

Anwer Jumaa Al-Obaidi

أنور جمعة احمد العبيدي

Assistant Professor

PROFILE

Dr. Al-Obaidi's research interests include applied mechanics, composite materials, and biomechanics. His research focuses on the mechanical behaviour of materials and structures, with a special emphasis on the development and use of composite materials in engineering. He is committed to expanding our understanding of biomechanics, bridging the gap between engineering principles and biological systems.

ACADEMIC TITLES

2021-09-04 Assistant Professor

TEACHING EXPERIENCE

Prof (Asst.)

Wasit University- Engineering College

2010-05 - Present

COURSES

- Engineering Mechanics (Dynamics)
- Mechanical Vibrations
- Advanced Plasticity

INTERNATIONAL MEMBERSHIPS

- Associate Fellow of the Higher Education Academy (AFHEA)

PUBLICATIONS (29)

1. Experimental and Numerical Investigation of Mechanical Properties of Sandwich Composite Structures: Effects of Skin Architectures
   Iranian Journal of Science and Technology, Transactions of Mechanical ..., 2026 | 2026 | Cited: 2
2. Exploring the Synergistic Influences of Clay Nanoplatelets and Waste Eggshell Particles on PMMA-Based Hybrid Nanocomposites
   Engineering Transactions, 2026 | 2026
3. Influence of High-Pressure Torsion Method on the Mechanical Properties of Ti-6Al-4V.
   Wasit Journal of Engineering Sciences 14 (2), 487-495, 2026 | 2026
4. The effect of notches on the mechanical properties and damage failures of fibre-metal laminates: an experimental and numerical study
   Proceedings of the Institution of Mechanical Engineers, Part L: Journal of ..., 2026 | 2026 | Cited: 5
5. Effect of displacement rate and additive materials on the mechanical performance of 3D glass composite laminates
   Proceedings of the Institution of Mechanical Engineers, Part E: Journal of ..., 2026 | 2026

CONTACT

Phone: 07817439347
Email: aalobaidi@uowasit.edu.iq
aalobaidi@uowasit.edu.iq

EDUCATION

Bachelor's Degree (2005-06-01)
Mechanical Engineering
Al-Nahrain University

Master's Degree (2009-04-01)
Applied Mechanics
Al-Nahrain University

Doctorate (2018-06-12)
Applied Mechanics
University of Sheffield

RESEARCH METRICS

h-index (Scopus)	9
h-index (GS)	9
Citations (Scopus)	200
Citations (GS)	228
Documents (Scopus)	25
Documents (GS)	29

PATENTS

- Production of silicon nanosheets for artificial bone grafts
- Joining of Metal-Polymer Materials Using Ultrsonic

RESEARCH INTERESTS

- Stress Analysis
- Composite Materials
- Lattice Structures
- Bio-mechanics

6. **Bioinspired PEEK/Bioactive Glass/β-TCP Hybrid Composites With Nano-HA Coatings: Interfacial Apatite Nucleation, Wettability Tuning, and In Vitro Bioactivity for Load-Bearing ...**
Engineering and Technology Journal 44 (12), 1-23, 2026 | 2026

7. **Effect of core hybridization on the mechanical performance of sandwich composites**
Journal of Industrial Textiles 55, 15280837251321137, 2025 | 2025 | Cited: 3

8. **Influence of silicon nanosheet (SiNS) on the toughness of biphasic calcium phosphate (BCP) composites**
Fracture and Structural Integrity 19 (72), 137-147, 2025 | 2025 | Cited: 2

9. **Investigating the Mechanical, Physical and Biological Properties of PMMA/TiO2 Composites with Nanoclay for Denture Applications**
Engineering Transactions 73 (1), 29-43, 2025 | 2025 | Cited: 3

10. **Enhancement of mechanical, physical, and electrical performances of epoxy composites by inclusion nano-particles: A review**
Journal of Composite Materials 59 (29), 3321-3351, 2025 | 2025 | Cited: 13

