

AI Powered Discovery: How LibKey is Enabling Next Generation Research Assistants

Kendall Bartsch
CEO | Co-founder
Third Iron, LLC
kendall@thirdiron.com





INSTALLED IN
2,000+
libraries

USED IN
35+
countries

An abstract digital background with a dark blue gradient. It features numerous glowing orange and yellow particles of varying sizes, some with trails, resembling stars or data points. A faint grid pattern is visible in the background, suggesting a digital or networked environment.

HIGHLY TRUSTED
99%
renewal rate

A laptop computer is shown from a top-down perspective. The screen is dark blue and displays a bright orange and yellow logo that looks like a stylized flame or a swirl. The laptop is positioned on a large, dynamic orange graphic that features swirling, flame-like patterns.

COMPANY FOCUS

LibKey intelligent access



Article level
data

+



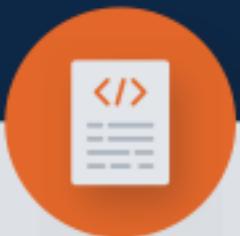
Real-time
intelligent
link-building

=



**Fastest,
most reliable,
informed linking**

Article level intelligence



Article metadata



Library entitlements



Authentication



Open Access Availability



Aggregator availability



Available versions



Available formats



Scholarly integrity

The “best source”



Real time analysis of
all available sources



Use AI expert system to
determine the “best source”



Best source versus all sources approach
improves overall linking reliability



OA VoR



Subscribed
Journal Publisher



Subscribed
Journal Aggregator

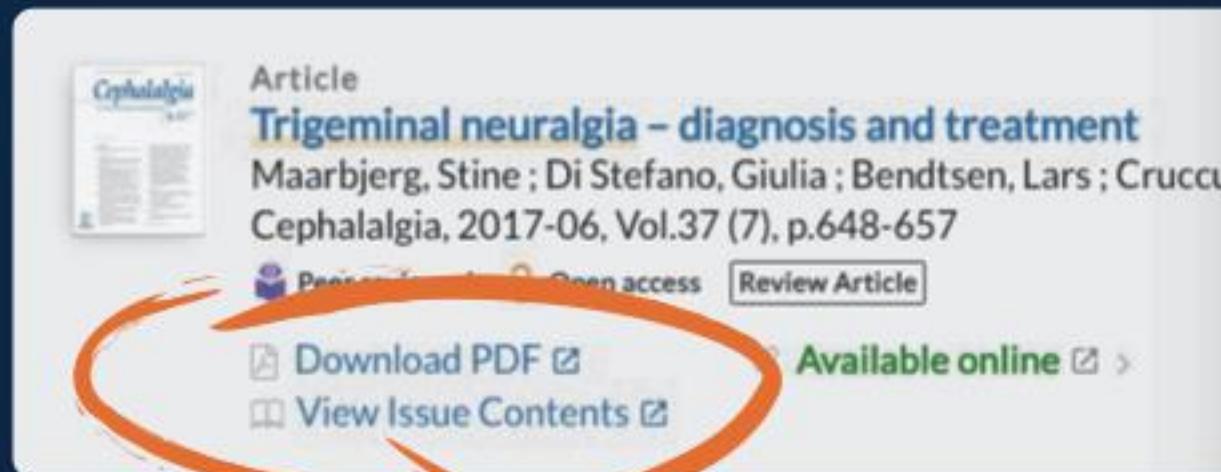


Accepted
Manuscripts



ILL/Document
Delivery

LibKey experience



Article

Trigeminal neuralgia – diagnosis and treatment

Maarbjerg, Stine ; Di Stefano, Giulia ; Bendtsen, Lars ; Cruccu, G.

Cephalgia, 2017-06, Vol.37 (7), p.648-657

Peer-reviewed Open access Review Article

Download PDF

View Issue Contents

Available online



Review

Trigeminal neuralgia – diagnosis and treatment

Stine Maarbjerg¹, Giulia Di Stefano², Lars Bendtsen¹ and Giorgio Cruccu³

Abstract

Introduction: Trigeminal neuralgia (TN) is characterized by touch-evoked unilateral brief shock-like paroxysmal pain in one or more divisions of the trigeminal nerve. In addition to the paroxysmal pain, some patients also have continuous pain. TN is divided into classical TN (CTN) and secondary TN (STN).

Etiology and pathophysiology: Demyelination of primary sensory trigeminal afferents in the root entry zone is the predominant pathophysiological mechanism. Most likely, demyelination paves the way for generation of ectopic impulses and epiphaptic cross talk. In a significant proportion of the patients, the demyelination is caused by a neurovascular conflict with morphological changes such as compression of the trigeminal root. However, there are also other unknown etiological factors, as only half of the CTN patients have morphological changes. STN is caused by multiple sclerosis or a space-occupying lesion affecting the trigeminal nerve.

Differential diagnosis and treatment: Important differential diagnoses include trigeminal autonomic cephalgias, posttraumatic or postherpetic pain and other facial pains. First line treatment is prophylactic medication with sodium channel blockers, and second line treatment is neurosurgical intervention.

Future perspectives: Future studies should focus on genetics, unexplored ecological factors, sensory function, the neurosurgical outcome and complications, combination and neuromodulation treatment as well as development of new drugs with better tolerability.

Keywords: trigeminal neuralgia, diagnosis, treatment, ICHD-3 criteria, guidelines, treatment, etiology, pathophysiology

Date received: 12 August 2014; revised: 21 November 2014; accepted: 7 December 2014

Definition

According to the beta version of the 3rd edition of the International Classification of Headache Disorders (ICHD-3 Beta) (1) (Table 1), trigeminal neuralgia (TN) is defined by recurrent unilateral brief electric shock-like pain that is abrupt in onset and termination. The pain is restricted to one or more of the trigeminal divisions and is triggered by innocuous sensory stimuli. TN is divided into either classical TN (CTN) or secondary TN (STN) caused by multiple sclerosis or a space-occupying lesion.

Symptomatology

In early descriptions of TN, the disorder was called tic dououreux (3), addressing the characteristic winter that TN patients may exhibit at a pain paroxysm; TN pain is not only extremely painful, it is also characteristic that the pain is sudden and unexpected, and short-lasting, hence the term *pain paroxysm*. The pain quality is stabbing, electrical shock-like, or shooting. Although one single

