DAFTAR PUSTAKA

Agarwal, A. and Mthembu, L. (2022) 'Structural Analysis and Optimization of Heavy Vehicle Chassis Using Aluminium P100/6061 Al and Al GA 7-230 MMC', *Processes*, 10(2). Available at: https://doi.org/10.3390/pr10020320.

AHMED, G.. S., KHANY, S.E. and SHAREEF, S.H. (2014) 'Design, Fabrication and Analysis of a Connecting Rod with Aluminum Alloys and Carbon Fiber', *International Journal of Innovative Research in Science, Engineering and Technology*, 03(10), pp. 16674–16687. Available at: https://doi.org/10.15680/ijirset.2014.0310036.

Ahmed, S. and Gupta, M.K. (2022) 'Investigations on motorbike frame material and comparative analysis using generative design and topology optimization', *Materials Today: Proceedings*, 56, pp. 1440–1446. Available at: https://doi.org/10.1016/j.matpr.2021.12.040.

Antonov, S.I. (2018) 'RESEARCHING THE CAPABILITIES OF INFORMATION TECHNOLOGIES FOR EDJUCATION IN DESIGN , 3D MODELING AND VISUALIZATION OF THE WORKING OF COMPLEX MECHANISMS', *INTERNATIONAL SCIENTIFIC JOURNAL 'MATHEMATICAL MODELING'*, 159(4), pp. 156–159.

Barbieri, L. and Muzzupappa, M. (2022) 'Performance-Driven Engineering Design Approaches Based on Generative Design and Topology Optimization Tools: A Comparative Study', *Applied Sciences (Switzerland)*, 12(4). Available at: https://doi.org/10.3390/app12042106.

Bhardwaj, S. *et al.* (2018) 'Design and Optimization of Steering Upright to Reduce the Weight Using FEA', *SAE Technical Papers*, 2018-July(July). Available at: https://doi.org/10.4271/2018-28-0081.

Choudhury, P., Suresh, N. and Panda, P. (2015) 'Shape Optimization Of A Suspension Bellcrank Using 3d Finite Element Methods', *Int. Journal of Engineering Research and Applications*, 5(1), pp. 31–36.

Dange, M.M., Zaveri, S.R. and S.D.Khamankar (2014) 'Stress Analysis of Bell Crank Lever', *International Journal on Recent and Innovation Trends in Computing and Communication*, 2(8), pp. 2423–2430.

Drndarević, B. *et al.* (2024) 'Impact of selecting the cutting technology on production time and cost', *Mining and Metallurgy Engineering Bor*, 8836(2), pp. 59–66. Available at: https://doi.org/10.5937/mmeb2402059D.

Gao, T. and Zhang, W. (2011) 'A mass constraint formulation for structural topology optimization with multiphase materials', *International Journal for Numerical Methods in Engineering*, 88(8), pp. 774–796. Available at: https://doi.org/10.1002/nme.3197.

Groover, M.P. (2015) *Automation, Production Systems, and Computer-Integrated Manufacturing fourth edition*. Available at: www.pearsonglobaleditions.com.

Güler, M.A. *et al.* (2024) 'Design Methods of Aluminium Pin-Ended Columns with Topology-Optimised Cross-Sections', *Buildings*, 14(11). Available at: https://doi.org/10.3390/buildings14113588.

Jama, M.I.B. *et al.* (2023) 'Engineering analysis of an upright wheel assembly for passenger vehicle', in *AIP Conference Proceedings*, p. 050003. Available at: https://doi.org/10.1063/5.0113876.

Kalista, B.M. (2018) 'Studi Numerik Mechanical Coupler Head Light Rail Transit (LRT) Menggunakan Metode Elemen Hingga'.

Kyratsis, P., Tzotzis, A. and Davim, J.P. (2025) *CAD-based Programming for Design and Manufacturing*. Cham: Springer Nature Switzerland (SpringerBriefs in Applied Sciences and Technology). Available at: https://doi.org/10.1007/978-3-031-78747-8.

Liu, B. *et al.* (2024) 'Topology Optimization and Lightweight Platform Development of Pure Electric Vehicle Frame-Type Aluminum Body Considering Crash Performance', *Journal of Materials Engineering and Performance*, 34(3), pp. 2424–2434. Available at: https://doi.org/10.1007/s11665-024-09239-3.

