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|  | **Chia Chin Hua (Prof. Dr. Ts.)** |

1. **Personal Data**

|  |  |
| --- | --- |
| Date of birth | 11th December 1979 |
| Place of birth | Petaling Jaya, Malaysia |
| Sex | Male |
| Citizenship | Malaysia |
| Mailing address | Head  Materials Science Program, Department of Applied Physics  Faculty of Science and Technology  Universiti Kebangsaan Malaysia  43600 Bangi, Selangor, Malaysia |
| Telephone number | 603 8921 5473 (Office)  6012 3986 933 (Mobile) |
| Email address | chia@ukm.edu.my / chiachinhua@yahoo.com |
| Expertise | * Nanomaterials & Nanocomposites |
| Total Publication Scopus ID  ResearcherID  ORCID | * 196   57215089308  http://www.researcherid.com/rid/I-7261-2013  http://orcid.org/0000-0002-5269-4070 |
| H-index (Scopus) | * 34 |
| Total citation | * 4087 |

**B. Educational Background**

|  |  |  |  |
| --- | --- | --- | --- |
| **Qualification** | **Grade** | **Year** | **Institution** |
| PhD (Materials Science) |  | 2005-2007 | Universiti Kebangsaan Malaysia |
| B. Sc. (Hons) Materials Science | First Class (3.75) | 2000-2003 | Universiti Kebangsaan Malaysia |
| STPM | 74/90 | 1999-2000 | Sekolah Tinggi Kluang, Johor |
|  |  |  |  |

**C. Working Experience**

1. Universiti Kebangsaan Malaysia (UKM)

Position Title: Professor

Duration: February 2021 – Present

1. Universiti Kebangsaan Malaysia (UKM)

Position Title: Associate Professor

Duration: August 2013 – February 2021

1. Universiti Kebangsaan Malaysia (UKM)

Position Title: Senior Lecturer

Duration: April 2008 - August 2013

2) Universiti Kebangsaan Malaysia (UKM)

Position Title: Post Doctorate

Duration: December 2007 –April 2008

3) Universiti Kebangsaan Malaysia (UKM)

Position Title: Research Assistance

Duration: July 2007 –November 2007

4) Australian Pulp and Paper Institute, Chemical Engineering Department, Monash University, VIC, Australia

Position Title: Visiting Researcher

Duration: March 2007 - June 2007

5) Australian Pulp and Paper Institute, Chemical Department, Monash University, Australia

Position Title: Visiting Researcher

Duration: March 2006 - June 2006

6) Universiti Kebangsaan Malaysia (UKM)

Position Title: Programming C Lab Demonstrator

Duration: March 2005 - March 2006

7) ALPS Electric (M) SDN BHD, Nilai Industrial Estate, 71800 Nilai, Negeri Sembilan, Malaysia

Position Title: Engineer

Duration: April 2003 – February 2005

8) Southern Steel (M) SDN BHD, Prai Industrial Estate, Butterworth, Pulau Pinang, Malaysia

