|  |  |
| --- | --- |
|  | **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 | HeadMaterials Science Program, Department of Applied PhysicsFaculty of Science and TechnologyUniversiti Kebangsaan Malaysia43600 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 IDResearcherIDORCID | * 196

57215089308http://www.researcherid.com/rid/I-7261-2013http://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 | CompletedStart : Jul 2006 – Jun 2008**Researcher** | Scientific Advancement Fund Allocation (SAGA)RM123,000 |
| 2 | Preparation of magnetic paper via *in situ* process | UKM | CompletedStart : August 2005 (3 Years)**Researcher** | IRPARM 171,000 |
| 3 | Biofuel from biomass: structure determination of separated chemical component obtained from solvolysis and hydrotreatment of biomass using metal oxide catalyst | UKM | CompletedStart: January 2009(2 years)**Researcher** | ExxonMobil University Research GrantRM30,000 |
| 4 | Preparation of Bioactive paper containing chitosan and silver nanoparticles using layer-by-layer assembly approach | UKM | CompletedStart: June 2010(2 years)**Project leader** | GGPMRM25,000 |
| 5 | Novel magnetic properties of graphene oxide | UKM | CompletedStart: December 2010(2 years)**Project leader** | RM68,300FRGS |
| 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 | CompletedStart: December 2010(2 years)**Co-researcher** | RM78,000FRGS |
| 7 | Rubber Toughened Epoxy Reinforced Kenaf Pulped Fiber for Automotive Components | UKM | CompletedStart: June 2010 (2 years)**Co-researcher** | SciFundRM200,000 |
| 8 | Surface Modified Superparamagnetic Iron Oxide Nanoparticles (SPIONs) Conjugated Cisplatin with Thermoresponsive Polymer as Magnetic Anticancer Drug Delivery Vehicle | UKM | CompletedStart: September 2011 (1 year)**Project leader** | GUP khasRM 30,000 |
| 8 | Application of biomimetic nanocatalyst in the hydrolysis of palm kernel cake (PKC) for the production of mannose and oligomannan | UKM | In progressStart: June 2012 (3 years)**Project leader** | ERGSRM 94,000 |
| 9 | Antibacterial Regenerated Cellulose Products loaded with Silver nanoparticles, Graphene Oxide and Nanocrystalline Cellulose | UKM | CompletedStart: June 2012 (2 years)**Co-researcher** | DIPRM 200,000 |
| 10 | Fabrication and Characterisation of Super Toughenen Regenerated Cellulose-Graphene Fibre | UKM | CompletedStart: June 2012 (3 years)**Co-researcher** | ERGSRM 99,000 |
| 11 | KENAF: SUSTAINABILITY MATERIALS IN AUTOMOTIVE INDUSTRY | UKM | In progressStart: Nov 2012 (5 years)**Co-researcher** | LRGSRM 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 | CompletedStart: Jan 2012 (1 years)**Co-researcher** | INOVASIRM30,000 |
| 13 | Advanced Palm-Fibre Composites (PFCs) For The Aerospace Industries | Nottingham University, Malaysia | In progressStart: May 2013 (2 years)**Co-researcher** | ScienceFundRM190,000 |
| 14 | Kinetics and mechanism of acid hydrolysis of oil palm empty fruit bunch fibres into levulinic acid | UKM | CompletedStart Dec 2013 – Nov 2015**Project leader** | FRGSRM 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** | KTPRM 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** | FRGSRM 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** | PENCHEMRM 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** | DIPRM 150,000 |
| 20 | THE CONVERSION OF SAP OIL PALM TRUNK INTO METHYL LEVULINATE BY USING CATALYSTS | UKM | Jul 2014 – Jun 2016**Co-researcher** | FRGSRM 108,200 |
| 21 | Graphene and graphene oxide reinforced gloves | UKM | 1 Jul 2015 – 30 Jun 2018**Project leader** | Ansell NP Sdn BhdRM 127,000 |
| 22 | Cellulose nanocomposite containing silver nanoparticles and graphene oxide for environmental remediation  | UKM | 1 Jan 2016 – 31 Dec 2017**Project leader** | DIPRM 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** | FRGSRM 102,000 |
| 24 | Production of Metallic Conducting Nanowires for Industrial Applications  | UKM | 16/10/2017 – 15/10/2019**Project leader** | GUPRM 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** | JICARM 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** | FRGSRM 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** | GUPRM 59,200 |
| 28 | Three-dimensional Hierarchical and Multifunctional Porous Nanocomposite Frameworks for Advanced Applications  | UKM | 1/10/2019 – 30/9/2021**Project leader** | DIPRM 100,000 |
| 29 | Characterisation of Solid Fuel Briquettes from Plastic Waste and Lignocellulose Biomass.  | UKM | 01/10/2019 - 31/03/2022 **Co-researcher** | GUPRM 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** | FRGSRM 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** | DIPRM 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** | FRGSRM 73,200 |
| 33 | Biodegradable Growing Media with Slow Release Fertilizer and Free Watering System  | UKM | 01/12/2019 - 28/02/2023**Co-researcher** | LRGSRM 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** | TRGSRM 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** | PRGSRM 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** | FRGSRM 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** | GUPRM 70,000 |
| 39 | Quantifying microplastics, provenance and fate in the Sungai Pulai Estuary, Johor  | UKM | 01/08/2020 – 31/1/2023**Co-researcher** | FRGSRM 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** | GUPRM 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.
			9. Noorhasmiera Abu Jahar, Fei-ling Pua, Wong Jia Chyi, Marhaini Mostapha, Sarani Zakaria, **Chin Hua Chia**, Sharifah Nabihah Syed Jaafar 2019. Utilization of Core Oil Palm Trunk Waste to Methyl Levulinate: Physical and Chemical Characterizations. *Waste and Biomass Valorization* 10: 655-660.
			10. Umar Adli Amran, Sarani Zakaria, **Chin Hua Chia**, Rasidi Roslan, Sharifah Nabihah Syed Jaafar, Kushairi Mohd Salleh 2019. Polyols and rigid polyurethane foams derived from liquefied lignocellulosic and cellulosic biomass. *Cellulose* 26: 3231-3246.
			11. Muhammad Amirul Nazhif Mohd Nohan, Chin Hua Chia, Aina Shasha Hashimi, Siew Xian Chin, Poi Sim Khiew, Sarani Zakaria, Azima Azmi, Kam Sheng Lau and Nur Fazlinda Razali 2019. Highly stable binder free CNTs/rGO aerogel electrode for decolouration of methylene blue & palm oil mill effluent via electro-Fenton oxidation process. *RSC Advances* 9: 16472-16478.
			12. Mohd Shaiful Sajab, Nur Nadia Nazirah Ismail, Jude Santanaraj, Abdul Wahab Mohammad, Hassimi Abu Hassan, **Chin Hua Chia**, Sarani Zakaria, Anamt Mohamed Noor 2019. Insight observation into rapid discoloration of batik textile effluent by in situ formations of zero valent iron. *Sains Malaysiana* 48: 393-399.
			13. Nyak Sazwani Nyak Mazlan, Sarani Zakaria, Sinyee Gan, Chin Hua Chia , Khairunnisa Wazanah Baharin 2019. Comparison of regenerated cellulose membrane coagulated in sulphate based coagulant. *CERNE* 25: 18-24.
			14. Mohamad Jani Saad, **Chin Hua Chia**, Sarani Zakaria, Mohd Shaiful Sajab, Sufian Misran, Mohammad Hariz Abdul Rahman, Siew Xian Chin 2019. Physical and chemical properties of the rice straw activated carbon produced from carbonization and KOH activation processes. *Sains Malaysiana* 48: 385 – 391.
			15. Mohamad Redwani Mohd Jasni, Mohamad Deraman, Zalita Zainuddin, **Chia Chin Hua**, Ramli Omar 2019. Elektrod Superkapasitor daripada Komposit Karbon Teraktif dan Grafen dengan Perekat PVDF-HFP. *Sains Malaysiana* 48: 407 – 417.

