

Mohamed Kamal Ahmed Ali (M.K.A. Ali)

*Assistant Professor in Automotive and Tractors Engineering Department, Faculty of Engineering,
Minia University, El-Minia 61519, Egypt.*



Date of birth 15/02/1985 | Nationality Egyptian
002/01020068536 (Egypt)



Eng.m.kamal@mu.edu.eg



<http://scholar.google.com/citations?user=RJU89YMAAAAJ&hl=en>

<https://www.scopus.com/authid/detail.uri?authorId=56780823900>

https://www.researchgate.net/profile/Mohamed_Ahmed_Ali

<http://orcid.org/0000-0002-5652-0262>

<https://www.mendeley.com/profiles/mohammed-kamal-ahmed-ali/stats/>

<https://publons.com/researcher/1330664/mohamed-kamal-ahmed-ali-mka-ali/>

<https://www.reviewerrecognition.elsevier.com/#/profile/e57465fc-fa22-404b-8e03-25>

[https://www.growkudos.com/profile/mohamed_kamal_ahmed_ali__\(m.k.a._ali\)](https://www.growkudos.com/profile/mohamed_kamal_ahmed_ali__(m.k.a._ali))

<http://misdb.minia.edu.eg/miniportal/StaffCV.aspx?id=2539>

Scopus

Author ID: 56780823900

Total citations: 513

h-index: 14

Google Scholar

Citations: 682

h-index: 15

i10-index: 17



RG Score: 30.72

@ 8/11/2019

➤ Quick Highlights:

- M.K.A. Ali received his PhD degree in May 2017 from Wuhan University of Technology, Wuhan, China.
- M.K.A. Ali is Assistant Professor in Automotive and Tractors Engineering Department, Faculty of Engineering, Minia University.
- M.K.A. Ali Awarded Minia University Encouragement Award for Engineering and Technology Science in 2019, Egypt.
- M.K.A. Ali Awarded Excellent Doctoral Dissertation from Wuhan University of Technology, 2018, China.
- M.K.A. Ali held a Post-Doctoral position at Automotive School, Wuhan University of Technology, Wuhan, China (2017: 2019).
- M.K.A. Ali is mainly engaged in the research field of nanotechnology application in automotive (Nano-Tribology in automotive engines) for saving the energy and improving engine performance using smart nanomaterials.
- M.K.A. Ali has published several articles tagged by SCI in leading journals such as Applied Energy, Tribology International, Wear, Energy, Renewable and Sustainable Energy Reviews, Energy, Energy Conversion and Management, etc.
- M.K.A. Ali is co-PI in the project from the National Natural Science Foundation of China (NSFC) from 2019 to 2022.
- M.K.A. Ali is Reviewer in several of the Journals such as Tribology International (Q1), ACS Applied Materials & Interfaces (Q1, Class: A) etc.
- M.K.A. Ali awarded his outstanding publication award for academic year 2015-2016-2017-2018 from Wuhan University of Technology and Minia University for academic year 2017-2018.

➤ Education and Training:

- 10/2017 – 10/2019** Postdoctoral Research, Hubei Key Laboratory of Advanced Technology for Automotive Components, Wuhan University of Technology, China. (Collaboration Supervisor: Prof. Hou Xianjun).
- 2014 - 2017** Ph.D., Automotive Engineering, School of Automotive, Wuhan University of Technology, China.
- 2010 - 2013** M.Sc., Automotive Engineering, Faculty of Engineering, Minia University, Egypt.
- 2010 - 2012** Technical affairs officer for vehicles Battalion 46 in the Armed Forces, Egypt.
- 2004 - 2009** B.Sc., Automotive Engineering (by distinction with Honors, Ranked the First), Faculty of Engineering, Minia University, Egypt.

➤ Professional Experience:

- 2017 - Now** Assistant Professor in Automotive Engineering, Minia University, El-Minia 61519, Egypt
- 2014 - 2017** PhD Candidate in Wuhan University of Technology, Wuhan 430070, China.
- 2013 - 2014** Assistant Lecturer in Automotive Engineering, Minia University, El-Minia 61519, Egypt.
- 2012 - 2013** Demonstrator in Automotive Engineering, Minia University, El-Minia 61519, Egypt.
- 2010 - 2012** Technical affairs officer for vehicles Battalion 46 Second Army in Egyptian armed forces.

