
REFERENCES

- ❖ A. Fathy, O. El-kady, Thermal expansion and thermal conductivity characteristics of Cu- Al₂O₃ nanocomposites, *Mater. Des.* 46 (2013) 355–359. <https://doi.org/10.1016/j.matdes.2012.10.042>.
- ❖ A. Jamwal, P.P. Seth, D. Kumar, R. Agrawal, K.K. Sadasivuni, P. Gupta, Microstructural, tribological and compression behaviour of Copper matrix reinforced with Graphite-SiC hybrid composites, *Mater. Chem. Phys.* 251 (2020) 123090. <https://doi.org/10.1016/j.matchemphys.2020.123090>.
- ❖ A. Mazloun, J. Kováčik, Š. Emmer, I. Sevostianov, Copper–graphite composites: thermal expansion, thermal and electrical conductivities, and cross-property connections, *J. Mater. Sci.* 51 (2016) 7977–7990. <https://doi.org/10.1007/s10853-016-0067-5>.
- ❖ A. Meher, D. Chaira, Effect of Graphite and SiC Addition into Cu and SiC Particle Size Effect on Fabrication of Cu–Graphite–SiC MMC by Powder Metallurgy, *Trans. Indian Inst. Met.* 70 (2017) 2047–2057. <https://doi.org/10.1007/s12666-016-1026-1>.
- ❖ A. Mondal, A. Upadhyaya, D. Agrawal, Effect of Heating Mode and Copper Content on the Densification of W-Cu Alloys, *Indian J. Mater. Sci.* 2013 (2013) 1–7.
- ❖ A.M. Kovalchenko, O.I. Fushchich, S. Danyluk, The tribological properties and mechanism of wear of Cu-based sintered powder materials containing molybdenum disulfide and molybdenum diselenite under unlubricated sliding against copper, *Wear.* 290–291 (2012) 106–123. <https://doi.org/10.1016/j.wear.2012.05.001>.

- ❖ A.R. Lansdown, Molybdenum disulphide lubrication, Tribology series, elsevier, 49(2015).
- ❖ A Sluzalec. “Stochastic characteristics of powder metallurgy processing. Applied Mathematical Modelling 39 (2015) 7303–7308.
- ❖ Alfons Fischer and Kirsten Bobzin, Friction, wear, and wear protection, International symposium on friction, wear and wear protection, WILEY-VCH Verlag GmbH & Co, 2011. <https://doi.org/10.1002/9783527628513.ch20>.
- ❖ B. Bhushan, An introduction to tribology, Tribology Series, 2nd Edition, March 2013.
- ❖ B C Kandpal, J Kumar, H Singh. Production Technologies of Metal Matrix Composite: A Review. International Journal of Research in Mechanical Engineering and Technology, 2(2) (2014) 27-32.
- ❖ Banerjee, S. Poria, G. Sutradhar, P Sahoo, Abrasive wear behavior of WC nanoparticle reinforced magnesium metal matrix composites. Surface Topography: Metrology and Properties. (2020). 8. 10.1088/2051-672X/ab82a1
- ❖ Buytoz S, Dagdelen F, Islak S, et al. Effect of the TiC content on microstructure and thermal properties of Cu-TiC composites prepared by powder metallurgy. J Therm Anal Calorim 2014; 117: 1277–1283
- ❖ C. Mitchell, A study of the powder processing, tribological, performance and metallurgy of aluminium-based, discontinuously reinforced metal matrix composites effect., Doctoral Thesis, Napier university Edinburgh, Scotland, 2002.
- ❖ C. Padmavathi, A. Upadhyaya, D. Agrawal, Effect of microwave and conventional heating on sintering behavior and properties of Al-Mg-Si-Cu alloy,

Mater. Chem. Phys. 130 (2011) 449–457.

<https://doi.org/10.1016/j.matchemphys.2011.07.008>.