2018

* + - 1. Kai Yin Chong, **Chin Hua Chia**, Sarani Zakaria, Thi Hao Pham, David Lucas, Siew Xian Chin 2018. Puncture resistance and mechanical properties of graphene oxide reinforced natural rubber latex. *Sains Malaysiana* 47: 2171-2178.
			2. Sinyee Gan, Sarani Zakaria, **Chin Hua Chia**, Harika Kaco 2018. Effect of graphene oxide on thermal stability of aerogel bio-nanocomposite from cellulose-based waste biomass. *Cellulose* 25: 5099-5112.
			3. K.M. Salleh, S. Zakaria, M.S. Sajab, S Gan, **C.H. Chia**, S.N.S. Jaafar, U.A. Amran 2018. Chemically crosslinked hydrogel and its driving force towards superabsorbent behavior. *International Journal of Biological Macromolecules* 118: 1422-1430.
			4. Kai Yin Chong, **Chin Hua Chia**, Soon Wei Chook, Sarani Zakaria, David Lucas 2018. Simplified production of graphene oxide assisted by high shear exfoliation of graphite with controlled oxidation. *New Journal of Chemistry* 42: 4507-4512.
			5. Kam Sheng Lau, **Chin Hua Chia**, Siew Xian Chin, Soon Wei Chook, Sarani Zakaria, Joon Ching Juan 2018. Conversion of glucose into lactic acid using silica-supported zinc oxide as solid acid catalyst*. Pure and Applied Chemistry* 90(6): 1035–1043
			6. M.R.M. Jasni, M. Deraman, M. Suleman, Z. Zainuddin, M.A.R. Othman **C.H. Chia**, M.A. Hashim 2018. Supercapacitor electrodes from activation of binderless green monoliths of biomass self-adhesive carbon grains composed of varying amount of graphene additive. *Ionics* 24: 1195-1210.
			7. Anuar, N.I.S., Zakaria, S., Kaco, H., **Hua, C.C.**, Chin hong, W., Abdullah, H.S. 2018. Physico-Mechanical, Chemical Composition, Thermal Degradation and Crystallinity of Oil Palm Empty Fruit Bunch, Kenaf and Polypropylene Fibres: A Comparatives Study. *Sains Malaysiana* 47: 839-851.
			8. Sharifah Nurul Ain Syed Hashim, Sarani Zakaria, **Chin Hua Chia**, Sharifah Nabihah Syed Jaafar 2018. Enhanced thermal stability of esterified lignin in different solvent mediums. *Polymers from Renewable Resources* 9: 39-49.
			9. Mohd Shaiful Sajab, Wannwana Jauhari, **Chin Hua Chia** 2018. Oleophilicity and Oil-Water Separation by Reduced Graphene Oxide Grafted Oil Palm Empty Fruit Bunch Fibres. *Sains Malaysiana* 47: 1891-1896.

