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DAFTAR PUSTAKA

Adrian P. Mouritz (2012) “Fibre–polymer composites for aerospace structures and engines”, Introduction to Aerospace Materials, Woodhead Publishing, 2012, Pages 338-393, ISBN 9781855739468

Ai, Y., Yang, Z., Que, H. *et al* (2022). Finite Element Simulation and Fatigue Damage Analysis of High-Speed Train Gearbox Shell Based on Structure and Material Cross-Scale Correlation. *J Fail. Anal. and Preven.* **22**, 1215–1228 (2022). https://doi.org/10.1007/s11668-022-01368-y

Anderson, T.L. (2016),” Fracture Mechanics Fourth Edition”, CRC Taylor & Francis.

Anastasios P. Vassilopoulos, 1 - Fatigue life modeling and prediction methods for composite materials and structures—Past, present, and future prospects, Editor(s): Anastasios P. Vassilopoulos, In Woodhead Publishing Series in Composites Science and Engineering, Fatigue Life Prediction of Composites and Composite Structures (Second Edition), Woodhead Publishing, 2020, Pages 1-43, ISBN 9780081025758, https://doi.org/10.1016/B978-0-08-102575-8.00001-2.

Amrute, A.V., Karlus, E.N. and Rathore, R.K. (2013). “Design and assessment of multi *leaf spring*”. International Journal of Research in Aeronautical and Mechanical Engineering, 1(7), 115–124.

Andoh, P. Y., Mensah, L. D., Dzebre, D. E. K., Amoabeng, K. O., & Sekyere, C. K. K. (2022.). INVESTIGATING THE FAILURE OF *LEAF SPRING*S IN AUTOMOBILE SUSPENSION ON GHANA ROAD. In *Journal of Applied Engineering and Technological Science* (Vol. 4, Issue 1).

Andrzej Kubit, Magdalena Bucior, Władysław Zielecki, Feliks Stachowicz, The impact of heat treatment and shot peening on the fatigue strength of 51CrV4 steel,Procedia Structural Integrity, Volume 2, 2016, Pages 3330-3336

UNIVERSITAS
GADJAH MADA
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Arora, V.K., Bhushan, G. and Aggarwal, M.L. (2014), "Effect of assembly stresses on fatigue life of symmetrical 65Si7 *leaf springs*", International Scholarly Research Notices, Vol. 2014, pp. 1-10.

Arora, V. K., Bhushan, G., & Aggarwal, M. L. (2014). Fatigue Life Assessment of 65Si7 *Leaf springs*: A Comparative Study. *International Scholarly Research Notices*, *2014*, 1–11. https://doi.org/10.1155/2014/607272

Arora, V. K., Bhushan, G., & Aggarwal, M. L. (2018). Mathematical modelling for fatigue life prediction of a symmetrical 65Si7 *leaf spring*. In *Int. J. Computer Aided Engineering and Technology* (Vol. 10, Issue 3).

Barsom, J.M. and Rolfe, S.T. (1999) Fracture and Fatigue Control in Structures: Application of Fracture Mechanics. 3rd Edition, ASTM International, West Conshohocken, PA. https://doi.org/10.1520/MNL41-3RD-EB

Beden, S. M., Ariffin, A. K., Beden, S. M., Abdullah, S., Ariffin, A. K., Al-Asady, N. A., & Rahman, M. M. (2009). Fatigue life assessment of different steel-based shell materials under variable amplitude loading Fracture Mechanics View project Semiconductor Packaging View project Fatigue Life Assessment of Different Steel-Based Shell Materials Under Variable Amplitude Loading. In *European Journal of Scientific Research* (Vol. 29, Issue 1).

Beedle, Lynn S. Structural Steel Design / by Lynn S. Beedle [and Others] Editorial Board: Lambert Tall, Lynn S. Beedle [and] Theodore V. Galambos. New York: Ronald Press Co., 1964. Print.

C. Naveen, N. Praveen, J. Sandeep, Dynamic analysis of composite plate using finite element analysis, Int. J. Eng. Res. Technol. 5 (11) (2016).

C.N. Nie, J.J. Jia-Jun, Liu JL Gu, D. Zhang (2007), "Production of Boron carbide reinforced 2024 aluminum matrix composite by mechanical alloying", J. Mater. Trans. 48990–995.

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Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Desiasni, R., Kusmiran, A., Abidin, Z., Hidayat, M., & Rahmani, N. S. (2019). *Mechanical Fatigue Life Analysis of Steel Leaf spring Structure Using Finite Element Method.*

Dhaval. B. Shah, S. Mehu, B. Vipul (2013). "Analysis of composite *leaf spring* using fea for light vehicle mini truck". International Conference on Research and Development in Engineering, Technology and sciences,

D.K. Koli, G. Agnihotri, R. Purohit, Advanced aluminium matrix composites: the critical need of automotive and aerospace engineering, Mater. Today: Proc. 2 (2015) 3032–3041.