- ❖ C. Suryanarayana, Mechanical alloying and milling, *Progress in Materials Science*, 46 (2001), 1-184.
- ❖ C.P. Samal, J.S. Parihar, D. Chaira, The effect of milling and sintering techniques on mechanical properties of Cu-graphite metal matrix composite prepared by powder metallurgy route, *J. Alloys Compd.* 569 (2013) 95–101.
<https://doi.org/10.1016/j.jallcom-2013.03.122>.
- ❖ C.S. Ramesh, R. Noor Ahmed, M.A. Mujeebu, M.Z. Abdullah, Development and performance analysis of novel cast copper-SiC-Gr hybrid composites, *Mater. Des.* 30 (2009) 1957–1965. <https://doi.org/10.1016/j.matdes.2008.09.005>.
- ❖ Charoo MS and Wani MF 2016 Tribological properties of IF-MoS₂ nanoparticles as lubricant additive on cylinder liner and piston ring tribo-pair *Tribol. Ind.* 38 156–62
- ❖ Chourasiya SK, Gautam G and Singh D. Mechanical and tribological behavior of warm rolled Al-6Si-3Graphite self-lubricating composite synthesized by spray forming process. *Silicon* 2020; 12: 831–842.
- ❖ D. Nayak, M. Debata, Effect of composition and milling time on mechanical and wear performance of copper–graphite composites processed by powder metallurgy route, *Powder Metall.* 57(2014) 265–273.
<https://doi.org/10.1179/1743290113Y.0000000080>.
- ❖ D.A. G Sethi, A Upadhyay, Microwave sintering of premixed and prealloyed Cu-12Sn bronze, *Sci. Sinter.* 35 (2003) 49–65.
- ❖ D.D.L. Chung, Review: Graphite, *J. Mater. Sci.* 37 (2002) 1475–1489.
<https://doi.org/10.1023/A:1014915307738>.

- ❖ D. O. Gavaldà, Gonzalo Garcia Luna, Zhirong Liao and Dragos A. Axinte. “The new challenges of machining Ceramic Matrix Composites (CMCs): Review of surface integrity.” *International Journal of Machine Tools and Manufacture* (2019).
- ❖ D.W. Lee, G.H. Ha, B.K. Kim, Synthesis of Cu- Al₂O₃ nano composite powder, *Scripta mater.* 44 (2001) 2137–2140.
- ❖ Das S, Chandrasekaran M, Samanta S, et al. Fabrication and tribological study of AA6061 hybrid metal matrix composites reinforced with SiC/B₄C nanoparticles. *Ind Lubr Tribol* 2019; 71: 83–93.
- ❖ Dipen Kumar Rajak, Durgesh D. Pagar, Ravinder Kumar, Catalin I. Pruncu, Recent progress of reinforcement materials: a comprehensive overview of composite materials, *Journal of Materials Research and Technology*, Volume 8, Issue 6, 2019, Pages 6354-6374, ISSN 2238- 7854, <https://doi.org/10.1016/j.jmrt.2019.09.068>.
- ❖ Evans, C. San Marchi, A. Mortensen, Metal matrix composites in industry, an introduction and a survey, Springer science business media, 2003. doi 10.1007/978-1- 4615-0405-4
- ❖ Fallahdoost H, Nouri A and Azimi A. Dual functions of TiC nanoparticles on tribological performance of Al/graphite composites. *J Phys Chem Solids* 2016; 93: 137–144.
- ❖ Fan G, Jiang Y, Tan Z, Guo Q, Bang Xiong D, Su Y, Lin R, HuL, Li Z and ZhangD2018 Enhanced interfacial bonding and mechanical properties in CNT/Al composites fabricated by flake powder metallurgy *Carbon* N. Y. 130 333–9.