2017

1. Umar Adli Amran, Sarani Zakaria, **Chin Hua Chia**, Zhen Fang, Mohamad Zulfahdli Masli 2017. Production of Liquefied Oil Palm Empty Fruit Bunch Based Polyols via Microwave Heating. *Energy & Fuels* 31: 10975-10982.
2. Santanaraj, J., Sajab, M.S., Mohammad, A.W., Harun, S., **Chia, C.H.**, Zakaria, S., Kaco, H. 2017. Enhanced delignification of oil palm empty fruit bunch fibers with *in situ* Fenton-oxidation. *BioResources* 12: 5223-5235.
3. Soon Wei Chook, **Chin Hua Chia**, Sarani Zakaria, Hui Min Neoh, Rahman Jamal 2017. Effective immobilization of silver nanoparticles on regenerated cellulose-chitosan composite membrane and its antibacterial activity. *New Journal of Chemistry* 41, 5061-5065
4. Siew Xian Chin, Soon Wei Chook**, Chin Hua Chia**, Kam Sheng Lau, Sarani Zakaria, Siti Masrinda Tasirin 2017. Graphene Oxide as Support and Regenerative Substrate for Lead Ions in Catalytic Conversion of Lactic Acid. *BioResources* 12: 7133-7144.
5. Noorhasmiera Abu Jahar, Fei-ling Pua, Wong Jia Chyi, Marhaini Mostapha, Sarani Zakaria, **Chin Hua Chia**, Sharifah Nabihah Syed Jaafar 2017. Utilization of Core Oil Palm Trunk Waste to Methyl Levulinate: Physical and Chemical Characterizations. *Waste and Biomass Valorization* (in press).
6. Soon Wei Chook, Shun Xiang Yau, **Chin Hua Chia**, Siew Xian Chin, Sarani Zakaria 2017. Carboxylated-nanoncellulose as a template for the synthesis of silver nanoprism. *Applied Surface Science* 422: 32-38.
7. S Moosavi, S Zakaria, **CH Chia**, S Gan, NA Azahari, H Kaco 2017. Hydrothermal synthesis, magnetic properties and characterization of CoFe2O4 nanocrystals. *Ceramics International* 43: 7889-7894.
8. S. Gan, S. Zakaria, **C.H. Chia**, R.S. Chen, A.V. Ellis, H. Kaco 2017. Highly porous regenerated cellulose hydrogel and aerogel prepared from hydrothermal synthesized cellulose carbamate. *PLOS ONE* 12 (3), e0173743.
9. M.Y. Ho, P.S. Khiew. Isa, W.S. Chiu, **C.H. Chia** 2017. Solvothermal synthesis of molybdenum oxide on liquid-phase exfoliated graphene composite electrodes for aqueous supercapacitor application. *Journal of Materials Science: Materials in Electronics* 28: 6907–6918.
10. S.X. Chin, **C.H. Chia**, S. Zakaria, A.S.M. Tasirin 2017. Combination of Gamma Irradiation and Sodium Carbonate Pretreatment on Oil Palm Empty Fruit Bunch (EFB) for High Acidic Hydrolysis Yield. *Sains Malaysiana* 46 (1), 167-173
11. S. Gan, S. Zakaria, R.S. Chen, **C.H. Chia**, F.N.M. Padzil, S. Moosavi 2017. Autohydrolysis processing as an alternative to enhance cellulose solubility and preparation of its regenerated bio-based materials. *Materials Chemistry and Physics* 192: 181-189.
12. Mohd Shaiful Sajab, **Chin Hua Chia**, Sarani Zakaria, Mika Sillanpää 2017. Adsorption of Heavy Metal Ions on Surface of Functionalized Oil Palm Empty Fruit Bunch Fibers: Single and Binary Systems. *Sains Malaysiana* 47: 157-165.

2016

1. Wei Tieng Owi, Ong Hui Lin, Sung Ting Sam, **Chin Hua Chia**, Sarani Zakaria, Muhammad Safwan Mohaiyiddin, Gil Nonato Santos, Hazizan Md Akil 2016. Comparative Study of Microcelluloses Isolated from Two Different Biomasses with Commercial Cellulose. *BioResources* 11: 3453-3465.
2. Muhammad Safwan Mohaiyiddin, Ong Hui Lina, Wei Tieng Owi, Chi Hoong Chan, **Chin Hua Chia**, Sarani Zakaria, Al Rey Villagracia, Hazizan Md Akil 2016. Characterization of nanocellulose recovery from *Elaeis guineensis* frond for sustainable development. *Clean Technologies and Environmental Policy* 18: 2503.
3. Mohd Shaiful Sajab, **Chin Hua Chia**, Chi Hoong Chan, Sarani Zakaria,a Hatika Kaco, Soon Wei Chook, Siew Xian Chin, An’Amt Mohamed Noor 2016. Bifunctional graphene oxide–cellulose nanofibril aerogel loaded with Fe(III) for the removal of cationic dye via simultaneous adsorption and Fenton oxidation. *RSC Advances* 6: 19819-19825.
4. S Gan, SH Piao, HJ Choi, S Zakaria, **CH Chia** 2016. Synthesis of kenaf cellulose carbamate and its smart electric stimuli-response. *Carbohydrate Polymers* 137: 693-700.
5. SX Chin, SM Tasirin, CH Chan, **CH Chia**, SW Chook, S Zakaria, MS Sajab 2016. Catalytic Conversion of Empty Fruit Bunch (EFB) Fibres into Lactic Acid by Lead (II) ions. *BioResources* 11 (1): 2186-2201.
6. Sinyee Gan, Sarani Zakaria, Peivun Ng, **Chin Hua Chia**, Ruey San Chen 2016. Effect of acid hydrolysis and thermal hydrolysis on solubility and properties of oil palm empty fruit bunch fiber cellulose hydrogel. *BioResources* 11: 126-139.
7. Soon Wei Chook, **Chin Hua Chia**, Hatika Kaco, Sarani Zakaria, Nay Ming Huang & Hui Min Neoh 2016. Highly Porous Chitosan Beads Embedded with Silver-Graphene Oxide Nanocomposites for Antibacterial Application. *Sains Malaysiana* 45: 1663 – 1667
8. J.C. Wong, **C.H. Chia**, S.Y. Chin, P.S. Khiew, S. Zakaria 2016. Synthesis and Characterization of Methoxy Poly (ethylene glycol)-co-poly (beta-amino ester) formed by Linear and Cyclic Hexylamines as Polymeric Micelles. *Sains Malaysiana* 45: 1849-1855

