CURRICULUM VITAE (CV)

Details

Assoc Prof. Dr. Raba'ah Syahidah Azis (A03819)
Department of Physics
Faculty of Science
Universiti Putra Malaysia
43400 UPM Serdang, Selangor.

Tel: 03-9769 6666
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Specialization

Material Science, Material Physics, Magnetic Materials, Ceramics

Date of birth

9 Oktober 1978

Academic qualification

1. Doctor of Philosophy
   University of Warwick, UK
   8th November 2010

2. Master of Science (Hons.) Advanced Materials
   Universiti Putra Malaysia
   13 May 2004

3. Bachelor Science (Hons.) Physics
   Universiti Putra Malaysia
   17 August 2000

Professional Qualification/ Membership/ Affiliation

Member, Institute of Physics, 2005 - date
Member, International Sol-gel Society, 2006- date
Life Member, Malaysian Solid State Science and Technology (MASS), 2010-date
Member, Persatuan Pegawai Akademik (PPA) UPM, 2010- date
Member, PERMATA UPM 2016 - date
Member, KOPERASI UPM, 2016 – date

Academic position/ Appoinments

Position	Faculty/Institute	Duration
Head MSCL Research Group	Institute of Advanced Material (ITMA), UPM	11 April 2016- date
Associate Researcher	Institute of Advanced Material (ITMA), UPM	26 Mac 2016 – date
Senior lecturer	Department of Physics, Faculty of Science, UPM	8 November 2011 - date
Tutor	Department of Physics, Faculty of Science, UPM	16 Oktober 2001-7 November 2011

Teaching experience (Pengalaman Mengajar)

Year	Semester/Tahun	Code	Course	Creadit hour	Level
2010	Semester 2 2010/2011	PHY3305	Introductory of Intrumentation	3+0	Undergraduates
		PHY3105	Modern Physics	3+0	Undergraduates
2011	Semester 1 2011/2012	PHY3305	Introductory of Intrumentation	3+0	Undergraduates
		PHY3105	Magnetism and Magnetic Materials	3+0	Undergraduates
	Semester 2 2011/2012	PHY3305	Introductory of Intrumentation	3+0	Undergraduates
		PHY3208	Magnetism and Magnetic Materials	3+0	Undergraduates
2012	Semester 1 2012/2013	PHY3105	Modern Physics	3+0	Undergraduates
		PHY3305	Introductory of Intrumentation	3+0	Undergraduates
	Semester 2 2012/2013	PHY3305	Introductory of Intrumentation	3+0	Undergraduates
		PHY3208	Magnetism and Magnetic Materials	3+0	Undergraduates
2013	Semester 1 2013/2014	PHY3305	Introductory of Intrumentation	3+0	Undergraduates
		PHY3105	Magnetism and Magnetic Materials	3+0	Undergraduates
	Semester 2 2013/2014	PHY3305	Introductory of Intrumentation	3+0	Undergraduates
		PHY3105	Modern Physics	3+0	Undergraduates
2014	Semester 1 2014/2015	PHY3305	Introductory of Intrumentation	3+0	Undergraduates
		PHY3105	Modern Physics	3+0	Undergraduates
	Semester 2 2014/2015	PHY2001	General Physics	4+0	Undergraduates
		PHY3208	Magnetism and Magnetic Materials	3+0	Undergraduates
2015	Semester 1 2015/2016	PHY3104	Physics II	4+0	Undergraduates
		PHY3105	Modern Physics	3+0	Undergraduates
	Semester 2 2015/2016	PHY2001	General Physics	4+0	Undergraduates
		PHY3208	Magnetism and Magnetic Materials	3+0	Undergraduates
2016	Semester 1 2016/2017	PHY3104	Physics II	4+0	Undergraduates
		PHY3105	Modern Physics	3+0	Undergraduates
	Semester 2	PHY3104	Physics II	4+0	Undergraduates

	2016/2017	PHY3208	Magnetism and Magnetic Materials	3+0	Undergraduates
2017	Semester 1 2016/2017	PHY3105	Modern Physics	3+0	Undergraduates
		PHY4203	Material Science	3+0	Undergraduates
2018	Semester 2 2017/2018	PHY3208	Magnetism and Magnetic Material	3+0	Undergraduates
		PHY3209	Thermodynamics	3+0	Undergraduates
	Semester 1 2017/2018	PHY4203	Material Science	3+0	Undergraduates
		PHY3105	Modern Physics	3+0	Undergraduates
2019	Semester 2 2018/2019	PHY3208	Magnetism and Magnetic Material	3+0	Undergraduates
		PHY4995	Advanced Laboratory	0+3	Undergraduates
	Semester 1 2019/2020	PHY3103	Physics 1	3+1	Undergraduates
		PHY3105	Modern Physics	3+0	Undergraduates
2020	Semester 2 2019/2020	PHY3208	Magnetism and Magnetic Material	3+0	Undergraduates
		PHY4204	Structure and microstructure analytical method	3+1	Undergraduates
	Semester 1 2020/2021	PHY3103	Physics 1	3+0	Undergraduates
		PHY4302	Materials Science	3+0	Undergraduates
			Total credit hours	**121 hours**	

Malay/ English Proficiency

Languange proficiency

Bahasa Malaysia – Excellent
English – Good

IELST score: 6.5

Administrative work

Academic post	Effective Date
Ketua Kumpulan Penyelidik di Institut Teknologi maju (ITMA), UPM	11 April 2016- 2019
Penyelidik Bersekutu di Institut Teknologi maju (ITMA), UPM	26 Mac 2016 – date
Pengerusi JK Seminar, Jabatan Fizik	13 Jun 2016- date
Penolong Ketua Jabatan	2016 - date
Pensyarah Kanan	8 November 2011 –

Jan 2019

Tutor 16 Oktober 2001 – 7 November 2011

Awards/Recognition

No.	Name of awards	Title	Award Authority	Award Type	Year
1		Ministry of Higher Education Malaysian Scholarship	MOHE	International	16 September 2005 – 16 April 2009
2		Majlis Amanah Rakyat (MARA) Sponsorship	MARA	Malaysia	1996-2000
3		Osman Ese Award (Best Physics (Hons.) Students Award.	Dept. of Physics, UPM	UPM	19 July 2000
4		Anugerah Projek Tahun Akhir Terbaik	Malaysian Solid Science and Technology Society (MASS)	National	25 September 2000
5		Dean List	Faculty of Science, UPM	Faculty	21 March 2000
6		Dean List	Faculty of Science, UPM	Faculty	12 September 2000
7	**Travel Award**	IOP Travel Bursary	Institute of Physics (IOP)	International	2009
8	**Travel Award**	Advanced Solid-State NMR Training Course at Sandbjerg Estate, Denmark	InSPIN, Sandbjerg Estate, Denmark	International	June 2 - 6, 2008
Award in Research / Won medal					
9	**Silver Medal**	*"Pure Iron Oxide, Fe_2O_3 and Magnet Ba/$SrFe_{12}O_{19}$ From Steel-Mill Waste Product"* , **Raba'ah Syahidah Azis**, Ass Prof. Dr. Mansor Hashim, Ass. Prof. Dr. Azmi Zakaria, Dr.Jumiah Hassan, Dr.Noorhana Yahya, Norlaily M.Saiden, Rosidah Alias	Exhibition of Invention, Research and Innovation UPM 2002	University	30th August 2002
10	**Silver Medal**	*"Oberservation of Surface*	Expo Science and	National	2-4

		Magneto-Optics Kerr Effect (SMOKE) on Some Ferrites Samples Prepared via Sol Gel Technique" Noorhana Yahya, Assoc.Prof.Dr. Mansor Hashim, **Raba'ah Syahidah Azis**, Norlaily M.Saiden	Technology, MOSTI		November 2002
11	**Gold Medal**	*NoNoise^{TM}: EMI Shielding Sheet Using YIG Filled Polymer Composite.* Noorhana Yahya, Mohd Hashim Saad, Mohd Shamsul Ezzad, Beh Hoe Guan, **Rabaah Syahidah Azis**, Mansor Hashim.	I-TEX2005 International Invention, Innovation Industrial Design & Technology Exhibition, Malaysia. Putra World Trade Center (PWTC), Kuala Lumpur, Malaysia.	International	19-21 May 2005
12	**Gold medal**	*Attainment of Low-Magnetic-Energy Loss for High Frequency Applications in the* $Ni_{0.76-X}Mg_{0.04+X}Ca_{0.005}Co_{0.1}Cu_{0.075}Zn_{0.04}Fe_{1.96}O_{3.96}$ *Ferrite System* Dr.Noorhana Yahya, Mansor Hashim, **Rabaah Syahidah Azis.**	33rd International Exhibition of Inventions New Techniques and Products, Geneva	International	6-10 April 2005
13	**Silver medal**	*EMI Shielding Sheet Using YIG Filled Polymer Composite* Noorhana Yahya, Mansor Hashim, **Rabaah Syahidah Azis**	Exhibition of Invention, Research and Innovation UPM 2005.	University	16- 17 Mac 2005
14	**Best Poster Award**	*Magnetic Properties of* $Sr_{1-x}Nd_xFe_{12}O_{19}$ *derived by Steel waste Product By Using Mechanical Alloying",* N.Daud, **R.S.Azis**, M.Hashim and K.A.Matori	Workshop on Advanced Materials and Nanotechnology 2014 (WAMN2014), UPM, Malaysia, 25-26 August 2014.	International	25-26 August 2014
15	**Silver Medal**	*New Approach Chemical Synthesis: Citrate-Nitrate Combustion of Monoclinic YAM Nanopowders* **Raba'ah Syahidah Azis**, Diane Holland, Andrew P. Howes,	Exhibition of Invention, Research and Innovation UPM 2014. *Pameran Reka*	University	30 September to 1st October 2014

