with powerful research tools with Academic Complete™!

New: Download e-books onto multiple devices!

[View Quick Start Guide](#)

[Sign Up for Training](#)

Browse by Topic

 <p>Anthropology</p>	 <p>Business & Economics</p>	 <p>Computers & IT</p>	 <p>Education</p>	 <p>Engineering & Technology</p>
 <p>Fine Arts</p>	 <p>History</p>	 <p>Language & Literature</p>	 <p>Law</p>	 <p>Life Sciences</p>
 <p>Medicine</p>	 <p>Physical Sciences</p>	 <p>Psychology</p>	 <p>Religion</p>	 <p>Social Sciences</p>

Simple Search: [Advanced](#) [All Subjects](#)

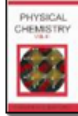
TITLE RESULTS CHAPTER RESULTS SEARCHES

▼ Focus your search using: Any of the selected subjects (e.g. Math OR Science) All of the selected subjects (e.g. Math AND Science)

<input type="checkbox"/> Chemistry, Physical And Theoretical	<input type="checkbox"/> Textbooks	<input type="checkbox"/> Problems, Exercises, Etc	<input type="checkbox"/> Chemistry	<input type="checkbox"/> Congresses	<input type="checkbox"/> Study And Teaching (Higher)
<input type="checkbox"/> Mathematics	<input type="checkbox"/> United States	<input type="checkbox"/> Biography	<input type="checkbox"/> Chemistry, Organic	<input type="checkbox"/> Study And Teaching	<input type="checkbox"/> Physics
<input type="checkbox"/> History	<input type="checkbox"/> Electrochemistry	<input type="checkbox"/> Materials Science			

Showing 1 - 20 of 19,179 documents


View: Short Medium Long
Sort results by: Relevance | [Title](#) | [Contributor](#) | [Publisher](#) | [Date](#)



[Physical Chemistry, Volume III](#)
Author: [Gurtu, J.N.](#), [Gurtu, Aayushi](#)
Publisher: [Global Media](#)
Original Publication Date: 2008
Subjects: [Chemistry, Physical and theoretical.](#)



[Physical Chemistry, Volume I](#)
Author: [Gurtu, J.N.](#), [Khera, H.C.](#)
Publisher: [Global Media](#)
Original Publication Date: 2010
Subjects: [Chemistry, Physical and theoretical.](#)

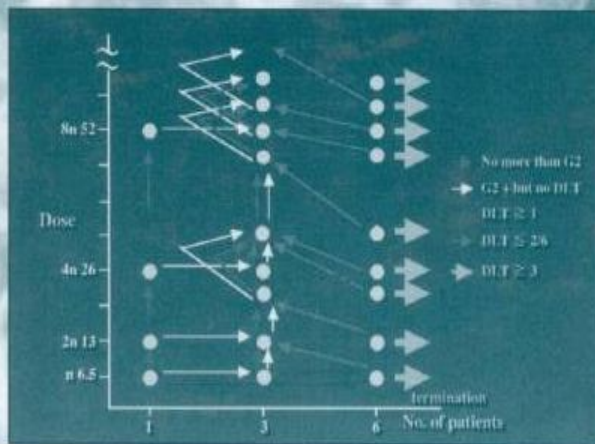


[Physical Chemistry, Volume 2](#)
Author: [Singh, N.B.](#), [Das, S.S.](#), [Singh, A.K.](#)
Publisher: [New Age International](#)
Original Publication Date: 2009
Subjects: [Chemistry, Physical and theoretical.](#) [Chemistry.](#)

Simple Search: Search ebrary [Advanced](#) [All Subjects](#)

InfoTools Download [ebrary Reader](#) Page 1 (1 of 470)

BIOMEDICAL POLYMERS AND POLYMER THERAPEUTICS



TOC NOTES(0)

Search Document [Add to My Bookshelf](#) Highlight Search Terms

Contents

Contents

PART 1. BIOMEDICAL POLYMERS AND POLYMER THERAPEUTICS

Chapter 1

MOLECULAR DESIGN OF BIODEGRADABLE DEXTRAN HYDROGELS FOR THE CONTROLLED RELEASE OF PROTEINS

W.E. Hennink, J.A. Cadée, S.J. de Jong, O. Franssen, R.J.H. Stenekes, H. Talsma, and W.N.E. van Kijk-Wolthuis

- | | |
|---|----|
| 1. Introduction | 3 |
| 2. Protein Release From Non-Degrading Dextran Hydrogels | 4 |
| 3. Protein Release From Enzymatically Degrading Dextran Hydrogels | 7 |
| 4. Protein Release From Chemically Degrading Dextran Hydrogels | 8 |
| 5. Protein Release From Degrading Dextran Microspheres | 13 |
| 6. In Vivo Biocompatibility of Dextran Based Hydrogels | 15 |
| 7. Conclusion | 16 |

