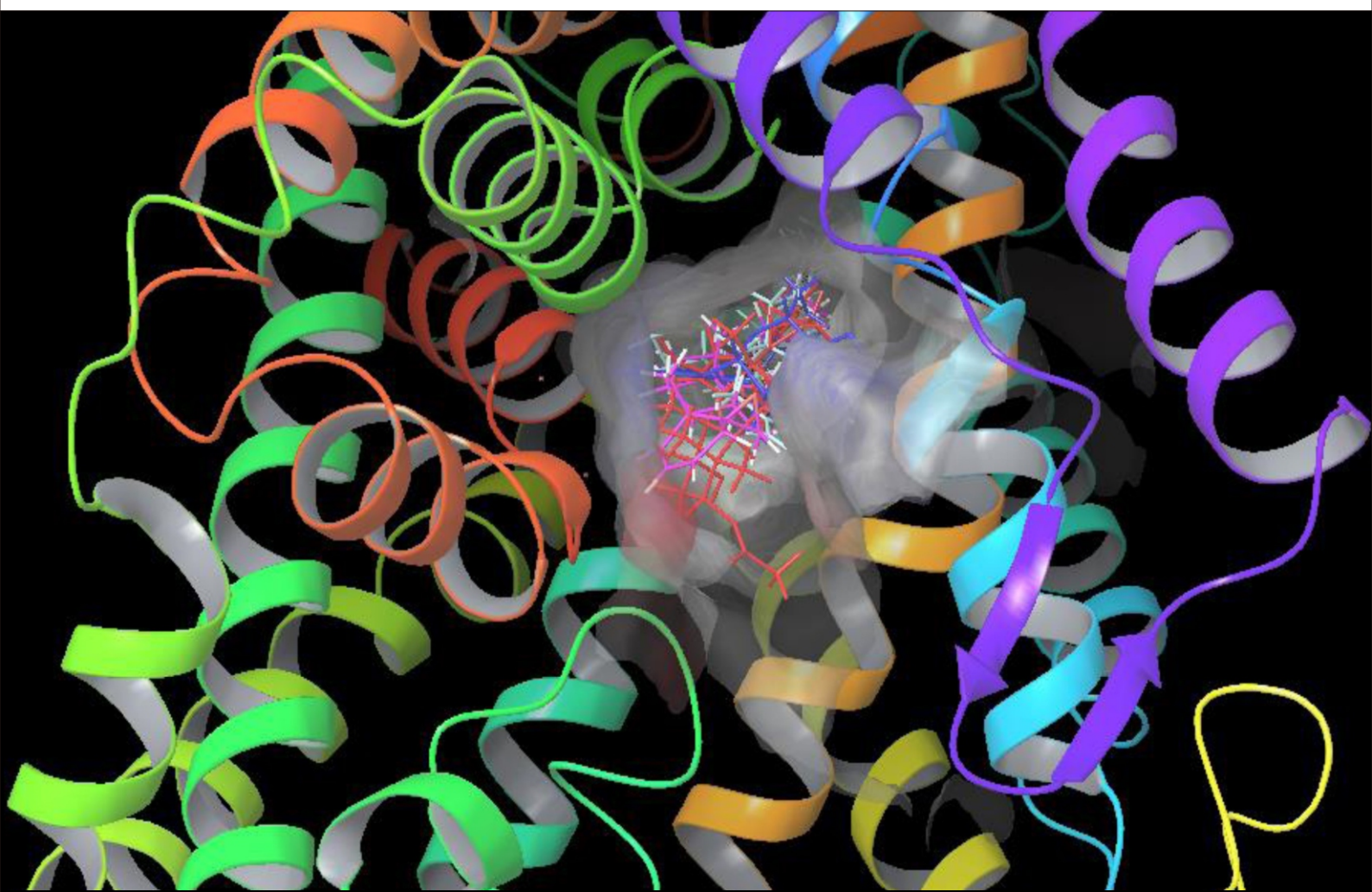


# Advances in Biological Chemistry



ISSN: 2162-2183



<https://www.scirp.org/journal/abc>

# Journal Editorial Board

ISSN 2162-2183 (Print) ISSN 2162-2191 (Online)