2015

1. Hanisah Syed Sulaiman, Chi Hoong Chan, **Chin Hua Chia**, Sarani Zakaria, Sharifah Nabihah Syed Jaafar 2015. Isolation and fractionation of cellulose nanocrystals from kenaf core. *Sains Malaysiana* 44: 1635-1642.
2. Sinyee Gan, Sarani Zakaria, **Chin Hua Chia**, Ruey Shan Chen, Norfadillah Jeyalaldeen 2015. Physico-mechanical properties of a microwave-irradiated kenaf carbamate/graphene oxide membrane. *Cellulose* 22: 3851-3863.
3. Soon Wei Chook, **Chin Hua Chia**, Chi Hoong Chan, Siew Xian Chin, Sarani Zakaria, Mohd Shaiful Sajab, Nay Ming Huang 2015. Porous aerogel nanocomposite of silver nanoparticles-functionalized cellulose nanofibrils for SERS detection and catalytic degradation of Rhodamine B. *RSC Advances* 5, 88915 – 88920.
4. Koguleshun, S., Fei-ling Pua, Nabihah, S., **Chin-Hua, Chia**, Shamala, G. 2015. Synthesis of Oil Palm EFB Derived Solid Acid Catalyst for Esterification of Waste Cooking Oils. *Sains Malaysiana* 44: 1573-1577.
5. Kai Yin Chong, **Chin Hua Chia**, Sarani Zakaria, Mohd Shaiful Sajab, Soon Wei Chook, Poi Sim Khiew 2015. CaCO3-decorated cellulose aerogel for removal of Congo Red from aqueous solution. *Cellulose* 22: 2683-2691
6. Soon Wei Chook, **Chin Hua Chia**, Sarani Zakaria, Mohd Khan Ayob, Nay Ming Huang, Hui Ming Neoh, Rahman Jamal 2015. Antibacterial hybrid cellulose-graphene oxide nanocomposite immobilized with silver nanoparticles. *RSC Advances* 5: 26263-26268.
7. Chi Hoong Chan, **Chin Hua Chia**, Sarani Zakaria, Mohd Shaiful Sajab and Siew Xian 2015. Cellulose nanofibrils: a rapid adsorbent for the removal methylene blue. *RSC Advances* 5: 18204-18212.
8. Chi Hoong Chan, **Chin Hua Chia**, Sarani Zakaria, Ishak Ahmad, Alain Dufresne, Kim Yeong Tshai 2015. Low filler content cellulose nanocrystal and graphene oxide reinforced polylactic acid film composites. *Polymer Research Journal* 9: 165-177.
9. Peivun Ng, **Chin Hua Chia**, Sarani Zakaria, Sinyee Gan, Hatika Kaco, Farah Nadia Mohammad Padzil, and Soon Wei Chook 2015. Preparation of Cellulose Hydrogel from Oil Palm Empty Fruit Bunch Fibers Cellulose. *Polymer Research Journal* 9: 449-459.
10. Farah Nadia Mohammad Padzil, Sarani Zakaria, **Chin Hua Chia**, Sharifah Nabihah Syed Jaafar, Hatika Kaco, Sinyee Gan, Peivun Ng 2015. Effect of Acid Hydrolysis on Regenerated Kenaf Core Membrane Produced using Aqueous Alkaline-Urea Systems. *Carbohydrate Polymers* 124: 164-171.
11. Sinyee Gan, Sarani Zakaria, **Chin Hua Chia**, Farah Nadia Mohammad Padzil, Peivun Ng 2015. Effect of hydrothermal pretreatment on solubility and formation of kenaf cellulose membrane and hydrogel. *Carbohydrate Polymers* 115: 62-68.
12. Umar Adli Amran, Sarani Zakaria, **Chin Hua Chia**, Sharifah Nabihah Syed Jaafar, Rasidi Roslan 2015. Mechanical properties and water absorption of glass fibre reinforced bio-phenolic elastomer (BPE) composite. *Industrial Crops and Products* 72: 54-59.
13. Siew Xian Chin, **Chin Hua Chia**, Sarani Zakaria, Zhen Fang, Sahrim Ahmad 2015. Ball milling pretreatment and diluted acid hydrolysis of oil palm empty fruit bunch (EFB) fibres for the production of levulinic acid. *Journal of Taiwan Institute of Chemical Engineers* 52: 85-92.
14. Sinyee Gan, Farah Nadia Mohammad Padzil, Sarani Zakaria, **Chin Hua Chia**, Sharifah Nabihah Syed Jaafar, Ruey Shan Chen 2015. Synthesis of Liquid Hot Water Cotton Linter to Prepare Cellulose Membrane using NaOH/Urea or LiOH/Urea. *BioResources* 10: 2244-2255.
15. Kasturi Muthoosamy, Renu Geetha Bai, Ibrahim Babanginda Abubakar, Surya Mudavasseril, Sudheer, Hong Ngee Lim, Hwei San Loh, Nay Ming Huang, **Chin Hua Chia**, Sivakumar Manickam 2015. Exceedingly biocompatible and thin-layered reduced graphene oxide nanosheets using an eco-friendly mushroom extract strategy. *International Journal of Nanomedicine* 10: 1505-1519.
16. Mohd Shaiful Sajab, **Chin Hua Chia**, Sarani Zakaria, Mika Sillanpää 2014. Fixed-bed column studies for the removal of cationic and anionic dyes by chemically modified oil palm empty fruit bunch fibers: single- and multi-solute systems. *Desalination and Water Treatment* 55: 1372-1379.
17. Sarani Zakaria, Chin Hua Chia, Wan Haslinda Wan Ahmad, Hatika Kaco, Soon Wei Chook, Chi Hoong Chan 2015. Mechanical and antibacterial properties of paper coated with chitosan. *Sains Malaysiana* 44: 905-911.

