Carotenoids as potential biocolorants: A case study of astaxanthin recovered from shrimp waste

By: Hatta, FAM (Hatta, Farah Ayuni Mohd)[1]; Othman, R (Othman, Rashidi)[1]

View Web of Science ResearcherID and ORCID

CAROTENOIDS: PROPERTIES, PROCESSING AND APPLICATIONS
Edited by: Galanakis, CM
Pages: 289-325
DOI: 10.1016/B978-0-12-817067-0.00009-9
Published: 2020
Document Type: Article; Book Chapter

Keywords:
KeyWords Plus: SUPERCRITICAL-FLUID EXTRACTION; PRESSURIZED SOLVENT-EXTRACTION; MARIGOLD TAGETES-ERECTA; ANTIOXIDANT ACTIVITY; BIOACTIVE COMPOUNDS; NATURAL PIGMENTS; COLOR STABILITY; P-BRASILIENSIS; HUMAN HEALTH; FOOD

Author Information
Reprint Address:
International Islamic University Malaysia
Int Islamic Univ Malaysia, Int Inst Halal Res & Training INHART, Herbarium Unit, Dept Landscape Architecture, Kulliyyah Architecture & Environm Design, Kuala Lumpur, Malaysia

Corresponding Address: Hatta, FAM (corresponding author)
Int Islamic Univ Malaysia, Int Inst Halal Res & Training INHART, Herbarium Unit, Dept Landscape Architecture, Kulliyyah Architecture & Environm Design, Kuala Lumpur, Malaysia.

Addresses:

Publisher
ACADEMIC PRESS LTD-ELSEVIER SCIENCE LTD, 125 LONDON WALL, LONDON EC2Y 5AS, ENGLAND

Categories / Classification
Research Areas: Biochemistry & Molecular Biology; Nutrition & Dietetics
Web of Science Categories: Biochemistry & Molecular Biology; Nutrition & Dietetics

See more data fields
1. A review article on edible pigments properties and sources as natural biocolorants in foodstuff and food industry. 
   By: Aberoumand, A. 
   World Journal of Dairy & Food Sciences Volume: 6 Issue: 1 Pages: 71-78 Published: 2011 

2. Changes in colour during high pressure processing of fruits and vegetables 
   By: Ahmed, J.; Ramaswamy, H.S. 
   Steward Postharvest Review Volume: 2 Pages: 1-8 Published: 2006 

3. Antimicrobial activity of silk fabrics dyed with saffron dye using microwave heating 
   By: Ali, N. F.; El-Khatib, E. M.; El-Mahamedy, R. S. S.; et al. 
   International Journal of Current Microbiology and Applied Science Volume: 3 Pages: 140-146 Published: 2014 

4. Astaxanthin: Sources, Extraction, Stability, Biological Activities and Its Commercial Applications-A Review 
   By: Ambati, Ranga Rao; Phang, Siew Moi; Ravi, Sarada; et al. 
   MARINE DRUGS Volume: 12 Issue: 1 Pages: 128-152 Published: JAN 2014 

5. Pressurized solvent extraction and monolithic column-HPLC/DAD analysis of anthocyanins in red cabbage 
   By: Arraitasas, Panagiotis; Turner, Charlotte 
   TALANTA Volume: 74 Issue: 5 Pages: 1218-1223 Published: FEB 15 2008 

6. Carotenoids extraction and quantification: a review 
   By: Arvayo-Enriquez, Hector; Mondaca-Fernandez, Iran; Gortarez-Moroyoqui, Pablo; et al. 
   ANALYTICAL METHODS Volume: 5 Issue: 12 Pages: 2936-2946 Published: 2013 

7. Nutritioally important carotenoids as consumer products 
   By: Berman, Judit; Zarrilla-Lopez, Usue; Farre, Gemma; et al. 
   PHYTOCHEMISTRY REVIEWS Volume: 14 Issue: 5 Pages: 727-743 Published: OCT 2015 

8. FRUIT, VEGETABLES, AND CANCER PREVENTION - A REVIEW OF THE EPIDEMIOLOGIC EVIDENCE 
   By: Block, G; Patterson, B; Subar, A 
   NUTRITION AND CANCER AN INTERNATIONAL JOURNAL Volume: 16 Issue: 1 Pages: 1-29 Published: 1992 

9. Factors Influencing the Chemical Stability of Carotenoids in Foods 
   By: Boon, Caitlin S.; McClements, D. Julian; Weiss, Jochen; et al. 
   CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION Volume: 50 Issue: 6 Pages: S15-S32 Article Number: PII 322843940 Published: 2010 

10. Natural pigments from six species of Thai plants extracted by water for hair dyeing product application 
    By: Boonsong, Panthip; Laohakunjit, Natta; Kerdcheechuen, Orapin 
    JOURNAL OF CLEANER PRODUCTION Volume: 37 Pages: 93-106 Published: DEC 2012 

11. Factors affecting intestinal absorption of highly lipophilic food microconstituents (fat-soluble vitamins, carotenoids and phytosterols) 
    By: Borel, P 
    CLINICAL CHEMISTRY AND LABORATORY MEDICINE Volume: 41 Issue: 8 Pages: 979-994 Published: 2003 

12. Anthocyanins as natural food colours - Selected aspects 
    By: Bridle, P; Timberlake, CF 
    FOOD CHEMISTRY Volume: 58 Issue: 1-2 Pages: 103-109 Published: JAN-FEB 1997 

13. Title: [not available] 
    By: Britton, G; Llaen-Jensen, S; Pfander, H 
    Carotenoids: Handbook Published: 2004 
    Publisher: Birkhauser, Basel, Switzerland 

14. Structure and properties of carotenoids in relation to function 
    By: Britton, G 
    FASEB JOURNAL Volume: 9 Issue: 15 Pages: 1551-1558 Published: DEC 1995 

15. Characterisation of sugar beet pectin fractions providing enhanced stability of anthocyanin-based natural blue food colourants 
    Times Cited: 37 
    By: Buchwitz, M; Nagel, A; Carle, R; et al. 