<https://www.scirp.org/journal/abc>

---

## Editor-in-Chief

Prof. Gary W. Black

Northumbria University, UK

## Editorial Board

Prof. Feng Wu Bai

Dalian University of Technology, China

Prof. Chi-Hin Cho

The Chinese University of Hong Kong, China

Dr. Madhu Dhar

University of Tennessee, USA

Dr. Nicolay Ivanov Dodoff

Bulgarian Academy of Sciences, Bulgaria

Prof. Asim K. Duttaroy

University of Oslo, Norway

Dr. Hani El-Nezami

University of Hong Kong, China

Dr. Prakash MMS Kinthada FRSC

Sree Vidyanikethan Engineering College, India

Dr. Purnachandra Nagaraju Ganji

Emory University, USA

Dr. Devrishi Goswami

The Scripps Research Institute, USA

Prof. Alireza Heidari

American International Standards Institute (AISI), Irvine, California, USA

Dr. Havard Jenssen

Roskilde University, Denmark

Dr. Alexander A. Konstantinov

Moscow State University, Russia

Dr. Jithesh Kottur

Icahn School of Medicine at Mount Sinai, USA

Dr. Shinichiro Kurosawa

Boston University, USA

Dr. David X. Liu

Pennsylvania State University College of Medicine, USA

Dr. Zixian Lu

Academy of State Administration of Grain, China

Dr. Peizhong Mao

Oregon Health & Science University (OHSU), USA

Dr. Monalisa Mukherjea

University of Pennsylvania, USA

Dr. Ali B. Naini

Columbia University Medical Center, USA

Dr. Moreno-Sánchez Rafael

Instituto Nacional de Cardiología, Mexico

Prof. Pogaku Ravindra

University Malaysia Sabah, Malaysia

Dr. David J. Riese II

Auburn University, USA

Prof. Arun Seth

Sunnybrook Health Sciences Centre, Canada

Dr. Mohammad Shahnawaz

University of Texas Health Science Center at Houston, USA

Prof. Akira Sugawara

Tohoku University Graduate School of Medicine, Japan

Prof. Pietro Volpe

University of Rome "Tor Vergata", Italy

Dr. Ling Shing Wong

INTI International University, Malaysia

Dr. Deyu Xie

North Carolina State University, USA

Dr. Tong Zhang

University of Hong Kong, China

# Table of Contents

**Volume 12    Number 6**

**December 2022**

<b>Effects of Inoculum Size of <i>Afifella marina</i> in the Bioprocessing of <i>Sargassum</i> spp. Meal</b>	
S. Al Azad, M. T. B. M. Lal.....	185
<b>Abnormalities of Serum Protein Fractions in Hemodialysis Patients with Chronic Renal Failure at Ouagadougou, Burkina Faso</b>	
A. Kouraogo, F. Soudre, A. Kiba, R. Karfo, O. Da, E. Zongo, E. Kabre, J. Sakande .....	196
<b>Superoxide Anion Release by Human Blood Phagocytes Can Increase the Microbicidal Activity Induced by a New Microemulsioned System Containing Cotton Oil</b>	
L. C. da Silva Ramos, A. H. F. Torres, L. D. L. Dalcin, K. P. G. Silva, L. G. S. de Freitas, M. Fujimori, D. L. G. Fagundes, E. L. França, A. C. H. França.....	207
<b><i>Desmarestia anceps</i> Montagne (Phaeophyceae) against Colorectal Cancer Cells: Cytotoxic Activity and Proapoptotic Effects</b>	
R. Frassini, D. Steffens, S. Moura, C. Aguzzoli, A. P. Martins, P. Colepicolo, M. T. Fujii, N. S. Yokoya, C. M. P. De Pereira, A. C. Phillipus, M. De Barcellos Falkenberg, J. A. P. Henriques, M. Roesch-Ely .....	228
<b>The Positive Effects of Proprietary Undenatured B-Glucans on Growing Pigs</b>	
B. Kristiansen, R. J. Amen .....	246
<b>Ionic Liquid Efficiency on Wood Dissolution and Polysaccharide Identification</b>	
I. Plazanet, C. Gady, S. Lhernould, R. Zerrouki, D. Montplaisir, G. Costa .....	254
<b>Antarctic Macroalgae <i>Palmaria decipiens</i> (Rhodophyta, Palmariales) Extracts Present Antioxidant and Antitumor Activity against Colorectal Cancer</b>	
M. D. Giustina, R. Frassini, S. Moura, F. J. Scariot, S. Echeverrigaray, V. S. Osaki, F. M. Pellizari, P. Colepicolo, J. A. P. Henriques, J. da Silva Crespo, M. Roesch-Ely.....	274
<b>Pesticide-Induced Alterations of Esterase and Antioxidant Enzymes of Aquatic Organisms <i>Oreochromis mossambicus</i> and <i>Xenopus laevis</i></b>	
R. Ndlovu, N. Basopo.....	292