Open Web Searching

PubMed



WILEY



AI services and research tools

scite

Consensus

moara

Litmaps



keenious

Databases

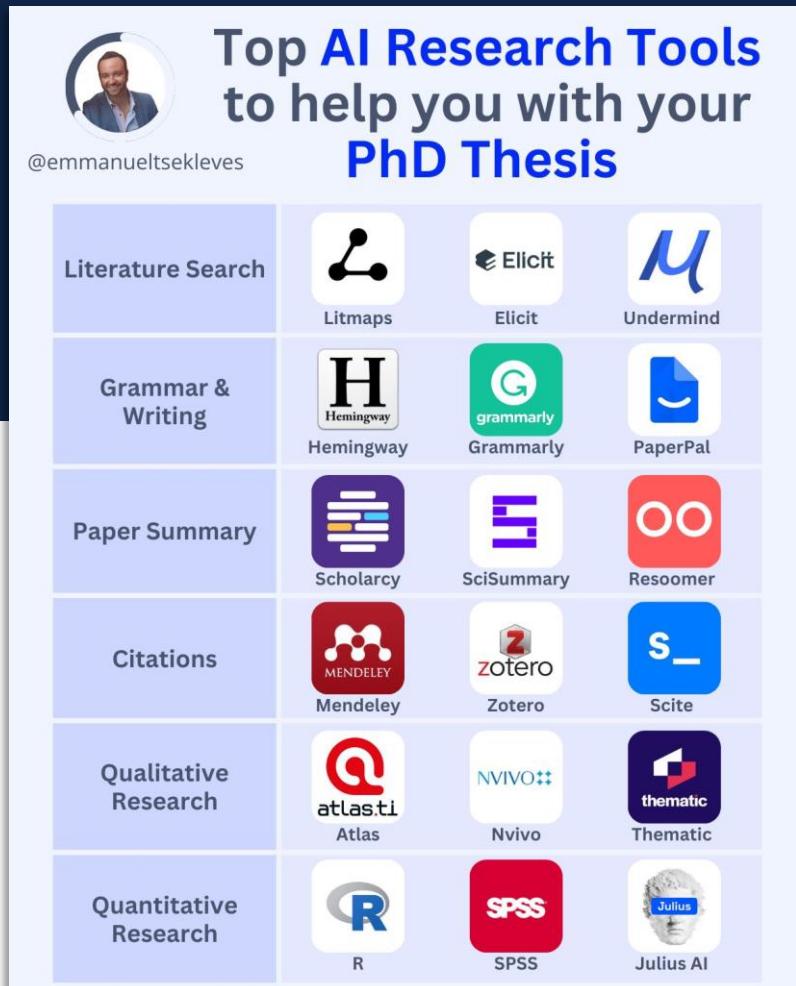
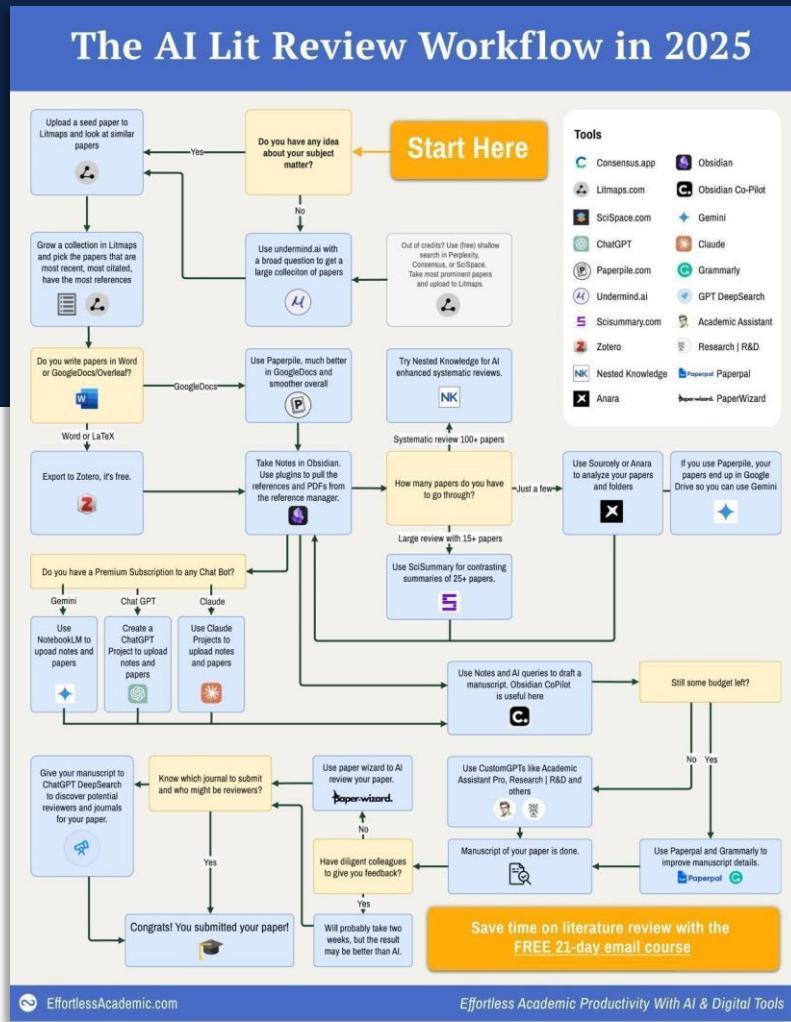


Discovery services

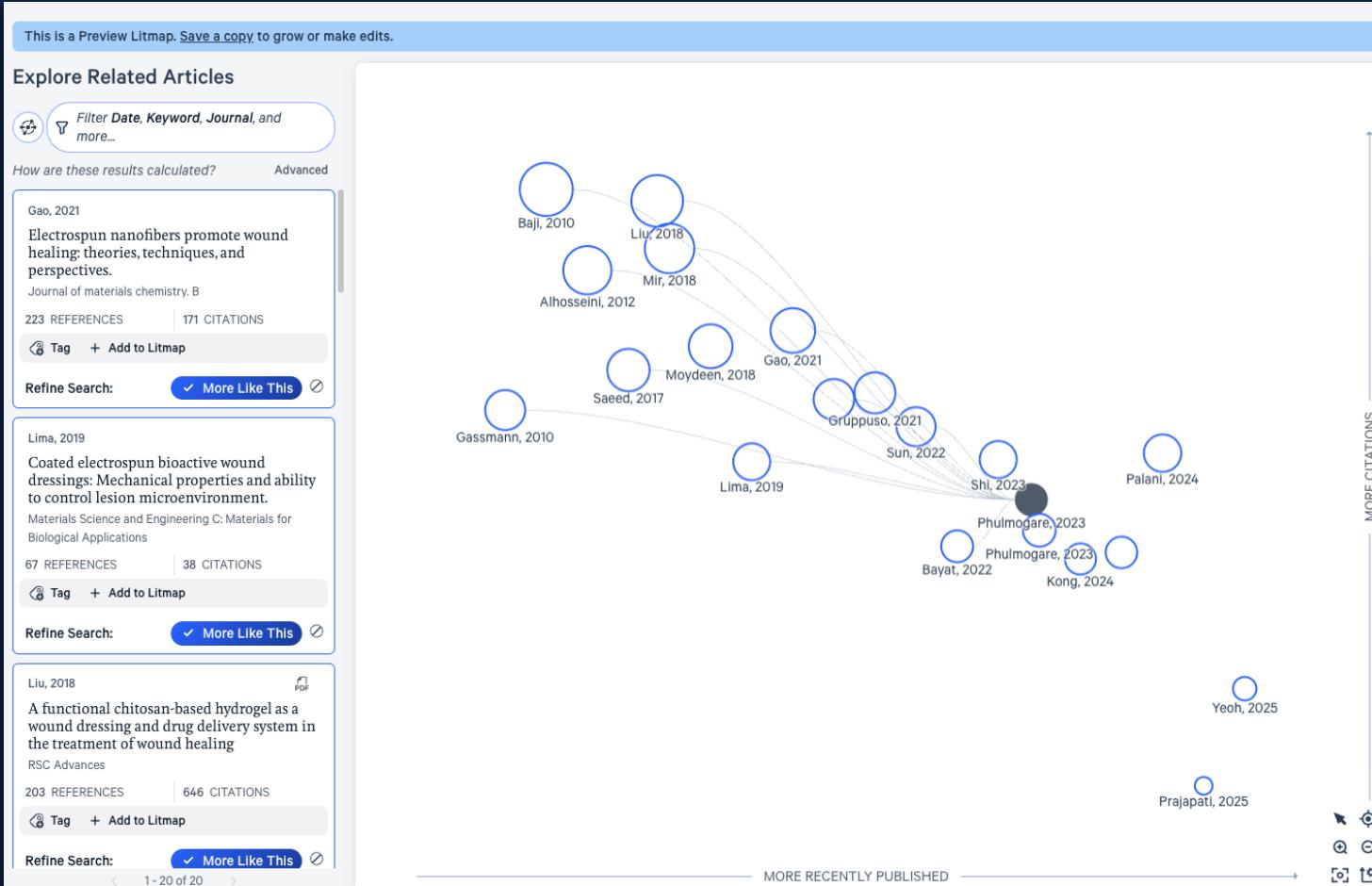
Primo



New AI research services



Litmaps



- Citation mapping service that visualizes citation networks to facilitate discovery, monitoring, organization and collaboration
- Launched 2021
- Raised \$1MM (to acquire Research Rabbit)
- "Used by 350,000+ researchers worldwide"