- ❖ Freschi M, Di Virgilio M, Haiko O, Mariani M, Andena L, Lecis N, Kömi J and DotelliG2022 Investigation of second phase concentration effects on tribological and electrical properties of Cu–WS₂ composites Tribol. Int. 166 107357.
- ❖ G Gautam, A Mohan. Effect of ZrB₂ particles on the microstructure and mechanical properties of hybrid (ZrB₂ + Al₃Zr)/AA5052 insitu composites. Journal of Alloys and Compounds Volume 649 (2015) Pages 174-183.
- ❖ G. E. Dieter, R. W. Heckel, R. M. Koerner, Powder metallurgy processing, new techniques and analyses, Academic Press, INC., 1978
- ❖ G Nageswaran, S. Natarajan, K.R. Ramkumar. Synthesis, Structural characterization, mechanical and wear behavior of CuTiO₂ Gr hybrid composite through stir casting technique. Journal of alloys and compounds768 (2018)733-741.
- ❖ G.S. Upadhyaya, Powder Metallurgy Technology, Cambridge Int. Sci. Publ. (2014) 1– 5. <https://doi.org/10.1073/pnas.0703993104>.
- ❖ Gautam G, Ghose AK and Chakrabarty I 2015 Tensile and dry sliding wear behavior of in-situ Al₃Zr+Al₂O₃-reinforced aluminum metal matrix composites Metall. Mater. Trans. A 46 5952–61.
- ❖ Ghasali E, Yazdani-rad R, Asadian Kand Ebadzadeh T 2017 Production of Al-SiC-TiC hybrid composites using pure and 1056 aluminum powders prepared through microwave and conventional heating methods J. Alloys Compd. 690 512–8.
- ❖ H. Kato, M. Takama, K. Washida, Y. Sasaki, S. Miyashita, Mechanical and Wear Properties of Sintered Cu-Sn Composites Containing Copper-Coated Solid Lubricant Powders, Funtai Oyobi Fummatsu Yakin/Journal Japan Soc. Powder Powder Metall. 50 (2003) 968–972. <https://doi.org/10.2497/jjspm.50.968>.

- ❖ H. Kato, M. Takama, Y. Iwai, K. Washida, Y. Sasaki, Wear and mechanical properties of sintered copper-tin composites containing graphite or molybdenum disulfide, *Wear.* 255 (2003) 573–578. [https://doi.org/10.1016/S0043-1648\(03\)00072-3](https://doi.org/10.1016/S0043-1648(03)00072-3).
- ❖ H Sevik, C Kurnaz S. Properties of alumina particulate reinforced aluminum alloy produced by pressure die casting. *Mater Des*27 (2006) 676-83.
- ❖ H. Zhao, L. Liu, Y. Wu, W. Hu, Investigation on wear and corrosion behavior of Cu- graphite composites prepared by electroforming, *Compos. Sci. Technol.* 67 (2007) 1210–1217. <https://doi.org/10.1016/j.compscitech.2006.05.013>.
- ❖ H. Zou, X. Ran, W. Zhu, Y. Wang, S. Zhan, Z. Hao, Tribological behavior of copper- graphite composites reinforced with Cu-coated or uncoated SiO₂ particles, *Materials (Basel)*. 11 (2018). <https://doi.org/10.3390/ma11122414>.
- ❖ Haimin Dinga , Weiwen Chua , Qing Liua , Huiqiang Wangb , Ce Haob , Haoran Jiaa , Jinfeng Wanga , Tiejun Cia, Microstructure evolution of Cu-TiC composites with the change of Ti/C ratio.
- ❖ J. Kumar, S. Mondal, Microstructure and properties of graphite-reinforced copper matrix composites, *J. Brazilian Soc. Mech. Sci. Eng.* 7 (2018). <https://doi.org/10.1007/s40430-018-1115-7>.
- ❖ J.F. Archard, Contact and rubbing of flat surfaces, *J. Appl. Phys.* 24 (1953) 981–988. <https://doi.org/10.1063/1.1721448>.
- ❖ J.U. Ejiofor, R. G. Reddy. Developments in the processing and properties of particulate Al-Si composites. *JOM*49 (1997) 31-37.
- ❖ Jabinth J and Selvakumar N. Enhancing the mechanical, wear behaviour of copper matrix composite with 2V-Gr as reinforcement. *Proc IMechE, Part J: J Engineering Tribology* 2021; 235: 1405–1419.