Position Title: Trainee

Duration: April 2002 – June 2002

**D. Honors, Awards and Merits**

|  |  |  |
| --- | --- | --- |
| **No** | **Date** | **Type of Awards** |
| 1 | Aug 2003 | **Book Prize** of University (UKM) 2003 |
| 2 | May 2005 | **Best presenter** of National Symposium of Polymer Malaysia |
| 3 | July 2005 | **Bronze medal** - Preparation of magnetic Pulp via In situ process, Expo Research and Innovation UKM |
| 4 | May 2008 | **Silver Medal** – 19th. International Invention, Innovation & Technology Exhibition (ITEX 2008), Kuala Lumpur:  Nano Cobalt Ferrites Magnetic Paper |
| 5 | Feb 2009 | **Bronze Medal** - Malaysia Technology Expo (MTE 2009), Kuala Lumpur: Green Molded Liquefied Soda Lignin Filled with EFB. |
| 6 | Feb 2009 | **Bronze Medal** - Malaysia Technology Expo (MTE 2009), Kuala Lumpur: Magnetic Rubber Wood |
| 7 | Feb 2009 | **Bronze Medal** - Malaysia Technology Expo (MTE 2009), Kuala Lumpur: Solvolysis of Wood Oil Using Nano Iron Oxide Catalyst |
| 8 | May 2009 | **Silver Medal** - 20th International Invention, Innovation & Technology Exhibition (ITEX 2009), Kuala Lumpur: Nano Ferrites Magnetic Paper Via *in Situ* Synthesis Method |
| 9 | May 2009 | **Bronze Medal** – 20th International Invention, Innovation & Technology Exhibition (ITEX 2009), Kuala Lumpur: Green Technology for Green Materials |
| 10 | May 2009 | **Silver Medal** – Water Malaysia 2009, Kuala Lumpur: Novel Nano-structured ZnO Based Photocatalyst Material for Organic Degradation in Waste Water Treatment System |
| 11 | May 2009 | **Bronze medal** – Hari Inovasi Nuklear Malaysia 2009: Ultraviolet Light (UV) Photo-induced Magnetic Nano-catalyst for Detoxification of Organic Pollutant in Waste Water Treatment System |
| 12 | May 2010 | **Gold Medal** – 21th International Invention, Innovation & Technology Exhibition (ITEX 2010), Kuala Lumpur: Novel Bi-Functional Nano-photocatalyst Material – Green, Advanced and Effective Purifier |
| 13 | Apr 2011 | **Young Scientist Award (Anugerah Penyelidik Muda) 2010 (UKM) -** Sijil Penghargaan |
| 14 | May 2011 | **Bronze medal –** Pemacuan Kecemerlangan Warisan Ilmu UKM: Chemically Treated Kenaf Core Fibres for The Removal of Heavy Metal Ions and Hazardous Dye from Aqueous Solution. |
| 15 | Jul 2012 | **Young Scientist Award (Anugerah Penyelidik Muda)**,Anugerah Kualiti FST 2011 |
| 16 | Apr 2012 | **Young Scientist Award (Anugerah Penyelidik Muda) 2012,** Anugerah Inovasi UKM ke-7, Universiti Kebangsaan Malaysia |
| 17 | May 2013 | **Excellent Service Award (UKM) 2013** |
| 18 | May 2014 | **Silver Medal** – 24th International Invention, Innovation & Technology Exhibition (ITEX 2014), Kuala Lumpur: Graphene oxide cellulose beads |
| 19 | May 2014 | **Silver Medal** – 24th International Invention, Innovation & Technology Exhibition (ITEX 2014), Kuala Lumpur: Green Phenolic Resin for Glass Fiber Composites |
| 20 | Nov 2014 | **Young Scientist Award** – Persatuan Sains & Teknologi Keadaan Pepejal Malaysia / *Malaysian Solid State Science and Technology Society* (MASS) |
| 21 | Oct 2015 | **Penyelia Cemerlang** – Fakult Sains dan Teknologi, UKM |
| 22 | Aug 2016 | **Bronze medal** – National Intellectual Property Award (Patent |
| 22 | Mac 2017 | **The Distinguished Lectureship Award** - Chemical Society of Japan (CSJ), Asian International Symposium |
| 23 | Mac 2019 | **Excellent Service Award (UKM) 2019** |

**E. Membership**

1. Professional Technologists (TS) - Malaysia Board Of Technologists
2. ember in ISO/TC 6 - Pulp, Paper and Board, Task Group 1 (TG1) – Standard on Cellulosic Nanomaterials
3. Editor - Sains Malaysiana - 2014 to Present
4. Editor-in-Chief – Polymer Research Journal (Nova Publishers) - 2017 to 2018
5. Member of the Malaysian Solid State Science and Technology Society (MASS) – 2010 to Present
6. Member of the Institute of Materials, Malaysia (IMM) - 2012 to Present
7. Member of the Malaysian Institute of Chemistry (IKM) – 2018 to Present
8. Council member of the Institute of Materials, Malaysia (IMM) – 2014-2016
9. Associate member of the Institute of Nanotechnology (IoN) - 2010 to Present
10. Deputy chairman, the Polymer Committee, the Institute Materials, Malaysia – 2013 to Present