Hiyam Farhat, Chapter 5 - Typical service-induced damages, Editor(s): Hiyam Farhat, Operation, Maintenance, and Repair of Land-Based Gas Turbines, Elsevier, 2021, Pages 107-130, ISBN 9780128218341,

Hongfang Sun, Guanping Guo, Shazim Ali Memon, Weiting Xu, Qiwu Zhang, Ji-Hua Zhu, Feng Xing, Recycling of carbon fibers from carbon fiber reinforced polymer using electrochemical method, Composites Part A: Applied Science and Manufacturing, Volume 78, 2015, Pages 10-17, ISSN 1359-835X, https://doi.org/10.1016/j.compositesa.2015.07.015.

Jancirani J, Assarudeen H. A review on structural analysis and experimental investigation of fiber reinforced composite *leaf spring*. Journal of Reinforced Plastics and Composites. 2015;34(2):95-100. doi:10.1177/0731684414564477

J. J. Fuentes, H. J. Aguilar, J. A. Rodr´ıguez, and E. J. Herrera (2009), "Premature fracture in automobile *leaf spring*s," Engineering Failure Analysis, vol. 16, no. 2, pp. 648–655.

UNIVERSITAS
GADJAH MADA
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Thoriq Fadhillah Handoko, Dr. Lilik Dwi Setyana, S.T., M.T.
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

M. Kamal, M.M. Rahman, Advances in fatigue life modeling: A review, Renewable and Sustainable Energy Reviews,Volume 82, Part 1, 2018, Pages 940-949,ISSN 1364-0321,

M.L. Aggarwal, V.P. Agrawal, R.A. Khan, A stress approach model for predictions of fatigue life by shot peening of EN45A spring steel, International Journal of Fatigue, Volume 28, Issue 12, 2006, Pages 1845-1853, ISSN 0142-1123, https://doi.org/10.1016/j.ijfatigue.2005.12.004.

M.P. Jenarthanan, S. Ramesh Kumar, G. Venkatesh, S. Nishanthan, Analysis of *leaf spring* using Carbon / Glass Epoxy and EN45 using ANSYS: A comparison, Materials Today: Proceedings, Volume 5, Issue 6, Part 2, 2018, Pages 14512-14519, ISSN 2214

Jens Pusch, Bernd Wohlmann, Chapter 2 - Carbon Fibers, Editor(s): Boris Mahltig, Yordan Kyosev, In The Textile Institute Book Series, Inorganic and Composite Fibers, Woodhead Publishing, 2018, Pages 31-51, ISBN 9780081022283

Jun Ke, Zhen-yu Wu, Xiao-ying Chen, Zhi-ping Ying,"A review on material selection, design method and performance investigation of composite *leaf springs*",Composite Structures,Volume 226, 2019.

Kale, S.S. and Gaur, A.V. (2016), "Stress analysis of multi *leaf spring* by using experimental method", International Research Journal of Multidisciplinary Studies, Vol. 2 No. 1, pp. 1-5.

Loganathan, T. G., Kumar, K. V., & Madhu, S. (2020). Flexural and fatigue of a composite *leaf spring* using finite element analysis. Materials Today: Proceedings, 22, 1014-1019.

Mahmood M Shokrieh, Davood Rezaei, "Analysis and optimization of a composite *leaf spring*", Composite Structures, Volume 60, Issue 3, 2003

UNIVERSITAS
GADJAH MADA
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Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Manibharathi, M., Usha, S., & Scholar, P. G. (n.d.). Design and Analysis of Composite *Leaf spring* with Different Arrangements. In *International Journal of Research in Engineering and Science (IJRES) ISSN* (Vol. 9).

M Sai Krishna, K Naresh Kumar, Dr. B.Naga Raju, M. Raja Roy "Fluctuating analysis on *leaf spring* of a mini load carrier automobile", International Journal of Engineering Trends and Technology (IJETT), V51(1),27-31 September 2017. ISSN:2231-5381.

Mukhopadhyay, N. K., Das, S. K., Ravikumar, B., Ranganath, V. R., & Chowdhury, S. G. (1997). Premature failure of a *leaf spring* due to improper materials processing. Engineering Failure Analysis, 4(3), 161-170

Mouleeswaran, Senthilkumar & Vijayarangan, (2007). Static analysis and fatigue life prediction of steel and composite leaf spring for light passenger vehicles. Journal of scientific and industrial research. Vol.66. pp.128-134.