		Mansor Hashim, Jumiah Hassan, Norlaily Mohd Saiden and M.K.Ikhwan	*Cipta, Penyelidikan dan Inovasi (PRPI) 2014*		
16	**Silver Medal**	*Use of Multiple-Field, High Resolution, ^{27}Al Solid-state MAS NMR Spectroscopy to Follow Phase Optimisation of YAG Nanopowders* **Raba'ah Syahidah Azis**, Diane Holland, M.E.Smith, Andrew P. Howes, Mansor Hashim, Azmi Zakaria, Mohd Khairul Ikhwan	Exhibition of Invention, Research and Innovation UPM 2014. *Pameran Reka Cipta, Penyelidikan dan Inovasi (PRPI) 2014*	University	30 September to 1st October 2014
17	**Silver Medal**	*nm-to-µm Grain-size Microstructure-Magnetic Properties EVOLUTION: A New Gulf of Experimental Data From Polycrystalline Magnetic Materials?* **Dr. Raba'ah Syahidah Azis**, Rodziah Nazlan, Dr. Ismayadi Ismail, Assoc. Prof. Dr. Zulkifly Abbas, Idza Riati Ibrahim	Exhibition of Invention, Research and Innovation UPM 2016. *Pameran Reka Cipta, Penyelidikan dan Inovasi (PRPI) 2016*	University	15-16 November 2016
18	**Silver Medal**	*New Approach Ferrites Fabrication From Steel Waste Product* **Dr. Raba'ah Syahidah Azis**, Prof. Dr. Azmi Zakaria, Assoc. Prof. Dr. Jumiah Hassan, Dr. Norlaily Mohd Saiden, Nuraine Mariana Mohd Shahrani, Noruzaman Daud, Nor Nadhirah Che Muda	Exhibition of Invention, Research and Innovation UPM 2016. *Pameran Reka Cipta, Penyelidikan dan Inovasi (PRPI) 2016*	University	15-16 November 2016
19	**Bronze Medal**	*Microstructure evolution and electro-magnetic properties to classify the phase transition of ferrites nanopowders* **Dr. Raba'ah Syahidah Azis**, Prof. Dr. Azmi Zakaria, Assoc. Prof. Dr. Jumiah Hassan, Nuraine Mariana Mohd Shahrani, Sakinah Sulaiman, Makiyyu Abdullahi Musa	Exhibition of Invention, Research and Innovation UPM 2016. *Pameran Reka Cipta, Penyelidikan dan Inovasi (PRPI) 2016*	University	15-16 November 2016
20	**Silver Medal**	*Simple Photothermal Method For Measuring Thermal Effusivity of Ag Nanofluid synthesized by Microwave Irradiation.* Prof. Dr. Azmi Zakaria, **Dr.**	Exhibition of Invention, Research and Innovation UPM 2016.	University	15-16 November 2016

		Raba'ah Syahidah Azis, Dr. Norkamilah Saat	*Pameran Reka Cipta, Penyelidikan dan Inovasi (PRPI) 2016*		
21	**Best Poster Award- Master Students (Nor Nadhirah Che Muda)**	*Structural and Magnetic Hysteresis of $BaFe_{12}O_{19}$ Steel Waste Based Via Ammonium Nitrate Salt Melt Method,* Nor Nadhirah Che Muda, **Dr. Raba'ah Syahidah Azis**, Jumiah Hassan, Abdul Haliam Shaari and Sakinah Sulaiman	Fundamental Science Congress (FSC2016)	Regional	9-10 August 2016
22	**Best Poster Award – Master Students (Sakina Sulaiman)**	*The effect of porosity on magnetic behavior of $SrFe_{12}O_{19}$ vary by pH via sol-gel auto combustion method* Sakinah Sulaiman, Nor Nadhirah Che Muda, **Dr. Raba'ah Syahidah Azis**, Jumiah Hassan, Abdul Haliam Shaari and	Fundamental Science Congress (FSC2016)	Regional	9-10 August 2016
23	**Best SEM Micrograph Award – Master Students (Yusnita Yusof)**	*"Magnetic, Morphological Properties and I-V characteristic of Ni-Zn Ferrite Thin Film Synthesized using Sol-Gel and Spin Coating Technique",* Yusnita Yusuf, **Raba'ah Syahidah Azis**, Ismayadi Ismail, Samikannu Kanagesan and Ghazaleh Bahmanrokh	Regional Conference of Solid State Science and Technology (RCSSST2016), KSL Hotel, Johor Bahru.	Regional	15-17th November 2016
24	**Best SEM Micrograph Award**	*"Microstructure - Magnetic Phase Transition of Fine-Grained Strontium Ferrites Synthesized via Mechanical Alloying Method"* Ismayadi Ismail, Shamsul Ezzad Shafie, Samikannu Kanagesan, Mohd Ali Mat Nong, Juraina Mohd Yusof, Rosiah Osman, **Raba'ah Syahidah Azis**, Norlaily Mohd Saiden and Nurhidayati Mokhtar	Regional Conference of Solid State Science and Technology (RCSSST2016), KSL Hotel, Johor Bahru.	Regional	15-17th November 2016

25	**Best Scannning Electron Microscopy (SEM) Micrograph Award – PhD Students (Rodziah Nazlan)**	*"Grain Size Dependence on Magnetic and Microwave Response in Mechanically Alloyed Yttrium Iron Garnet"* Rodziah Nazlan, **Rabaah Syahidah Azis,** Mansor Hashim, Ismayadi Ismail, , Zulkifly Abbas, Fadzidah Mohd Idris and Idza Riati Ibrahim	Regional Conference of Solid State Science and Technology (RCSSST2016), KSL Hotel, Johor Bahru.	Regional	15-17th November 2016
26	**Certificate of Excellent "Best Poster (Physics)" FSC2017 – Muhammad Misbah Zulkimi**	Microwave absorbing properties of $SrMe_2Fe_{36}O_{60}$ Me = (Mg-Zn, Mn-Zn) composite in Ku band frequencies Muhammad Misbah Muhammad Zulkimi, **Raba'ah Syahidah Azis**, Ismayadi Ismail1, Khamirul Amin Matori, Zulkifly Abbas, Fadzidah Mohd Idris, Farah Nabilah Binti Shafiee	Fundamental Science Congress (FSC2017), 21-22 Nov. 2017, Office of the Deputy Vice Chancellor (Research and Innovation) UPM.	National	22 November 2017
27	**Certificate of Excellent "Best Poster (Physics)" FSC2017 – Muhammad Misbah Zulkimi**	Microwave absorbing properties of $SrMe_2Fe_{36}O_{60}$ Me = (Mg-Zn, Mn-Zn) composite in Ku band frequencies Muhammad Misbah Muhammad Zulkimi, **Raba'ah Syahidah Azis**, Ismayadi Ismail1, Khamirul Amin Matori, Zulkifly Abbas, Fadzidah Mohd Idris, Farah Nabilah Binti Shafiee	Fundamental Science Congress (FSC2017), 21-22 Nov. 2017, Office of the Deputy Vice Chancellor (Research and Innovation) UPM.	**Certificate of Excellent "Best Poster (Physics)" FSC2017 – Muhammad Misbah Zulkimi**	22 November 2017
28	**Certificate of Achievement "Gold Medal Dean's Award 2017" (Master students – Musa Makiyyu Abdullahi)**		Majlis Anugerah Graduan	Faculty	3 November 2017
29	**Certificate of Achievement "Excellence Graduate Award 2017" (Master students – Musa**		Majlis Anugerah Graduan	Faculty	3 November 2017

	Makiyyu Abdullahi)				
30	**Certificate of Appreciation "Supervisor for Musa Makiyyu Abdullahi ho graduated on time (GOT) in 2017**			Universiti Putra Malaysia	2017
Anugerah Perkhidmatan Cemerlang					
31	**Anugerah Perkhidmatan Cemerlang**		UPM	University	9 April 2003
32	**Anugerah Perkhidmatan Cemerlang 2002**		UPM	University	3 July 2003
33	**Anugerah Perkhidmatan Cemerlang 2003**		UPM	University	17 Disember 2004
34	**Anugerah Perkhidmatan Cemerlang 2004**		UPM	University	3 Oktober 2005
35	**Anugerah Perkhidmatan Cemerlang 2006**		UPM	University	22 November 2007
36	**Anugerah Perkhidmatan Cemerlang 2012**		UPM	University	2 Disember 2013
37	**Anugerah Perkhidmatan Cemerlang 2014**		UPM	University	23 April 2015
38	**Anugerah Perkhidmatan Cemerlang**	Anugerah Perkhidmatan Cemerlang (Perkhidmatan	Majlis Gemilang Putra dan	Universiti	24 May 2017

	2016	Cemerlang Tahun 2016)	Sambutan Hari Pekerja 2017		
39	**Anugerah Perkhidmatan Cemerlang**	Anugerah Perkhidmatan Cemerlang (Perkhidmatan Cemerlang Tahun 2016)	Majlis Gemilang Putra dan Sambutan Hari Pekerja 2017	Universiti	24 May 2017
40	**Anugerah Kecemerlangan Penilaina Pengajaran**	Anugerah Kecemerlangan Penilaian Pengajaran Semester 2 2014/2015 Kursus PHY3208 (4.52)	Faculty of Science, UPM	Faculty	2015
41	**Anugerah Perkhidmatan Cemerlang Fakulti 2003**	Sempena Sambutan Hari Kualiti Fakulti Sains 2004, Fakulti Sains dan Alam Sekitar	Faculty of Science, UPM	Faculty	2004
42	**Anugerah Saintis Cemerlang 2004**	Sempena Sambutan Hari Kualiti Fakulti Sains 2005 "Kualiti Berterusan Asas Keterbilangan Sejagat"	Faculty of Science, UPM	Faculty	29 November 2005
43	**Anugerah Perkhidmatan Cemerlang 2004**	Sempena Sambutan Hari Kualiti Fakulti Sains 2005 "Kualiti Berterusan Asas Keterbilangan Sejagat"	Faculty of Science, UPM	Faculty	29 November 2005
44	**Anugerah Perkhidmatan Cemerlang 2006**	Bersempena Hari Kualiti Fakulti Sains 2007 "Kualiti Cemerlang Fakulti Gemilang"	Faculty of Science, UPM	Faculty	22 November 2007

Research Activities

No	Project title		Amount	Year	Source of fund	Status
1	The Structural Studies of $Y_3Al_{5-x}Ga_xO_{12}$ ($5 \leq x \geq 0$) via Varied Sol-gel Synthesis and Their Solid-State Reaction, (Project No. 9199848) **Rabaah Syahidah Azis**, Mansor Hashim	**Project leader**	RM 25,000	15/4/11-15/10/13	Skim Geran Universiti Penyelidikan (RUGS)	Completed
2	Novel Extraction of Pure Hematite and Magnetite	Co-researcher	RM378, 000	1/5/2012-31/102014	Strategic and Advanced	Completed

	and Their Utilisation in the Development of Low-Cost, (Project No. 5528000)				Magnetic Technological Prototypes (PRGS)	
3	Purification, Synthesis and Recycling of Steel Scrap-Iron Ore Waste Product to Produce High Purity Magnetic Materials (Project No. 5524218) **Rabaah Syahidah Azis,** Mansor Hashim, Azmi Zakaria, Jumiah Hassan, Norlaily Mohd Saiden	**Project leader**	RM78,000	1 Mei 2012 -28 April 2015	Fundamental Research Grants Scheme (FRGS)	Completed
4	Intensive Exploratory Investigation on Probable Surface/Interface Spins Influence on Novel Magnetic Properties of Extremely Nanostructured Magnetic Materials (Project No. 9344800)	Co-researcher	RM57,000	1/9/12 – 1/9/14	Research University Grants Scheme (RUGS)	Completed
5	Optimizing and Modelling of Fabrication Process in $ZnO-TiO_2$ Low-Voltag Varistor By Semi-Empirical Method	Co-researcher	RM155 000		Putra Grants	Completed
6	Investigation of the parallel evolving microstructures and complex permitivities of the grain and garin boundaries of magnesium titanate and strintium titanate nanocomposites prepared via mechanical alloying and sol-gel method, (Project No. 9375000)	Co-researcher	RM155, 000	1/9/2012-1/9/2014	Putra Grants	Completed
7	Development of multifuntional nano capsules and monitoring of their delivery and efficacy for cancer cells extermination	Co-researcher	RM117, 000	1/12/2013-1/12/2015	IPB-Putra Grants	Completed