**F. List of Postgraduate Students**

|  |  |  |  |
| --- | --- | --- | --- |
| **Program** | **Status** | **As a Chairman**  **(Main Supervisor)** | **As a Member**  **(Co-supervisor)** |
| PhD | Graduated | 9 | `12 |
| Ongoing | 5 | 5 |
| Masters  (with thesis) | Graduated | 3 | 7 |
| Ongoing | 2 | 8 |

**G. Thesis Examiner**

|  |  |  |
| --- | --- | --- |
| **Program** | **Internal Examiner** | **External Examiner** |
| Ph.D. | 12 | 9 |
| Master | 9 | 13 |

1. **Research Projects**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Title** | **Place** | **Status** | **Funding** |
| 1 | Study on the electronic stabilization, mechanism and kinetics of the *in situ* nano magnetic particle in Beta glucopyranose chain- Modification of DVLO theory | UKM | Completed  Start : Jul 2006 – Jun 2008  **Researcher** | Scientific Advancement Fund Allocation (SAGA)  RM123,000 |
| 2 | Preparation of magnetic paper via *in situ* process | UKM | Completed  Start : August 2005 (3 Years)  **Researcher** | IRPA  RM 171,000 |
| 3 | Biofuel from biomass: structure determination of separated chemical component obtained from solvolysis and hydrotreatment of biomass using metal oxide catalyst | UKM | Completed  Start: January 2009  (2 years)  **Researcher** | ExxonMobil University Research Grant  RM30,000 |
| 4 | Preparation of Bioactive paper containing chitosan and silver nanoparticles using layer-by-layer assembly approach | UKM | Completed  Start: June 2010  (2 years)  **Project leader** | GGPM  RM25,000 |
| 5 | Novel magnetic properties of graphene oxide | UKM | Completed  Start: December 2010  (2 years)  **Project leader** | RM68,300  FRGS |
| 6 | Characterisation of Green Phenol Derived from Oil Palm Fibre Biomass and Oil Palm Lignin via Fast Solvolysis Process for The Production of Green Phenolic Adhesives | UKM | Completed  Start: December 2010  (2 years)  **Co-researcher** | RM78,000  FRGS |
| 7 | Rubber Toughened Epoxy Reinforced Kenaf Pulped Fiber for Automotive Components | UKM | Completed  Start: June 2010 (2 years)  **Co-researcher** | SciFund  RM200,000 |
| 8 | Surface Modified Superparamagnetic Iron Oxide Nanoparticles (SPIONs) Conjugated Cisplatin with Thermoresponsive Polymer as Magnetic Anticancer Drug Delivery Vehicle | UKM | Completed  Start: September 2011 (1 year)  **Project leader** | GUP khas  RM 30,000 |
| 8 | Application of biomimetic nanocatalyst in the hydrolysis of palm kernel cake (PKC) for the production of mannose and oligomannan | UKM | In progress  Start: June 2012 (3 years)  **Project leader** | ERGS  RM 94,000 |
| 9 | Antibacterial Regenerated Cellulose Products loaded with Silver nanoparticles, Graphene Oxide and Nanocrystalline Cellulose | UKM | Completed  Start: June 2012 (2 years)  **Co-researcher** | DIP  RM 200,000 |
| 10 | Fabrication and Characterisation of Super Toughenen Regenerated Cellulose-Graphene Fibre | UKM | Completed  Start: June 2012 (3 years)  **Co-researcher** | ERGS  RM 99,000 |
| 11 | KENAF: SUSTAINABILITY MATERIALS IN AUTOMOTIVE INDUSTRY | UKM | In progress  Start: Nov 2012 (5 years)  **Co-researcher** | LRGS  RM 1,498,300 |
| 12 | Development of Phenolic Resin (PR) made from Liquefied Oil Palm Empty Fruit Bunch Fibre for the Prototype Products of Moulded PR and PR Adhesives | UKM | Completed  Start: Jan 2012 (1 years)  **Co-researcher** | INOVASI  RM30,000 |
| 13 | Advanced Palm-Fibre Composites (PFCs) For The Aerospace Industries | Nottingham University, Malaysia | In progress  Start: May 2013  (2 years)  **Co-researcher** | ScienceFund  RM190,000 |
| 14 | Kinetics and mechanism of acid hydrolysis of oil palm empty fruit bunch fibres into levulinic acid | UKM | Completed  Start Dec 2013 – Nov 2015  **Project leader** | FRGS  RM 109,700 |
| 15 | KNOWLEDGE TECHNOLOGY TRANSFER (KTP) UTILIZATION OF LIQUEIFIED GREEN PHENOLIC RESIN IN GREEN COMPOSITES OF FRONT AND REAR OF COACH BODY PARTS | UKM | Aug 2013 – Jul 2015  **Project leader** | KTP  RM 120,950 |
| 17 | Role of Ti, Al, Cu and Zn doping on photoelectrochemical water-splitting of hematite (α-Fe2O3) nanostructure | UKM | Dec 2013 – Nov 2015  **Co-researcher** | FRGS  RM 122,700 |
| 18 | Development of Silicone Thermal Pad using Cellulose Nanofibirls as Template for Thermal Conducting Filler | UKM | 1 April 2014– 31 Mac 2016  **Project leader** | PENCHEM  RM 99,000 |