➤ Research Interests:

Tribology, Engine Tribology, Advanced Lubrication for Energy Efficiency, Engine Performance and Emission Control Technologies, Nanomaterials, Nano-Lubricants Additives, Solid Lubricants, and Nano-Tribology Applications in Automotive (Nuclear Tribology).

➤ Honors and Awards:

- 2019** Awarded Minia University Encouragement Award for Engineering and Technology Science in 2019, Egypt.
- 2018** Awarded Excellent Doctoral Dissertation from Wuhan University of Technology, Wuhan, 2018, China.
- 2017** Outstanding Reviewer from Tribology International, 2017, Elsevier.
- 2017** Scientific publication award for the academic years 2017 and 2018 from Minia University, Egypt.
- 2017-2016** Outstanding publication award for academic years 2016-2017, 2018 and 2019 from Wuhan University of technology, China.

➤ Grants and Fellowships:

- 1- Post-doctoral position from 10/2017 to 10/2019 at Automotive School, Wuhan University of Technology, Wuhan, China.
- 2- CSC Scholarship from 9/2014 to 9/2017 to study PhD at Automotive School, Wuhan University of Technology, Wuhan, China.

➤ Academic Activities:

The contribution in the peer review process in academic journals:

[HTTPS://PUBLONS.COM/RESEARCHER/1330664/MOHAMED-KAMAL-AHMED-ALI-MKA-ALI/](https://publons.com/researcher/1330664/mohamed-kamal-ahmed-ali-mka-ali/)

- 1- Tribology International (SCI, IF: 3.246, Q1)
- 2- Applied Surface Science (SCI, IF: 5.155, Q1)
- 3- ACS Applied Materials & Interfaces (SCI, IF: 8.456, Q1)

- 1- Renewable & Sustainable Energy Reviews (SCI, IF: 10.556, Q1)
- 2- Energy Conversion and Management (SCI, IF: 7.181, Q1)
- 3- Friction (SCI, IF: 3.00, Q1)
- 4- Solar Energy (SCI, IF: 4.674, Q1)
- 5- Materials Research Express (SCI, IF: 1.449, Q3)
- 6- Metals and Materials International (SCI, IF: 1.647, Q2)
- 7- Journal of Nanofluids
- 8- Physica A (SCI, IF: 2.500, Q2)
- 9- Mechanical Systems and Signal Processing (SCI, IF: 5.005, Q1)
- 10- Journal of Materials Science (SCI, IF: 3.442, Q1)
- 11- Iranian Journal of Science and Technology (SCI, IF: 0.727, Q3)
- 12- Lubrication Science (SCI, IF: 1.682, Q2)
- 13- Tribology in Industry
- 14- Advances in Mechanical Engineering (SCI, IF: 1.024, Q3)
- 15- Surface and Interface Analysis (SCI, IF: 1.319, Q3)
- 16- Nanotechnology Reviews (SCI, IF: 2.759, Q2)
- 17- ACS Applied Nano Materials
- 18- International Journal of Engineering and Technologies
- 19- Bulletin of the Chemical Society of Ethiopia
- 20- Tribology in industry
- 21- Current Mechanics and Advanced Materials
- 22- Powder Technology (SCI, IF: 3.413, Q1)
- 23- Transactions on Mechatronics (SCI, IF: 4.943, Q1)
- 24- Clean Technologies and Environmental (SCI, IF: 2.277, Q2)

➤ Conferences and Workshops:

#	Conference Date	Country	Publication Status	Role	Conference Title
1	March, 2019	UK	Paper Published	Presenting	International Conference on Innovative Applied Energy (IAPE'19).
2	March, 2019	China	Paper Published	Presenting	5 th International Conference on Materials, Mechanical Engineering and Automation Technology (MMEAT2019),
3	March, 2019	China	Paper Published	Co-author	5 th International Conference on Materials, Mechanical Engineering and Automation Technology (MMEAT2019),
4	June, 2018	China	PPT (Oral)	Presenting	4 th International Automotive Emissions Control and Inspection Conference.
5	August, 2018	Canada	Paper Published	Co-author	The ASME 2018 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference (IDETC/CIE 2018).
6	April, 2018	USA	Paper Published	Co-author	Smart Cities, Autonomous Vehicles and ICE Powertrain Just Some of the Topics to be Discussed at SAE International WCX World Congress Experience.
7	July, 2017	China	PPT (Oral)	Presenting	3 th Vehicle Emissions Control and Supervision Technology International Seminar Workshop.