Consensus

- Evidence synthesis, summarizing current state of research
- Launched 2022
- Raised \$11.5MM
- "Over 5 million researchers, students, and clinicians trust Consensus"; "7 million users, web traffic has surpassed WoS and Scopus"

can electrospun dextran be used for wound healing?

60 Pro · 1 step · 8 sources

Yes, electrospun dextran-based nanofibers show strong potential for use in wound healing applications due to their biocompatibility, ability to promote cell proliferation, and antimicrobial properties.

Can electrospun dextran be used for wound healing? N = 7

60 Pro · 1 step · 8 sources

6 1 1 1 1 1 1

Yes 86% Possibly 14% Mixed 0% No 0%

All details ▾

Mechanisms and Benefits

Electrospun dextran, often blended with other polymers like polyvinyl alcohol (PVA) or polyurethane, forms nanofibrous scaffolds that mimic the extracellular matrix, supporting cell attachment and proliferation—key factors in wound healing. These scaffolds can be loaded with bioactive agents (e.g., antibiotics, growth factors) for controlled release, further enhancing healing and infection control 1 2 3 4 5 6.

Evidence from Research

- Enhanced Wound Closure: In vivo studies using PVA/dextran nanofibers loaded with fucoidan or antibiotics demonstrated significantly improved wound closure rates and prolonged bioactive agent availability at the wound site 1 2 2.
- Cell Proliferation and Antimicrobial Activity: Electrospun dextran-based nanofibers promote fibroblast proliferation and exhibit strong antimicrobial properties, especially when loaded with antibacterial drugs like ampicillin, tetracycline, or ciprofloxacin 2 4 6.
- Biocompatibility and Customization: Dextran-based nanofibers are cytocompatible, support neovascularization.

Ask a follow up...

60 Pro · 1 step · 8 sources

Filter ↑



Elicit

Recent Library Alerts PRO

Electrospun Dextran for Wound Healing

September 8, 2025

can electrospun dextran be used for wound healing?

Electrospun dextran-based scaffolds effectively promote wound healing in laboratory settings by enhancing fibroblast activity, cell proliferation, and wound closure mechanisms.

ABSTRACT

Electrospun dextran-based scaffolds were evaluated in three laboratory studies for wound healing. * One study using polyvinyl alcohol–dextran nanofibers with citric acid and sodium ampicillin reported that lower citric acid levels yielded the highest wound gap closure and increased human fibroblast proliferation, with higher citric acid concentrations enhancing scaffold mechanical and thermal stability and offering strong antimicrobial effects. * Another investigation with polyurethane–dextran nanofibers incorporating beta-estradiol supported cell proliferation and suggested potential for neovascularization, albeit with limited quantitative data. * A third study employing a dextran/poly(lactic-co-glycolic acid) scaffold found that dermal fibroblast viability, proliferation, migration, extracellular matrix deposition, and gel contraction improved alongside increased scaffold strength. *

These findings indicate that electrospun dextran composites activate key cellular and mechanical processes associated with wound healing in controlled laboratory settings. *

METHODS >

We analyzed 3 sources from an initial pool of 50, using 8 screening criteria. Each paper was reviewed for 5 key aspects that mattered most to the research question. [More on methods](#)

