5GH Foundation

Abnormal References on 10.1007/s00339-025-08626-4

Our recent investigation reveals that the article [1] has 4 irrelevant references, with a common author Hayder A Alalwan, an Iraq researchers.

Title: Surface efect on the elastic property of rectangular nanobeams
DOI: 10.1007/s00339-025-08626-4

Ref No.	Citing Statement	Reference Title	Reference Authors
37	The combination of dangling bonds moves surface atoms and changes the symmetry and lattice structure of outmost atomic layer. There may be interactions with other gas molecules at surface. For example, methane may be adsorbed on the metal oxide surfaces as methoxy and formate [37]. The carbon dioxide interactions with transition metal oxide nanoparticles were also studied by researchers [38]. The mechanical properties of nanomaterials near surface are changed and diferent from bulk material counterparts [39, 40]	Methane activation on metal oxide nanoparticles	**Hayder A. Alalwan**; Alaa H. Alminshid; Malik M. Mohammed; Mohammed Fakhir Mohammed
38	The combination of dangling bonds moves surface atoms and changes the symmetry and lattice structure of outmost atomic layer. There may be interactions with other gas molecules at surface. For example, methane may be adsorbed on the metal oxide surfaces as methoxy and formate [37]. The carbon dioxide interactions with transition metal oxide nanoparticles were also studied by researchers [38]. The mechanical properties of nanomaterials near surface are changed and diferent from bulk material counterparts [39, 40]	Spectroscopic Investigation of Carbon Dioxide Interactions with Transition Metal-Oxide Nanoparticles	**Hayder A. Alalwan**; Alaa Alminshid; Malik M. Mohammed; Mohammed Fakhir Mohammed
50	In Eq. (12) or (13), the frst term is bulk Young's modulus, the second and third terms are same as core-surface and core–shell models [28], while the fourth and ffth terms are the infuence of exponentially decreased property. For expansion nanoparticles were used as a catalyst in ethanol conversion to acetone [50]. In Fig. 2, compared our theoretical solution in Eq. (7) or (8) with ZnO nanobeam experiment as well as numerical computation.	Synthesis of ZnO-CoO/Al2O3 nanoparticles and its application as a catalyst in ethanol conversion to acetone	Malik M. Mohammed; Nisreen Sabti Mohammed Ali; **Hayder A. Alalwan**; Alaa H. Alminshid; Haydar A.S. Aljaafari
53	Si-based nanomaterials were of importance in practical application. The synthesized MgO-SiO2 nanoparticles were as catalysts in ethanol conversion to 1,3-Butadiene [53]. Surface elasticity effect hardens ZnO nanobeams obviously. On the other hand, other nanomaterials may be softened by surface elasticity efect, silicon nitride (SiNx) for example [54].	Employing Synthesized MgO-SiO2 Nanoparticles as Catalysts in Ethanol Conversion to 1,3-Butadiene	**H. A. Alalwan**; A. H. Alminshid; M. M. Mohammad; S. A. M. Hussein; M. F. Mohammed

This article [1] is about the about the numerical simulation of the mechanical properties of ZnO nano-structures. However, in order to cite those 4 irrelevant references, authors make irrelevant citing statement in the "Introduction" and "Results and Discussions" section of this article [1].

For example, in the "Introduction" section, when discussing the surface effect on the mechanical properties of nano-materials, the authors added an unnecessary statement about the interaction between the surface and the gas molecules, and cited 2 references (Ref 37, 38) both of which were coauthored by Hayder A Alalwan.

In the "Results and Discussions" section, while presenting the results, authors added an unnecessary statement about the material's application potential, which is irrelevant to the

results being discussed by the author, to cite another reference (Ref 50) by Hayder A Alalwan.

Finally, also in the "Results and Discussions" section, authors added an unnecessary statement about the MgO-SiO2, which is irrelevant to the results being discussed by the author, to cite the reference (Ref 53) by Hayder A Alalwan.

The above mentioned irrelevant citing statements were carefully designed, but a common author among those 4 irrelevant references suggests that those references were manipulated.

[1] 10.1007/s00339-025-08626-4