| 19 | Decoration of silver nanoparticles on graphene and graphene oxide using a continuous flow microfluidic system | UKM | Aug 2014 – Jul 2016  **Project leader** | DIP  RM 150,000 |
| 20 | THE CONVERSION OF SAP OIL PALM TRUNK INTO METHYL LEVULINATE BY USING CATALYSTS | UKM | Jul 2014 – Jun 2016  **Co-researcher** | FRGS  RM 108,200 |
| 21 | Graphene and graphene oxide reinforced gloves | UKM | 1 Jul 2015 – 30 Jun 2018  **Project leader** | Ansell NP Sdn Bhd  RM 127,000 |
| 22 | Cellulose nanocomposite containing silver nanoparticles and graphene oxide for environmental remediation | UKM | 1 Jan 2016 – 31 Dec 2017  **Project leader** | DIP  RM 150,000 |
| 23 | Study on continuous flow chemistry acid hydrolysis of oil palm empty fruit bunch fibres into levulinic acid | UKM | 1 Aug 2016 – July 2018  **Project leader** | FRGS  RM 102,000 |
| 24 | Production of Metallic Conducting Nanowires for Industrial Applications | UKM | 16/10/2017 – 15/10/2019  **Project leader** | GUP  RM 70,000 |
| 25 | Verification Survey with the Private Sector for Disseminating Japanese Technologies for Wastewater Treatment System utilizing the Natural Mineral Limonite and Kenaf | UKM | 26 Jul 2017 – 26 Aug 2019  **Project leader** | JICA  RM 414,760 |
| 26 | Graphene oxide aerogel nanocomposites as cathode in electro-Fenton oxidation for wastewater treatment | UKM | 1/9/2019 – 31/8/2021  **Co-researcher** | FRGS  RM 73,200 |
| 27 | CARBON-BASED NANOFILLERS REINFORCED ELASTOMERIC POLYMERS FOR THE ENHANCEMENT OF PHYSICAL AND MECHANICAL PROPERTIES | UKM | 15/11/2018 -14/05/2021  **Co-researcher** | GUP  RM 59,200 |
| 28 | Three-dimensional Hierarchical and Multifunctional Porous Nanocomposite Frameworks for Advanced Applications | UKM | 1/10/2019 – 30/9/2021  **Project leader** | DIP  RM 100,000 |
| 29 | Characterisation of Solid Fuel Briquettes from Plastic Waste and Lignocellulose Biomass. | UKM | 01/10/2019 - 31/03/2022  **Co-researcher** | GUP  RM 70,000 |
| 30 | Unravelling the Ultrafast Charge Carrier Dynamics of the Graphene / Cobalt Vanadate Nanohybrid during Transient Effect for Electrochemical Storage | Nottingham University, Malaysia | 1/10/2019 – 30/9/2021  **Co-researcher** | FRGS  RM 96,000 |
| 31 | Biomass-derived cellulose nanofibril composite hydrogels loaded with platelet-rich plasma for Diabetic Wound Healing | UKM | 14/12/2018 - 13/06/2021  **Co-researcher** | DIP  RM 100,000 |
| 32 | Chemical modification of cellulose with EDTA via microwave assisted and Gamma irradiation technique | UKM | 01/01/2019 - 31/03/2021  **Co-researcher** | FRGS  RM 73,200 |
| 33 | Biodegradable Growing Media with Slow Release Fertilizer and Free Watering System | UKM | 01/12/2019 - 28/02/2023  **Co-researcher** | LRGS  RM 1,209,200 |
| 34 | Improving Malaysian HE Knowledge towards a Wood and Furniture Industry 4.0 - MAKING4.0 | UKM | 15/11/2018 - 14/11/2021  **Co-researcher** | ERASMUS+  RM 637,789 |
| 35 | Plasma surface modification and beta-irradiation treatment of woven wet spinning chito-cellulose fibre embedded with graphene quantum dot-silver nano particles and aerogel for wound dressing | UKM | 01/12/2019 - 28/02/2023  **Co-researcher** | TRGS  RM 273,000 |
| 36 | Development and upscaling of continuous wet spinning regenerated cellulose fibre via precool method | UKM | 01/12/2019 - 28/02/2022  **Co-researcher** | PRGS  RM 161,000 |
| 37 | A mechanistic study on the adsorption of ionic species onto chitosan beads encapsulated ionic polyelectrolytes for water treatment | UKM | 01/11/2020 - 31/10/2022  **Project leader** | FRGS  RM 82,738 |
| 38 | Regenerated chitosan fibres embedded limonite powder for the degradation of organic compounds via sulfate radical-based advanced oxidation processes | UKM | 01/08/2020 – 31/1/2023  **Project leader** | GUP  RM 70,000 |
| 39 | Quantifying microplastics, provenance and fate in the Sungai Pulai Estuary, Johor | UKM | 01/08/2020 – 31/1/2023  **Co-researcher** | FRGS  RM 102,600 |
| 40 | A facile method for fractionation lignin and nanocellulose from lignocellulosic biomass as compatible reinforced stereolithography materials | UKM | 15/11/2018 - 14/05/2021  **Co-researcher** | GUP  RM 60,000 |

