

Name: Divya Bhakta

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| <p>Source # _____<br/>Bibliography<br/>(MLA or APA)</p> <p>10 pts</p>   | <p>Feng. Liu et al. "New Frontiers in Biomedical Science and Engineering during 2014-2015." Bio-Medical Materials &amp; Engineering, vol. 26, 2015 Supplement1, pp. S3-S7. EBSCOhost, doi:10.3233/BME-151283.</p>   |
| <p>Annotation:<br/>(Describe ALL info. that might be important for your paper. Explain to the reader and/or summarize what might be found in this source)</p> <p>35 pts</p> | <p><b>Biomedical Imaging:</b> Paper 1 studies the SPECT (sing-proton emission computed tomography) image reconstruction for a small animal based on a voxel-driven algorithm. The results indicate that the VD model can handle a longer object with manageable storage space. Paper 2 discusses the importance of CT radiation dose, especially for those who are receiving radiation therapy. Paper 3 studies the motor network in hemiparetic stroke patient.</p> <p><b>Biomechanical Engineering:</b> The papers present a numerical solution of the flow and heat transfer outside an expanding/contracting porous cylinder.</p> <p><b>Biosensors and bio-signal Processing:</b> Paper 1 addresses the demands for improving the computation time of CT image reconstruction. By applying GPU calculation processing to CT reconstruction with ART algorithm, the time efficiency increased by a factor of 20. Paper 2 analyses the quality of sleep based off of calculated Sample Entropy. The results showed that Sample Entropy could be used to discriminate between different sleep stages.</p> <p><b>Antioxidant Therapy and Natural Bioactives:</b> These bioactive compounds can possibly prevent/treat important diseases. Paper 1 discusses the protective mechanisms of Vitamin E on kidney injuries. Paper 3 discusses the cardioprotective actions of H<sub>2</sub>S and the NaHS treatment in diabetes. Paper 4 explores different strategies that may lead to new active ingredients useful for the prevention of osteoporosis (porous bone disease)</p> |
| <p>Potential Quotes:<br/>(Are there any significant quotes you can use or paraphrase from this source?)</p> <p>15 pts</p>   | <p>"The authors have dealt with this issue using CTDI value, which is generally used as index for CT dose calculation, and this approach can be easily applied to clinical field to evaluate the patient dose in linac-integrated cone beam CT due to its characteristics of simplicity and reproducibility." (2)</p> <p>"The authors have dealt with this issue using CTDI value, which is generally used as index for CT dose calculation, and this approach can be easily applied to clinical field to evaluate the patient dose in linac-integrated cone beam CT due to its characteristics of simplicity and reproducibility." (3)</p>   |

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| <p>Assessment:<br/>(Analyze and explain why this source is credible)</p> <p>15 pts</p> | <p>This source is credible because it includes research papers written by biomedical researchers and practitioners hoping to exchange the most recent advances and future challenges in the engineering field at the International Conference on Biomedical Engineering and Biotechnology.</p>  |
| <p>Reflection:<br/>(How will you potentially use it?)</p> <p>25 pts</p>                | <p>I will use this academic journal to explore the advancements of biomedical engineering and the latest technology. With this new information I will be able to understand the effects of the technology/machinery used in Aziyo. In addition, I could use specific examples and experiments discussed to provide evidence in regards to technological advancements in the medical/ engineering field.</p> |