8	Synthesis Nono-Perovskite of $CoCu_3Ti_4O_{72}$ For Processing ln Ceramics Varistor (Project No. 9421100)	Co-researcher	RM105 000	1//1/2014–1/12/ 2015	Putra Grants	Completed
9	Optimize and Characterize the Magnetic Properties of Iron Compounds of Wustite, FeO, Magnetite, Fe_3O_4 and Hematite, Fe_3O_4 from the Steel Waste Making Product Collected From Steel Industries in Malaysia to produce High Performance Permanent Magnet	**Project leader**	RM 15,000	1/9/14 – 1/9/16	IPS Grants	Completed
10	Investigation of the Parallel Microstructure Effect on the Magnetic, Structural and Microwave Properties of Micro-Nano Powder Yttrium Iron Garnet Derived By Recycling Steel Waste Product (Perwaja Steel Industry) Prepared By Sol-gel Synthesis and Mechanical Alloying	**Project leader**	RM 15,000	17/11/14–17/11/16	IPS Grants	Completed
11	Parallel Study on the Relationship of Microstructure and Dielectric Properties of Pure and Er-substituted $Bi_4Ti_3O_{12}$ and $Bi_5Ti_3CrO_{15}$ Aurivillius Ceramics Through Solid State and Mechanical Activation Processes as a Subsitute for Lead-based Electroceramics	Co-researcher	RM151 200	17/11/14 – 17/11/16	FRGS	Completed
12	Establishment of exchange-coupling in nanocomposite hard/soft ferrite as a new generation of low cost and corrosion free permanent magnet Project No. 5524422	Co-researcher	RM 150 000	01/12/2013 - 30/5/2016	FRGS	Completed

13	Supercontinuum generation in mid-infrared region from a femtosecond pulses using saturable absorber-based thulium-doped fiber laser for high-resolution spectroscopy	Co-researcher	RM 70, 000	1/8/2016-1/7/18	FRGS	Ongoing
14	Heavy metal contaminants separation using low cost recycled iron oxides magnetic nanopowders from steel scrap waste for nanoabsorbance waste water treatment (9541600)	**Project leader**	RM 88,100	1/6/17–30/5/19	Putra Grants	Ongoing
15	Influence of microstructure on magneto-dielectric properties of Aluminium, Bismuth - Substituted Yttrium Iron Garnet nanoparticles for low loss antenna applications (9539100)	**Project leader**	RM 20,000	1/7/17–30/6/19	IPS Grants	Ongoing
16	Microwave, dielectric and magnetic properties of magnetic gadolinium iron garnet nanoparticle ferrite for high frequency (HF) radar applications Investigation of the (9533300)	**Project leader**	RM 20,000	1/7/17–30/6/19	IPS Grants	Ongoing
17	Microstructural, Magnetic, Electrical and Dielectric Properties of Aluminum-substitution Yttrium Iron Garnet (Al-YIG) Ferrites (9542700)	**Project leader**	RM 20,000	1/7/17–30/6/19	IPS Grants	Ongoing
18	Fabrication of low cost magnetite nanoparticles for metal removal waste water treatment (9580600)	**Project leader**	RM 20,000	1/12/17–31/12/19	IPS Grants	Ongoing
19	Microstructure and	**Project**	RM 20,000	1/8/16–	IPS Grants	Ongoing

	Nonlinear Properties of Rare Earth oxide doped zno based varistors ceramics fabricated by solid state method (9493000)	**leader**		1/8/18		
20	Green synthesis of reduced graphene oxide/ silver nanofluids using using microwave heating technique and evaltuin of their thermal properties (5524942)	**Project leader**	RM 80,000	1/8/16–31/7/18	Fundamental Science Grants Scheme	Ongoing
21	Synergistic effects between the resistive ferrimagnets and conductive carbonaceous materials in ferrites - carbon allotropes nanocomposites (9628400)	Co-researcher	RM 50, 000	15/3/2018-14/3/18	Geran Putra	Ongoing

Grants	**Total amounts**	
Completed grants	RM 1 284 200	Project leader (4) – RM 133 000 Members (7) – RM 1151 200
Ongoing grants	RM 388 100	Project leader (7) – RM 268 100 Members (2) – RM 120 000
Total	**RM 1 672 300**	

Paten

1. Mansor Hashim, Ismayadi Ismail, **Raba'ah Syahidah Azis**, A method of converting iron oxides into pure iron oxide – PI205700828 (2015)

Supervision (Penyeliaan)

Supervision : Doctor of Philosophy (PhD)

Main Supervisor for PhD students

No	Name of Student	Type of Supervision	Level	Title of Research Project	Year Started	Status
1	Rodziah Nazlan (GS33943)	Supervisor	PhD with Thesis	Expositions of parallel evolving microstructure and magnetic properties and their attendant relationships in pure and indium-substituted yttrium iron garnet	2012	Graduated 2017
2	Nor Hapishah Abdullah (GS34583)	Supervisor	PhD with Thesis	Parallel evolution of morphology and multiferroic properties of polycrystalline holmium and yttrium manganite ($HoMnO_3$ and $YMnO_3$) synthesized via mechanical alloying	2012	Graduated 2017
3	Muhammad Syazwan Bin Mustaffa (GS39139)	Supervisor	PhD with Thesis	Synthesis and characterization of magnetic-polymer nanocomposite for radar wave absorption	February 2014	Graduated 2017
4	Muhammad Misbah Bin Muhammad Zulkimi (GS40445)	Supervisor	PhD With Thesis	Synthesis and characterization of nanostructured radar absorber materials	September 2014	Ongoing
5	Nur Asyikin Binti Ahmad Nazri (GS48556)	Supervisor	PhD With Thesis	Synthesis and Characterization of ferrite nanoparticles	February 2017 – present	Ongoing

Co- supervisor PhD. students

1	Zahra Behjat (GS31779)	Co supervisor	PhD with Thesis	New Generation of Organic Materials as Light Emitting Diodes	September 2012-2015	Graduated 2015
2	Dayang Nur Fazliana Bt Abdul Halim (GS31170)	Co supervisor	PhD with Thesis	Evolution of Microstructural and Dielectric Properties of Magnesium Titanate Prepared Via Micro Emulsion and mechanical Alloying	September 2012-present	Graduated 2019
3	Noorfauzana Adnin (GS35556)	Co supervisor	PhD with Thesis	Microstructure and mechanical evolution of bio-glass hydroapatite composites	February 2013-present	Graduated 2018
4	Mustafa Dihom (GS40475)	Co-Supervisor	PhD With Thesis	Supercondsynthesis, characterization and structural investigation of nano crystalline ceramic superconductor YBCO using the thermal treatment method.	February 2015-present	Graduated 2018
5	Tasiu Zangina (GS40946)	Co-Supervisor	PhD With Thesis	Mechanochemical synthesis and impedance spectroscopy studies of $Li(PO)_4$ and $LiAl_x(PO_4)(VO_4)Y$ Nassion Compounds	February 2015-present	Graduated 2018
6	Zamratul Maisarah Mohd Ismail (GS40975)	Co-Supervisor	PhD With Thesis	Synthesis and Characterization of Nanoparticles Doped Mg, Mn and Cu,Co	2014-present	Graduated 2018
7	Menseh Ebenezer Ekow (GS46333)	Co-Supervisor	PhD With Thesis	Synthesis and Characterization of PCL filled with nanocomposite ferrrite	February 2015-present	Graduated 2020
8	Nur Fadilah Baharudin Pallan (GS38129)	Co-Supervisor	PhD With Thesis	Effect of heat treatment on morphology, physical and mechanical properties of SiO_3-Na_2O-CaO-P_2O_5 glass-ceramic from waste materials	September 2013-present	Graduated 2018
9	Nurzilla Mohamed (GS40976)	Co-Supervisor	PhD With Thesis	Development of Willemite Based Glass Ceramic Doped with Praseodymiun for Optical	2014-present	Graduated 2018
10	Ahmad Khamis (GS46801)	Co-supervisor	PhDr With Thesis	Nanocomposite	September 2019	Ongoing
11	Abba	Co-supervisor	PhDr With Thesis	Nano adsorbent	February 2019	Ongoing

PhD students	Supervisor	5	Completed	3	Ongoing	2
	Co-Supervisor	10	Completed	9	Ongoing	2
	Total	14				

Main Supervisor : Master Science (Hons.) students

No.	Name of Student	Type of Supervision	Level	Title of Research Project	Year Started	Status
1	Mohd Khairul Ikhwan Bin Zawawi (GS31285)	Main Supervisor	Master With Thesis	Physical and Optical Characterization of Aluminium Monoclinic Prepared Via Citrate-Nitrate Sol-Gel and Mechanical Alloying Method	September 2011	Graduated (2014)
2	Noruzaman Bin Daud (GS37619)	Main Supervisor	Master With Thesis	Study the Effect of Transition Metal Co^{3+} on the Hexagonal Strontium Ferrites Derived By Steel Scrap Product	September 2012	Graduated (2017)
3	Nuraine Mariana Bin Mohd Shahrani (GS39168)	Main Supervisor	Masters With Thesis	Preparation and Characterization of Yttrium Iron Garnet Derived By Steel Waste Making Product	September 2013	Graduated 2017
4	Yusnita Yusof (GS38084)	Main Supervisor	Masters With Thesis	Synthesis and Characterization of Nickel Zinc Ferrite Thin Films Deposited Using Spin oating Technique	September 2012	Graduated 2017
5	Makiyyu Abdullahi Musa (GS43255)	Main Supervisor	Master With Thesis	Effect of Gamma Irradiation on the Properties of Aluminium-Substituted Yttrium Iron Garnet, $Y_3Fe_{5-x}Al_xO_{12}$Via Improved Sol-gel Technique.	February 2015	Graduated 2017
6	Nor Nadhirah Che Muda (GS42038)	Main Supervisor	Master With Thesis	Synthesize And Characterization Steel Waste Derived of $BaFe_{12}O_{19}$ Thin Film Permanent Magnet Via Sol Gel Synthesis	February 2015	Graduated 2018
7	Raheleh Mohammadi (GS39388)	Main supervisor	Master With Thesis	Comparative studies of ceramics fabrication methods for zinc oxide (ZnO) based low voltage varistors	2015	Graduated 2017

8	Nasrat Hannah Binti Shudin (GS42875)	Main Supervisor	Master With Thesis	Parallel Study of Structure and Optical Properties of YAG:Ce, Gd phosphor material for white LED performance synthesize by sol-gel method.	February 2015	Terminated
9	Sakinah Binti Sulaiman (GS42040)	Main Supervisor	Master With Thesis	Parallel Study on the Relationship of Microstructure and Magnetic Properties of Pure and Cobalt substituted $SrFe_{12}O_{19}$ through Sol gel Synthesis	February 2015	Ongoing
10	Farah Nabila Shafiee (GS44488)	Main Supervisor	Master With Thesis	The study of evolution of microstructure of nanoparticle gadolinium iron garnet and its magnetic properties prepared via mechanical alloying	September 2015	Graduated 2018
11	Abddul Halim Azizan (GS45087)	Main Supervisor	Master With Thesis	Structural, Electrical and Dielectric Properties Of Al,Co-YIG ferrites	September 2015	Terminated
12	Nor Hasanah Isa	Main Supervisor	Master With Thesis	Nonlinear Electrical, Microstructural Properties And Stress Effects Of ZnO-Based Low Voltage Varistor Ceramics Substituted With Nd2O3 And Gd2O3	February 2015	Graduated 2018
13	Syazana Sulaiman	Main Supervisor	Master With Thesis	Magnetite nanoparticles used for waste water treatment process (WWTP)	September 2018	Ongoing
14	Nurshahiera Rosdi	Main Supervisor	Master With Thesis	Barium Ferrite nanocomposites (MWCNT/graphene) used for radar absorbing materials (RAM)	September 2018	Ongoing

Co- supervisor MSc.

