
THE DEVELOPMENT OF AESTHETIC FORMATIONS AND INNOVATIVE FORMATIVE OF THE STRUCTURAL FORMS OF NANOMATERIALS TO DESIGN CONTEMPORARY LADIES FABRICS

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Abstract

The fashion industry and the world of fashion in recent times is developing rapidly to catch up with modernity and technology. Textile printing is an important and mainstay of the textile industry. As that industry relies on the close link between textile design and printing in terms of design thinking (innovation) and implementation technology. The research presents the basic role of nanotechnology as one of the most important data of the modern era and the possibility of benefiting from it in designing textile printing in general and design designs for special textile designs. Structural features of nanomaterials.

Keywords

Aesthetic Formations, Innovative, Formative, Nanomaterials, Design, Ladies Fabrics.

Introduction

To reach contemporary designs that suit the modern trends of fashion and the requirements of the modern era. Given the scarcity of research dealing with nanotechnology as one of the new sources for the development of creative thinking in the field of textile printing design and modern trends in fashion, the current research is an essential step to activate it, and it is an incentive for researchers to increase their interest in different ways to benefit from creativity in solving various creative problems.

Research Problem

- 1- How can innovative plastic treatments for structural shapes of nanomaterials be employed and adapted to reach a new plastic structure that fits with the development of design thinking and modern trends of fashion for women's fabrics?
- 2- What is the potential for inspiration from nanomaterials the print design of women's fabrics?
- 3- How can the structural shapes of nanomaterials develop the creative thinking of a textile printing designer?

The goals of research:

- 1- Uniqueness of textile printing designer, distinction and production of a thought that no one has preceded, through the use of nanomaterials as an inspiration for a print design.
- 2-dealt with a different artistic vision to obtain designs of a high degree of diversity and richness suitable for the production of contemporary ladies' fabrics.

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Research importance

- 1- Analytical study of the structural vocabulary of some structural shapes of nanomaterials.
- 2- Finding innovative design solutions for some technical problems related to women's fabrics that keep pace with modern trends in fashion.
- 3 - Inspiration from nanomaterials as an experimental input in the design of women's fabrics.

Delimitations Limits of Research

- 1- Chronological research limits: suitable for women for the age group (20-45) years.
- 2- Spatial research limits: application to one piece of women's fabrics in the Arab Republic of Egypt.
- 3- Objective Research Limitations: An experimental technical study to create one-piece print designs for ladies' fabrics inspired by the structural composition of nanomaterials.

Research Methodology

- 1- **Descriptive method:** through the descriptive study of nanoscale materials, their types and forms
- 2-**Experimental (applied) method:** on which the research relies on dealing with the innovative and experimental aspect of printed designs for one piece of women's fabrics.

Hypothesis

- 1- There are easy areas to take advantage of nanotechnology in modern trends, fashion design and the changes of the times in the design of textile printing in general, and the design of women's fabrics in particular.
- 2 - The existence of a positive, mutually significant relationship between the use of technical techniques of some computer programs and the richness of printed designs for women's fabrics.

Results

- 1- The nanomaterials have unlimited form and values that can be a source of inspiration and innovation for the designer and represent a link between the designer and scientific progress and can be used to enrich the field of textile printing
- 2- The possibility of taking advantage of the aesthetics of the structural composition of nanomaterials as a visual stimulus to create a print design as an atypical method to contribute to adding innovative new ideas through the integration between science and art.
- 3- Putting forth a new artistic vision and thought and opening horizons for experimental thought by using some specialized computer programs to reach contemporary design solutions in a print design for women's fabrics.

Recommendations:

- 1- The researcher recommended intensifying studies with its various objectives in the field of designing textile printing by making use of from nanotechnology.
- 2- Opening the door to more knowledge and study of the various elements of nature, as they can be a new source to inspire and innovate.
- 3- Linking plastic and applied arts with the outputs of modern science, especially nanotechnology.
- 4- Finding and creating new experimental areas to enrich the printed designs of ladies' fabrics.