Nagendra and Srivastava, S.K. (2014), “Fatigue life prediction of parabolic spring based on strain life theories”, International Journal of Mechanical Engineering and Robotics Research, Vol. 3 No. 1, pp. 320-326.

Nishan Bhosle (2017), Designing and Comparative Analysis of EN-45 Steel Mono *Leaf spring* with Composite Material Mono *Leaf spring* under Static Loading Condition, Global Journal for Research Analysis: Volume-6, issue-1

Noronha, B., Yesudasan, S. & Chacko, S. Static and Dynamic Analysis of Automotive Leaf Spring: A Comparative Study of Various Materials Using ANSYS. J Fail. Anal. and Preven. 20, 804–818 (2020). https://doi.org/10.1007/s11668-020-00877-y

Qianfan Xin, 2 - Durability and reliability in diesel engine system design,Editor(s): Qianfan Xin, Diesel Engine System Design, Woodhead Publishing, 2013,Pages 113-202, ISBN 9781845697150, https://doi.org/10.1533/9780857090836.1.113

UNIVERSITAS
GADJAH MADA
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Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Rajamohan Ganesan, 7 - Fatigue behavior of thick composite laminates, Editor(s): Anastasios P. Vassilopoulos, In Woodhead Publishing Series in Composites Science and Engineering, Fatigue Life Prediction of Composites and Composite Structures (Second Edition), Woodhead Publishing, 2020, Pages 239-267, ISBN 9780081025758, https://doi.org/10.1016/B978-0-08-102575-8.00007-3.

Raja, V., & Fernandes, K. J. (2008). *Reverse Engineering: An Industrial Perspective*.

Rathore, M., &, J. M. (2022). Fatigue analysis of composite material parabolic *leaf spring* through S-N approach using FEA. *International Research Journal of Engineering and Technology*.

Ritesh Mistry, Dynamic Analysis of a *Leaf spring*, IJREAT, Vol.2, Issue 2, Apr-May, 2014.

R. Suthan, V. Jayakumar, S. Madhu, Evaluation of Mechanical properties of kevlar fibre epoxy composites: an experimental study, Int. J. Vehicle Struct. Syst. 10 (6) (2019) 389–394.

Shukla, M. J., Kumar, D. S., Mahato, K. K., Rathore, D. K., Prusty, R. K., & Ray, B. C. (2015). A comparative study of the mechanical performance of Glass and Glass/Carbon hybrid polymer composites at different temperature environments. *IOP Conference Series: Materials Science and Engineering*, *75*(1). https://doi.org/10.1088/1757-899X/75/1/012002

S. Krall, R. Zemann, Investigation of the dynamic behaviour of CFRP leaf springs, Procedia Eng. 100 (2014) 646–655.

S. Madhu, M. Balasubramanian, Impact of Nozzle Design on surface roughness of abrasive jet machined glass fibre reinforced polymer composites, Silicon 10 (6) (2018) 2453–2462.

UNIVERSITAS
GADJAH MADA
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Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

S. Madhu, M. Balasubramanian, Effect of abrasive jet process parameters on machining glass fibre reinforced polymer composite, Mater. Sci. Eng. Technol.48 (2017) 1146–1157.

Sri Vidhya, M., & Merlyn Christina, K. V. (2020). Fatigue Life, Fatigue Damage, Fatigue Factor of Safety, Fatigue Sensitivity, Biaxiality Indication and Equivalent Stress of a Radial Connecting Rod. *International Research Journal of Engineering and Technology*.

S. Saelem, S. Chantranuwathana, K. Panichanun, P. Preedanood, P. Wichienprakarn, and P. Kruoongarjnukool (2009) "Experimental verification of *leaf spring* model by using a *leaf spring* test rig," in Proceedings of the 23rd Conference of the Mechanical Engineering Network of Thailand, Chiang Mai, Thailand.

Thillikkani S, Nataraj M. Fatigue life prediction of heavy vehicle suspension system under varying load conditions. Advances in Mechanical Engineering. 2020;12(11). doi:10.1177/1687814020968325

Wang, J., Li, Z., Jiang, Q. (2013). The Analysis of Composite *Leaf spring* by Finite Element Method and Experimental Measurements. In: Proceedings of the FISITA 2012 World Automotive Congress. Lecture Notes in Electrical Engineering, vol 195. Springer, Berlin, Heidelberg.

Weng, J., Wen, W., dan Zhang, H. (2017). Multiaxial Fatigue Life Prediction of Composite Materials, Chinese J Aeronaatics, Elsevier

Zamanzadeh, M. and Larkin, E., Mirshams, R. (2015). Fatigue failure analysis case studies. Journal of Failure Analysis and Prevention, 15, doi: 10.1007/s11668-015-0044