- ❖ Jafari Nodooshan HR, Liu W, Wu G, et al (2014) Mechanical and tribological characterization of Al-Mg₂Si composites after yttrium addition and heat treatment. *Journal of Materials Engineering and Performance* 23:1146–1156. <https://doi.org/10.1007/s11665-014-0900-4>.
- ❖ K. Dash, B.C. Ray, D. Chandra, Synthesis and characterization of copper-alumina metal matrix composite by conventional and spark plasma sintering, *J. Alloys Compd.* 516 (2012) 78–84. <https://doi.org/10.1016/j.jallcom.2011.11.136>.
- ❖ K. Rajkumar, S. Aravindan, M.S. Kulkarni, Wear and life characteristics of microwave- sintered copper-graphite composite, *J. Mater. Eng. Perform.* 21 (2012) 2389–2397. <https://doi.org/10.1007/s11665-012-0161-z>.
- ❖ K. Rajkumar, S. Aravindan, Tribological performance of microwave-heat-treated copper-graphite composites, *Tribol. Lett.* 37 (2010) 131–139. <https://doi.org/10.1007/s11249-009-9499-2>.
- ❖ K. Skotnicová, M. Kurša, I. Szurman, *Powder Metallurgy (University Textbook)*, 2014. [http://katedry.fmfi.vsb.cz/Opory_FMFI_ENG/AEM/Powder Metallurgy.pdf](http://katedry.fmfi.vsb.cz/Opory_FMFI_ENG/AEM/Powder%20Metallurgy.pdf).
- ❖ K.H.W. Seah, composites properties of as-cast and ZA-27 /graphite particulate, *Compos. Part A Appl. Sci. Manuf.* (1997) 251–256.
- ❖ K.K. Chawla, N. Chawla, *Metal Matrix Composites*, Springer science business media, 1986. ISBN: 100-387-23306-7.
- ❖ Kartheesan S, Shahul Hamid Khan B, Kamaraj M, Tekumalla S and Gupta M 2022 Dry sliding wear behavior of magnesium nanocomposites using response surface methodology *J. Tribol.* 144 011704
- ❖ Kestursatya M, Kim JK and Rohatgi PK. Wear performance of copper–graphite composite and a leaded copper alloy. *Mater Sci Eng A* 2003; 339: 150–158. 34.

- ❖ Khereddine AY, Larbi FH, Azzeddine H, et al. Microstructures and textures of a Cu–Ni–Si alloy processed by high-pressure torsion. *J Alloys Compd* 2013; 574: 361– 367.
- ❖ L. Ru-Tie, X. Xiang, C. Fu-Sheng, L. Jin-Zhong, H. Li-Ling, Z. Yi-Qing, Tribological performance of graphite containing tin lead bronzesteel bimetal under reciprocal sliding test, *Tribol. Int.* 44 (2011) 101–105. <https://doi.org/10.1016/j.triboint.2010.09.012>.
- ❖ Lipatnikov, V. & Kottar, A. & Zueva, L. & Gusev, Aleksandr. (2000). Ordering effects in nonstoichiometric titanium carbide. *Inorganic Materials.* 36. 155-161. [10.1007/BF02758018](https://doi.org/10.1007/BF02758018).
- ❖ Liu B, Zhang D, Li X, He Z, Guo X, Liu Z and Guo Q 2018 Effect of graphite flakes particle sizes on the microstructure and properties of graphite flakes/copper composites *J. Alloys Compd.* 766 382–90.
- ❖ M.R. Akbarpour, M. Najafi, S. Alipour, H.S. Kim, Hardness, wear and friction characteristics of nanostructured Cu-SiC nanocomposites fabricated by powder metallurgy route, *Materials Today Communications*, Volume 18, 2019, Pages 25-31, ISSN 2352-4928, <https://doi.org/10.1016/j.mtcomm.2018.11.001>
- ❖ M. Amirjan, H. Khorsand, M.H. Siadati, R. Eslami Farsani, Artificial Neural Network prediction of Cu-Al₂O₃ composite properties prepared by powder metallurgy method, *J. Mater. Res. Technol.* 2 (2013) 351–355. <https://doi.org/10.1016/j.jmrt.2013.08.001>.
- ❖ M. Barmouz, P. Asadi, M.K. Besharati Givi, M. Taherishargh, Investigation of mechanical properties of Cu/SiC composite fabricated by FSP: Effect of SiC particles' size and volume fraction, *Mater. Sci. Eng. A.* 528 (2011) 1740–1749. <https://doi.org/10.1016/j.msea.2010.11.006>.