1	Muhammad Syazwan Bin Mustaffa (GS31268)	Co-supervisor	Master With Thesis	Elucidation of Parallel Microstructure and Physical Properties Evolution In Nickel Zinc Ferrite	September 2011	Graduated 2013
2	Muhammad Misbah Bin Muhammad Zulkimi (GS31274)	Co-supervisor	Master With Thesis	Elucidation of Parallel Microstructure And Physical Properties and Their Relationships In Cobalt Zinc Ferrite	September 2011	Graduated 2013

3	Ismail Ibrahim Lakin (GS36445)	Co supervisor	Master With Thesis	Fabrication and Degradation of Low Voltage Varistor From Zn+ Camno3 Ceramics	September 2012	Graduated 2014
4	Izzatil Ameerah Jaiah (GS32538)	Co-supervisor	Master With Thesis	Effect of sintering temperature on microstructural and dielectric properties nickel zinc ferrite via sol-gel technique	2012-2016	Graduated 2018
5	Radzi Rahman Ibrahim (GS44508)	Co-supervisor	Master With Thesis	Preparation and characterization of fiber-reinforced polycaprolactone-ferrite	September 2015	Graduated 2018
6	Sunday Dauda Balami (GS 43945)	Co-supervisor	Master With Thesis	Development of high density polyethylene and oil palm empty fruit bunch fiber for microwave applications	September 2015	Graduated 2018
7	Norhafizah Mohd Rasdi (GS42165)	Co-supervisor	Master With Thesis	Synthesis, Characterization and optical studies of Cobalt (II) oxide doped zinc silicate nanocomposite	February 2015	Graduated 2018
8	Ahmad Khamis (GS46801)	Co-supervisor	Master With Thesis	One-pot synthesis exchange coupled soft/hard nanocomposite ferrite	September 2016	Graduated 2019
9	Muhamed Firdaus Azmi (GS40444)	Co-supervisor	Master With Thesis	The effect of calcination temperature on microstructural of strontium ferrite nanoparticles via thermal treatment	February 2015	Ongoing
10	Ting Lee Mon	Co-supervisor	Master With Thesis	Improving Output Signal for photothermal imaging using dual-beam mode mismatched thermal lens method for non-destruction eva;uation surface of composite materials	February 2018	Ongoing

MSc. students	Supervisor	14	Graduated	9	Ongoing	3	Terminated	2
	Co-Supervisor	10	Graduated	8	Ongoing	2		
	Total	24	Total	17				

Supervise Final year students (BSc.)

1	Mohd Asyraf Bin Mohtar	Purify, Synthesis and Characterization of Strontium Permanent Magnet Derived From Iron Waste Product	Sem 1 2012/2013	Graduated
2	Tan Chew Yee	Synthesize of Yttrium Aluminium Monoclinic (YAM) and RE(Nd, La, Er)-YAM Using Sol-Gel Synthesisis And Their Solid Solution	Sem 1 2012/2013	Graduated
3	Goh Min Nee	Preparation and Characterization of YAG and YAG: RE (Nd, La, Er, Eu) via Sol-gel synthesis and solid-state conventional technique	Sem 1 2012/2013	Graduated
4	Phua Eng Hui	Preparation & Characterization of Barium Hexaferrite Derived By Steel-Ore Iron Waste Product	Sem 1 2012/2013	Graduated
5	Siti Hilmiza Binti Sulaiman	Preparation And Characterization Of Rare Earth (Nd, La) Doped In Yttrium Aluminium Garnet (YAG) Via Improved Sol-Gel Technique	Sem 2 2012/2013	Graduated
6	Nurul Syazwani Binti Abd Samat	Preparation and Characterization of Nd:$YAlO_3$ (0, 0.1, 0.2, 0.3) Via Modified Sol-Gel Synthesis	Sem 2 2012/2013	Graduated
7	Nurul Nadhirah Dormad	Preparation and Characterization of Yttrium Aluminium Monoclinic Doped Rare Earth Element: $Y_4Al_2O_9$: Re (Nd, La) Via Modified Sol-Gel Synthesis	Sem 2 2012/2013	Graduated
8	Pua Chong Siang	Preparation and Characterization of Cobalt-Substituted Barium Hexaferrite, $Ba_{(1-x)}Co_xFe_{12}O_{19}$ (x = 0, 0.03, 0.05, 0.10, 0.20) Derived By Steel Waste Product	Sem 1 2013/2014	Graduated
9	Siti Irryani Binti Adnan	Preparation And Characterization of Y3Fe5-xAlxO12 derived by millscales	Sem 1 2013/2014	Graduated
10	Loo Yong Mun	Preparation and Characterization Of Strontium Hexaferrite, Sr1-xLaCoxFe12O19 (x= 0.0, 0.05, 0.1, 0.15, 0.2) From Recycled Steel Waste Product	Sem 1 2013/2014	Graduated
11	Sieo Chib Hao	Magnetic Properties and Microstructural Study of Nickel Zinc Ferrite, $Ni_{1-x}Zn_xFe_2O_4$ (x=0.0, 0.2, 0.4, 0.6, 1.0) From Recycled Steel Waste Product	Sem 1 2013/2014	Graduated
12	Siti Mazieatul Azma Binti Che Omar	Preparation and Characterization of $Sr_{0.9}Nd_{0.1}Fe_{12}O_{19}$ From Recycle Steel Waste Product	Sem 1 2013/2014	Graduated

13	Siti Noradawiyah Binti Hashim	Study The Effect of La Substituted Yttrium Aluminum Perovskite Via Sol-Gel Synthesis	Sem 2 2013/2014	Graduated
14	Nurazyan Laily Abd Rashid	Study The Effect of La Substituted Yttrium Aluminium Garnet (YAG) Via Sol-Gel Synthesis	Sem 2 2013/2014	Graduated
15	Sim Ai Jia	Preparation and Characterization of MnZn ferrite Derived By Steel waste Via Mechanical Alloying Technique	Sem 2 2014/2015	Graduated
16	Asraf Mustaqim Bin Amran	Dielectric and Electric Properties of Aluminum (x = 1.2, 1.4, 1.6, 1.8, 2.0) Subtituted In Yttrium Iron Garnet Via Sol-Gel Synthesis	Sem 2 2014/2015	Graduated
17	Nor Azlin Fazira Binti Alias	Investigate The Effect Of Lanthanum Substitution (x = 0.25, 0.30, 0.35, 0.40, 0.45) on Strontium Hexaferrite Via Mechanical Alloying Technique	Sem 2 2014/2015	Graduated
18	Nur Faiezah Binti Shafie	Investigate The Properties And Characterization Of Cobalt Substitution (x = 0.25, 0.30, 0.35, 0.40, 0.45) on Strontium Hexaferrite Via Mechanical Alloying Technique	Sem 2 2014/2015	Graduated
19	Faiz Na'imi Bin Zakaria	Preparation And Characterization of Cobalt Substitution (x = 0, 0.3, 0.6, 0.9, 1.2) on Yttrium Iron Garnet Via Sol-Gel Synthesis	Sem 2 2014/2015	Graduated
20	Abddul Halim Bin Azizan	Preparation and Characterization Of Y3-xAl1-xFe5O12 (x = 0.2 , 0.4 , 0.4 , 0.8 , 1.0) Via Modified Sol-Gel Synthesis	Sem 2 2014/2015	Graduated
21	Lim Su Lian	Preparation and Characteristics Of Nickel-Zinc Ferrite Derived By Steel Waste Product	Sem 2 2014/2015	Graduated
22	Ng Weng Zhun	Preparation and Characteristic of Cerium Substituted Yttrium Iron Garnet (YIG) Derived By Steel Waste Product	Sem 2 2014/2015	Graduated
23	Muhammad Syafiq Bin Ramli	Investigate The Properties Of Steel Waste Flakes And Hematite Fe2O3 Based Recycled Steel Waste Product	Sem 2 2014/2015	Graduated
24	Ying Yuet Lee	Morphology And Magnetic Properties Of Fe2O3 At Varied Oxidation Heat Treatement Derived From Steel Waste Product	Sem 2 2014/2015	Graduated
25	Nor Quratul Aini Binti Che Muda	Investigate The Mechanical Properties And Thermal Properties Of Thermal Insulator From Biodegradable Coconut Fibres	Sem 1 2015/2016	Graduated
26	Hanis Hanani Bt Harun	Biodegradable Plastics From Natural Products	Sem 1 2015/2016	Graduated
27	Siti Zulaikha Bt Ismail	Biodegradable Thermal Insulation Based	Sem 1	Graduated