Chapter 2

BIODEGRADABLE NANOSPHERES: THERAPEUTIC APPLICATIONS

Jasmine Davda, Sinjan De, Wenzhong Zhou, and Vinod Labhasetwar

- | | |
|-----------------|----|
| 1. Introduction | 19 |
|-----------------|----|

Biomedical Polymers and Polymer Therapeutics

Chiellini, Emo

Pages: 470

Publisher: Kluwer Academic Publishers

Location: Hingham, MA, USA

Date Published: 06/2001

Language: en



Contents

Notes

Highlights

Contents

PART 1. BIOMEDICAL POLYMERS AND POLYMER THERAPEUTICS

Chapter 1

MOLECULAR DESIGN OF BIODEGRADABLE DEXTRAN HYDROGELS FOR THE CONTROLLED RELEASE OF PROTEINS

W.E. Hennink, J.A. Cadée, S.J. de Jong, O. Franssen, R.J.H. Stenekes, H.

Contents xvii

Philip R. Dash and Leonard W. Seymour

- | | |
|--|-----|
| 1. Introduction | 341 |
| 2. Potential Disease Targets for Gene Therapy | 343 |
| 3. Clinical Trials of Gene Therapy | 346 |
| 4. Viral Gene Delivery Systems | 348 |
| 5. Non-Viral Gene Delivery Systems | 351 |
| 6. Polymer-Based Non-Viral Gene Delivery Systems | 355 |

Chapter 27

**HIGH-MOLECULAR WEIGHT POLYETHYLENE GLYCOLS
CONJUGATED TO ANTISENSE OLIGONUCLEOTIDES**

Gian Maria Bonora

- | | |
|--|-----|
| 1. Introduction | 371 |
| 2. Polymer-Conjugated Oligonucleotides | 373 |

Define

Explain

Locate

Translate

Who

Search Document...

Search All Documents...

Search Web

Highlight

Add To Bookshelf

Copy Text...

Copy Bookmark

Print...

Print Again

Toggle Automenu

Preferences...

Help...

About ebrary Reader...

Philip R. Dash and Leonard W. Seymour

343

POTENTIAL DISEASE TARGETS FOR GENE THERAPY

1.1 Gene therapy of inherited genetic diseases

The replacement of inherited defective genes is, perhaps, the most obvious use of gene therapy. The aim of replacement gene therapy is to replace a missing or defective gene that is responsible for the disease in order to restore normal function. The ultimate aim is the permanent correction of the disorder, possibly by integration of the gene into stem cells. A major limitation to this type of treatment is the problem of gaining access to the relevant tissues. For this reason, the early gene replacement strategies have focused on readily accessible tissue such as muscle, lung, blood and bone marrow³.

Blood cells and bone marrow are associated with a number of relatively

Define
Explain
Locate
Translate
Who

Search Document...
Search All Documents...
Search Web

Highlight
Add To Bookshelf

Copy Text...
Copy Bookmark
Print...
Print Again

Toggle Automenu

Preferences...
Help...
About ebrary Reader...

Philip R. Dash and Leonard W. Seymour

343

ESSENTIAL DISEASE TARGETS FOR GENE THERAPY

1.1 Gene therapy of inherited genetic diseases

The replacement of inherited defective genes is, perhaps, the most obvious use of gene therapy. The aim of replacement gene therapy is to replace a missing or defective gene that is responsible for the disease in order to restore normal function. The ultimate aim is the permanent correction of the disorder, possibly by integration of the gene into stem cells. A major limitation to this type of treatment is the problem of gaining access to the relevant tissues. For this reason, the early gene replacement strategies have focused on readily accessible tissue such as muscle, lung, blood and bone marrow³.

Blood cells and bone marrow are associated with a number of relatively

Notes	Page
ciljne bolesti	362

replace a missing or defective gene that is responsible for the disease in order to restore normal function. The ultimate aim is the permanent correction of the disorder, possibly by integration of the gene into stem cells. A major limitation to this type of treatment is the problem of gaining access to the relevant tissues. For this reason, the early gene replacement strategies have focused on readily accessible tissue such as muscle, lung, blood and bone marrow³.