2014

1. Sin Yee Gan, Sarani Zakaria, **Chin Hua Chia**, Padzil, F.N.M., Pei Vun Ng 2014. Effect of Hydrothermal Pretreatment on Solubility and Formation of Kenaf Cellulose Membrane and Hydrogel. *Carbohydrate Polymers* 115:62-68.
2. Hatika Kaco, Sarani Zakaria, Nur Fazlinda Razali, **Chin Hua Chia**, Lina Zhang, Saad Mohd Jani 2014. Properties of Cellulose Hydrogel from Kenaf Core Prepared via Pre-cooled Dissolving Method. *Sains Malaysiana* 43: 1221-1229.
3. Kai Yin Chong, **Chin Hua Chia**, Sarani Zakaria, Mohd Shaiful Sajab 2014. Vaterite calcium carbonate for the adsorption of Congo red from aqueous solutions. *Journal of Environmental Chemical Engineering* 2:2156-2161.
4. Rasidi Roslan, Sarani Zakaira, **Chin Hua Chia**, Ricarda Boehm, Marie-Pierre Laborie 2014. Physico-mechanical properties of resol phenolic adhesives derived from liquefaction of oil palm empty fruit bunch fibres. *Industrial Crops and Products* 62: 119-124.
5. Soon Wei Chook, **Chin Hua Chia**, Sarani Zakaria, Mohd Khan Ayob, Nay Ming Huang, Hui Min Neoh, Meng He, Lina Zhang, Rahman Jamal 2014. A graphene oxide facilitated a highly porous and effective antibacterial regenerated cellulose membrane containing stabilizer silver nanoparticles. *Cellulose* 21:4261-4270.
6. Ho, M.Y., Khiew, P.S., Isa, D., Tan, T.K., Chiu, W.S., **Chia, C.H.** 2014. Charge storage performance of lithiated iron phosphate/activated carbon composite as symmetrical electrode for electrochemical capacitor. *Current Applied Physics* 14: 1564-1575.
7. Peik See Teo, Alagarsamy Pandikumar, Hong Ngee Lim, Nay Ming Huang, **Chia Chin Hua** 2014. Magnetically separable reduced graphene oxide/iron oxide nanocomposite materials for environmental remediation. *Catalysis Science & Technology* 4: 4396-4405.
8. Siaw Cheng Lau, Hong Ngee Lim, Mahiran Basri, Hamid Reza Fard Masoumi, Asilah Ahmad Tajudin, Nay Ming Huang, Alagarsamy Pandikumar, **Chin Hua Chia**, Yoshito Andou 2014. Enhanced Biocatalytic Esterification with Lipase-Immobilized Chitosan/Graphene Oxide Beads. *Plos One* 9: e104695.
9. Mohd Shaiful Sajab, **Chin Hua Chia**, Sarani Zakaria, Mika Sillanpää 2014. Removal of organic pollutants and decolorization of bleaching effluents from pulp and paper mill by adsorption using chemically treated oil palm empty fruit bunch fibers. *BioResources* 9:4517-4527.
10. Chin, S.X., **Chia, C.H.**, Zakaria, S. 2014. Green liquor pretreatment of oil palm empty fruit bunch (EFB) fibers for high yield of reducing sugars. *Journal of Biobased Materials and Bioenergy* 8: 1-6.
11. Ho, M.Y., Khiew, P.S., Isa, D., Tan, T.K., Chiu, W.S., **Chia, C.H.**, 2014. A review of metal oxide composite electrode materials for electrochemical capacitors. *Nano 9: 1430002.*
12. Chin, S.X., **Chia, C.H.**, Fang, Z., Zakaria, S., Li, X.K, Zhang, F., 2014. A kinetic study on acid hydrolysis of oil palm empty fruit bunch fibres using a microwave reactor system. *Energy & Fuels* 28(4): 2589-2597.
13. Gan, S.Y., Zakaria, S., **Chia, C.H.**, Kaco, H., Padzil, F.N.M. 2014. Synthesis of kenaf cellulose carbamate using microwave irradiation for preparation of cellulose membrane. *Carbohydrate Polymers* 106: 160-165
14. Ahmadi, S., Zhang, X., Gong, Y., **Chia, C.H.**, Sun, C.Q. 2014. Skin-resolved local bond contraction, core electron entrapment, and valence charge polarization of Ag and Cu nanoclusters. *Physical Chemistry Chemical Physics* 16(19): 8940-8948.
15. Kaco, H., Zakaria, S., **Chia, C.H.**, Zhang, L. 2014. Transparent and printable regenerated kenaf cellulose/PVA film. *BioResources* 9: 2167-2178
16. Jumeri, F.A., Lim, H.N., Ariffin, S.N., Huang, N.M., Teo, P.S., Fatin, S.O., **Chia, C.H.**, Harrison, I. 2014. Microwave synthesis of magnetically separable ZnFe2O4-reduced graphene oxide for wastewater treatment. *Ceramics International* 40: 7057-7065.
17. Fan, S.P., Jiang, L.Q., **Chia, C.H.**, Fang, Z., Zakaria, S., Chee, K.L. 2014. High yield of production of sugars from deproteinated palm kernel cake under microwave irradiation via dilute sulfuric acid hydrolysis. *Bioresource Technology* 153: 69-78.
18. Suet Pin Fan, **Chin Hua Chia**, Zhen Fang, Sarani Zakaria, Kah Leong Chee 2014. Optimization of mannose yield from deproteinated palm kernel cake via diluted fumaric acid hydrolysis. *Advanced Materials Research* 911: 302-306.
19. Noorhafanita Norhakim, Sahrim Hj Ahmad, **Chin Hua Chia**, Nay Ming Huang 2014. Mechanical and thermal properties of graphene oxide filled epoxy nanocomposites. *Sains Malaysiana* 43: 603-609.