➤ Academic Supervision Activity:

#	Degree	Status	Name of Candidate	Host University	Role	Keywords
1	M.Sc.	Active	Diaa Mahmoud	Minia University	Senior supervisor	Engine Tribology, Nanolubricants
2	M.Sc.	Active	Wang Shicheng (王士成)	Wuhan University of Technology	Co-supervisor	Engine Performance and Emission Control Technologies
3	M.Sc.	Active	Tian Zekun (田泽坤)	Wuhan University of Technology	Co-supervisor	Engine Performance and Emission Control Technologies
4	PhD.	Active	Ahmed Elagouz	Wuhan University of Technology	Co-supervisor	Engine Tribology, Nanolubricants

➤ Involvement in Funded Research Projects:

#	Agency	No. of Project	PI and co-PI	Working Time	Country
1	National Natural Science Foundation of China (NSFC)	51875423	Hou Xianjun (PI), M.K.A Ali (co-PI)	From: 1/1/2019 To: 12/31/2022	China
2	ESI project in Wuhan university of technology	1653422	Hou Xianjun (PI), M.K.A Ali (co-PI)	From: 20/4/2019 To: 5/2020	China

➤ Publications Listed by Year

[M.K.A Ali](#) published several Articles tagged by SCI in peer-reviewed journals such as: Applied Energy, Tribology International, Renewable and Sustainable Energy Reviews, Wear, RSC Advances, etc. Moreover, he is published Book and Chinese Patent.

<https://scholar.google.com/citations?user=RJU89YMAAAAJ&hl=en>

<https://www.scopus.com/authid/detail.uri?authorId=56780823900>

Articles in Academic Journals:

Click on Published Paper Title to Access Paper Online

2019

- 1- [M.K.A. Ali](#), H. Xianjun, M.A.A. Abdelkareem. Anti-wear properties evaluation of frictional sliding interfaces in automobile engines lubricated by copper and graphene nanolubricants. **Friction**, 2019,1, 1-12. (SCI, IF: 3.00, Q1)
- 2- [M.K.A. Ali](#), H. Xianjun. M50 matrix sintered with nanoscale solid lubricants shows enhanced self-lubricating properties under dry sliding at different temperatures. **Tribology Letters**, 2019, 67(71), 1-16. (SCI, I F: 2.182, Q2)
- 3- [M.K.A. Ali](#), M.M. Makrahy, H. Xianjun. Role of the friction layer formed on the brake lining surface in friction stabilization for automotive brakes. **Surface Topography: Metrology and Properties**, 2019, 7(1), 015026. (SCI, IF: 2.07, Q2)

