

CURRICULUM VITAE

***h* – index (Scopus) : 10**
***h* – index (Google Scholar) : 10**
Total Citations : 280 (GS), 212 (Scopus)



A. BUTIR-BUTIR PERIBADI (*Personal Details*)

Nama Penuh (<i>Full Name</i>)	Muhammad Kashfi Bin Shabdin	Gelaran (<i>Title</i>): Dr.	
No. MyKad (<i>MyKad No.</i>) 900711126165	Warganegara (<i>Citizenship</i>) Malaysia	Bangsa (<i>Race</i>) Malay	Jantina (<i>Gender</i>) Male
Jawatan (<i>Designation</i>)	Senior Lecturer	Tarikh Lahir (<i>Date of Birth</i>)	11.07.1990

Alamat Semasa (<i>Current Address</i>)	Jabatan/Fakulti (<i>Department/Faculty</i>)	E-mel (<i>E-mail address</i>)
A-29-11, Residensi Rampai II, No. 2, Jalan Rejang 15, Setapak, 53300 Kuala Lumpur, WPKL, Malaysia.	Department of Physics Faculty of Science 43400 Serdang Selangor Tel: +60198818571 / 03-9769 6673	kashfi.shabdin@upm.edu.my dekashaf@gmail.com

B. KELAYAKAN AKADEMIK (*Academic Qualification*)

Nama Sijil / Kelayakan (<i>Certificate / Qualification obtained</i>)	Nama Sekolah / Institusi (<i>Name of School / Institution</i>)	Tahun (<i>Year obtained</i>)	Bidang pengkhususan (<i>Area of Specification</i>)
Bachelor of Science (Hons.)	UPM	2013	Instrumentation Physics
Master of Science	UPM	2016	Sensor and Instrumentation
Ph.D.	MJIIT, UTMKL	2020	Material Engineering
Postdoctoral	Tokyo University of Agriculture and Technology	2023-2025	Computational Superconductor

C. KEMAHIRAN BAHASA (Language Proficiency)

Bahasa (Language)	Lemah Poor (1)	Sederhana Moderate (2)	Baik Good (3)	Amat Baik Very Good (4)	Cemerlang Excellent (5)
English					√
Bahasa Melayu					√

D. PENGALAMAN SAINTIFIK DAN PERALATAN (Scientific experience and Specialisation)

- LabVIEW
- Arduino
- MATLAB
- Multisim and Ultiboard
- PIC Flowcode
- Rheometer
- Vibrating Sample Magnetometer (VSM)

E. PEKERJAAN (Employment)

Majikan / Employer	Jawatan / Designation	Jabatan / Department	Tarikh Lantikan / Start Date	Tarikh Tamat / Date Ended
UPM	Senior Lecturer	Physics	2021	Current
MJIIT, UTMKL	Research Assistant	Vehicle System Engineering	2017	2020
UPM	Research Assistant	Biological and Agricultural Engineering	2013	2016

F. GERAN (Grants)

Name of Grant	PI/Co-PI	Grant Value	Grant Authority	Grant Type	Year
Geran Putra – Inisiatif Putra Muda (GP – IPM)	PI	RM 30,000	Universiti Putra Malaysia	University	2022
Fundamental Research Grant Scheme (FRGS)	Co-PI	RM 117,945	Ministry of Higher Education Malaysia	National	2023
Knowledge Transfer Grant Scheme (KTGS)	PI	RM 5000	University Community Transformation Centre University (UCTC)	Community	2023

G. ANUGERAH DAN HADIAH (Honours and Awards)

<i>Name of Awards</i>	<i>Title</i>	<i>Award Authority</i>	<i>Award Type</i>	<i>Year</i>
Academic Awards	MJIT Industrial Excellence Award (Akademia Baru Publishing)	Malaysia – Japan International Institute of Technology, UTMKL	Faculty	2020
Best Invention Awards	Gold Category (Best Invention) - SAEM International Innovation Exhibition 2021	SAE International Malaysia, UTM, ASEAN NCAP, MIROS	International	2021
KA17 Erasmus+ EU International Credit Mobility Award	University of Minho, Portugal	European Union	International Teaching Mobility	2022
The International Materials Technology Challenge 2023	Bronze award	Malaysia Solid-State Association (MASS)	International	2023
Reviewer Award	Institute of Physics - IOP Trusted Reviewer	IOP Publishing	International	2023

H. PENGALAMAN MENGAJAR (Teaching Experience)

<i>Code</i>	<i>Subject</i>
PHY 4602	Computational Physics
PHY 4304	Microcontrollers and System Design
PHY4303	Computer Interface and Controls
PHY3902	Electromagnetism and Optics Laboratory
PHY3306	Electronics
PHY 3303	Sensors and Transducers
PHY3304	Principle of Measurements