1. **Publications**

Book

1. Chan, C.H., **Chia, C.H.**, Thomas, S. 2014. Physical Chemistry of Macromolecules: Macro to Nanoscales. Apple Academic Press, Distributed by CRC Press – Taylor and Francis Group
2. **Chia, C.H.**, Chan, C.H., Thomas, S. 2017. Functional Polymeric Composites: Macro to Nanoscales. Apple Academic Press, Distributed by CRC Press – Taylor and Francis Group
3. Haghi, A.K., Pogliani, L., Castro, E.A., Balkose, D., Mukbaniani, O.V., **Chia, C.H.** 2017. Applied Chemistry and Chemical Engineering, Volume 4, Experimental Techniques and Methodical Developments. Apple Academic Press, Distributed by CRC Press – Taylor and Francis Group
4. Hatika Kaco, Mohd Shaiful Sajab, Sarani Zakaria & **Chia Chin Hua** 2018. Potensi Produk Hijau Termaju daripada Sumber Biojisim Pertanian (sunt.), Penerbit UKM

Book Chapters

1. Rasidi Roslan, Sarani Zakaria, **Chin Hua Chia**, Umar Adli Amran, and Sharifah Nabihah Syed Jaafar 2018. Bio-Based Phenol Formaldehyde from Lignocellulosic Biomass. In Chia, C.H. (Ed.). Functional Polymeric Composites: Macro to Nanoscales. Apple Academic Press, Distributed by CRC Press – Taylor and Francis Group.
2. Chan, C.H., **Chia, C.H.**, Zakaria, S. 2018. Emergence of New Nanomaterial: Nanocellulose and Its Nanocomposites. In Chia, C.H. (Ed.). Functional Polymeric Composites: Macro to Nanoscales. Apple Academic Press, Distributed by CRC Press – Taylor and Francis Group.
3. Juan, J.C., **Chia, C.H.** 2016. Polylactic Acid (PLA) Synthesis and Catalytic Mechanism. In Inamuddin (Ed.). Green Polymer Composite Technology. CRC Press.
4. Hong Ngee Lim, Nay Ming Huang, **Chin Hua Chia**, Ian Harrison 2013. Inorganic Nanostructures Decorated Graphene. In Ferreira, S.O. (Ed.). *Advanced Topics on Crystal Growth*, pp. 1-26. Intech.
5. **Chia, C.H.**, Zakaria, S., Khiew, P.S., Chiu, W.S., Abdullah, M.H. 2011. [Various Synthesis Methods for the Preparation of Well-Crystalline and Monodisperse Cobalt Ferrite Nanocrystals. In Vidmar, L.J. (Ed.). *Cobalt: Characteristics, Compounds and Applications*, pp. 277-292](https://www.novapublishers.com/catalog/product_info.php?products_id=30172). Nova Publisher Inc.
6. Khiew, P.S., Chiu, W.S., Tan, T.K., Radiman, S., Abd-Shukor, R., **Chia, C.H.** 2011. [Capping Effect of Palm-Oil Based Organometallic Ligand towards the Production of Highly Monodispersed Nanostructured Material. In Palmetti, M.L. (Ed.). *Palm Oil: Nutrition, Uses and Impacts*, pp. 189-220](https://www.novapublishers.com/catalog/product_info.php?products_id=30172). Nova Publisher Inc.