- 4- M.A.A. Abdelkareem, Lin Xu, [M.K.A. Ali](#), Abdel-Rahman BM El-Daly, Mohamed A. Hassan, Ahmed Elagouz, and Yang Bo. Analysis of the Prospective Vibrational Energy Harvesting of Heavy-Duty Truck suspensions: A Simulation Approach. **Energy**, 2019, 173,332-351. (SCI, IF: 4.968, Q1).
- 5- A. Elagouz, [M.K.A. Ali](#), H Xianjun, M. A. A. Abdelkareem, M. A. Hassan. Frictional performance evaluation of sliding surfaces lubricated by zinc-oxide nano-additives. **Surface Engineering**. 2019, 30, 1-14. (SCI, I F: 1.978, Q2)
- 6- Ammar H. Elsheikh, Swellam W. Sharshir, [M.K.A. Ali](#), J. Shaibo, Elbager M. A. Edreis, Talaat Abd elhamid, Chun Du, Zhang Haiou. Thin film technology for solar steam generation: A new dawn. **Solar Energy**, 2019, 171(1), 561-575. (SCI, I F: 4.374, Q1)
- 7- [M.K.A. Ali](#), H. Xianjun. Tribological characterization of M50 matrix composites reinforced by TiO₂/graphene nanomaterials in dry conditions under different speeds and loads. **Materials Research Express**. 6, 2019, 1165d6. (SCI, I F: 1.449, Q3)
- 8- [M.K.A. Ali](#), H. Xianjun, M.A.A. Abdelkareem, A.H. Elsheikh. Role of nanolubricants formulated in improving vehicle engines performance. 5th International Conference on Materials, Mechanical Engineering and Automation Technology (MMEAT2019), **China**.
- 9- [M.K.A. Ali](#), H. Xianjun, M.A.A. Abdelkareem. Recent advances in nanolubricant additives for fuel economy in automotive. International Conference on Innovative Applied Energy (IAPE'19). **UK**.
- 10- A. Elagouz, [M.K.A. Ali](#), H Xianjun, M. A. A. Abdelkareem. Techniques used to improve the tribological performance of the piston ring-cylinder liner contact. 5th International Conference on Materials, Mechanical Engineering and Automation Technology (MMEAT2019), **China**.
- 11- S.W. Sharshir, A.H. Elsheikh, E.M.A. Edreis, [M.K.A. Ali](#), R. Sathyamurthy, A.E. Kabeel, J. Zang, N. Yang. Improving the solar still performance by using thermal energy storage materials: A detailed review. **Desalination and Water Treatment**. (SCI, I F: 1.38, Q3)
- 12- K.h. Salman, A.H. Elsheikh, [M.K.A. Ali](#), M. Ashham, H. Zhang. Effect of Cutting Parameters on Surface Residual Stresses in Dry Turning of AISI 1035 Alloy. **Journal of the Brazilian Society of Mechanical Sciences and Engineering**, 2019, 41(8), 349. (SCI, I F: 1.743, Q3)
- 13- M.E. Zayed, S.W. Sharshir, J. Shaibo, F.A. Hammad, K.h. [M.K.A. Ali](#), Salman K.H., A.H. Elsheikh, et al. Application of nanofluids in direct absorption solar collectors (**Chapter**). In Nanofluids and their engineering applications (Book). **CRC Press/Taylor and Francis Group**, USA, ISBN 978-1-138-73902-4, 2018.

2018

- 14- [M.K.A. Ali](#), P. Fuming, H.A. Younus, M.A.A. Abdelkareem, A. Elagouz, H. Xianjun, Fuel economy in gasoline engines using Al₂O₃/TiO₂ nanomaterials as nanolubricant additives. **Applied Energy**, 2018, 211(1), 461–478. (SCI, IF: 7.9, Q1).
- 15- [M.K.A. Ali](#), H. Xianjun, M. A.A. Abdelkareem, M Gulzar, A.H. Elsheikh, Novel approach of the graphene nanolubricant for energy saving via anti-friction/wear in automobile engines. **Tribology International**, 2018, doi.org/10.1016/j.triboint.2018.04.004. (SCI, IF: 3.246, Q1).

- 16- [M.K.A. Ali](#), H. Xianjun, F.A. Essa, M.A. A. Abdelkareem, A. Elagouz, S.W. Sharshir, Friction and wear reduction mechanisms of the reciprocating contact interfaces using nanolubricant under different loads and speeds. **Journal of Tribology**, 2018, doi:10.1115/1.4039720. (SCI, IF: 1.787, Q2).
- 17- M.A.A. Abdelkareem, L. Xu, [M.K.A. Ali](#), A. Elagouz, J. Mi, S. Guo, Y. Liu, L. Zuo. Vibration energy harvesting in automotive suspension system: A detailed. **Applied Energy**, 2018, 229, 672–699. (SCI, IF: 7.9, Q1).
- 18- M.A.A. Abdelkareem, L. Xu, X. Guo, [M.K.A. Ali](#), A. Elagouz, M. A. Hassan, F.A. Essa, J. Zou. Energy harvesting sensitivity analysis and assessment of the potential power and full car dynamics for different road modes. **Mechanical Systems and Signal Processing**, 2018, 110, 307–332. (SCI, IF: 4.370, Q1).
- 19- A.H. Elsheikha, S.W. Sharshir, M.E. Mostafa, F.A. Essa, [M.K.A. Ali](#). Applications of nanofluids in solar energy: A review of recent advances. **Renewable and Sustainable Energy Reviews**, 2018, doi.org/10.1016/j.rser.2017.10.108. (SCI, Impact Factor: 9.184, Q1).
- 20- M.A.A. Abdelkareem, Lin Xu, Junyi Zou, [M.K.A. Ali](#), F. A. Essa, A Elagouz and Mohamed A. Hassan. Energy-Harvesting Potential and Vehicle Dynamics Conflict Analysis under Harmonic and Random Road Excitations. **SAE Technical Paper 2018-01-0568**, 2018, doi:10.4271/2018-01-0568.
- 21- M.A.A. Abdelkareem, M.M Makrahy, A.M. Abd-El-Tawwab1, A.S.A. EL-Razaz, [M.K.A. Ali](#), and M.M. Moheyldein. An analytical study of the performance indices of articulated truck semi-trailer during three different cases to improve the driver comfort. **Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics**, 2018, 232 (1), 84-102. (SCI, I F: 1.288, Q3)
- 22- M.A.A. Abdelkareem, Lin Xu, [M.K.A. Ali](#), Mohamed A. Hassan, Ahmed Elagouz, Junyi Zou. On-field measurements of the dissipative vibrational power of an SUV car traditional viscous shock absorber. **American Society of Mechanical Engineers**, 2018. "ASME IDETC2018", doi:10.1115/DETC2018-85148.
- 23- 侯献军, 王士成, [M.K.A. Ali](#), 纳米润滑添加剂改善摩擦磨损提高发动机性能的研究. **润滑与密封**, 06, 1-5. 2018.
- 24- Mohamed A.A. Abdelkareem., Kaldas M, [M.K.A. Ali](#) and Xu L. Analysis of the energy harvesting potential based suspension for truck semi-trailer. **Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering**, doi.org/10.1177/0954407018812276. (SCI, I F: 1.414, Q3)