2013

1. Ahmad, A.F., Moin, F.H.A., Mohd, H.M.K., Rahman, I.A., Mohamed, F., **Hua, C.C.**, Ramli, S., Radiman, S. 2013. Graphene colloidal dispersion in various organic solvents. *Malaysian Journal of Analytical Sciences* 17: 475-480
2. Khiew, P.S., Ho, M.Y., Chiu, W.S., Tan, T.K., Shamsudin, R., Abd-Hamid, M.A., **Chia, C.H.** 2014. Synthesis and Electrochemical Characterization of Iron Oxide/Activated Carbon Composite Electrode for Symmetrical Supercapacitor. *International Journal of Chemical, Materials Science and Engineering* 7: 1-5.
3. **Chin Hua Chia**, Sarani Zakaria, Seng Chau Goh, Chi Hoong Chan 2013. Layer-by-layer deposition of CoFe2O4 nanocrystals onto unbleached pulp fibres for producing magnetic paper. *International Journal of Institute Materials Malaysia* 1: 73-89.
4. Zakaria, S., Liew, T.K., **Chia, C.H.**, Pua, F.L., Fan, S.P., Roslan, R., Amran, U.A., Potthast, A., Rosenau, T., Liebner, F. 2013. Characterization of Fe2O3/FeOOH catalyzed solvolytic liquefaction of oil palm empty fruit bunch (EFB) products. *Journal of Bioremediation & Biodegradation* 84
5. Tan, S.K., Ahmad, S., **Chia, C.H.**, Mamun, A., Heim, H.P. 2013. A comparison study of liquid natural rubber (LNR) and liquid epoxidized natural rubber (LENR) as the toughening agent for epoxy. *American Journal of Materials Science* 3:55-61.
6. Pua, F.L., Sajab, M.S., **Chia, C.H.**, Zakaria, S., Rahman, I.A., Salit, M.S. 2013. Alkaline-treated cocoa pod husk as adsorbent for removing methylene blue from aqueous solutions. *Journal of Environmental Chemical Engineering* 1:460-465.
7. Pua, F.L., Zakaria, S., **Chia, C.H.**, Fan, S.P., Rosenau, T., Potthast, A., Liebner, F. 2013. Solvolytic liquefaction of oil palm empty fruit bunch (EFB) fibres: Analysis of product fractions using FTIR and pyrolysis-GCMS. *Sains Malaysiana* 42(6): 793-799.
8. **Chia, C.H.**, Razali, N.F., Sajab, M.S., Zakaria, S., Huang, N.M., Lim, H.N. 2013. Methylene Blue Adsorption on Graphene Oxide. *Sains Malaysiana* 42(6): 819-826.
9. Vijay Kumar, S., Huang, N.M., Lim, H.N., Zainy, M., Harrison, I., **Chia, C.H.** 2013. Preparation of highly water dispersible functional graphene/silver nanocomposite for detection of melamine. *Sensors and Actuators B: Chemical* 181: 885-893.
10. Vijay Kumar, S., Huang, N.M., Lim, H.N., Marlinda, A.R., Harrison, I., **Chia, C.H.** 2013. One-step size-controlled synthesis of functional graphene oxide/silver nanocomposites at room temperature. *Chemical Engineering Journal* 219: 217-224.
11. Golsheikh, A.M., Huang, N.M., Lim, H.N., **Chia, C.H.**, Harrison, I., Muhamad, M.R. 2013. One-pot hydrothermal synthesis and characterization of FeS2 (Pyrite)/graphene nanocomposites. *Chemical Engineering Journal* 218: 276-284**.**
12. Chan, C.H., **Chia, C.H.**, Zakaria, S., Ahmad, I., Dufresne, A. 2013. Production and characterization of cellulose and nanocrystalline cellulose from kenaf core wood. *BioResources* 8: 447-460.
13. Chin, S.X., **Chia, C.H.**, Zakaria, S. 2013. Production of reducing sugar from oil palm empty fruit bunch (EFB) cellulose fibres via acid hydrolysis. *BioResources* 8: 785-794.
14. Sajab, M.S., **Chia, C.H.**, Zakaria, S., Khiew, P.S. 2013. Cationic and anionic modifications of oil palm empty fruit bunch fibres for the removal of dyes from aqueous solutions. *Bioresource Technology* 128: 571-577.