RESULTS

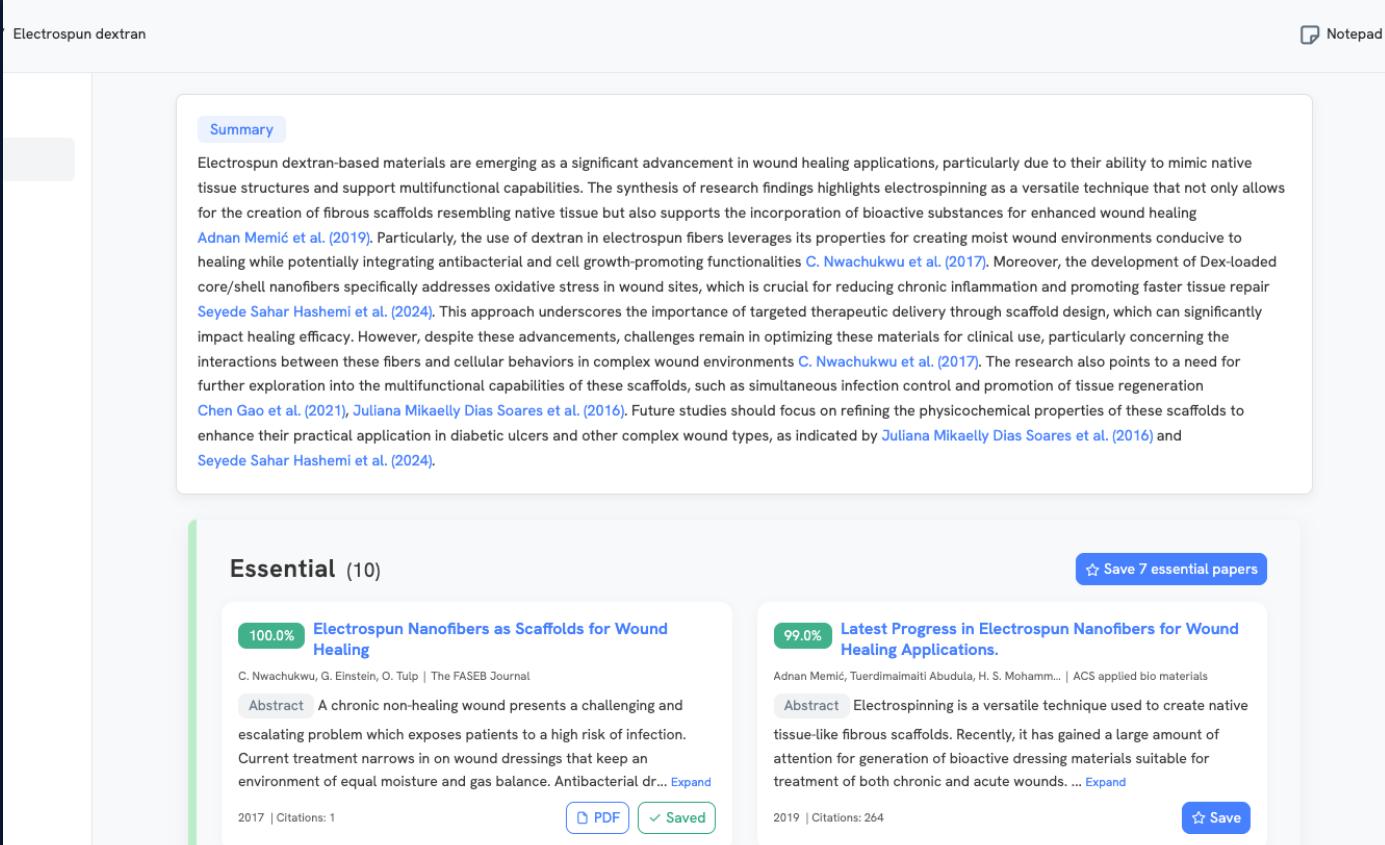
Characteristics of Included Studies

Study	Composite Material	Target Application	Assessment Methods	Key Outcomes
Kenawy et al., 2022	Polyvinyl alcohol (10%)–dextran (10%) nanofibers, citric acid (1–10%), sodium ampicillin *	Topical wound healing *	In vitro: human fibroblast (HFB-4) cells; cell viability (MTT) assay; wound gap closure; antimicrobial	Enhanced cell proliferation, accelerated wound closure, st antimicrobial activity, improved

- Tailored to systematic reviews and automated extraction - ideal for rigorous literature synthesis
- Launched 2023
- Raised \$22MM
- "Over 2 million researchers"

moara

- Highly integrated workflow tool, helping researchers from design, to discovery, to document creation
- Launched in 2025
- Undisclosed funding
- Promoting library “pilots” over number of users



The screenshot shows a search result for "Electrospun dextran" on the moara platform. The interface includes a "Notepad" icon in the top right corner. The main content area displays a "Summary" of the research, followed by a section titled "Essential (10)" containing two paper cards. The first card is for "Electrospun Nanofibers as Scaffolds for Wound Healing" by C. Nwachukwu, G. Einstein, and O. Tulp, published in The FASEB Journal. The second card is for "Latest Progress in Electrospun Nanofibers for Wound Healing Applications" by Adnan Memić, Tuerdimalaiti Abdula, and H. S. Mohamm... from ACS applied bio materials. Both cards include abstracts, publication details, and download/saving options.

Electrospun dextran

Notepad

Summary

Electrospun dextran-based materials are emerging as a significant advancement in wound healing applications, particularly due to their ability to mimic native tissue structures and support multifunctional capabilities. The synthesis of research findings highlights electrospinning as a versatile technique that not only allows for the creation of fibrous scaffolds resembling native tissue but also supports the incorporation of bioactive substances for enhanced wound healing [Adnan Memić et al. \(2019\)](#). Particularly, the use of dextran in electrospun fibers leverages its properties for creating moist wound environments conducive to healing while potentially integrating antibacterial and cell growth-promoting functionalities [C. Nwachukwu et al. \(2017\)](#). Moreover, the development of Dex-loaded core/shell nanofibers specifically addresses oxidative stress in wound sites, which is crucial for reducing chronic inflammation and promoting faster tissue repair [Seyede Sahar Hashemi et al. \(2024\)](#). This approach underscores the importance of targeted therapeutic delivery through scaffold design, which can significantly impact healing efficacy. However, despite these advancements, challenges remain in optimizing these materials for clinical use, particularly concerning the interactions between these fibers and cellular behaviors in complex wound environments [C. Nwachukwu et al. \(2017\)](#). The research also points to a need for further exploration into the multifunctional capabilities of these scaffolds, such as simultaneous infection control and promotion of tissue regeneration [Chen Gao et al. \(2021\)](#), [Juliana Mikaelly Dias Soares et al. \(2016\)](#). Future studies should focus on refining the physicochemical properties of these scaffolds to enhance their practical application in diabetic ulcers and other complex wound types, as indicated by [Juliana Mikaelly Dias Soares et al. \(2016\)](#) and [Seyede Sahar Hashemi et al. \(2024\)](#).

Essential (10)

100.0% [Electrospun Nanofibers as Scaffolds for Wound Healing](#)

C. Nwachukwu, G. Einstein, O. Tulp | The FASEB Journal

Abstract A chronic non-healing wound presents a challenging and escalating problem which exposes patients to a high risk of infection. Current treatment narrows in on wound dressings that keep an environment of equal moisture and gas balance. Antibacterial dr... [Expand](#)

2017 | Citations: 1 [PDF](#) [Saved](#)

99.0% [Latest Progress in Electrospun Nanofibers for Wound Healing Applications](#)

Adnan Memić, Tuerdimalaiti Abdula, H. S. Mohamm... | ACS applied bio materials

Abstract Electrospinning is a versatile technique used to create native tissue-like fibrous scaffolds. Recently, it has gained a large amount of attention for generation of bioactive dressing materials suitable for treatment of both chronic and acute wounds. ... [Expand](#)

2019 | Citations: 264 [Save](#)

ANSWER THIS

Answer

Can electrospun dextran be used for wound healing?

Used tools

Electrospun dextran—especially when used in combination with other polymers—shows significant promise as a material for wound healing applications.

To begin, electrospun polyvinyl alcohol-dextran (PVA-Dextran) nanofibrous scaffolds have been developed specifically for topical wound healing. These scaffolds demonstrate enhanced mechanical and thermal stability, wettability, and show a concentration-dependent ability to promote fibroblast proliferation, as well as notable antimicrobial activity. In vitro experiments show that wound closure rates are accelerated with these scaffolds compared to control samples, indicating their positive impact on wound healing processes^[1].

Dextran is a carbohydrate polymer, and electrospun nanofibers made from such biocompatible and biodegradable polymers have attracted notable interest for biomedical applications like wound dressings. These fibers can be engineered for drug delivery and loaded with antimicrobial or healing-promoting agents, making them highly adaptable for different wound types. Their high surface area-to-volume ratio and porosity mimic the extracellular matrix, supporting cell attachment and growth^[2].

Furthermore, electrospun nanofibers—including those made with dextran—can be designed to act as both cell-supportive scaffolds and vehicles for controlled release of bioactive compounds, supporting tissue regeneration and infection control^[3]. Several reviews emphasize the broad utility of carbohydrate-based electrospun fibers for advanced wound healing, including the ability of dextran-based materials to serve as scaffolds and drug-release platforms^{[4][5]}.

Supporting these findings, there are methods to produce dextran fibers capable of carrying bioactive agents such as antibiotics and hemostatics. For example, dextran fibers loaded with antibiotics have demonstrated the ability to suppress bacterial growth and support clot formation, which are crucial for complex wound environments^[6].

Ask follow up question

Sources for Q1 Can electrospun dextran be used for wound...

All PDF Search

Table View Sort Extract Data IEEE Export

Show 10 Bibliometric Analysis Saving to: Default project

Select papers to perform actions like Chat, Summarize, or Export.

Electrospun PVADextran Nanofibrous Scaffolds for Acceleration of Topical Wound Healing: Nanofiber Optimization, Characterization and In Vitro...