I. PENYEMAK/EDITOR (Reviewer/Editor)

<i>Year</i>	<i>Journal</i>
2023	Waves in Random and Complex Media
2019, 2020, 2021, 2022, 2023	Smart Material and Structures
2022	Journal of Mechanical Engineering
2022	Materials Express Journal
2022	Malaysian Journal of Analytical Science

J. SENARAI PENERBITAN (Sila masukkan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) (List of publications – author (s), title, journal, volume, page and year published)

Featured Article	<p>Muhammad Kashfi Shabdin, Mohd Mustafa Awang Kechik. Smart Materials Applications. <i>Malaysia Smart City Outlook 2023 – 2024, Shaping The Smart City Industry: Harnessing Technology and Digital Skills for Growth, MiGHT, 2024</i>, Vol II, pp 66 – 67.</p>
Journal	<p>Muhammad Kashfi Shabdin, Abdul Rashid Mohamed Shariff, Mohd Nazrul Azlan Johari, Nor Kamillah Saat, Zulkifly Abbas. A Study on The Fresh Fruit Bunch (FFB) Ripeness Detection by Using Hue, Saturation, and Intensity (HIS) Approach. <i>IOP Conference Series: Earth and Environmental Science</i>, Vol 37(1), pp. 012039.</p> <p>Muhammad Kashfi Shabdin, Mohd Azizi Abdul Rahman, Saiful Amri Mazlan, Siti Aishah Abdul Aziz, Irfan Bahiuddin. "Effect of Graphite Reinforcement on the Resistivity Property of Magnetorheological Elastomer (MRE). <i>International Journal of Recent Technology and Engineering</i>, Vol 7, pp 321-323</p> <p>Dimas Adiputra, Muhammad Kashfi Shabdin, Siti Aishah Abdul Aziz, Irfan Bahiuddin, Abdul Rahman, Mohd Azizi Abdul Rahman, Saiful Amri Mazlan. "Hybrid Magnetorheological Elastomer: The Future of Gait Detection". <i>Key Engineering Materials</i>, Vol 775, pp. 177-183</p> <p>Siti Aishah Abdul Aziz, Mohd Syafiq Abdull Aziz, Muhammad Kashfi Shabdin, Saiful Amri Mazlan, Nur Azmah Nordin, Hafizal Yahaya, Rizuan Mohd Rosnan. "Rheological Properties of Mg Substituted Cobalt Nickel Ferrite Nanoparticles as an Additive in Magnetorheological Elastomer". <i>Proceedings of the 6th International Conference and Exhibition on Sustainable Energy and Advanced Materials</i>, pp. 153-162.</p> <p>Muhammad Kashfi Shabdin, Mohd Azizi Abdul Rahman, Saiful Amri Mazlan, Siti Aishah Abdul Aziz, Nurhazimah Nazmi. "Rheological Behavior of Graphite Induced Anisotropic Magnetorheological Elastomer". <i>Proceedings of the 6th International conference and Exhibition on Sustainable Energy and Advanced Materials</i>, pp. 163-170.</p> <p>Siti Aishah Abdul Aziz, Saiful Amri Mazlan, U Ubaidillah, Muhammad Kashfi Shabdin, Nurul Azhani Yunus, Nur Azmah Nordin, Seung-bok Choi, Rizuan Mohd Rosnan. "Enhancement of Viscoelastic and Electrical Properties of Magnetorheological Elastomers with Nanosized Ni-Mg Cobalt-Ferrites as Fillers". <i>Materials</i>, 2019, 12(21), 3531.</p> <p>Dimas Adiputra, Mohd Azizi Abdul Rahman, Ubaidillah, Saiful Amri Mazlan, Nurhazimah Nazmi, Muhammad Kashfi Shabdin, Jun Kobayashi, Mohd Hatta Mohammed Ariff. "Control Reference Parameter for Stance Assistance using a passive controlled ankle foot orthoses-a preliminary study". <i>Applied Sciences</i>, 2019, 9(20), 4416.</p>

Muhammad Kashfi Shabdin, Mohd Azizi Abdul Rahman, Saiful Amri Mazlan, Ubaidillah, Norhiwani Mohd Hapipi, Dimas Adiputra, Siti Aishah Abdul Aziz, Irfan Bahiuddin, Seung-Bok Choi. "Material Characterization of Gr-Based Magnetorheological Elastomer for Possible Sensor Applications: Rheological and Resistivity Properties". *Materials*, **2019**, vol. 12 (3), pp. 391.