Liu, Y. *et al.* (2025) 'Multiscale damage analysis of engineering structures from

material level to structural level: a systematic review', *International Journal of Structural Integrity* [Preprint]. Available at: https://doi.org/10.1108/IJSI-12-2024-0211.

Mazahery, A. and Shabani, M.O. (2014) 'Extruded AA6061 alloy matrix composites: The performance of multi-strategies to extend the searching area of the optimization algorithm', *Journal of Composite Materials*, 48(16), pp. 1927–1937. Available at: https://doi.org/10.1177/0021998313492357.

Mesicek, J. *et al.* (2019) 'Topological optimization of the formula student bell crank', *MM Science Journal*, 2019(October), pp. 2964–2968. Available at: https://doi.org/10.17973/MMSJ.2019_10_201893.

Mikulikova, A. *et al.* (2023) 'Topology Optimization of the Clutch Lever Manufactured by Additive Manufacturing', *Materials*, 16(9). Available at: https://doi.org/10.3390/ma16093510.

Muho, E. V, Beskou, N.D. and Qian, J. (2025) 'Models and methods for dynamic response of 3D flexible and rigid pavements to moving loads: A review by representative examples', *Journal of Road Engineering* [Preprint]. Available at: https://doi.org/10.1016/j.jreng.2024.07.003.

Mulyanto, T. and Sapto, A.D. (2017) 'Analisis Tegangan Von Mises Poros Mesin Pemotong Umbi-Umbian Dengan Software Solidworks', *Presisi Jurnal Teknik Mesin FTI*, 18(2), pp. 24–29.

Nainaragaram Ramasamy, M. *et al.* (2025) 'Topology Optimization and Testing of Connecting Rod Based on Static and Dynamic Analyses', *Applied Sciences (Switzerland)*, 15(4), pp. 1–16. Available at: https://doi.org/10.3390/app15042081.

Pang, T.Y. and Fard, M. (2020) 'Reverse engineering and topology optimization for weight-reduction of a bell-crank', *Applied Sciences (Switzerland)*, 10(23), pp. 1–16. Available at: https://doi.org/10.3390/app10238568.

Rao, R.N. and Chaitanya, C.S. (2023) 'Topology Optimization of the Bell Crank Lever', in *Proceedings of the International Conference on Industrial Engineering and Operations Management*. Michigan, USA: IEOM Society International, pp.

220–225. Available at: https://doi.org/10.46254/AU02.20230071.

Sclater, Chironis, N.P. (2007) *Mechanisms and Mechanical Devices Fourth Edition*, *New York : McGraw-Hill*.

Sharma, M. *et al.* (2021) *Ergonomic Assessment of a Fettling Operation in Foundry Based on Digital Human Modeling and Statistical Analysis*, *Lecture Notes on Multidisciplinary Industrial Engineering*. Available at: https://doi.org/10.1007/978-981-15-4550-4_30.

Uprikar, B., Pelne, H. and Dahake, S. (2022) 'Design and Optimization of Suspension Rocker (Bell-Crank)', *International Research Journal of Engineering and Technology*, pp. 46–49. Available at: www.irjet.net.

Wicaksono, D.S. and Sugiharto, B. (2021) 'Optimasi Topologi Arm Excavator Cat 320D Menggunakan', *Prosiding Seminar Nasional Riset dan Teknologi Terapan (RITEKTRA)*, 1, pp. 1–8. Available at: https://journal.unpar.ac.id/index.php/ritektra/article/view/4944/3492.

Wunda, S. *et al.* (2019) 'Analisis Tegangan , Regangan Dan Deformasi Crane Hook Dari Material Baja Aisi 1045 Dan Baja St 37 Menggunakan Software Elmer', *Jurnal Fisika : Fisika Sains dan Aplikasinya*, 4(2), pp. 131–137.

Yu, H., Shi, H. and Chen, S. (2019) 'A novel multi-cell CFRP/AA6061 hybrid tube and its structural multiobjective optimization', *Composite Structures*, 209(October 2018), pp. 579–589. Available at: https://doi.org/10.1016/j.compstruct.2018.10.112.

Yuan, S. *et al.* (2025) 'Topological optimization design of SLM additive manufactured unmanned aerial vehicle bearing joint structure based on variable density method', *Gongcheng Kexue Xuebao/Chinese Journal of Engineering*, 47(1), pp. 56–65. Available at: https://doi.org/10.13374/j.issn2095-9389.2024.05.17.002.