ElRefaie Kenawy, Elbadawy A. Kamoun, Ma... Springer Science+Business Media 2022-05-30
28 citations DOI

PDF Available

E. Kenawy et al., "Electrospun PVADextran Nanofibrous Scaffolds for Acceleration of Topical Wound Healing: Nanofiber Optimization, Characterization and In Vitro Assessment," Springer Science+Business Media, 2022. <https://doi.org/10.1007/s13369-022-06856-9>

Chat Save

Emerging applications of nanofibers electrospun from carbohydrate polymers

Nicole Angel, Songnan Li, Lingyan Kong Elsevier BV 2023-12-14 # 15 citations DOI

N. Angel, S. Li, L. Kong, "Emerging applications of nanofibers electrospun from carbohydrate polymers," Elsevier BV, 2023. <https://doi.org/10.1016/j.jfutfo.2023.11.001>

Save

Recent Advances in Electrospun Nanofibers for Wound Healing

medicine 2017-05-18 # 366 citations

PDF Available

- AI assistant for research; finds and summarizes papers, helps identify research gaps, organizes findings
- Launched in 2025
- Part of the RIoT Accelerator Program
- "Trusted by over 100,000+ researchers"

Summary of new services

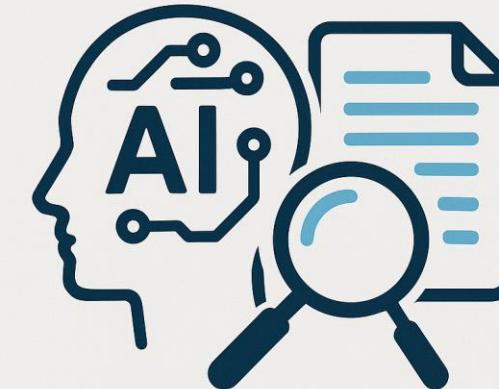
Emergent and evolving

Funded

Have both B2C and B2B revenue models

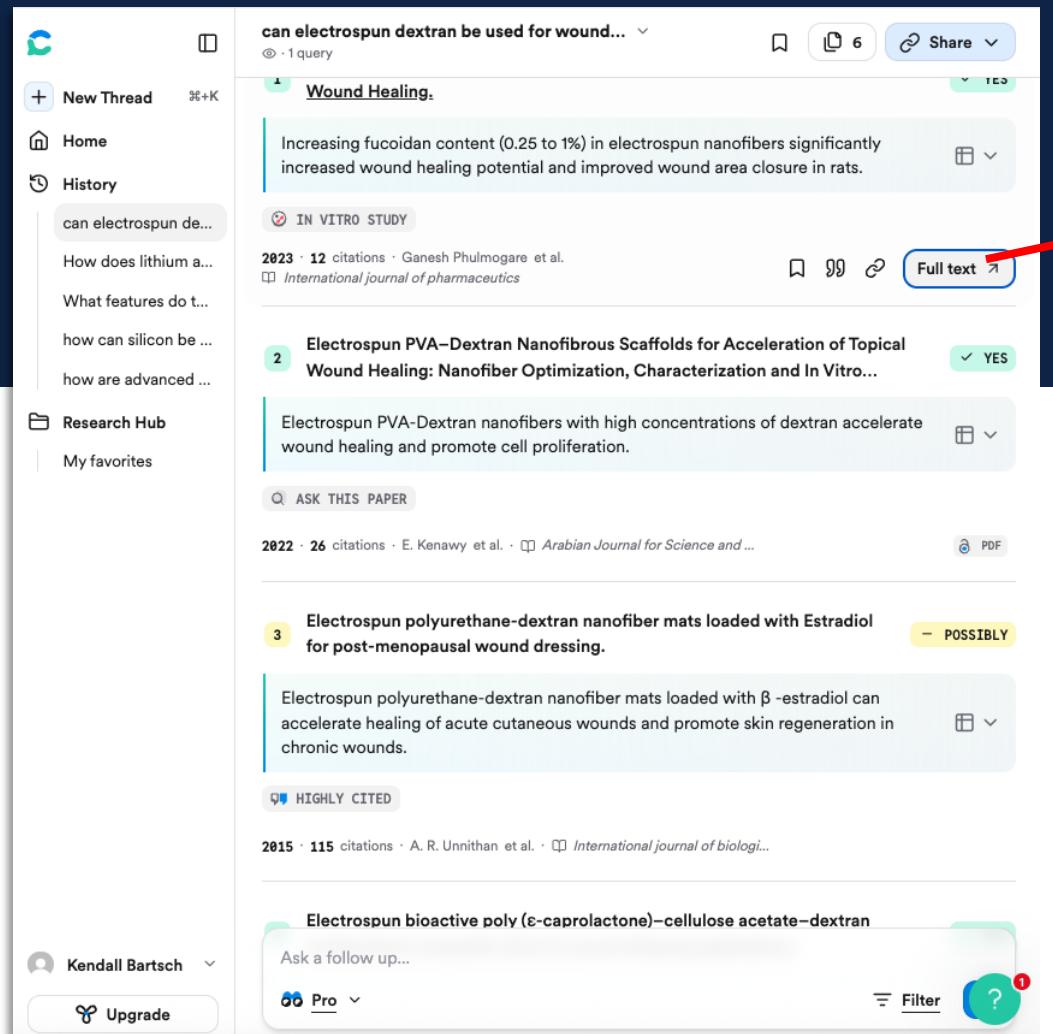
Being used by lots of researchers

Primarily use DOIs to connect to full text



AI RESEARCH

Uncertainty of access



can electrospun dextran be used for wound... · 1 query

Wound Healing.

Increasing fucoidan content (0.25 to 1%) in electrospun nanofibers significantly increased wound healing potential and improved wound area closure in rats.

IN VITRO STUDY

2023 · 12 citations · Ganesh Phulmogare et al. · International journal of pharmaceutics

Full text

Electrospun PVA–Dextran Nanofibrous Scaffolds for Acceleration of Topical Wound Healing: Nanofiber Optimization, Characterization and In Vitro...

YES

Electrospun PVA-Dextran nanofibers with high concentrations of dextran accelerate wound healing and promote cell proliferation.

ASK THIS PAPER

2022 · 26 citations · E. Kenawy et al. · Arabian Journal for Science and...

PDF

Electrospun polyurethane-dextran nanofiber mats loaded with Estradiol for post-menopausal wound dressing.

POSSIBLY

Electrospun polyurethane-dextran nanofiber mats loaded with β -estradiol can accelerate healing of acute cutaneous wounds and promote skin regeneration in chronic wounds.

HIGHLY CITED

2015 · 115 citations · A. R. Unnithan et al. · International journal of biologi...