Afiq Azri Zainuddin, Nurul Azhani Yunus, Saiful Amri Mazlan, **Muhammad Kashfi Shabdin**, Siti Aishah Abdul Aziz, Nur Azmah Nordin, Nurhazimah Nazmi, Mohd Azizi Abdul Rahman. "Rheological and Resistance Properties of Magnetorheological Elastomer with Cobalt for Sensor Application". *Materials*, **2020**, vol 10 (5), pp 1638.

Muhammad Kashfi Shabdin, Afiq Azri Zainudin, Saiful Amri Mazlan, Mohd Azizi Abdul Rahman, Siti Aishah Abdul Aziz, Irfan Bahiuddin, Seung-Bok Choi. "Tunable Low Range Gr induced Magnetorheological Elastomer with Magnetically Conductive Feedback". *Smart Materials and Structures*, **2020**, vol 29 (5) 057001 pp 12.

Nuraidyanie Effendy, Sidek Hj Abd Aziz, Halimah Mohamed Kamari, Mohd Hafiz Mohd Zaid, Caceja Elyca Anak Budak, **Muhammad Kashfi Shabdin**, Mohammad Zulhasif Ahmad Khiri, Siti Aisyah Abdul Wahab. "Artificial Neural Network Prediction on Ultrasonic Performance of Bismuth-Tellurite Glass Compositions". *Journal of Materials Research and Technology*, **2020**, vol 9 (6), pp 14082-14092.

Nurhazimah Nazmi, Mohd Azizi Abdul Rahman, Saiful Amri Mazlan, Dimas Adiputra, Irfan Bahiuddin, **Muhammad Kashfi Shabdin**, Nurul Afifah Abdul Razak, Mohd Hatta Mohammed Ariff. "Analysis of EMG Signals during Stance and Swing Phases for Controlling Magnetorheological Brake applications". *Open Engineering*, **2021**, vol 11 (1), pp 112119.

Afiq Azri Zainudin, Saiful Amri Mazlan, **Muhammad Kashfi Shabdin**, Siti Aishah Abdul Aziz, Koji Homma, Nurhazimah Nazmi, Nur Azmah Nordin, Ahmad Faiz Noordin, Shuib Rambat. Effects of Magnetic field and particles content on rheology and resistivity behavior of magnetorheological elastomer with embedded cobalt particles" *Smart Materials and Structures*, **2021**, vol 30 055002 pp11.

Nur Alyaa Mohd Nasir, Nurhazimah Nazmi, Norzilawati Mohamad, Ubaidillah Ubaidillah, Nur Azmah Nordin, Saiful Amri Mazlan, Siti Aishah Abdul Aziz, **Muhammad Kashfi Shabdin**, Nurul Azhani Yunus. "Rheological Performance of Magnetorheological Grease with Embedded Graphite Additive" *Materials*, **2021**, vol 14 (17), pp 5091.

N. Effendy, M.H.M. Zaid, H.A.A. Sidek, M.K. Halimah, **M.K. Shabdin**, K.A. Yusof, M.Z.H. Mayzan, "The elastic, mechanical and optical properties of bismuth modified borate glass: Experimental and artificial neural network simulation" *Optical Materials*, **2022**, vol 126, 112170.

N.A.N. Hisham, M.H.M. Zaid, K.A. Matori, **M.K. Shabdin**, "Effect of ark clam shell on crystal growth and mechanical evaluation of foam glass-ceramic derived from cullet glass waste" *Materials Science and Engineering: B*, **2022**, vol 281, 115730.

Abdul Kadir, K.A.; Nazmi, N.; Mohamad, N.; **Shabdin, M.K.**; Adiputra, D.; Mazlan, S.A.; Nordin, N.A.; Mohd Yusuf, S.; Ubaidillah. Effect of Magnetorheological Grease's Viscosity to the Torque Performance in Magnetorheological Brake. *Materials* **2022**, 15, 5717.

Dzul-Kifli, N.A.C.; Kechik, M.M.A.; Baqiah, H.; Shaari, A.H.; Lim, K.P.; Chen, S.K.; Sukor, S.I.A.; **Shabdin, M.K.**; Karim, M.K.A.; Shariff, K.K.M.; Miryala, M. Superconducting Properties of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ with a Multiferroic Addition Synthesized by a Capping Agent-Aided Thermal Treatment Method. *Nanomaterials* **2022**, 12, 3958.