11. **Experimental and numerical study on failure mechanisms of sandwich composite structure: Effect of auxetic core**
Proceedings of the Institution of Mechanical Engineers, Part L: Journal of ..., 2025 | 2025 | Cited: 13

12. **Enhancing the mechanical and biological properties of artificial bone regeneration with functionally graded ceramics**
Physica Scripta 100 (7), 075944, 2025 | 2025 | Cited: 2

13. **Out-of-plane compressive properties of a butterfly-shaped auxetic metamaterial**
Smart Materials and Structures 33 (11), 115031, 2024 | 2024 | Cited: 42

14. **Studying the influence of micro-particles on the mechanical performance and damage failures of composite laminates**
Journal of Industrial Textiles 54, 15280837241275018, 2024 | 2024 | Cited: 4

15. **Physical and structural properties of biphasic calcium phosphate BCP reinforced with silicene fillers**
AIP Conference Proceedings 3091 (1), 030003, 2024 | 2024 | Cited: 5

16. **Effect of thermoplastic particles on the mechanical performance and damage failure of notched fibre metal laminates**
Journal of Reinforced Plastics and Composites | 2024 | Cited: 2

17. **Revue des Composites et des Matériaux Avancés-Journal of Composite and Advanced Materials**
Journal homepage: http://iieta. org/journals/rcma 33 (1), 7-12, 2023 | 2023

18. **NUMERICAL ASSESSMENT OF THE EFFECT OF H2 AND EQUIVALENCE RATIO ON TEMPERATURE AND NITRIC OXIDE EMISSION FOR TRI-FUEL ENGINE MODEL**
Journal of Engineering Science and Technology 18 (4), 2161-2179, 2023 | 2023

19. **Effect of Alumina Particles on the Mechanical and Physical Properties of Polypropylene Whisker Reinforced Lamination 80:20 Resin Composite**
Revue des Composites et des Materiaux Avances 33 (1), 7–12, 2023 | 2023 | Cited: 12

20. **Optimization of the mechanical performance and damage failure characteristics of laminated composites based on fiber orientation**
Frontiers of Structural and Civil Engineering 17 (9), 1357-1369, 2023 | 2023 | Cited: 19

21. **Improvement of the mechanical properties of biphasic calcium phosphate ceramic composite using silicene**
Engineering Transactions 71, 185-195, 2023 | 2023 | Cited: 4

22. **Influence of yarn-hybridisation on the mechanical performance and thermal conductivity of composite laminates**
Journal of Industrial Textiles 51 (3_suppl), 5086S-5112S, 2022 | 2022 | Cited: 7

23. **Influence of nanoparticles reinforcements on the mechanical performance and tribological properties of aluminum 6082 alloys**
Engineering Transactions 70 (4), 391-405, 2022 | 2022 | Cited: 6

24. **Synthesis and study of the mechanical properties of biodegradable polyvinyl alcohol/eggshell composites**
Journal of Engineering Science and Technology 16 (4), 3084-3093, 2021 | 2021 | Cited: 9

25. **The influence of the inter-ply hybridisation on the mechanical performance of composite laminates: Experimental and numerical analysis**
Science Progress 104 (2), 00368504211023285, 2021 | 2021 | Cited: 29

26. **The effect of factors on the flexural of the composite leaf spring**
Materials Today: Proceedings 20, 566-571, 2020 | 2020 | Cited: 10

27. **Investigation the mechanical properties of epoxy polymer by adding natural materials**
J. Eng. Sci. Technol 15 (4), 2544-2558, 2020 | 2020 | Cited: 22

28. **Ultrasonic welding of polymer–metal hybrid joints**
Transactions on Intelligent Welding Manufacturing: Volume II No. 2 2018, 21-38, 2019 | 2019 | Cited: 13

29. **Ultrasonic joining of metal-polymer surfaces**
University of Sheffield, 2018 | 2018 | Cited: 8