2017

- 25- [M.K.A. Ali](#), H. Xianjun, R.F. Turkson, and M. Ezzat. An analytical study of tribological parameters between piston ring and cylinder liner in internal combustion engines. **Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics**, 2017, 230, 329-349. (SCI, IF: 1.288, Q3).
- 26- [M.K.A. Ali](#), 侯献军, 陈必成, 蔡清平. 边界润滑条件下机油-污染物对摩擦学性能的影响. **润滑与密封**, 42, 1-5, 2017.
- 27- 侯献军, 陈必成, 蔡清平, [M.K.A. Ali](#), 彭辅明. Al₂O₃/TiO₂ 纳米复合粉体的摩擦学性能研究. **润滑与密封**, 2017, 45, 127-129.

- 28- 侯献军, 陈必成, 蔡清平, [M.K.A. Ali](#), 彭辅明. 缸套-活塞环摩擦学性能模拟实验研究. 化工新型材料, 2017, 42:8-11.
- 29- 侯献军, 蔡清平, 陈必成, [M.K.A. Ali](#), 彭辅明. 纳米TiO₂和 Al₂O₃添加剂润滑油对缸套-活塞环摩擦磨损性能的影响. 武汉理工大学学报 (交通科学与工程版), 2017, 41,191-194.
- 30- [M.K.A. Ali](#), M.A.A. Abdelkareem, A. Elagouz, F.A. Essa, H. Xianjun. Mini Review on the Significance Nano-Lubricants in Boundary Lubrication Regime. arXiv preprint arXiv:1705.08401, 2017.
- 31- F.A. Essa, Q. Zhang, X. Huang, [M.K.A. Ali](#), Ahmed Elagouz, Mohamed A. A. Abdelkareem. Effects of the mixtures of ZnO and MoS₂ solid lubricants on mechanical and tribological properties of M50-steel based composites against silicon nitride at high temperatures: Experimental and simulation study. **Tribology Letter**, 2017, 65(3), 97. (SCI, IF: 2.182, Q2).
- 32- F.A. Essa, Q. Zhang, X. Huang, A.M.M. Ibrahim, [M.K.A. Ali](#), and S.W. Sharshir. Enhancing the tribological and mechanical properties of M50 steel using solid lubricants-A detailed review. **Part J: Journal of Engineering Tribology**, 2017, doi: 1350650117723224. (SCI, IF: 1.318, Q3)
- 33- F.A. Essa, Q. Zhang, X. Huang, A.M.M. Ibrahim, [M.K.A. Ali](#), M.A.A. Abdelkareem, and A. Elagouz. Improved friction and wear of M50 steel composites incorporated with ZnO as a solid lubricant with different concentrations under different loads. **Journal of Materials Engineering and Performance**, 2017, 26(10), 4855-4866. (SCI, IF: 1.340, Q3).