		Sugarcane Bagasse Fiber	2015/2016	
28	Nur Shahira Zakaria	Physics Module – Electric Charge, Electric Field and Electric Potential	Sem 1 2016/2017	Graduated
29	Aeda Marzianti Zulkafli	Physics Module – Gauss law	Sem 1 2016/2017	Graduated
30	Raja Mohamad Abduh B. Raja Harun	Structural and magnetic properties of YIG nanoparticles via sol-gel synthesis	Sem 2 2016/2017	Graduated
31	Mohd Amriz Imran B. Mohd Amin	Synthesis and characterization of Co-Al-YIG nanoparticles.	Sem 2 2016/2017	Graduated
32	Evi Fariska Bt. Muslih	Synthesis and characterization of Fe_2O_3 nanoparticles using mechanical alloying technique from steel waste sources	Sem 2 2016/2017	Graduated
33	Nurhahiera Bt. Rosdi	Synthesis and Characterization of BaFe12O19 , BaMgTiFeO nanoparticles via Salt Melt method from Steel Waste Sources	Sem 2 2016/2017	Graduated
34	Syazana Sulaiman	Synthesis And Characterization Of Magnetite, Fe3O4 Nanoparticles Coated With Chitosan For Wastewater Treatment	Sem 1 2017/2018	Graduated
35	Nurul Ayuni Bt Mohd Azuan	Synthesis And Characterization Of Iron Oxide Nanoparticles In Wastewater Tretment	Sem 1 2017/2018	Graduated
36	Lee Shian Boon	Synthesis and Characterization of SrFe12O19 nanocomposite via hydrothermal technique	Sem 1 2017/2018	Graduated
37	Sim Keng	Synthesis and Characterization of Fe2O3 nanocomposite via chemical vapour deposition technique	Sem 1 2017/2018	Graduated
38	Intan Nor Qamarina Yunus	Synthesis and Characterization of BaTiFeO, BaMgFeO nanoparticles via mechanical alloying technique steel waste based	Sem 2 2016/2017	Graduated
39	Haziera Halid	Magnetic nanoparticles for waste water treatment	Sem 2 2017/2018	Graduated
40	Fatin Azura Che Sa	Functionalize magnetic nanoparticles for waste water treatment	Sem 2 2017/2018	Graduated
41	Nur Najwa Binti Mohd Rizal 190245	Influence of Temperature on The Magnetic And Microwave Properties of Barium Hexagonal Ferrite	Sem 1 2018/2019	Graduated
42			Sem 1	Graduated

			2018/2019	
42	Siti Khadijah Binti Zulkipli (188795)	Magnetic and Electromagnetic Microwave Absorption Properties of Multi-walled Carbon Nanotubes (MWCNTs) / Barium Hexagonal Ferrite ($BaFe_{12}O_{19}$)	Sem 1 2018/2019	Graduated
44	Noor Atika Syawallina Binti Kamal 187232	Magnetic and Microwave Properties of W-Type Hexaferrites Nanocomposites	Sem 1 2018/2019	Graduated
45	Aqilatul Afifah Binti Suhaimi 187393	Magnetic and microwave properties of hard/soft (BaFeNiZnO) nanocomposites	Sem 1 2019/2020	Graduated
46	Nurul Syafiqah Binti Zainal Abidin 194447	Synthesis And Characterization Of Tea Waste/Iron Oxides Nanoparticles Absorbent For Heavy Metal Removal In An Aqueous Solution	Sem 1 2019/2020	Ongoing
47	Nur Syazani Binti Mohd Saufi	Fabrication Of Sugarcane Bagasse/ Iron Oxides Absorbent From Waste Product For Heavy Metals Removal In Water	Sem 1 2019/2020	Ongoing
48	Nurainaa Natasya Binti Mazlan 194050	Synthesis And Characterization of Waste Eggshell-Iron Oxide (Fe_3O_4) Nanoparticles For Heavy Metal Removal In Water	Sem 1 2019/2020	Ongoing

BSc Final year students	Supervisor	48
	Graduated	45
	Ongoing	3

Examiner

Internal examiner (MSc)

1. Azdiya Suhada Abdul Rahim @ Arifin (GS38134), Surface Modification Of Iron Oxide Nanoparticles Extracted From Millscale And Its Potential In Waste Water Treatment.

2. Nor Azrina Anuar (GS45061), UV VIS Spectroscopy Characteristic Of Crude Palm Oil at 55°C-120°C, 2018

3. Nurul Auni Binti Khalid (GS38134), Carbon Nanofibers (CNFs) And Carbon Nanotubes (CNTs) Effect On The Superconducting And Physical Properties Of Superconductor $YBa_2Cu_3O_{7-\delta}$ Bulks, 2018

4. Wan Nur Wathiq Wan Jusoh (GS37743), Size Effect On The Structural, Electrical, Magnetic And Magnetoresistance Properties Of Polycrystalline La0.67A0.33MnO3 (A=Ca, Sr) Bulks And Thin Films, 19/8/2016

5. Noradira Suhaime (GS46178), Open- Ended Coaxial Sensor for The Determination of Moisture Content, Soluble Solid Content, PH and Dielectric Properties of Chok Anan Mango, 28/5/2018.

Chairman (MSc)

1. Afiq Azri Zainudin (GS39457), Characterization Of Ionophore Doped Graphene Based Biocomposite Thin Film For Detection Of Potassium Ion Using Surface Plasmon Resonance.

2. Hartini Abdullah Ahmad (GS42190), One-Pot Synthesis and Characterizations of Exchange-Coupled Hard/Soft Nanocomposite Ferrite Nanoparticles

3. Nurul Assikin Ariffin (GS40599), Structural and Optical Properties of Rf-Sputtered Ge Thin Films by Magnetron Sputtering Technique, Oct. 2018

4. Nur Ain Asyiqin Anas (GS52845), Structural And Optical Properties Of Hydroxylfunctionalized Graphene Quantum Dots-Based Thin Film And Its Potential Sensing For Ferric Ion Using Surface Plasmon Resonance, July 2020

List of Publications

Journals publications

2020

1. Farah Nabilah Shafiee, **Raba'ah Syahidah Azis**, Nor Hapishah Abdullah, Muhammad Syazwan Mustaffa, Rodziah Nazlan, Ismayadi Ismail, Mohd Nizar Hamidon & Intan Helina Hasan , *Potential patch antenna application with particle size variation in polycrystalline gadolinium iron garnet (GdIG)* , *Journal of the Australian Ceramic Society* (2020).

2. M.S.Amir Faiz, C.A.Che Azurahanim, **Raba'ah Syahidah Azis**, M.Z.Ruzniza, *Low cost and green approach in the reduction of graphene oxide (GO) using palm oil leaves extract for potential in industrial applications*, Results in Physics (2020), 16, 102954, https://doi.org/10.1016/j.rinp.2020.102954

3. Makiyyu Abdullahi Musa, **Raba'ah Syahidah Azis**, Xiangting Dong, Nurul Huda Osman, Jumiah Hassan, Farah Diana Muhammad and Nurhidayaty Mokhtar, Influence of aluminum substitution on

microstructural, electrical, dielectric and electromagnetic properties of sol-gel synthesized yttrium iron garnet (YlG), AIP Advances **10**, 045128 (2020); https://doi.org/10.1063/1.5111894

4. Nur Asyikin Ahmad Nazri, **Raba'ah Syahidah Azis**, Muhammad Syazwan Mustaffa, Abdul Halim Shaari, Ismayadi Ismail, Hasfalina Che Man, Norlaily Mohd Saiden & Nor Hapishah Abdullah, Magnetite Nanoparticles (MNPs) used as Cadmium Metal Removal from the Aqueous Solution from Mill Scales Waste Sources, Sains Malaysiana 49(4)(2020): 847-858 http://dx.doi.org/10.17576/jsm-2020-4904-14

2019

1. Muhammad Syazwan Mustaffa, **Rabaah Syahidah Azis** and Sakinah Sulaiman, *Chapter 4: Dependence of pH Variation on the Structural, Morphological, and Magnetic Properties of Sol-Gel Synthesized Strontium Ferrite Nanoparticles*, Chapter in Book, Book of Design and Synthesis of new materials with interesting physical, chemical and biological proeprties, http://dx.doi.org/10.5772/intechopen.80667

2. Muhammad Syazwan Mustaffa, **Raba'ah Syahidah Azis**, Nor Hapishah Abdullah, Ismayadi Ismail & Idza Riati Ibrahim3An investigation of microstructural,magnetic and microwave absorption properties of multiwalled carbon nanotubes/Ni0.5Zn0.5Fe2O4, Scientific Report. (2019), 9(1):15523. doi: 10.1038/s41598-019-52233

3. Nur Asyikin A.N, **Rabaah Syahidah Azis**, Syazana Sulaiman, Nurul Ayuni Azuan, Abdul Halim Shaari, Hasfalina Che Man, Ismayadi Ismail, Idza Riati Ibrahim, Norlaily Mohd Saiden, Removal of Copper ions from aqueous solutions using waste millscales, Solid State Phenomena, 2020 (Accepted).

4. Zhi Huang Low, Ismayadi Ismail, Mohd Shamsul Ezzad Shafie, Idza RiatiIbrahim, Mehmet Ertuğrul, **Rabaah Syahidah Azis**, Norlaily Mohd Saiden, Intan Helina Hasan, Fadzidah Mohd Idris, Rodziah Nazlan, Magnetic Phase Transition of Mechanically Alloyed Single Sample Co0.5Ni0.5Fe2O4, Results in Physics (2019), 15, 102683, https://doi.org/10.1016/j.rinp.2019.102683

5. Nur Asyikin Ahmad Nazri, **Raba'ah Syahidah Azis**, Hasfalina Che Man, Ismayadi Ismail, Idza Riati Ibrahim, Extraction of Magnetite from Millscales Waste for Ultrafast Removal of Cadmium Ions, International Journal of Engineering and Advanced Technology (IJEAT) (2019), ISSN: 2249 – 8958, 9(1), 5902 – 2907.

2018

1. **Raba'ah Syahidah Azis**, Nor Nadhirah Che Muda, Jumiah Hassan, Abdul Halim Shaari, Idza Riati Ibrahim, Muhammad Syazwan Mustaffa, Sakinah Sulaiman, Khamirul Amin Matori, Yap Wing Fen, *Effect of ratio in ammonium nitrate on structural, microstructural, magnetic and AC conductivity properties of BaFe12O19*, Materials (2018), 11(11), 2190 (Q2).

2. **R. S. Azis**, M. M. Syazwan, N. M. M. Shahrani, A. N. Hapishah, R. Nazlan, F. M. Idris, I.Ismail, M.M. M.Zulkimi, I.R.Ibrahim, Z.Abbas , N.M.Saiden, "*Influence of sintering temperature on the structural, electrical and microwave properties of yttrium iron garnet (YIG)",* Journal of Materials Science: Materials in Electronics (2018), 29 (10), pp 8390–8401 (Q2)

3. Rodziah Nazlan; Ismayadi Ismail; **Raba'ah Syahidah Azis**; Zulkifly Abbas; Idza Riati Ibrahim; Fadzidah Mohd Idris; Farah Nabilah Shafiee; Azdiya Suhada Aripin; Nurul Ainaa Najihah Busra, " *Dependence of*

magnetic and microwave loss on evolving microstructure in yttrium iron garnet" , Journal of Materials Science: Materials in Electronics (2018), 29 (10), pp 8688–8700 (Q2)

4. Syazwan Mustaffa, Hapishah abdullah, Mohd Nizar Hamidon, **Raba'ah Syahidah Azis**, Zulkifly Abbas, "*Grain growth effects on magnetic properties of Ni0.6Zn0.4Fe2O4 material prepared using mechanically alloyed nanoparticles*", Results in Physics (2018), 9, 842-850 (Q2)

5. Farah Nabilah Shafiee, **Raba'ah Syahidah Azis**, Fadzidah Mohd Idris Muhammad Syazwan Mustaffa, Rodziah Nazlan, Ismayadi Ismail, Nor Hapishah Abdullah, "*Effect of milling time on the microstructure and magnetic properties of gadolinium iron garnet*", Results in Physics , submitted Feb 2018, (Q2).