2012

1. Chang, B.Y.S., Huang, N.M., Anamt, M.N., Marlinda, A.R., Norazriena, Y. Muhamad, M.R., Harrison, I., Lim, H.N., **Chia, C.H.** 2012. Facile hydrothermal preparation of titanum dioxide decorated reduced graphene oxide nanocomposites. *International Journal of Nanomedicine* 7: 3379-3387.
2. Chook, S.W., **Chia, C.H.**, Zakaria, S., Ayob, M.K., Chee, K.L., Huang, N.M., Neoh, H.M., Lim, H.N., Jamal, R., Rahman, R.M.F.R.A. 2012. Antibacterial performance of Ag nanoparticles and AgGO nanocomposites prepared via rapid microwave-assisted synthesis method. *Nanoscale Research Letter* 7: 541.
3. Zainy, M., Huang, N.M., Vijay Kumar, S., Lim, H.N., **Chia, C.H.**, I. Harrison 2012. Simple and scalable preparation of reduced graphene oxide-silver nanocomposites via rapid thermal treatment. *Materials Letters* 89: 180-183.
4. Ahmadi, S., **Chia, C.H.**, Zakaria, S., Saeedfar, K., Asim, N. 2012. Synthesis of Fe3O4 nanocrystals using hydrothermal approach. *Journal of Magnetism and Magnetic Materials* 324: 4147-4150.
5. Teo, P.S., Lim, H.N., Huang, N.M., **Chia, C.H.** 2012. Room temperature *in situ* chemical synthesis of Fe3O4/Graphene. *Ceramics International* 38: 6411-6416.
6. Marlinda, A.R. Huang, N.M., Muhamad, M.R., An'amt, M.N., Chang, B.Y.S., Yusoff, N. , Harrison, I., Lim, H.N., **Chia, C.H.**, Vijay Kumar, S. 2012. Highly efficient preparation of ZnO nanorods decorated reduced graphene oxide nanocomposites. *Materials Letters* 80: 9-12.
7. Bakarrudin, S.B., Zakaria, S., **Chia, C.H.**, Jani, S.M. 2012. Liquefied residues of kenaf core wood produced at different phenol-kenaf ratio. *Sains Malaysiana* 41:225-231.
8. Chook, S.W., **Chia, C.H.**, Zakaria, S., Ayob, M.K., Chee, K.L., Huang, N.M. 2012. Silver nanoparticles – graphene oxide nanocomposite for antibacterial purpose. *Advanced Materials Research* 364: 439-443.
9. Neoh, K.W., Tshai, K.Y., Khiew, P.S., **Chia, C.H.** 2012. Micro palm and kenaf fibers reinforced PLA composite: effect of volume fraction on tensile strength. *Applied Mechanics and Materials* 145: 1-5.

2011

1. Pua, F.L., Fang, Z., Zakaria, S., Guo, F., **Chia, C.H.** 2011. Direct production of biodiesel from high-acid value Jatropha oil with solid acid catalyst derived from lignin. *Biotechnology for Biofuels* 4:56.
2. Huang, N.M., Lim, H.N., Chia, C.H., Yarmo, M.A., Muhamad, M.R. 2011. Simple room-temperature preparation of high-yield large-area graphene oxide. *International Journal of Nanomedicine* 6: 3443-3448.
3. Lim, H.N, Huang, N.M., Lim, S.S., Harrison, I., **Chia, C.H.** 2011. Fabrication and characterization of graphene hydrogel via hydrothermal approach as a scaffold for preliminary study of cell growth. *International Journal of Nanomedicine* 6: 1817-1823.
4. Sajab, M.S., **Chia, C.H.**, S. Zakaria, Mohd Jani, S., Ayob, M.K. Chee, K.L., Khiew, P.S., Chiu, W.S. 2011. Citric acid modified kenaf core fibres for removal of methylene blue from aqueous solution. *Bioresource Technology* 102: 7237-7243.
5. Chai, L.L., **Chia, C.H.**, Zakaria, S., Nabihah, S., Rasid, R. 2011. Morphology and properties of polypropylene blends containing phenolic resin produced from the liquefaction of empty fruit bunch fibers. *Polymers & Polymer Composites* 19: 625-631.
6. Haw, C.Y., **Chia, C.H.**, Zakaria, S., Mohamad, F., Radiman, S., Teh, J.H., Khiew, P.S., Chiu, W.S., Huang, N.M. 2011. Morphological Studies of Randomized Dispersion Magnetite Nanoclusters Coated with Silica. *Ceramics International* 37: 451-464.
7. Fan, S.P., Zakaria, S., **Chia, C.H.**, Jamaluddin, F., Nabihah, S., Liew, T.K., Pua, F.L. 2011. Comparative studies of products obtained from solvolysis liquefaction of oil palm empty fruit bunch fibres using different solvents. *Bioresource Technology* 102: 3521-3526.
8. Pua, F.L., **Chia, C.H.**, Zakaria, S., Neoh, S.K., Liew, T.K. 2011. Nano transition metal sulphide catalyst for solvolysis liquefaction of soda lignin. *Sains Malaysiana* 40 (3): 221-226.
9. Khiew, P.S., Chiu, W.S., Tan, T.K., Radiman, S., Abd-Shukor, R., Abd-Hamid, M.A., Chia, C.H. 2011. Synthesis and characterization of ZnO and Fe3O4 nanocrystals from oleat-based organometallic compounds. *World Academy of Science, Engineering and Technology* 79: 667-673.