N. F. Amlee, N. Nazmi, **M. K. Shabdin**, I. Bahiuddin, S. A. Mazlan and N. A. Nordin, "Force Sensing Performance of Hydrogel-based Magnetorheological Plastomers with Graphite," *2022 IEEE-EMBS Conference on Biomedical Engineering and Sciences (IECBES)*, Kuala Lumpur, Malaysia, **2022**, pp. 264-269,

X. T. Hon, L. N. Lau, K. P. Lim, Y. J Wong, A. N. Ishak, M. M. Awang Kechik, S. K. Chen, **M. K. Shabdin**, A. H. Shaari. Thermal treatment method: A novel approach to prepare $\text{Nd}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ manganite. *Physica B: Condensed Matter* **2023**, 650, 414565.

Wong, Y.J.; Lau, L.N.; Lim, K.P.; Hon, X.T.; Daud, N.A.A.; Kechik, M.M.A.; Chen, S.K.; **Shabdin, M.K.B.**; Shaari, A.H.; Miryala, M. Characterisations of La-Sr-Mn-O (LSMO) Thin Film Fabricated by RF Sputtering. *Coatings* **2023**, 13, 541.

L.N. Lau, X.T. Hon, Y.J. Wong, K.P. Lim, N.H. Kamis, M.M.A. Kechik, S.K. Chen, N.B. Ibrahim, **M.K. Shabdin**, M. Miryala, A.H. Shaari "Wide temperature range magnetoresistance enhancement of $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$: NiO nanocomposites," *Appl. Phys. A Mater. Sci. Process.*, vol. 129, no. 4, pp. 1–10, **2023**.

Barood, F.; Kechik, M.M.A.; Tee, T.S.; Kien, C.S.; Pah, L.K.; Hong, K.J.; Shaari, A.H.; Baqiah, H.; Karim, M.K.A.; **Shabdin, M.K.**; et al. Orthorhombic $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Superconductor with TiO_2 Nanoparticle Addition: Crystal Structure, Electric Resistivity, and AC Susceptibility. *Coatings* **2023**, 13, 1093.

Abdullah, S.N.; Kechik, M.M.A.; Kamarudin, A.N.; Talib, Z.A.; Baqiah, H.; Kien, C.S.; Pah, L.K.; Abdul Karim, M.K.; **Shabdin, M.K.**; Shaari, A.H.; et al. Microstructure and Superconducting Properties of Bi-2223 Synthesized via Co-Precipitation Method: Effects of Graphene Nanoparticle Addition. *Nanomaterials* **2023**, *13*, 2197.

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Bello Murtala Alhaji, Raba'ah Syahidah Azi, **Muhammad Kashfi Shabdin**, Nurul Huda Osman, and Abubakar Yakubu, "Synthesis and Characterization of Hematite Fe₂O₃ Nanofiller for Enhanced Dielectric and Microwave-Absorbing Properties in PTFE Composites", *IJNeaM*, vol. 17, no. 1, pp. 164–171, **Mar. 2024**.

Mohd Saiful Asmal Rani, Ahmad Salihin Samsudin, Mohd Nor Faiz Norrrahim, N.M. Nurazzi, Muhammad Khalis Abdul Karim, Mohd Hafiz Mohd Zaid, **Muhammad Kashfi Shabdin**, Mohd Mustafa Awang Kechik, Khalina Abdan, "9 - Development and characterization of crab-based chitosan filler-reinforced polymer composites", *Polymer Composite Derived from Animal Sources*, pp. 171-187, **2024**.

Akmal Arif Nasrudin, **Muhammad Kashfi Shabdin**, Mohd Mustafa Awang Kechik, Chen Soo Kien, Lim Kean Pah, Abdul Halim Shaari, Muhammad Khalis Abdul Karim, Nurhazimah Nazmi, Muralidhar Miryala; "Physical, magnetic, morphological, and optical properties of isotropic magnetorheological elastomers with cobalt as fillers for assistive sensor devices applications", *Journal of Materials Science: Materials in Electronics*, Vol. 35, Issue 14, pp 948, **2024**.

Nur Afiqah Mohamed Indera Alim Sah, Mohd Mustafa Awang Kechik, Chen Soo Kien, Lim Kean Pah, Abdul Halim Shaari, **Muhammad Kashfi Shabdin**, Muhammad Khalis Abdul Karim, Muralidhar Miryala, Hussein Baqiah, Khairul Khaizi Mohd Shariff, Yap Siew Hong, Arebat Ryad Alhadei Mohamed; "Comparative studies of pure YBa₂Cu₃O_{7-δ} prepared by modified thermal decomposition method against thermal treatment method", *Applied Physics A*, Vol. 130, Issue 5, pp. 340, **2024**.