6. **Raba'ah Syahidah Azis**, Sakinah Sulaiman; Idza Riati Ibrahim; Azmi Zakaria; Jumiah Hassan; Rodziah Nazlan; Nor Nadhirah Che Muda; Norlaily Mohd Saiden; Yap Wing Fen; Muhammad Syazwan Mustafa, "*Influence of pH adjustment parameter for sol-gel modification on structural, microstructure and magnetic properties of nanocrystalline strontium ferrite*", Nanoscale Research Letters (2018), 13(1):160. doi: 10.1186/s11671-018-2562-x. (Q2).

7. Makiyyu Abdullahi Musa, **Rabaah Syahidah Azis**, Jumiah Hassan, Nurul Huda Osman, "*Microstructural, electrical and dielectric properties of yttrium aluminum iron garnet (YAlG) nano ferrite prepared via auto-combustion sol-gel synthesis*", Journal of Advanced Ceramics, submitted Feb. 2018. (Q2)

8. **Raba'ah Syahidah Azis**, Nor Nadhirah Che Muda, Idza Riati Ibrahim, Muhammad Syazwan Mustaffa, Jumiah Hassan, Abdul Halim Shaari, Sakinah Sulaiman, Khamirul Amin Matori, Yap Wing Fen, "*Effect of ratio in ammonium nitrate on structural, microstructural, magnetic and AC conductivity properties of BaFe12O19* ", Journal of Advanced Ceramics, *Accepted* March. 2018. (Q2)

9. Makiyyu Abdullahi Musa, **Raba'ah Syahidah Azis**, Nurul Huda Osman, Jumiah Hassan, Tasiu Zangina, *"Structural and magnetic properties yttrium aluminum iron garnet (YAlG) nanoferrite via auto combustion synthesis",* Journal of the Australian Ceramic Society, 2018, Vol. 54 (1), pp 55-63. https://doi.org/10.1007/s41779-017-0126-7 (Q2)

10. Nor Hasanah Isa, **Raba'ah Syahidah Azis**, Azmi Zakaria, Nor Kamilah Saat, and Raheleh Mohammadi *Temperature stresses effect on the optimum nonlinear properties of rare earth zinc oxide (ZnO-V2O5-MnO2-Nb2O5-Gd2O3) based varistor ceramics*, Science of Sintering, Submitted, March 2018

11. N H Isa, **R S Azis** and N K Saat, The Effect of Sintering Time on The Microstructural and Nonlinear Electrical Properties of Zn-V-Mn-Nb-Nd-O Low-Voltage Varistor Ceramics (2018), Journal of Physics: Conference Series, 1083, 012009.

12. Tasiu Zangina, Jumiah Hassan, **Raba' ah Syahidah Azis**, Khamirul Amin Matori, Chifu Ebenezer Ndikilar and Fatin Hana Naning Dielectric Relaxation Analysis of Chemical Solid Electrolyte Lithium Aluminum Titanium Phosphate (2018), Asian Journal of Applied Sciences, DOI: 10.3923/ajaps.2018. ISSN 1996-3343

2017

13. A. N. Hapishah, **R. S. Azis**, M. Hashim, I. Ismayadi, J. Hassan, M. M. Syazwan, R. I. Idza, *Influence of temperature on microstructure, structural and ferroelectricity evolution properties with nano and micrometer grain size in multiferroic HoMnO3 ceramics*, J Mater Sci: Mater Electron 2017, Issues 21, DOI 10.1007/s10854-017-7505-2. (Q2)

14. Makiyyu Abdullahi Musa, **Raba'ah Syahidah Azis**, Nurul Huda Osman, Jumiah Hassan, Tasiu Zangina, *"Structural and magnetic properties of yttrium iron garnet (YIG) and yttrium aluminum iron garnet (YAlG) nanoferrite via sol-gel synthesis",* Results in Physics, 2017, Vol. (7), 2017, pg. 1135-1142. https://doi.org/10.1016/j.rinp.2017.02.038 (Q2)

15. Yusnita Yusuf, **Raba'ah Syahidah Azis**, Samikannu Kanagesan, Ghazaleh Bahmanrokh, *Microstructure and Magnetic properties of Ni-Zn ferrite thin film synthesized using sol-gel and spin coating technique*, Journal of the Australian Ceramic Society, 2017, Vol. 53 (2), pp 767–774. DOI 10.1007/s41779-017-0090-2 (Q2)

16. Mustafa Mousa Dihom, Abdul Halim Shaari, Hussein Baqiah, Naif Mohammed Al-Hada, Zainal Abidin Talib, Chen Soo Kien, **Rabaah Syahidah Azis**, Mohd Mustafa Awang Kechik, Lim Kean Pah, Roslan Abd-Shukor, "*Structural and superconducting properties of Y (Ba 1-x K x) 2 Cu 3 O 7-δ ceramics*", Ceramics International 2017, 43, Issue 14 (1), pg. 11339 - 11344. https : //doi.org/ 10.1016/ j.ceramint. 2017.05.339 (Q1)

17. Mustafa Mousa Dihom, Abdul Halim Shaari, Hussein Baqiah, Naif Mohammed Al-Hada, Chen Soo Kien, **Rabaah Syahidah Azi**s, Mohd Mustafa Awang Kechik, Zainal Abidin Talib, Roslan Abd-Shukor, *"Microstructure and superconducting properties of Ca substituted Y(Ba1-xCax)2Cu3O7-δ ceramics prepared by thermal treatment method",* Results in Physics, (2017), Vol. 7, pg 407–412. https://doi.org/10.1016/j.rinp.2016.11.067 (Q2)

18. H.A. Ahmad, N.M. Saiden, E. Saion, **R.S. Azis**, M.S. Mamat, M. Hashim, *"Effect of PVP as a capping agent in single reaction synthesis of nanocomposite soft/hard ferrite nanoparticles",* Journal of Magnetism and Magnetic Materials 428 (2017) 219–222. https://doi.org/10.1016/j.jmmm.2016.12.047 (Q1)

19. Nurzilla Mohamed, Jumiah Hassan, Khamirul Amin Matori, **Raba'ah Syahidah Azis**, Zaidan Abdul Wahab, Zamratul Maisarah Mohd Ismail, Nur Fadilah Baharuddin, Siti Syuhaida Abdul Rashid, *"Influence of Pr doping on the thermal, structural and optical properties of novel SLS-ZnO glasses for red phosphor",* Results in Physics, 2017. https://doi.org/10.1016/j.rinp.2017.03.018 (Q2)

20. M. I. M. Zamratul, W. A. Zaidan, A. M. Khamirul, S. A. Halim, **S. A. Raba'ah**, M. Nurzilla B. P. Nur Fadilah, "*Novel eco-friendly synthesis of neodymium doped zinc silicate phosphor based waste glass ceramic: structural, thermal and luminescence properties*", J Mater Sci: Mater Electron 2017, Vol. 28, Issue 13, pp 9395–9402 DOI 10.1007/s10854-017-6680-5. DOI: 10.1007/s10854-017-6680-5 (Q2)

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Thesis

BSc.: **R.S.Azis**, "Ketulenan dan Pembentukan Mikrostruktur Ferit Barium Heksagon Daripada Sisik Besi", Universiti Putra Malaysia, 19 April 2000.

MSc.: **R.S.Azis**, "Preparation and Characterisation of Barium and Strontium Hexaferrite Employing Recycled Millscale" 20 April 2004.

PhD. : **R.S.Azis**, "Structure Development in Sol-gel derived Yttrium Aluminium Oxide, Yttrium Gallium Oxide and Their Solid Solutions, 9 November 2011.

Consultation *(Perundingan)*

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2011

1. Pemeriksa Skrip Jawapan Fizik (SF026), Semester 2 Session 2011/2012, Hotel Empress, Sepang, 30 April -5 May 2011
2. Pemeriksa Skrip Jawapan Fizik, Semester 1 Session 2011/2012, Hotel Flamingo, Ampang, 11-16 November 2011

2012

3. Pentaksir Soalan Fizik Semester 2 (DF035), Hotel Quality City Center, KL, 10-13 Julai 2012
4. Pentaksir Soalan Fizik Semester 1 (SF016), Hotel Regency, KL, 17-20 Julai 2012.
5. Pentaksir Soalan Fizik Kejuruteraan (TF025), Semester 1, Hotel Silka Maytower, KL, 29 Mei – 1 Jun 2012
6. Penggubal Soalan Fizik (SF026), Semester 2, Peperiksaan semester program matrikulasi (PSPM), Kementerian Pelajaran Malaysia, 11 Jun 2012.
7. Penggubal Soalan Fizik Semester 2 (SF026), 25 Jun 2012.

2013

8. Pentaksir Soalan Fizik Kejuruteraan Semester 1 (TF015), Hotel The Nomad Sucasa, Ampang KL, 9-12 April 2013.
9. Pemeriksa Skrip Jawapan Fizik, Semester 2, Sesi 2012/2013, 6-11 May 2013.
10. Pentaksir Soalan Fizik, Semester 3 (DF035), Hotel , 4 - 7 Jun 2013
11. Pentaksir Soalan Fizik, Semester 4 (DF045), Hotel Residence @ Uniten, Bangi, 3-6 September 2013
12. Pemeriksa Skrip Jawapan Fizik, Semester 1, Sesi 2013/2014, 6-11 November 2013

2014

13. Pentaksir Soalan Fizik Kejuruteraan Semester 1 (TF015), Ancasa Hotel & Spa KL, 21-24 January 2014.
14. Pentaksir Soalan Fizik Semester 1 (DF015), Hotel Crystal Crown, KL, 11-14 March 2014.
15. Pemeriksa Skrip Jawapan Fizik PSPM, Semester 2, Sesi 2014/2015, Ancasa Hotel & Spa, KL, 7-12 May 2014.
16. Pemeriksa Skrip Jawapan Fizik PST Semester 2, sesi 2013/2014, Ancasa Hotel & Spa KL, 7-12 May 2014.
17. Pentaksir Soalan Fizik Semester 2 (SF026), Hotel Empress, Sepang, Selangor, 27 – 30 May 2014
18. Penggubal Soalan Fizik Semester 2 (SF026), 1 Julai 2014
19. Pentaksir Soalan Fizik Kjuruteraan Semester 2 (TF025), Hotel Empress, Sepang, Selangor, 26-29 August 2014.
20. Pemeriksa Skrip Jawapan Fizik PSPM, Semester 1, Sesi 2014/2015, Ancasa Hotel & Spa, KL, 10-15 November 2014.