2016

- 34- [M.K.A. Ali](#), H. Xianjun, L. Mai, C. Qingping, R.F. Turkson, and C. Bicheng. Improving the tribological characteristics of piston ring assembly in automotive engines using Al₂O₃ and TiO₂ nanomaterials as nano-lubricant additives. **Tribology International**, 2016, 103, 540-554. (SCI, IF: 3.246, Q1)
- 35- S.W. Sharshir, G. Peng, N. Yang, M.A. Eltawil, [M.K.A. Ali](#), A.E. Kabeel. A hybrid desalination system using humidification-dehumidification and solar stills integrated with evacuated solar water heater. **Energy Conversion and Management**, 2016, 124, 287-296. (SCI, IF: 6.377, Q1).
- 36- [M.K.A. Ali](#), H. Xianjun, L. Mai, C. Bicheng, R.F. Turkson, and C. Qingping. Reducing frictional power losses and improving the scuffing resistance in automotive engines using hybrid nanomaterials as nano-lubricant additives. **Wear**, 2016, 364, 270-281. (SCI, IF: 2.960, Q1)
- 37- [M.K.A. Ali](#), H. Xianjun, R.F. Turkson, Z. Peng, and X. Chen. Enhancing the thermophysical properties and tribological behavior of engine oils using nano-lubricant additives. **RSC Advances**, 2016, 6, 77913-77924. (SCI, IF: 3.108, Q2).
- 38- [M.K.A. Ali](#), H. Xianjun, A. Elagouz, F.A. Essa, and M.A.A. Abdelkareem. Minimizing of the boundary friction coefficient in automotive engines using Al₂O₃ and TiO₂ nanoparticles. **Journal of Nanoparticle Research**, 2016, 18 (12), 377. (SCI, IF: 2.127, Q2)
- 39- R.F. Turkson, F Yan, [M.K.A. Ali](#), J. Hu. Artificial neural network applications in the calibration of spark-ignition engines: An overview. **Engineering Science and Technology, an International Journal**, 19: 1346-1359, 2016

- 40- R.F. Turkson, 颜伏伍, 侯献军, [M.K.A. Ali](#), 刘博. 基于人工神经网络-网络的发动机点火提前角预测模型. 2016. DOI:10.3969/j.issn.1005-2550.2016.04.010.
- 41- R.F. Turkson, F. Yan, [M.K.A. Ali](#), B. Liu, and J. Hu. Modeling and multi-objective optimization of engine performance and hydrocarbon emissions via the use of a computer aided engineering code and the NSGA-II genetic algorithm. *Sustainability*, 2016, 8(1): 72. (SCI, IF: 2.075, Q2)

2015

- 42- [M.K.A. Ali](#), and H. Xianjun. Improving the tribological behavior of internal combustion engines via the addition of nanoparticles to engine oils. *Nanotechnology Reviews*, 2015, 4, 347-358. (SCI, IF: 1.904, Q3)
- 43- [M.K.A. Ali](#), F.M.H. Ezzat, K.A. Abd El-Gawwad, M.M.M. Salem. Effect of lubricant contaminants on tribological characteristics during boundary lubrication reciprocating sliding. *Bulletin of the Faculty of Engineering & Technology, Minia University (MJET)*, 32 (2): 90-102. 2013.

Books and Chapters:

- 1- [M.K.A. Ali](#), Fawzy M.H. Ezzat & S.W. Sharshir. Effect of Contaminants on the Tribological Performance of Engine Oils (Book). LAMBERT Academic Publishing, ISBN: 978-3-659-76393-9. 2016.
- 2- M.E. Zayed, S.W. Sharshir, J. Shaibo, F.A. Hammad, K.h. [M.K.A. Ali](#), Salman K.H., A.H. Elsheikh, et al. Application of nanofluids in direct absorption solar collectors (Chapter). In *Nanofluids and their engineering applications* (Book). CRC Press/Taylor and Francis Group, USA, ISBN 978-1-138-73902-4, 2018.

Patents:

- 1- 侯献军, 陈必成, 蔡清平, 彭辅明, [M.K.A. Ali](#). Tribometer designed to measure the friction behaviour of the piston ring/cylinder liner interface in engines. (一种发动机缸套-活塞环摩擦副摩擦磨损测试系统). Chinese patent (中国专利), Application number: CN105675423A, Patent number: CN105675423B, Priority date: 2016-01-04, Grant date: 2018-03-16.