Blood cells and bone marrow are associated with a number of relatively common genetic diseases and as such are a major target for gene therapy. Gene transfer into lymphocytes or haemopoietic stem cells potentially allows the treatment of a variety of diseases including immune deficiency disorders such as adenosine deaminase deficiency (ADA-SCID); storage disorders such as Gaucher's disease and haemoglobinopathies such as sickle cell anaemia and the thalassemys. The only clinical trials involving gene transfer into lymphocytes have been concerned with the correction of ADA-SCID, a very rare immune deficiency syndrome, and most work has concentrated on transfer of genes into stem cells¹.

Cystic fibrosis is the most common inherited genetic disease in Europe and the United States. A mutation in the cystic fibrosis transmembrane conductance regulator (CFTR) gene results in the production of an abnormal protein that does not properly control the flow of chloride ions across membranes. The major clinical manifestation of this disease is in the airway epithelia, resulting in chronic inflammation with subsequent damage to the lung tissue. The average life expectancy of patients with CF is around 30

ciljne bolesti

Delete Revert

User: antonio

Notes	Page
ciljne bolesti	362
ostala oboljenja	364

Gene therapy has the potential to be used in the treatment of almost any disease with a genetic component. There are a number of cardiovascular diseases that are under investigation for possible treatment with gene therapy. For example, familial hypercholesterolaemia might be treated by transferring the gene encoding for the low density lipoprotein receptor into hepatocytes in order to reduce the level of serum cholesterol¹⁰⁻¹². Other strategies for the gene therapy of cardiovascular disease include inhibiting smooth muscle cell proliferation, that might lead to stenosis, following balloon angioplasty^{13,14} and stimulation of vascular growth to overcome ischaemia¹⁰.

Other diseases that have been investigated for possible treatment with gene therapy include AIDS^{1,15}, neurodegenerative diseases such as Alzheimer's and Parkinson's¹⁶, traumatic nerve injury¹⁷ and autoimmune diseases^{1,18}.

ostala oboljenja

Delete

Revert

User: antonic

Contents	Notes	Highlights
Notes	Page	
ciljne bolesti	362	
ostala oboljenja	364	

ostala oboljenja

Delete Revert

InfoTools

Define

Explain

Locate

Translate

Who

Search Document...

Search All Documents...

Search Web

Highlight

Add To Bookshelf

Copy Text...

Copy Bookmark

Print...

Print Again

Toggle Automenu

Preferences...

Help...

About ebrary Reader...

Gene therapy has the potential to be used in the treatment of almost any disease with a genetic component. There are a number of cardiovascular diseases that are under investigation for possible treatment with gene therapy. For example, familial hypercholesterolaemia might be treated by transferring the gene encoding for the low density lipoprotein receptor into hepatocytes in order to reduce the level of serum cholesterol¹⁰⁻¹². Other strategies for the gene therapy of cardiovascular disease include inhibiting smooth muscle cell proliferation, that might lead to stenosis, following balloon angioplasty^{13,14} and stimulation of vascular growth to overcome atherosclerosis¹⁰.

Other diseases that have been investigated for possible treatment with gene therapy include AIDS^{1,15}, neurodegenerative diseases such as Alzheimer's and Parkinson's¹⁶, traumatic nerve injury¹⁷ and autoimmune diseases^{1,18}.

Notes	Page
ciljne bolesti	362
ostala oboljenja	364

ostala oboljenja

Delete Revert

Gene therapy has the potential to be used in the treatment of almost any disease with a genetic component. There are a number of cardiovascular diseases that are under investigation for possible treatment with gene therapy. For example, familial hypercholesterolaemia might be treated by transferring the gene encoding for the low density lipoprotein receptor into hepatocytes of serum cholesterol¹⁰⁻¹². Other cardiovascular disease include inhibiting smooth muscle growth to lead to stenosis, following balloon angioplasty. Other diseases such as Alzheimer's disease^{1,18} and autoimmune

Preferences ✖

Highlight Search Terms: Red Text

Highlight Text Links: Publisher Default

Highlight Graphic Links: Publisher Default

Display InfoTools menu after selecting

Citation Style: APA Select

Cancel
OK

Other diseases that have been investigated for possible treatment with gene therapy include AIDS 1,15 , neurodegenerative diseases such as Alzheimer's and Parkinson's 16 , traumatic nerve injury 17 and autoimmune diseases 1,18 .

Chiellini, Emo(Editor). (2001). *Biomedical Polymers and Polymer Therapeutics*.
Retrieved from <http://site.ebrary.com/lib/belgrade/Doc?id=10052981&ppg=364>.

Copyright © 2001. Kluwer Academic Publishers. All rights reserved.