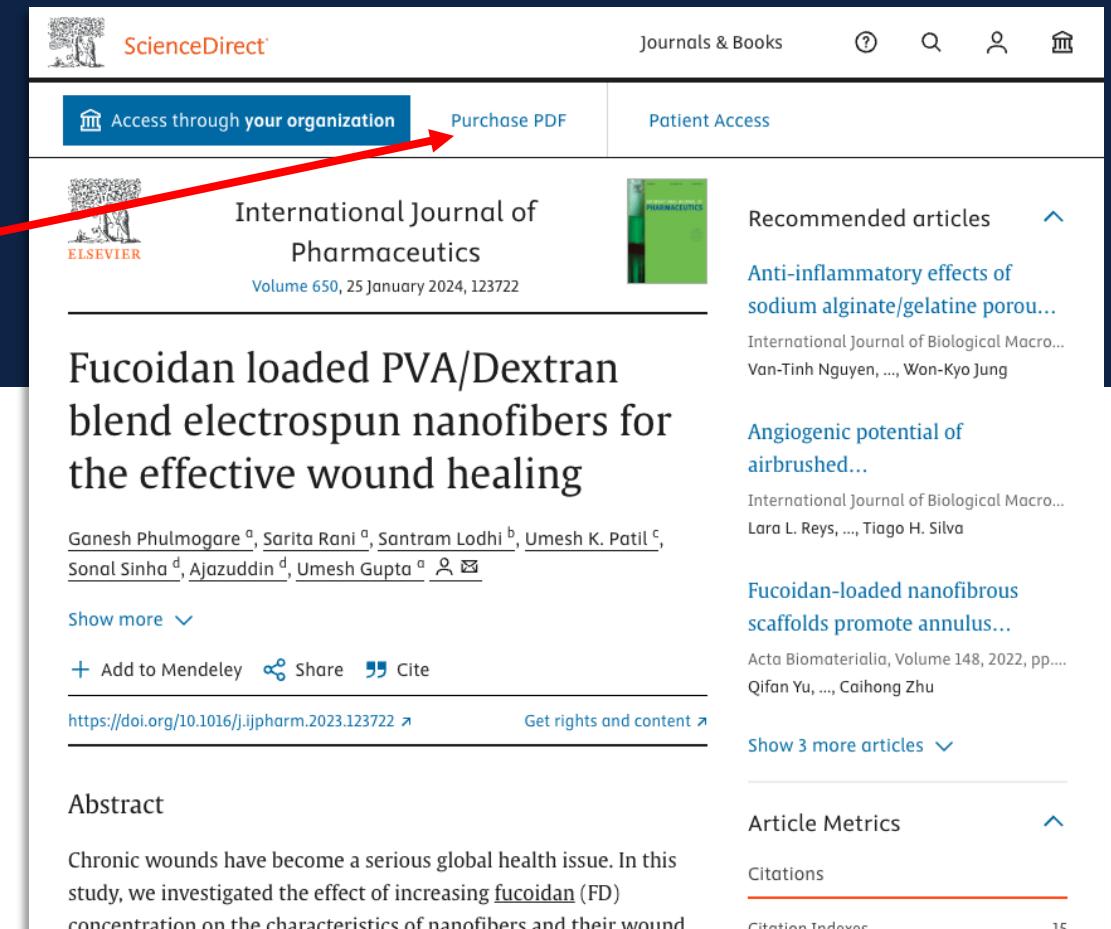
Electrospun bioactive poly (ϵ -caprolactone)-cellulose acetate-dextran

Ask a follow up...

Pro

Filter

?



ScienceDirect

Journals & Books

Access through your organization

Purchase PDF

Patient Access

International Journal of Pharmaceutics

Volume 650, 25 January 2024, 123722

Fucoidan loaded PVA/Dextran blend electrospun nanofibers for the effective wound healing

Ganesh Phulmogare ^a, Sarita Rani ^a, Santram Lodhi ^b, Umesh K. Patil ^c, Sonal Sinha ^d, Ajazuddin ^d, Umesh Gupta ^a  

Show more

Add to Mendeley Share Cite

<https://doi.org/10.1016/j.ijpharm.2023.123722> Get rights and content

Show 3 more articles

Abstract

Chronic wounds have become a serious global health issue. In this study, we investigated the effect of increasing fucoidan (FD) concentration on the characteristics of nanofibers and their wound

Article Metrics

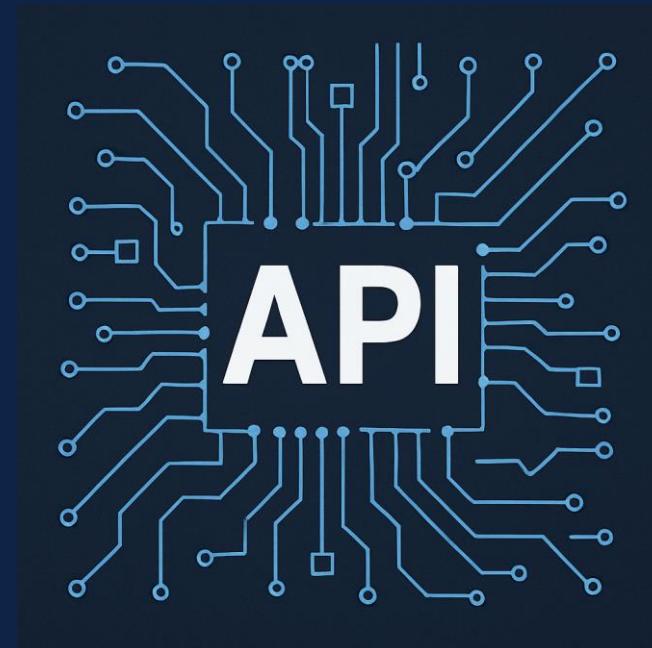
Citations

Citation Indexes

15

LibKey: integrating Library Holdings and full-text access into AI Services

- New services are using LibKey to understand awareness of holdings and connect their users to library collections
- LibKey's patented signposting API helps researchers understand what experience to expect when retrieving full text as well as see article status (retraction, expression of concern, etc. in real time)
- Completes the research process with easy access to full text (publisher, aggregator, ILL and document delivery)
- Free for platforms to use, included with LibKey access for libraries