International Journals

2021

1. Zi Jia Low, Jia Chyi Wong, Kuan Hoon Ngoi, **Chin Hua Chia**, Hyun-Joong Kim, Hong-Chul Kim, Moonhor Ree 2021. Hardness and Abrasion Resistance Characteristics of Poly(ethylene terephthalate) Films without and with Hard and Adhesive Coatings. *Macromolecular Research* 29: 230-243.
2. Jia Chyi Wong, Li Xiang, Kuan Hoon Ngoi, **Chin Hua Chia**, Kyeong Sik Jin, Hong-Chul Kim, Hyun-Joong Kim, Akira Hirao, Moonhor Ree 2021. Molecular weight effect on the structural detail and chain characteristics of 33-armed star polystyrene. *Polymer* 212: 123304
3. Nurul Hazwani Aminuddin Rosli, Kam Sheng Lau, Tan Winie, Siew Xian Chin, **Chin Hua Chia** 2021. Microwave-assisted reduction of graphene oxide for an electrochemical supercapacitor: Structural and capacitance behavior. *Materials Chemistry and Physics* 262: 12427.
4. Kuan Hoon Ngoi, Jia Chyi Wong, Wee Siong Chiu, **Chin Hua Chia**, Kyeong Sik Jin, Hyun-Joong Kim, Hong-Chul Kim, Moonhor Ree 2020. Morphological structure details, size distributions and magnetic properties of iron oxide nanoparticles. *Journal of Industrial and Engineering Chemistry* 95: 37-50.
5. Wei Hau Low, Siew Shee Lim, Chiu Wee Siong, **Chin Hua Chia**, Poi Sim Khiew 2020. One dimensional MnV2O6 nanobelts on graphene as outstanding electrode material for high energy density symmetric supercapacitor. *Ceramics International* 47: 9560-9568.
6. Azima Azmi, Kam Sheng Lau, Siew Xian Chin, Poi Sim Khiew, Sarani Zakaria, **Chin Hua Chia** 2021. Zinc oxide-filled polyvinyl alcohol–cellulose nanofibril aerogel nanocomposites for catalytic decomposition of an organic dye in aqueous solution. *Cellulose* 28: 2241-2253.
7. Savisha Mahalingam, Abreeza Manapa, Azimah Omar, Foo Wah Low, N.F. Afandi, Chin Hua Chia, Nasrudin Abd Rahim 2021. Functionalized graphene quantum dots for dye-sensitized solar cell: Key challenges, recent developments and future prospects. Renewable and Sustainable Energy Reviews144: 110999.
8. Evyan, C.-Y.Y., Salleh, K.M., Chong, M.Y., Chia, C.H., Zakaria, S. 2021. Effect of dimensionality of nanosized TiO2 embedded in regenerated cellulose beads as a portable catalyst for reusable decomposition system. *Polymers for Advanced Technologies* doi.org/10.1002/pat.5365.
9. Ling, Y.T.Q., Heng, Y.X., Ang, D.T.C., Koh, R.Y., Chia, C.H. 2021. Physiochemical and in vitro cytotoxicity properties of biocompatible palm fatty acid-based polyesters. *Sains Malaysiana* 2021, 50(2), pp. 395–407.