البيانات الخاصة

الاسم/ محمد كمال أحمد على تاريخ الميلاد/ 15-2-1985

التخصص الدقيق/ تطبيقات النانو تكنولوجي في السيارات (النانوترايبولوجي)

التخصص العام/ هندسة السيارات والجرارات

الوظيفة/ مدرس بقسم هندسة السيارات والجرارات - كلية الهندسة - جامعة المنيا

الايمل / Eng.m.kamal@mu.edu.eg / رقم التليفون/ 002/01020068536 (Egypt)

الدرجات العلمية

بكالوريوس:	هندسة السيارات - جامعة المنيا	تاريخ: مايو 2009 (تقدير تراكمي: امتياز مع مرتبة الشرف)
ماجستير:	هندسة السيارات - جامعة المنيا	تاريخ: 10/12/2013 (تقدير: امتياز)
دكتوراه:	هندسة السيارات - جامعة ووهان للتكنولوجيا بالصين.	تاريخ: 2017/6/19 (تقدير: امتياز)

التاريخ الوظيفي

معيد:	كلية الهندسة - جامعة المنيا	تاريخ: 2010 / 24/1
مدرس مساعد:	كلية الهندسة - جامعة المنيا	تاريخ: 2014 / 1 / 27
مدرس:	كلية الهندسة - جامعة المنيا	تاريخ: 2017/ 8 / 29

المهام العلمية

- حصل على مهمة علمية في جامعة ووهان للتكنولوجيا بدولة الصين لمدة عامين من 2017/10/30 الى 2019/10/20

الانجازات العلمية والجوائز العلمية

- نشر العديد من الابحاث العلمية المحكمة في الدوريات العلمية المتخصصة والمصنفة طبقا (SCI) Science Citation Index وكانت تهدف الابحاث الى تحسين الاداء الترابولوجي والاقتصاد في استهلاك الوقود وتقليل الانبعاثات الضارة بيئيا من محركات السيارات.
- المشاركة في براءة اختراع منشورة باللغة الصينية عن تصميم جهاز يحاكي الحركة الترددية داخل محركات السيارات.
- نشر كتاب كمؤلف أول وشارك في كتاب اخر منشور في CRC Press/Taylor and Francis Group, USA.
- مشارك CO-PI في المشروع البحثي الممول من المؤسسة الوطنية للعلوم الطبيعية في الصين (NSFC) من 2019 إلى 2022.
- اقضى مهمة علمية لمدة عامين بمدرسة السيارات ب جامعة ووهان للتكنولوجيا - بدولة الصين.
- مراجع للابحاث العلمية في العديد من الدوريات العلمية والمصنفة والمتخصصة مثل (Q1) Tribology International وحصل على افضل 10% من المراجعين بداخل المجلة لعام 2017.
- منحت رسالة الدكتوراه الخاصة به على تقييم رسالة دكتوراه ممتازة لعام 2017 من جامعة ووهان للتكنولوجيا - الصين.
- حصل على جوائز النشر العلمى الدولى خلال الثلاث سنوات الماضية 2016-2017-2018-2019 من جامعة المنيا وجامعة ووهان للتكنولوجيا بالصين.
- حصل على جائزة جامعة المنيا التشجيعية فى العلوم الهندسية والتكنولوجية لعام 2019.

نبذة مختصرة عن الانتاج العلمى

الابحاث الخاصة بالدكتور/ محمد كمال أحمد على تقدم حلول تطبيقية واقتصاديته لتحسين أداء محركات السيارات عن طريق تحسين السلوك الترابولوجي للاجزاء الاحتكاكية بالمحرك لتقليل استهلاك الوقود والتلوث البيئي بواسطة استخدام الجسيمات النانوية كأضافات صديقة للبيئة فى زيوت التشحيم لمحركات السيارات. والنتائج العملية لهذه الدراسات أدت بالفعل الى تقليل استهلاك الوقود بنسبة تتعدى 12% وتم نشر اغلب النتائج فى مجالات علمية مصنفة (Q1(A).

هذا يترجم في نهاية المطاف إلى استخدام محركات اقتصادية وصديقة للبيئة ذات كفاءة عالية وبالتالي قد يكون الاتجاه المناسب لقمع تكلفة استهلاك الوقود للحفاظ على موارد الطاقة المستهلكة فى المركبات وحماية البيئة..

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<https://www.scopus.com/authid/detail.uri?authorId=56780823900>