LibKey API logic

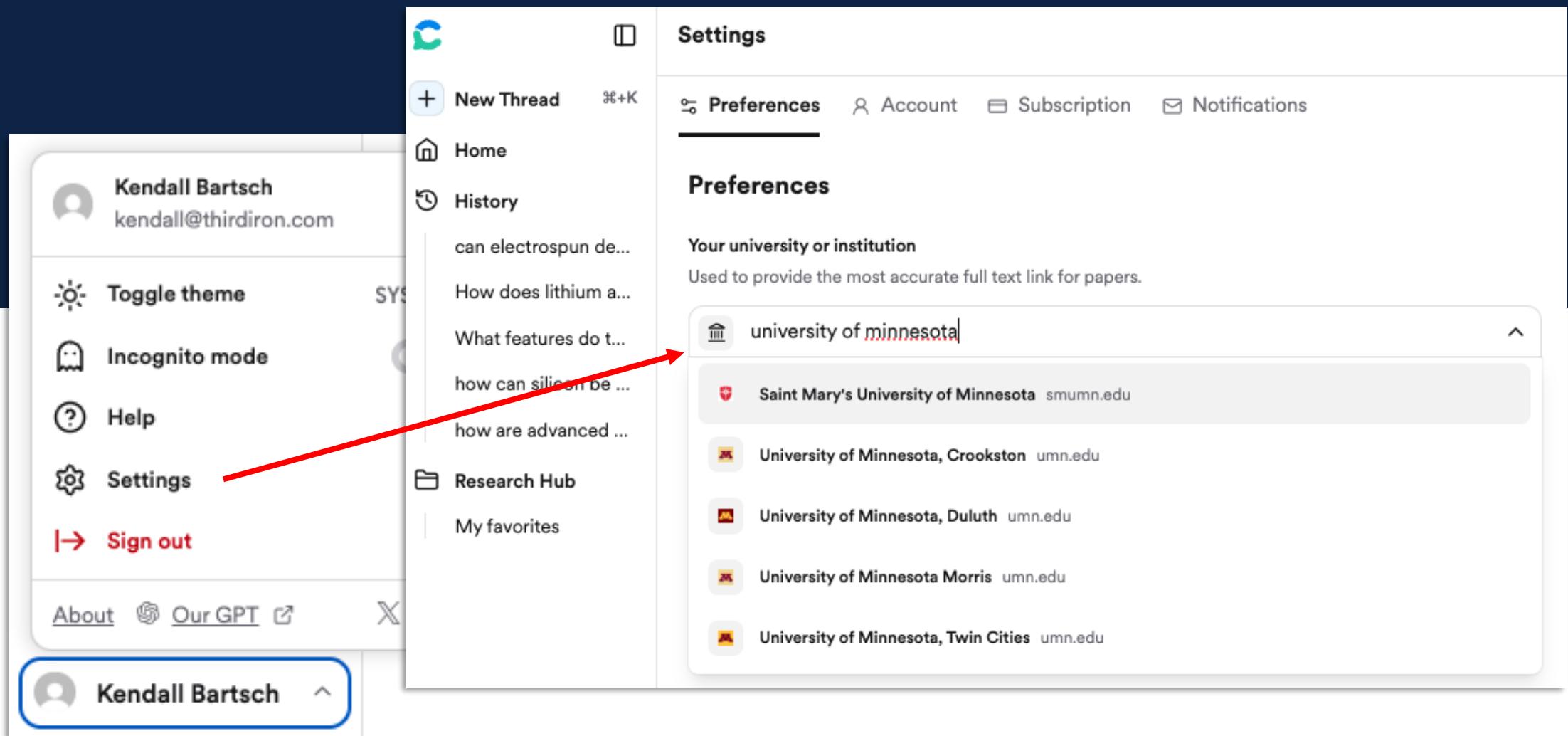
Article Lookup

- Issue a GET request to the Third Iron endpoint with:
 - DOI or PMID
 - Library ID
 - API key
- LibKey API returns:
 - “bestIntegratorLink” for the optimal URL for accessing the article
 - Open Access Status
 - Retraction status

Library List Endpoint

- Provides a real-time catalog of all LibKey libraries

User affiliation in AI services



The image shows a user interface for an AI service. On the left, a sidebar menu includes options like 'Toggle theme', 'Incognito mode', 'Help', 'Settings' (which is highlighted with a red arrow), and 'Sign out'. The main area is a 'Settings' page with tabs for 'Preferences', 'Account', 'Subscription', and 'Notifications'. The 'Preferences' tab is active. A search bar shows the text 'university of minnesota'. Below the search bar is a list of five universities, each with a small logo and a link to their website (e.g., smumn.edu, umn.edu, umn.edu, umn.edu, umn.edu).

Preferences

Your university or institution
Used to provide the most accurate full text link for papers.

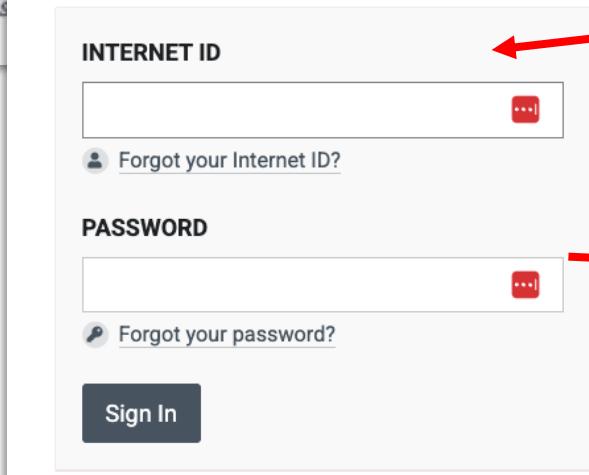
- university of minnesota
- Saint Mary's University of Minnesota smumn.edu
- University of Minnesota, Crookston umn.edu
- University of Minnesota, Duluth umn.edu
- University of Minnesota Morris umn.edu
- University of Minnesota, Twin Cities umn.edu

LibKey integration experience

4 **Electrospun bioactive poly (ε-caprolactone)-cellulose acetate-dextran antibacterial composite mats for wound dressing applications**

Electrospun dextran composite mats with tetracycline hydrochloride improve cell proliferation, blood clotting ability, and coagulation.  **UNIVERSITY OF MINNESOTA**
Driven to Discover®

 **CrossMark**

 **Sign In**

INTERNET ID  

PASSWORD 

Sign In

Contents lists available at [ScienceDirect](#)
Colloids and Surfaces A: Physicochemical and Engineering Aspects
journal homepage: [www.elsevier.com/locate/colsurfa](#) 

bioactive poly (ε-caprolactone)-cellulose dextran antibacterial composite mats for wound dressing ons

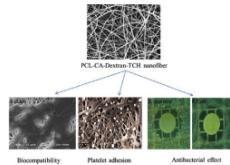
Afeesh Rajan Unnithan^a, Mahesh Kumar Joshi^a, Arjun Prasad Tiwari^b, Jool Hong^b, Chan-Hee Park^{a,c,*}, Cheol Sang Kim^{a,c,*}

^a Nano System Engineering, Chonbuk National University, Jeonju 561-756, Republic of Korea
^b Microbiology and Genetics, Medical School, Chonbuk National University, Jeonju 561-756, Republic of Korea
^c Division of Mechanical Design Engineering, Chonbuk National University, Jeonju 561-756, Republic of Korea

HIGHLIGHTS

- One step synthesis of PCL-CA-dextran-drug loaded nanofibers via electrospinning.
- Enhanced blood clotting and excellent platelet activation ability.
- Good bactericidal activity against both gram-positive and gram-negative bacteria.
- Scaffolds showed enhanced cell viability and infiltration.
- Applicable to most of the open wounds due to bactericidal activity.

GRAPHICAL ABSTRACT



Adds problematic article notification

4 **Electrospun bioactive poly (ϵ -caprolactone)-cellulose acetate–dextran anti-mats for wound dressing applications**

Electrospun dextran composite mats with tetracycline hydrochloride improve cell clotting ability, and cell attachment for wound dressing applications.

 IN VITRO STUDY  HIGHLY CITED

2015 · 127 citations · Nina Liao et al. ·  Colloids and Surfaces A: Physico...

ACCESS PROVIDED BY


UNIVERSITY OF MINNESOTA

[Not your organization?](#)

POWERED BY 

LibKey.io is a Third Iron technology supported by your library

 PDF

Article Contains Retracted Citations

RETRACTED: PREPARATION AND PERFORMANCE EVALUATION OF TETRACYCLINE HYDROCHLORIDE LOADED WOUND DRESSING MATS BASED ON ELECTROSPUN NANOFIBROUS...