2015

21. Pentaksir Soalan Fizik, Semester 1 (DF015), Program matrikulasi dua tahun (PDT), Hotel Quality KL, 10-13 Februari 2015
22. Pemeriksa Skrip Jawapan Fizik Kejuruteraan Semester 2, Sesi 2014/2015, Ancasa Hotel & Spa, KL, 4- 10 May 2015
23. Pemeriksa Skrip Jawapan Fizik Semester 2, Sesi 2014/2015, Ancasa Hotel & Spa KL, 4 - 9 May 2015.
24. Pemeriksa Skrip Japan Rayuan Semak Semula Fizik Kejuruteraan TF025, 12 Jun 2015.
25. Pentaksir Soalan Fizik Semester IV (DF045), Program Matrikulasi Dua Tahun (PDT), KPM, Hotel de Palma, Ampang, 28-31 Julai 2015

2016

26. Pentaksir Soalan Fizik Semester 1 (SF016), Bahagain Matrikulasi Aras 7, Blok E15, Kementerian Pelajaran Malaysia, Putrajaya, 5-7 April 2016.
27. Pentaksir Soalan Fizik Kejuruteraan Semester 2 (TF025), Bahagain Matrikulasi Aras 7, Blok E15, Kementerian Pelajaran Malaysia, Putrajaya, 19-21 July 2016.
28. Pentaksir Soalan Fizik PSPM, Bahagain Matrikulasi Aras 6 & 7, Blok E15, Kementerian Pelajaran Malaysia, Putrajaya, 2-4 August 2016.
29. Pentaksir Soalan Fizik, Program Matrikulasi Dua Tahun (PDT), Bahagain Matrikulasi Aras 7, Blok E15, Kementerian Pelajaran Malaysia, Putrajaya, 4-6 Oktober 2016.
30. Pentaksir Soalan Fizik PST Semester 2 (SF026), Bahagain Matrikulasi Aras 7, Blok E15, Kementerian Pelajaran Malaysia, Putrajaya, 18-20 Oktober 2016.
31. Ketua Kumpulan Pemeriksa Skrip Jawapan Fizik PST Semester 1 , Sesi 2016/2017, Acapella Suite Hotel, Shah Alam, 23-30 November 2016.

Professional services

Journal Editor		
Role	*Title*	*Year*
Editor	Main Tendencies in Applied Material Science, Trans. Tech. Publications	2016
Guest Editor	Journal of Solid State Science and Technology, ISSN 0128-7389	2016
Guest Editor	Journal of Solid State Science and Technology Letters, ISSN 0128-839	2015
Journal Reviewer		
Role	*Title*	*Year*
Reviewer	Journal of Physical Science, "Analysis of the magnetic properties nanoscale barium hexaferrite (BHF) and prepared by milling and ultrasonic method"	2016
Reviewer	Journal of Solid State Science and Technology, "Nanocomposite of Polyamiline and Magnetic Alloys (Ag-Fe, Ag-Co, Ag-Ni) thin films based amperometric microbial sensor synthesized by low heat treatment (300ºC) for E.Coli detection".	2016
Reviewer	Journal of Solid State Science and Technology, "Effects of the Interaction Between Li+ and CF_3SO_3- in Poly(ethyl methcrylate)/Epoxidized Natural Rubber-50/ $LiCF_3SO_3$ Blend Based Polymer Electrolyte System ".	2016
Reviewer	Journal of Solid State Science and Technology, "Effect of magnesium deficient in MgB_2"	2016
Reviewer	Journal of Solid State Science and Technology, "Effect of Sintering on the Structural and Magnetic Properties of CoFe2O4 Synthesized via Co-Precipitation Method"	2016
Reviewer	Advanced Material Research, "Ultra-Sensitive Breath Sensor Device For Sleep Disorder Monitoring and Clinical Studying"	2015
Reviewer	Advanced Material Research, "Composition Effect of Poly (3,4-ethylenedioxythiophene): Poly(styrene sulphonic acid) and Polyaniline to Dispersion and Optical properties of Polymer Blends"	2015
Reviewer	Advanced Material Research, "The Effect of Titanium Oxide on Characteristic	2015

	of Polysulfone Membrane”.	
Reviewer	Advanced Material Research,” Exploitation of Microwave System for Control of Insect Infestation in Rice Grain”.	2015
Reviewer	Advanced Material Research,” Photoelectrode Thin Film of Dye-Sensitized Solar Cell Fabricated by Doctor Blade and Spin Coating and Electrochemical Impedance Properties of DSSC”.	2015
Reviewer	Advanced Material Research,” Electrical Conductivity and Hall Effect Study of Organic Solar Cell Using Downy Rose Myrtle Berries as Natural Dye: A Heat Treatment”.	2015
Reviewer	Advanced Material Research, “Electrospun Poly ε-Caprolactone co-Lactide (PLCL) Nanofibers Structural Evolusion in Series of Binary Solvent Systems”.	2015
Reviewer	Advanced Material Research, “Scratch Hatch and Nanoscratch Evaluation of Silicone-Dammar Coating as Soft Coating Resin Materials”.	2015
Reviewer	Advanced Material Research, “Effects of EAF Slag’s Particle Size and Vitrification Temperature to EAF Slag Added Ceramic Tile Properties”.	2015
Reviewer	Advanced Material Research, “Effects of Milling Time On Morphology and Electrochemical Performance Of Li4Ti5O12/C Composite Anode”.	2015
Conferences Abstract / Proceeding Reviewer		
Role	*Title*	*Year*
Reviewer	International Conference On Functional Materials And Metallurgy (ICoFM2014), Design of Experiment (DOE) Study of Hydroxyapatite-Coated Magnesium by Cold Spray Deposition	2014
Reviewer	5th International Conference on Solid state Science and Technology (ICSSST2015), “Lattice dynamics of Mixed Superionic Crystal $BaxSr_{1-x}F_2$”.	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, “Copper-doped Tin Sulphide Thin Film for Solar Cell Material”	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, “Microstructural dependence of thermal diffusivity in lanthanum-doped strontium titanate upon evolving through nanometric-to-micronic microstructure”	2015
Reviewer	5th International Conference on Solid state Science and Technology CSSST2015, “Effects of Ionic Liquid and Rare Earth salt on PMMA/ENR 50 Blend Film Electrolyte”	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, “Optical Mode-converters based on Few Mode Fiber for Mode Division Multiplexing”	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, “Structural, Magnetic and Electrical Properties of $(1-x)BaTiO_{3-x}$ $MgFe_2O_4$ Composites”	2015

Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Synthesis of Thioctic Acid Polyethylene Glycol 3 N-Hydroxysuccinimide (TA-PEG3-NHS) and Thioctic Acid Polyethylene Glycol 600 N-Hydroxysuccinimide (TA-PEG600-NHS) as a linker between quantum dot and antiviral peptide "	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "PMMA-based Conducting Polymer Prepared by in Situ Free Radical Polymerization of MMA in Ionic Liquids and Their Characterization as Polymer Electrolytes"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Optical Properties of Copper Nitride Thin Films Grown by Reactive DC Sputtering"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Conductivity and optical studies of plasticized solid polymer electrolytes doped with CuInS/ZnS quantum dot"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "NiSi/SiC heterostructure nanowires growth and the effects of filament temperature on its structural properties by Hot Wire-CVD"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Absorption and Luminescence Characteristics of Sm3+ Doped Zinc Tellurite Glass: Role of Manganese Nanoparticles"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Influence of Non-Aqueous Solvent on the Properties of Titania Nanotubes Prepared by Anodisation Method"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Synthesis And Characterization of Sodium Magnesium Borate Doped Dyprosium Glass For Dosimetric Properties"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Frequency, temperature and In3+ dependent electrical resistivity and complex permeability in Yttrium Iron Garnet "	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Pulsed laser processing of back contact on p-type wafers with Al foil and evaporated Aluminum films "	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Optical Properties And Surface Morphology of Al-Doped Zinc Oxide Thin Solar Cell"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Modification of Titanium Dioxide paste viscosity in Tuning Nanostructured TiO2/CdS"	2015
Reviewer	5th International Conference on Solid state Science and Technology ICSSST2015, "Formation and Structural Characterization of Neodymium Doped Willemite Glass Ceramic "	2015
Reviewer	7th International conference on magnetic and superconducting materials	2011

	(MSM11), "The effect of Co doping on the magnetic and magnetocaloric properties of Pr0.7Ca0.3Mn1-xCoxO3 manganites".	
Reviewer	7th International conference on magnetic and superconducting materials (MSM11),"FePt, magnetic nanoparticles with oriented and uniform surface distributions"	2011

Editor

No	Book name	Role	Publisher	Year
1	Abstract book, Fundamental Science Congress (FSC2017)	Editor	Dept. Biology, Faculty of Science, UPM	2017
2	Chapter in Book, Fundamental Science Congress (FSC2017)	Editor	Penerbit UPM	2017
3	Main Tendencies in Applied Mayerials Science	Editor	Trans Tech Publications, Switzeland	2016
4	Journal of Solid State Science and Technology Letters, Vol. 16, No. 2, 2015	Editor	Malaysian Solid State Science and Technology Society	2016
5	Journal of Solid State Science and Technology Letters, Vol. 16, No. 1-2, 2015	Editor	Malaysian Solid State Science and Technology Society	2016
6	Abstract book, International Conference Solid State Science and Technology (ICSSST) 2015	Editor	Dept. Physics, Faculty of Science, UPM	2015
7	Abstract book, Fundamental Science Congress (FSC2014)	Editor	Dept. Mathematic, Faculty of Science, UPM	2014

Attended Conferences/ Seminar

Conferences attended

International conferences

Presenting papers

1. **R.S.Azis**, D.Holland, M.E.Smith and A.P.Howes, *"Quantitative analysis and structural study of $Y_3Al_5O_{12}$ derived by sol-gel synthesis using ^{27}Al MAS NMR"*, Proceeding of The Seventh International Conference on Magnetic and Superconducting Materials, 2011.

2. **R.S.Azis**, D.Holland, M.E.Smith and A.P.Howes, *"^{27}Al and ^{89}Y MAS MAS NMR Study on $Y_3Al_5O_{12}$ prepared by Sol-gel Synthesis"*, Proceeding of the 26th Regional Conference of Solid State Science and Technology (RCSSST), 2011.

3. **Rabaah Syahidah Azis**, Dr. Diane Holland, Prof. Mark E. Smith, Dr. Danielle Laurencin and Dr. Alan Wong, *"Effect of Sol-Gel Process on ^{27}Al and ^{89}Y MAS NMR Parameters of Yttrium Aluminium Garnet",* RSC NMR Discussion Group Post-Graduate Meeting, 19 June 2008, AstraZeneca R&D Loughborough.