2020

* + - 1. Kuan Hoon Ngoi, Li Xiang, Jia Chyi Wong, **Chin Hua Chia**, Kyeong Sik Jin, Moonhor Ree 2020. Morphology details and size distribution characteristics of single-pot-synthesized silica nanoparticles. *Journal of Industrial and Engineering Chemistry* 89: 212-221.
      2. Fang Sheng Lim, Sin Tee Tan, Yuanmin Zhu, Jhih-Wei Chen, Bao Wu, Hao Yu, Jung-Mu Kim, Riski Titian Ginting, Kam Sheng Lau, **Chin Hua Chia**, Heng'an Wu, Meng Gu, Wei Sea Chang 2020. Tunable Plasmon-induced Charge Transport and Photon Absorption of Bimetallic Au-Ag Nanoparticles on ZnO Photoanode for Photoelectrochemical Enhancement Under Visible Light. *Journal of Physical Chemistry C* 124: 14105–14117.
      3. Aina Shasha Hashimi, Muhammad Amirul Nazhif Mohd Nohan, Siew Xian Chin, Poi Sim Khiew, Sarani Zakaria, **Chin Hua Chia** 2020. Copper Nanowires as Highly Efficient and Recyclable Catalyst for Rapid Hydrogen Generation from Hydrolysis of Sodium Borohydride. *Nanomaterials* 10: 1153-1167.
      4. Wei Hau Low, Siew Shee Lim, **Chin Hua Chia**, Chiu Wee Siong, Poi Sim Khiew 2020. Three-dimensional lion's mane like AlV3O9 deposited on graphene surface for supercapacitors with a promising electrochemical performance. *Journal of Science: Advanced Materials and Devices* 5: 164-172.
      5. Seyedehmaryam Moosavi, Sinyee Gan, **Chin Hua Chia** & Sarani Zakaria 2020. Evaluation of Crosslinking Effect on Thermo-mechanical, Acoustic Insulation and Water Absorption Performance of Biomass-Derived Cellulose Cryogels. *Journal of Polymers and the Environment* 28: 1180–1189.
      6. Nur Fazlinda Razali, **Chin Hua Chia**, Sarani Zakaria, Mohd Shaiful Sajab, Tatsuya Tobe, Miku Tsuda 2020. Penyahwarnaan Eﬂuen Kilang Minyak Kelapa Sawit (POME) melalui Proses Pengoksidaan Fenton secara Berterusan menggunakan Limonit sebagai Pemangkin. *Sains Malaysiana* 49: 69-74.
      7. Jia Chyi Wong, Li Xiang, Kuan Hoon Ngoi, **Chin Hua Chia**, Kyeong Sik Jin, and Moonhor Ree 2020. Quantitative Structural Analysis of Polystyrene Nanoparticles Using Synchrotron X-Ray Scattering and Dynamic Light Scattering. *Polymers* 12: 477.
      8. Aina Shasha Hashimi, Riski Titian Ginting, Siew Xian Chin, Kam Sheng Lau, Muhammad Amirul Nazhif Mohd Nohan, Sarani Zakaria, Chi Chin Yap, **Chin Hua Chia** 2020. Fast microwave-assisted synthesis of copper nanowires as reusable high-performance transparent conductive electrode. *Current Applied Physics*. 20: 205-211.
      9. Kam Sheng Lau, Sin Tee Tan, Riski Titian Ginting, Poi Sim Khiew, Siew Xian Chin, **Chin Hua Chia** 2020. Mechanistic Study of Silver Nanostructures Incorporated Reduced Graphene Oxide via Flow Synthesis Approach. *New Journal of Chemistry*. 44, 1439-1445.
      10. Thian Khoon Tan, Poi Sim Khiew, Wee iong Chiu, **Chin Hua Chia** 2020. Magnetised photocatalyst TiO2/Fe3O4 nanocomposite capable to photodegrade organic dye. *IOP Conf. Series: Materials Science and Engineering* 744: 01202 – 01205.
      11. Thian Khoon Tan, Poi Sim Khiew, Wee Siong Chiu, **Chin Hua Chia** 2020. Simple fabrication of magnetically separable ZnO-based photocatalyst nanocomposites. *IOP Conf. Series: Materials Science and Engineering* 744: 01202 – 01205.