Full Text Format Options:

DOWNLOAD PDF 

ARTICLE LINK 

Automatically remember format choice for 24 hours

Discover More:

VIEW ARTICLE IN CONTEXT 

See all content access options for this article 

LibKey integration benefits

Users

Instant full-text access

Streamlined workflow

Safeguards research integrity

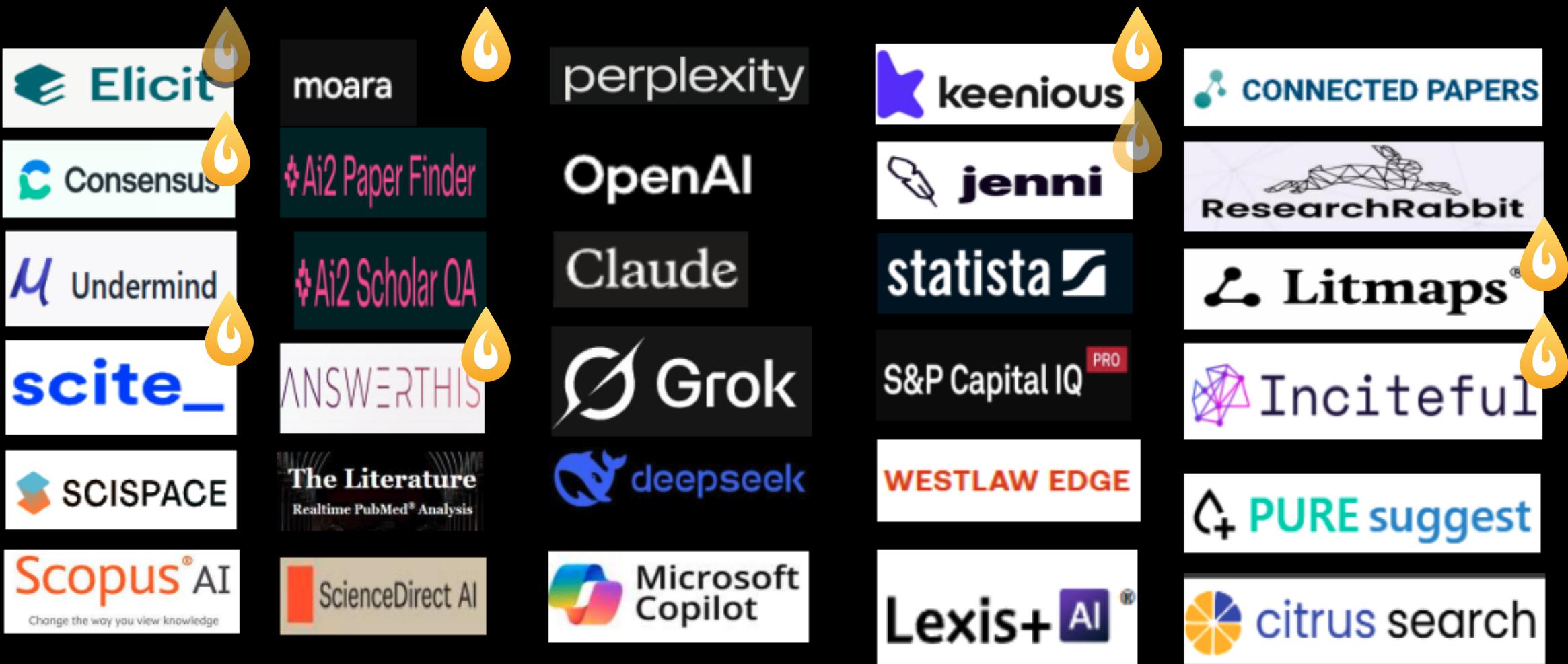
Libraries

Increased visibility of holdings and library services

Increased usage of library resources

Usage tracking and analytics*

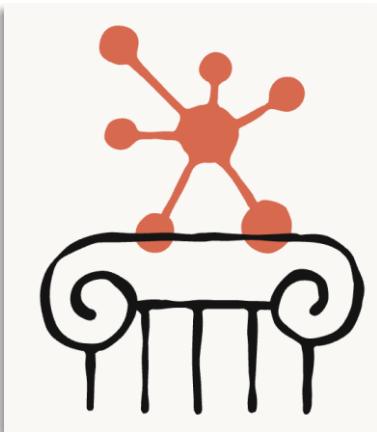
AI assisted Literature Review tools



Primo Research Assistant

My list of "innovative" literature review tools

Looking ahead



RESEARCH ARTICLE-CHEMISTRY

Electrospun PVA-Dextran Nanofibrous Scaffolds for Acceleration of Topical Wound Healing: Nanofiber Optimization, Characterization and In Vitro Assessment

El-Refaie S. Kenawy¹ · Elbadawy A. Kamoun^{2,3} · Mahmoud Serag Eldin¹ · Hesham M. A. Soliman⁴ · Shahira H. EL-Moslamy⁵ · Esmail M. El-Fakharany⁶ · Abdel-basset M. Shokr¹

Received: 6 September 2021 / Accepted: 29 March 2022 / Published online: 30 May 2022
© The Author(s) 2022

Abstract
Electrospun polyvinyl alcohol-dextran (PVA-Dex)-based nanofibers (NFs) are explored as a novel class of bioactive injury dressing materials, which have an essential role for topical injury mending. Sodium ampicillin-loaded citric acid-cross-linked PVA-Dex NFs were fabricated by electrospinning for wound recuperating purposes. Results revealed that PVA (10%)-dextran (10%) cross-linked with 5% citric acid (CA) was chosen as an optimized condition for obtaining non-beaded and morphologically accepted nanofibers. Altered concentrations of CA as cross-linker progressively enhanced significantly the mechanical/thermal stability and wettability-proof of NFs scaffolds, compared to un-cross-linked (PVA-Dex) scaffolds. Meanwhile, swelling (%), protein adsorption and released ampicillin of NFs decreased dramatically with the increase in the CA concentration, and conversely enhanced with increasing dextran concentrations. Interestingly, resultant PVA-Dex NFs with high concentrations of dextran promoted the proliferation of *HFB-4* cells in a high concentration-dependent manner and high antimicrobial activity behavior, compared to NFs containing high concentrations of CA cross-linker after 24 and 48 h of cell exposure. Notably, all fabricated NFs have remarked ability to accelerate the rate of *in vitro* wound gap closure (%) after treatment for 24 and 48 h, compared to control sample. However, reducing CA concentration in NFs showed the highest percentages of wound healing for scratched *HFB-4* cells with clear observed healing process.

Keywords PVA/dextran nanofiber · Electrospinning · Bioevaluation assessments

1 Introduction
A wound is an injury in which the dermal area is damaged, due to a cut or defected part. Generally, wounds are divided into two types, known as acute and chronic wounds. Chronic wounds display prolonged and abnormal inflammation, regular infections, presence of resistant microbial biofilms and failure of dermal and epidermal cells to return to repair stimuli. Acute wounds follow a predictable, well-controlled

Can Electrospun Dextran Be Used for

Summary Answer

Yes — electrospun dextran, either alone or blend, has promising potential for wound healing. Studies have shown its ability to promote cell proliferation and antimicrobial activity, and effectively support tissue regeneration.

Evidence from the Scientific Literature

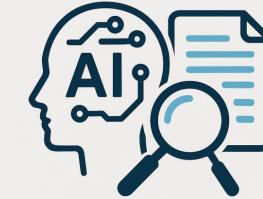
- Dextran's Inherent Wound-Healing Properties**
Dextran on its own has demonstrated the ability to promote wound healing in animal models, suggesting intrinsic therapeutic potential. Crosslinked dextran-based nanofibers have been identified as promising scaffolds in tissue engineering and drug delivery, with proven *in vivo* efficacy in rat wound models. [ScienceDirect](#)
- Key Advantages of Dextran in Wound Application**
As a biomacromolecule, dextran is valued for its **biocompatibility, biodegradability, low toxicity, and clinical safety profile**. These characteristics make it well-suited for wound dressing development.

LibKey



Integrating LibKey
into AI service
access infrastructure

Bridge to access



AI RESEARCH

- Enables users reliably connect with more Open Access content, especially that published in hybrid journals
- Helps preserve scholarly integrity
- Prevents the spread of misinformation
- Ensures reliable research output

Thank you!

Kendall Bartsch
CEO | Co-founder
Third Iron, LLC
kendall@thirdiron.com