2010

1. Sajab, M.S., **Chia, C.H.**, Zakaria, S., Mohd Jani, S., Khiew, P.S., Chiu, W.S. 2010. Removal of copper (II) ions from aqueous solution using alkaline-treated kenaf core fibres. *Adsorption Science and Technology* 28: 337-386.
2. Munawar, R.F., Zakaria, S., **Chia, C.H.**, Radiman, S., Abdullah, M. 2010. Properties of magnetic paper prepared via in situ synthesis methods. *Sains Malaysiana* 39(4): 593-598.
3. Lim, H.N., Kassim, A., Huang, N.M., Lee, K.H., Syahida, A., **Chia, C.H.** 2010. High internal phase emulsion as reaction medium for precipitating brushite crystals. *Ceramics International* 36: 1503-1509
4. Sik, H.S., Choo, K.T., Zakaria, S., Ahmad, S., **Chia, C.H.**, Yusoff, M. 2010. The influence of drying temperature on the hygroscopicity of rubberwood. Journal of Agricultural Science 2: 48-58.
5. Sik, H.S., Choo, K.T., Zakaria, S., Ahmad, S., **Chia, C.H.**, Yusoff, M. 2010. Dimensional stability of high temperature dried rubberwood solid lumber at two equilibrium moisture contents. *Drying Technology* 28(9): 1083-1090.
6. Chiu, W.S., Khiew, P.S., Cloke, M., Isa, D., Lim, H.N., Tan, T.K., Huang, N.M., Radiman, S., Abd-Shukor, R., Abd. Hamid, M.A., **Chia, C.H.** 2010. Heterogeneous seeded growth: synthesis and characterization of bifunctional Fe3O4/ZnO core/shell nanocrystals. *The Journal of Physical Chemistry C 114(*18): 8212–8218.
7. Othman, R., Zakaria, S., **Chia, C.H.**, Zuriyati, A., Isa, N. 2010. Mechanical and Optical Properties of Paper Lumen-Loaded with CaCO3: Effect of Polyethylenimine and alum. *Sains Malaysiana* 39: 435-439.
8. Pua, F.L**., Chia, C.H.**, Zakaria, S., Liew, T.K., Yarmo, M.A., Huang, N.M. 2010. Preparation of Transition Metal Sulfide Nanoparticles via Hydrothermal Route. *Sains Malaysiana* 39: 243-248.
9. Chiu, W.S., Khiew, P.S., Cloke, M., Isa, D., Tan, T.K., Huang, N.M., Radiman, S., Abd-Shukor, R., Abd. Hamid, M.A., Lim, H.N., **Chia. C.H.** 2010. Photocatalytic Study of 2-Dimensional ZnO Nanopellets in the Decomposition of Methylene Blue. *Chemical Engineering Journal* 158: 345-352.
10. Goh, S.C., **Chia, C.H.**, Zakaria, S., Yusoff, M., Haw, C.Y., Ahmadi, Sh., Huang, N.M., Lim, H.N. 2010. Hydrothermal preparation of high saturation magnetization and coercivity cobalt ferrite nanocrystals without subsequent calcination. *Materials Chemistry and Physics* 120:31-35.
11. Haw, C.Y., Mohamed, F., **Chia, C.H.**, Radiman, S., Zakaria, S., Huang, N.M., Lim, H.N. 2010. Hydrothermal synthesis of magnetite nanoparticles as MRI contrast agents. *Ceramics International* 36: 1417-1422.
12. Huang, N.M., Lim, H.N., Radiman, S., Khiew, P.S., Chiu, W.S., Hasim, R., **Chia, C.H.**, 2010. Sucrose ester micellar-mediated synthesis of Ag nanoparticles and the antibacterial properties. *Colloids and Surfaces A: Physicochem. Eng. Aspects* 353: 69-76.
13. **Chia, C.H.**, Zakaria, S., Yusoff, M., Goh, S.C., Haw, C.Y., Ahmadi, S., Huang, N.M., Lim, H.N. 2010. Size and crystallinity-dependent magnetic properties of CoFe2O4 nanocrystals. *Ceramics International* 36: 605-609.
14. Lim, H.N., Kassim, A., Huang, N.M., **Chia, C.H.** 2010. Microstructure of brushite crystals prepared via high internal phase emulsion. *Central European Journal of Chemistry* 8(1): 202-206.

2009

1. Chai, L.L., **Chia, C.H.**, Zakaria, S., Nabihah, S., Rasid, R. 2009. Physical-mechanical properties of PF composite board from EFB fibers using liquefaction technique. *Iranian Polymer Journal* 18(11): 1-7.
2. Huang, N.M., Radiman, S., Lim, H.N., Khiew, P.S., Chiu, W.S., **Chia, C.H.**, Hasmin, R. 2009. Sintesis dan pencirian kobalt sulfide menggunakan misel ester sukrosa dan kegunaan sebagai penjerap pewarna. *Sains Malaysiana* 38(6): 863-868.
3. Huang, N.M., Radiman, S., Lim, H.N., Khiew, P.S., Chiu, W.S., Lee, K.H., Shahida, A., Hashim, R., **Chia, C.H.** 2009. Gamma-ray assisted synthesis of silver nanoparticles in chitosan solution and the antibacterial properties. *Chemical Engineering Journal* 155: 499-507.
4. **Chia, C.H.**, Zakaria, S., Nguyen, K.L. Dang, V.Q., Duong, T.D. 2009. Characterisation of magnetic paper using Fourier transform infrared spectroscopy. *Materials Chemistry and Physics* 113: 768-772.

2008

1. **Chia, C.H.**, Zakaria, S., Nguyen, K.L., Abdullah, M. 2008. Utilisation of kenaf fibers for the preparation of magnetic paper. *Industrial Crops and Products* 28(3): 333-339.
2. **Chia, C.H.**, Zakaria, S., Farahiyan, R., Liew, T.K., Nguyen, K.L., Abdullah, M., Ahmad, S. 2008. Size-controlled synthesis and characterization of Fe3O4 nanoparticles by chemical coprecipitation method. *Sains Malaysiana* 37: 389-394.

2007

1. **Chia, C.H.**, Duong, T.D., Nguyen, K.L., Zakaria, S. 2007. Thermodynamics aspects of sorption of Fe2+ onto unbleached kraft fibres. *Journal of Colloid and Interface Science* 307: 29-33.