Highlights	Page
Blood cells and ...	362
For this reason, ...	362
Gene Directed E...	363
Other diseases t...	364

InfoTools

- Define
- Explain
- Locate
- Translate
- Who
- Search Document...
- Search All Documents...
- Search Web
- Highlight
- Add To Bookshelf
- Copy Text...
- Copy Bookmark
- Print...
- Print Again
- Toggle Automenu
- Preferences...
- Help...
- About ebrary Reader...

of the gene therapy clinical trials .

There are numerous approaches to using gene therapy to treat cancer, and some of these are outlined below.

Immunotherapy. The immunotherapy approach to cancer gene therapy is one in which the immunogenicity of tumours is increased by causing the local production of immunomodulatory agents such as cytokines (interleukin-2 or granulocyte macrophage colony stimulating factor for example) or by increasing the level of MHC antigen expression⁷. Increasing the immunogenicity of tumours may then lead to an antitumour response. Because immunity is a systemic reaction, this immune reaction could potentially eliminate all the tumour cells in the body, including sites of metastatic deposit.

Gene Directed Enzyme Pro-drug Therapy (GDEPT). The introduction of genes that encode enzymes capable of converting pro-drugs to cytotoxic drugs is the basis of the GDEPT approach to cancer gene therapy. A relatively harmless pro-drug can be administered to a patient following the transfection of some tumour cells with genes encoding enzymes that will activate the pro-drug *in situ* to form a cytotoxic drug that will kill the tumour cell. This approach may be considered as using gene therapy to improve upon conventional chemotherapy. The local expression of an activating enzyme ensures that the peripheral toxicity often associated with chemotherapy is reduced. The use of a relatively harmless pro-drug ensures that high doses can be administered to the patient, resulting in high

Bookshelf (polica)

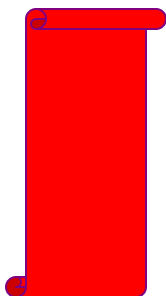
My Folders

Create folders to organize your documents and notes.

Unclassified Documents & Annotations

All Documents & Annotations

Add Folder



gauge



[Bible, Theology & Faith : A Study of Abraham & Jesus](#) ebrary Reader

The scholarly study of the Bible is a difficult discipline. Many

bitno

To be sure, Jews and Christians have substantial disagreements (both between

For that could leave people still in the position of the

podela

or novelists or filmmakers who imaginatively interpret the text. Nor does

zakljucak

and



[Biomedical Polymers and Polymer Therapeutics](#) ebrary Reader

For this reason, the early gene replacement strategies have focused on

Blood cells and bone marrow are associated with a number of

ciljne bolesti



Other diseases that have been investigated for possible treatment with gene

ostala oboljenja

Gene Directed Enzyme Pro-drug Therapy (GDEPT). The introduction of genes that



[Cancer Gene Therapy : Past Achievements and Future Challenges](#) ebrary Reader

Apart from IL-2 and IL-12, a...

IL2



[Concise Handbook of Human Anatomy](#) ebrary Reader



[Creative Guide to Research : How to Find What You Need... Online or Offline](#) ebrary Reader

Bookshelf (polica)

Biomedical Polymers and Polymer Therapeutics - Windows Internet Explorer

http://site.ebrary.com/lib/belgrade/edf.action?p00=&docID=10052981&page=362

Notes	Page
ciljne bolesti	362
ostala oboljenja	364

InfoTools

Page 362 of 470

replace a missing or defective gene that is responsible for the disease in order to restore normal function. The ultimate aim is the permanent correction of the disorder, possibly by integration of the gene into stem cells. A major limitation to this type of treatment is the problem of gaining access to the relevant tissues. For this reason, the early gene replacement strategies have focused on readily accessible tissue such as muscle, lung, blood and bone marrow³.

Blood cells and bone marrow are associated with a number of relatively common genetic diseases and as such are a major target for gene therapy. Gene transfer into lymphocytes or haemopoietic stem cells potentially allows the treatment of a variety of diseases including immune deficiency disorders such as adenosine deaminase deficiency (ADA-SCID); storage disorders such as Gaucher's disease and haemoglobinopathies such as sickle cell anaemia and the thalassemias. The only clinical trials involving gene transfer into lymphocytes have been concerned with the correction of ADA-SCID, a very rare immune deficiency syndrome, and most work has concentrated on transfer of genes into stem cells¹.

Cystic fibrosis is the most common inherited genetic disease in Europe and the United States. A mutation in the cystic fibrosis transmembrane conductance regulator (CFTR) gene results in the production of an abnormal protein that does not properly control the flow of chloride ions across membranes. The major clinical manifestation of this disease is in the airway epithelia, resulting in chronic inflammation with subsequent damage to the lung tissue. The average life expectancy of patients with CF is around 30

ciljne bolesti

Delete Revert

User: antonic