2019

* + - 1. Wei Hau Low, Chiu Wee Siong, **Chin Hua Chia**, Siew Shee Lim, Poi Sim Khiew 2019. A facile synthesis of graphene/Co3V2O8 nanocomposites and their enhanced charge storage performance in electrochemical capacitors. *Journal of Science: Advanced Materials and Devices*. 4: 515-523.
      2. Kam Sheng Lau, Riski Titian Ginting, Sin Tee Tan, Siew Xian Chin, Sarani Zakaria & **Chin Hua Chia** 2019. Sodium cholate as efficient green reducing agent for graphene oxide via flow reaction for flexible supercapacitor electrodes. *Journal of Materials Science: Materials in Electronics* 30: 19182–19188
      3. Mohd Shaiful Sajab, Denesh Mohan, Jude Santanaraj, **Chin Hua Chia**, Hatika Kaco, Shuhaida Harun, Nur Hidayatul Nazirah Kamarudin 2019. Telescopic synthesis of cellulose nanofibrils with a stable dispersion of Fe (0) nanoparticles for synergistic removal of 5-fluorouracil. *Scientific Reports* 9: 11703
      4. Tan, T., Khiew, P.S., Chiu, W.S., **Chia, C.H.** 2019. Investigation of metal oxides toward organic dyes decolourisation and environmental remediation. *IOP Conference Series: Materials Science and Engineering* 544: 012023.
      5. Kam Sheng Lau, Siew Xian Chin, Sin Tee Tan, Fang Sheng Lim, Wei Sea Chang, Chi Chin Yap, Mohammad Hafizuddin Hj Jumali, Sarani Zakaria, Soon Wei Chook, **Chin Hua Chia** 2019. Silver nanowires as flexible transparent electrode: Role of PVP chain length*. Journal of Alloys and Compounds* 803: 165–171
      6. Aina Shasha Hashimi, Muhammad Amirul Nazhif Mohd Nohan, Siew Xian Chin, Sarani Zakaria, **Chin Hua Chia** 2019. Rapid catalytic reduction of 4-nitrophenol and clock reaction of methylene blue using copper nanowires. *Nanomaterials* 9: 936-948
      7. Noor Intan Saffinaz Anuar, Sarani Zakaria, Sinyee Gan, **Chin Hua Chia**, Chunhong Wang, Jalaluddin Harun 2019. Comparison of the morphological and mechanical properties of oil Palm EFB fibres and kenaf fibres in nonwoven reinforced composites. *Industrial Crops and Products* 127: 55-65.
      8. Wei Hau Low, Poi Sim Khiew, Swee Shee Lim, Chiu Wee Siong, **Chin Hua Chia**, Ejikeme Raphael Ezeigwe 2019. Facile synthesis of graphene-Zn3V2O8 nanocomposite as a high performance electrode material for symmetric supercapacitor. *Journal of Alloys and Compounds* 785: 847-855.
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