- ❖ M. Dixit, R. Srivastava, The effect of copper granules on interfacial bonding and properties of the copper-graphite composite prepared by flake powder metallurgy, *Adv. Powder Technol.* (2019). <https://doi.org/10.1016/j.apt.2019.09.013>.
- ❖ M. Grandin, U. Wiklund, Tribology International Influence of mechanical and electrical load on a copper / copper-graphite sliding electrical contact, *Tribol. Int.* 121 (2018) 1–9. <https://doi.org/10.1016/j.triboint.2018.01.004>.
- ❖ M. Kestursatya, J.K. Kim, P.K. Rohatgi, Wear performance of copper-graphite composite and a leaded copper alloy, *Mater. Sci. Eng. A.* 339 (2003) 150–158. [https://doi.org/10.1016/S0921-5093\(02\)00114-4](https://doi.org/10.1016/S0921-5093(02)00114-4).
- ❖ M.L.T. Guo, C.Y.A. Tsao, Tribological behavior of self-lubricating aluminium/SiC/graphite hybrid composites synthesized by the semi-solid powder- densification method, *Compos. Sci. Technol.* 60 (2000) 65–74. [https://doi.org/10.1016/S0266-3538\(99\)00106-2](https://doi.org/10.1016/S0266-3538(99)00106-2).
- ❖ M. Rosso. Ceramic and metal matrix composites: routes and properties. *J. Mater. Process. Technology* 175 (2006) 364-375.
- ❖ Madavali B, Lee JH, Lee JK, Cho KY, Challapalli S and Hong S J 2014 Effects of atmosphere and milling time on the coarsening of copper powders during mechanical milling *Powder Technol.* 256 251–6.
- ❖ Mandava RK, Reddy V V, Rao VRK and Reddy KS 2022 Wear and frictional behaviour of Al 7075/FA/SiC hybrid MMC's using response surface methodology *Silicon.* 14 5319–31.
- ❖ Menezes PL, Ingole SP, Nosonovsky M, et al. *Tribology for scientists and engineers: From basics to advanced concepts.* New York: Springer–Verlag, 2013, pp.1–948. DOI: 10. 1007/978-1-4614-1945-7.

- ❖ Moses J J, Dinaharan I and Sekhar S J 2016 Prediction of influence of process parameters on tensile strength of AA6061/ TiC aluminum matrix composites produced using stir casting *Trans. Nonferrous Met. Soc. China* 26 1498–511.
- ❖ Nayak D and Debata M 2014 Effect of composition and milling time on mechanical and wear performance of copper-graphite composites processed by powder metallurgy route, *Powder Metall.* 57 265–73
- ❖ P. Maji, R.K. Dube, B. Basu, Enhancement of wear resistance of copper with tungsten addition (≤ 20 wt %) by powder metallurgy route, *Journal of Tribology* 131 (2009) 1–9. <https://doi.org/10.1115/1.3204776>.
- ❖ P.D. Srivivas, M.S. Charoo, Role of fabrication route on the mechanical and tribological behavior of aluminum metal matrix composites- A Review, *Mater. Today Proc.* 5 (2018) 20054–20069. <https://doi.org/10.1016/j.matpr.2018.06.372>.
- ❖ P.K. Rohatgi, S. Ray, Y. Liu, Tribological properties of metal matrix-graphite particle composites, *Int. Mater. Rev.* 37 (1992) 129–152. <https://doi.org/10.1179/imr.1992.37.1.129>.
- ❖ P.K. Rohatgi, *Self-Lubricating Composites*, n.d.
- ❖ Parvizi-Majidi A: "Particulate Reinforced MMCs, Chapter 3.26" in *Comprehensive Composite Materials, Vol. I: Reinforcement Materials and General Theories*, T.W. Chou, ed., Pergamon, Oxford, UK, 2000, pp. 175-198.
- ❖ Pradeep K. Rohatgi, Metal-matrix composites, *Defence science journal*, 43 (1993) 323– 349.
- ❖ Prajapati DK, Singh K and Tiwari M 2019 Tribological investigation of copper and AISI 304 steel during dry sliding wear *Surf. Topogr. Metrol. Prop.* 7 015021