References

- 1- Bertimly, Jan “: A Study in Aesthetics,” translated by Anwar Abdel Aziz, Cairo: Dar Nahdet Misr 12.
- 9- Khaldoun Ghassan: “Nanotechnology, the new wonder of the world,” Middle East Journal, Issue 9, 2005.
- 9- Ali Yusef: “Nanotechnology and its applications in the future,” Syrian Arab Republic, Ministry of Education, National Center for Excellence, 2015
- 4- Omar Najdi: “The Alphabet of Design,” Egyptian General Book Authority, Cairo, 1986.
- 5- Muhammad Al-Salhi and Abdullah Al-Dhawyan: “Nanotechnology: Where it Will Lead Us,” online publication, Ministry of Higher Education. College of Science, King Saud University, 2009.
- 6- Muhammad Al-Salihi, Abdullah Al-Dawyan: “An Introduction to Nanotechnology,” electronic publication, Ministry of Higher Education, College of Science, King Saud University, 2009.
- 9- Muhammad Sharif Al-Iskandarani: “Nanotechnology for a Better Tomorrow,” The World of Knowledge, Kuwait, April 2010
- 9- Mahmoud Helmy Hegazy: “An Ecologist,” Helwan University Press, Cairo 2009.
- 9- A matter of size (2006): Triennial review of the national nanotechnology initiative Committee to review the national nanotechnology initiative National research council.
- 10-Yung Liou: Nanotechnology: Institute of Physics Academia Sinica
- 11- Rakesh M, Divya TN, Vishal T, Shalini K Applications of Nanotechnology. J Nanomedine Biotherapeutic Discov Volume 5 • Issue 1 • 5: 131(2015)
- 12- <https://www.slideshare.net/hebatalrahmanahmed/ppt-58119763>
- 13- <http://nano.ksu.edu.sa/ar/nanotech-shapes>
- 14- <http://nano.ksu.edu.sa/ar/nanotech-shapes>

15- <http://sc.egyres.com/3FtOr>

16- <https://www.egyres.com/%D9%85%D9%82%D8%AF%D9%85%D8%A9>

17- <https://www.egyres.com>

18- <https://www.egyres.com/%D9%85%D9%82%D8%AF%D9%85%D8%A9-%D9%84%D9%84%D9>

19- <http://www.wadifatima.net/vb/t36958.html>

20-https://mawdoo3.com/%D8%B7%D8%B1%D9%82_%D8%

[AA%D8%AD%D8%B6%D9%8A%D8%B1_%D9%85%D9%88%D8%A7%D8%AF_%D8%A7%D9%84%D9%86%D8%A7%D9%86%D9%88](https://mawdoo3.com/%D8%B7%D8%B1%D9%82_%D8%AA%D8%AD%D8%B6%D9%8A%D8%B1_%D9%85%D9%88%D8%A7%D8%AF_%D8%A7%D9%84%D9%86%D8%A7%D9%86%D9%88)

21- <https://www.slideshare.net/hebatalrahmanahmed/ppt-58119763>

22- Amal Gerges William HABIB, Zainab Abdel Hafeez FARGHALI, Magda Youssef MOHAMED, PROBLEMS OF LASER CUTTING IN THE READY MADE GARMENT, International Journal of Design and Fashion Studies, Vol. 2, No. 1, 2019, pp. 12-17.

23- Ashraf Mustafa Ali LABIB, SPACE- SAVING AND MULTIPLE USING FURNITURE, International Journal of Design and Fashion Studies, Vol. 2, No. 1, 2019, pp. 18-21.

24- Faten Abdel Fattah Metwally ALI, STIMULATING SERIOUS POSITIVE INTERACTION BY CONFIRMING ITS DIMENSIONS AND MONITORING ITS ASPECTS OF CERAMIC DESIGNS, International Journal of Design and Fashion Studies, Vol. 2, No. 1, 2019, pp. 22-24.

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