## Advances in Biological Chemistry (ABC)

### Journal Information

#### SUBSCRIPTIONS

The *Advances in Biological Chemistry* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published bimonthly by Scientific Research Publishing, Inc., USA.

##### **Subscription rates:**

Print: \$79 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: [sub@scirp.org](mailto:sub@scirp.org)

#### SERVICES

##### **Advertisements**

Advertisement Sales Department, E-mail: [service@scirp.org](mailto:service@scirp.org)

##### **Reprints (minimum quantity 100 copies)**

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: [sub@scirp.org](mailto:sub@scirp.org)

#### COPYRIGHT

##### **Copyright and reuse rights for the front matter of the journal:**

Copyright © 2022 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

##### **Copyright for individual papers of the journal:**

Copyright © 2022 by author(s) and Scientific Research Publishing Inc.

##### **Reuse rights for individual papers:**

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

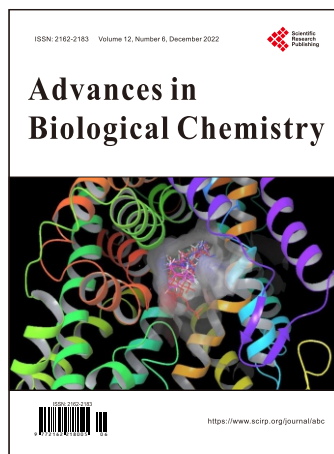
##### **Disclaimer of liability**

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

#### PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: [abc@scirp.org](mailto:abc@scirp.org)



# Advances in Biological Chemistry (ABC)

ISSN 2162-2183 (Print) ISSN 2162-2191 (Online)

<https://www.scirp.org/journal/abc>

**Advances in Biological Chemistry (ABC)** is an international journal dedicated to the latest advancement of Biological Chemistry. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of Biological Chemistry. All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- Animal and Human Biochemistry
- Applied Biochemistry and Biochemical Engineering
- Biocatalysis
- Biochemical Immunology
- Biochemical Methods
- Biochemical Pharmacology and Toxicology
- Biomolecular Spectroscopy
- Carbohydrate Biochemistry
- Computational Biochemistry and Biomolecular Modelling
- Enzymology
- Inorganic Biochemistry
- Lipid Biochemistry
- Medical Biochemistry
- Medicinal Chemistry
- Membrane Biochemistry
- Microbial Biochemistry
- Neurobiochemistry
- Nucleic Acids Biochemistry
- Peptide and Protein Biochemistry
- Plant Biochemistry
- Structural Bioinformatics
- Synthetic Biology

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

## Website and E-Mail

<https://www.scirp.org/journal/abc>

E-mail: [abc@scirp.org](mailto:abc@scirp.org)



## ***What is SCIRP?***

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

## ***What is Open Access?***

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



**Scientific  
Research  
Publishing**

**Website: <https://www.scirp.org>  
Subscription: [sub@scirp.org](mailto:sub@scirp.org)  
Advertisement: [service@scirp.org](mailto:service@scirp.org)**