- ❖ R. Casati, M. Vedani, Metal matrix composites reinforced by Nano-Particles—A review, *Metals*, 4 (2014) 65–83. <https://doi.org/10.3390/met4010065>.
- ❖ R. Venkatesh, V. Seshagiri, Thermal, corrosion and wear analysis of copper based metal matrix composites reinforced with alumina and graphite, *Def. Technol.* 14 (2018) 346– 355. <https://doi.org/10.1016/j.dt.2018.05.003>.
- ❖ R.O. THUMMLER, F., *An Introduction to Powder Metallurgy*, The Institute of Materials, 1993.
- ❖ Radhika N and Raghu R 2015 Dry sliding wear behaviour of aluminium Al-Si12Cu/TiB2 metal matrix composite using response surface methodology *Tribol. Lett.* 59 2.
- ❖ Rajesh Kumar B and Subba Rao T 2012AFMstudies on surface morphology, topography and texture of nanostructured zinc aluminum oxide thin films *Dig. J Nanomater. Biostructures.* 7 1881–9.
- ❖ Rajkumar K and Aravindan S. Tribological performance of microwave sintered copper–TiC–graphite hybrid composites. *Tribol Int* 2011; 44: 347–358.
- ❖ Raoufi D, Kiasatpour A, Fallah HR and Rozatian A SH2007 Surface characterization and microstructure of ITO thin films at different annealing temperatures *Appl. Surf. Sci.* 253 9085–90.
- ❖ Ravindran P, Manisekar K, Narayanasamy R, et al. Tribological behaviour of powder metallurgy-processed aluminium hybrid composites with the addition of graphite solid lubricant. *Ceram Int* 2013; 39: 1169–1182.
- ❖ S Attar, M Nagral, H N Reddappa, V Auradi. A Review on Particulate Reinforced Aluminum Metal Matrix Composites. *JETIR* Volume 2 Issue 2 (2015) 2349-5162.

- ❖ S. Motozuka, M. Tagaya, T. Ikoma, T. Yoshioka, Z. Xu, J. Tanaka, *Journal of Composite Materials*, (2012). <https://doi.org/10.1177/0021998311432947>.
- ❖ S.F. Moustafa, S.A. El-badry, A.M. Sanad, B. Kieback, Friction and wear of copper – graphite composites made with Cu-coated and uncoated graphite powders, *Wear*. 253 (2002) 699–710.
- ❖ S.F. Moustafa, Z. Abdel-Hamid, A.M. Abd-Elhay, Copper matrix SiC and Al₂O₃ particulate composites by powder metallurgy technique, *Mater. Lett.* 53 (2002) 244–249. [https://doi.org/10.1016/S0167-577X\(01\)00485-2](https://doi.org/10.1016/S0167-577X(01)00485-2).
- ❖ S.K. Khatkar, N.M. Suri, S. Kant, Pankaj, A review on mechanical and tribological properties of graphite reinforced self lubricating hybrid metal matrix composites, *Rev. Adv. Mater. Sci.* 56 (2018) 1–20. <https://doi.org/10.1515/rams-2018-0036>.
- ❖ Sahoo P and Koczak MJ. Analysis of in situ formation of titanium carbide in aluminum alloys. *Mater Sci Eng A* 1991; 144: 37–44. 35.
- ❖ Salguero J, Vazquez-Martinez JM, Del Sol I, et al. Application of pin-on-disc techniques for the study of tribological interferences in the dry machining of A92024-T3 (Al-Cu) alloys. *Materials (Basel)* 2018; 11: 1–11.
- ❖ Sands, B Fink, S McKnight et al. Environmental issues for polymer matrix composites and structural adhesives. *Clean Products and Processes* 2, 228–235 (2001). <https://doi.org/10.1007/s100980000089>.
- ❖ Somani N, Tyagi YK, Kumar P, Srivastava V and Bhowmick H, 2019 Enhanced tribological properties of SiC reinforced copper metal matrix composites *Mater. Res. Express* 6 016549.
- ❖ Su L, Gao F, Han X, Fu R and Zhang E 2015 Tribological behavior of copper-graphite powder third body on copper based friction materials *Tribol. Lett.* 60 30

- ❖ Sujith SV, Mahapatra MM and Mulik RS. An investigation into fabrication and characterization of direct reaction synthesized Al-7079-TiC in situ metal matrix composites. Arch Civ Mech Eng 2019; 19: 63–78.
- ❖ T. Varol, A. Canakci, The effect of type and ratio of reinforcement on the synthesis and characterization Cu-based nanocomposites by flake powder metallurgy, J. Alloys Compd. 649 (2015) 1066–1074. <https://doi.org/10.1016/j.jallcom.2015.07.008>.
- ❖ T. William Clyne, An introductory overview of metal matrix composites systems, types and developments, Elsevier Ltd., 2017. <https://doi.org/10.1016/B978-0-12-803581-8.09961-6>
- ❖ T.W.C. and P.J. Withers, An Introduction to Metal Matrix Composites, 2016.
- ❖ Tayyeb Ali, Lin Wang, Xingwang Cheng, Di Gu, Zhe Zhou, Xinhua Min, The effect of TiC on microstructure and mechanical properties of Ti-5553 beta phase titanium alloy, Materials & Design, Volume 214, 2022, 110395, ISSN 0264-1275, <https://doi.org/10.1016/j.matdes.2022.110395>.
- ❖ Thirumoorthy, Prabhuram & Somurajan, V. & Prabhakaran, S. (2010). Hybrid composite materials. Proceedings of the International Conference on Frontiers in Automobile and Mechanical Engineering- 2010, FAME-2010. 27-31. [10.1109/FAME.2010.5714794](https://doi.org/10.1109/FAME.2010.5714794).
- ❖ Uyyuru RK, Surappa MK and Brusethaug S. Tribological behavior of Al–Si–SiCp composites/automobile brake pad system under dry sliding conditions. Tribol Int 2007; 40: 365–373
- ❖ Varol T and Canakci A 2015 The effect of type and ratio of reinforcement on the synthesis and characterization Cu-based nanocomposites by flake powder metallurgy J. Alloys Compd. 649 1066–74

- ❖ Vettivel SC, Selvakumar N, Narayanasamy R, Leema N (2013) Numerical modelling, prediction of Cu-W nano powder composite in dry sliding wear condition using response surface methodology. *Materials and Design* 50:977–996. <https://doi.org/10.1016/j.matdes.2013.03.072>.
- ❖ Xiao-Ming H, Fei G, Lin-Lin S, Rong F and En Z 2017 Effect of graphite content on the tribological performance of copper matrix composites under different friction speeds *J. Tribol.* 139 041601.
- ❖ Yi Zenga, X Xionga, D Wanga, L Wu. Infiltration mechanism and factors influencing carbon/carbon– Zr–Ti–C composites prepared by liquid metal infiltration. *Journal of Materials Processing Technology* 214 (2014) 3150–3157.
- ❖ Y. Zhan, G. Zhang, Friction and wear behavior of copper matrix composites reinforced with SiC and graphite particles, *Tribol. Lett.* 17 (2004) 91–98. <https://doi.org/10.1023/B:TRIL.0000017423.70725.1c>.
- ❖ Y. Zhan, G. Zhang, Graphite and SiC hybrid particles reinforced copper composite and its tribological characteristic, *J. Mater. Sci. Lett.* 22 (2003) 1087–1089. <https://doi.org/10.1023/A:1024986824717>.
- ❖ Z. Xiao, R. Chen, X. Zhu, Z. Li, G. Xu, Y. Jia, Y. Zhang, Microstructure, and Physical and Mechanical Properties of Copper – Graphite Composites Obtained by In Situ Reaction Method, *J. Mater. Eng. Perform.* 2 (2020). <https://doi.org/10.1007/s11665-020-04646-8>.

LIST OF PUBLICATIONS

1. **Ankit**, G. Gautam, K.K. Singh, S. Mohan, Synergetic influence of TiC_{np} and graphite particles on tribological performance of Cu based composites prepared by flake powder metallurgy, *Proc. Inst. Mech. Eng. Part E J. Process Mech. Eng.* (2023).
2. **Ankit**, G. Gautam, K.K. Singh, S. Mohan, Correlating topographical characteristics of relaxed layer to tribology in Cu-Gr-TiC composite system, *Surf. Topogr. Metrol. Prop.* 11 (2023).
3. **Ankit**, V. Kumar, A. K. Yadav, G. Gautam, K.K. Singh, S. Mohan, Prediction of tribological performance of Cu-Gr-TiC composites based on response surface methodology and worn surface analysis. *Physica Scripta* (2023).
4. **Ankit**, Vineet Kumar, Ankitendran Mishra, Sunil Mohan, K.K. Singh, Anita Mohan, The effect of titanium carbide particles on microstructure and mechanical properties of copper/graphite composites prepared by flake powder metallurgy route. *Materials Today Proceedings* (2020).