4. **R S Azis**, D Holland, M E Smith, *"Synthesis of Yttrium Aluminium Garnet by the Low Temperature Sol-gel Modified Citrate Nitrate Combustion Technique"*, UK-MEC :UK- Malaysia Engineering Conference 2008, 14-15 July 2008, University College London, London , UK.

5. **R S Azis**, D Holland and M E Smith, *"^{27}Al MAS NMR Comparison of Solid State and Sol-Gel Prepared Yttrium Aluminium Garnet: Crystallite size and Impurity"*, BRSG Meeting: Frontier of Magnetic Resonance, 15-16 September 2008, University of Warwick, UK.

6. **R S Azis**, D Holland and M E Smith, *"A ^{27}Al MAS NMR Study of $Y_3Al_5O_{12}$ Prepared By Modified Sol-Gel Combustion Process"*, The Sixth International Conference on Inorganic Materials, 28 - 30 September 2008, Dresden, Germany.

7. **Raba'ah Syahidah Azis**, N.M.M.Shahrani, J.Hassan, N.M.Saiden and N. Mokhtar, *Effect of sintering temperature on structural, microstructural and magnetic properties of Yttrium Iron Garnet (Y3Fe5O12) ferrit*e, Fundamental Science Congress (FSC2017), 21-22 November 2017.

8. **R.S.Azis**, N.M.Shahrani, J.Hassan, Z.Abbas and N.M.Saiden, *Structural, Phase Development and Magnetic Behavior of Polycrystalline Yttrium Iron Garnet*, Universiti Putra Malaysia (UPM) and Kyushu Institute of Technology (Kyutech), 5th Kyushu Institute of TechnologyInternational Symposium on Applied Engineering and Sciences (SAES2017) in conjunction with The NanoMITe Annual Symposium (NMAS 2017), 14 – 15th November 2017, Universiti Putra Malaysia.

9. **Raba'ah Syahidah Azis**, Jumiah Hassan, "*Magnetic behavior of zinc substituted nickel ferrite*", Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

10. **Raba'ah Syahidah Azis**, Mansor Hashim, Azmi Zakaria, Jumiah Hassan, Ying Yuet Lee, Noruzaman Daud and Nuraine Mariana Mohd Shahrani, *"The Effect of Thermal Treatment on Magnetic Properties and Morphology of Fe_2O_3 Derived by Mill scales via Mechanical Alloying Technique*", 5th International Conference of Solid State Science and Technology 2015, 13-15 December 2015, Bayview Hotel Langkawi.

11. **R.S.Azis**, M.Hashim, D,.Holland, M.E.Smith, J.Hassan and M.K.Ikhwan, "*^{71}Ga Nuclear Magnetic Resonance Quadrupolar Nuclei of $Y_3Ga_5O_{12}$",* 4th International Conference on Solid State Science and Technology, 2012
12. **R.S.Azis**, D.Holland, M.E.Smith and A.P.Howes, *"^{27}Al and ^{89}Y MAS MAS NMR Study on $Y_3Al_5O_{12}$ prepared by Sol-gel Synthesis"*, The 26th Regional Conference of Solid State Science and Technology (RCSSST), 2011.

13. **R.S.Azis**, D.Holland, M.E.Smith and A.P.Howes, *"Quantitative analysis and structural study of $Y_3Al_5O_{12}$ derived by sol-gel synthesis using ^{27}Al MAS NMR"*, The Seventh International Conference on Magnetic and Superconducting Materials, 2011.

14. **R.S.Azis**, M.Hashim, N.Yahya, R.Alias, N.M.Saiden, N.A.Aini, A.A.rejab and Z.Hari, *"Effect of sintering temperature on orientation grain growth in millscales-derived $BaFe_{12}O_{19}$"*, Seminar Kimia Bersama UKM-ITB Ke-5, 16-17 Julai 2002, Hotel Equatorial Melaka.

National level

Presenting papers

15. **Raba'ah Syahidah Azis,** Jumiah Hassan, Azmi Zakaria, Mohd Faiz Naimi, "*Magnetic properties of cobalt substituted yttrium iron garnet prepared by sol-gel synthesis*", Fundamental Science Congress (FSC2016), 9-10 August 2016, Faculty Science, UPM.

16. **Raba'ah Syahidah Azis**, Mansor Hashim, Azmi Zakaria, Jumiah Hassan, Norlaily Mohd Saiden and Pua Chong Siang, *"Magnetic Proeprties and Microstructure of Cobalt Substituted Barium Hexaferrites Derived By Steel Waste Product Via Mechanical Alloying Technique",* 28th Regional Conference on Solid State Science and Technology 2014, 25-27 November 2014.

17. **R.S.Azis**, D.Holland, M.E.Smith, *"^{89}Y MAS Nuclear Magnetic Resonance Low-γ Nuclei of $Y_3Al_5O_{12}$"*, Abstract book, Fundamental Science Congress, UPM, 2012

18. **Raba'ah Syahidah Azis**, Mansor Hashim, Noorhana Yahya and Zaleha Mohd Akhiruddin, "*Purified iron oxide α-Fe_2O_3 from millscale using Curie temperature separation technique"*, Malaysian Solid State Science and Technology Conferences, 7-9 September 2001, Bayview Hotel, Langkawi.

Others (Postgraduate students)

2017

1. Muhammad Misbah Muhd Zulkimi, **Raba'ah Syahidah Azis**, Ismayadi Ismail, Khamirul Amin Matori, Fadzidah Mohd Idris, "*Microwave-absorbing properties of Sr4Me2Fe24O41 Me = Mg-Zn, Mn-Zn composite in X-band frequencies*", Symposium on structures, materials and systems (VSMS 2017), 7-8th February 2017, Everly Hotel, Putrajaya.

2016

2. Muhammad Syazwan bin Mustaffa, **Raba'ah Syahidah Azis**, Ismayadi Ismail, Nor Hapishah Abdullah and Idza Riati Ibrahim, *"Synthesis and Characterization of Magnetic-Polymer Nanocomposite for Radar Wave Absorption"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

3. Nor Hapishah Abdullah, Raba'ah Syahidah Azis, Ismayadi Ismail, Muhammad Syazwan bin Mustaffa and IdzaRiati Ibrahim, *"Evolution of Microstructural Properties of Polycrystalline Holmium Manganite ($HoMnO_3$) Synthesized via Mechanical Alloying"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

4. Muhammad Misbah Muhammad Zulkimi, **Raba'ah Syahidah Azis**, Khamirul Amin Matori, Ismayadi Ismail and Zulkifly Abbas, "*Microwave Absorption Properties of Strontium Nickel Hexaferrite"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

5. Yusnita Yusuf, **Raba'ah Syahidah Azis**, Ismayadi Ismail, Samikannu Kanagesan and Ghazaleh Bahmanrokh, *"Magnetic, Morphological Properties and I-V characteristic of Ni-Zn Ferrite Thin Film Synthesized using Sol-Gel and Spin Coating Technique*", Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

6. Ismayadi Ismail, Shamsul Ezzad Shafie, Samikannu Kanagesan, Mohd Ali Mat Nong, Juraina Mohd Yusof, Rosiah Osman, **Raba'ah Syahidah Azis**, Norlaily Mohd Saiden and Nurhidayati Mokhtar, *"Microstructure-Magnetic Phase Transition of Fine-Grained Strontium Ferrites Synthesized via Mechanical Alloying Method*", Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

7. Hartini Abdullah Ahmad, Norlaily Mohd Saiden, Elias Saion, **Raba'ah Syahidah Azis** and Shuhazlly Mamat, *"The Influence of Phase Distribution on the Magnetic Characteristics of Nanophase Ferrite Particles"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

8. Firdaus Azmi, N.M. Saiden, E. Saion and **R.S. Azis**, *"The Effect of Calcination Temperature on Microsturtural of Strontium Ferrite Nanoparticles via Thermal Treatment"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

9. Rodziah Nazlan, Mansor Hashim, Ismayadi Ismail, **Rabaah Syahidah Azis**, Zulkifly Abbas, Fadzidah Mohd Idris and Idza Riati Ibrahim, *"Grain Size Dependence on Magnetic and Microwave Response in Mechanically Alloyed Yttrium Iron Garnet*", Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

10. Farah Nabilah Shafiee, **Raba'ah Syahidah Azis** and Ismayadi Ismail, "Microwave Loss of Nanocrystalline Gadolinium Iron Garnet", Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

11. Tasiu zangina, Jumiah Hassan, Khamirul Amin Matori, **Raba'ah Syahidah Azi**s and Alex See, "*A.C. Conductivity and Dielectric Properties of Li1.5Ti1.5Al0.5 (PO4)3 NASICON-type Material*", Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

12. Mustafa Mousa Dihom, Abdul Halim Shaari, Hussein Baqiah, Chen Soo Kean, **Rabaah Syahidah Azis**, Mohd Mustafa Awang Kechik and Roslan Abd-Shukor, *"Effects of Calcination Temperature on Microstructure and Superconducting Properties of YBa2Cu3Ox Ceramic Prepared using Thermal Treatment Method"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

13. Nor Hasanah Isa, Azmi Zakaria and **Raba'ah Syahidah Azis**, *"The Effect of Gd_2O_3 Doping on the Microstructure and Electrical Properties of (V, Mn, Nb) - Doped ZnO Ceramics Varistor"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

14. Wong Yick Jeng, Jumiah Hassan, Chen Soo Kien, Ismayadi Ismail and **Raba'ah Syahidah Azis**, *"Effect of Er^{3+} Substitution for Bi^{3+} on the Phase Formation and Dielectric Properties of Aurivillius-type $Bi_5CrTi_3O_{15}$ Ceramic"*, Regional Conference of Solid State Science and Technology (RCSSST2016), 15-17th November 2016, KSL Hotel, Johor Bahru.

15. Farah Nabilah Shafiee, **Raba'ah Syahidah Azis**, Ismayadi Ismail, "*Microwave loss of nanocrystalline gadolinium iron garnet*", Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

16. Muhammad Misbah Muhammad Zulkimi, **Raba'ah Syahidah Azis**, Khamirul Amin Matori, Ismayadi Ismail, "*Investigation of Microwave properties of Z-type Strontium Hexaferrite Polymer-Composite*", Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

17. Yusnita Yusuf, **Raba'ah Syahidah Azis**, Ismayadi Ismail, Samikannu Kanagesan, Ghazaleh Bahmanrokh, "*Morphological properties and I-V characteristic of Ni-Zn Ferrite Thin film synthesized using sol-gel method*", Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

18. Rodziah Nazlan, Mansor Hashim, Ismayadi Ismail, **Raba'ah Syahidah Azis**, Fadzidah Mohd Idris, Idza Riati Ibrahim, Zulkifly Abbas, "*Magnetic and microwave properties dependences yttrium iron garnet*", Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

19. Nor Hapishah Abdullah, **Raba'ah Syahidah Azis**, Jumiah Hassan, Ismayadi Ismail, Samihannu Kanagesan, Muhammad Syazwan Mustaffa, Idza Riati Ibrahim, Wan Norailiana Wan Ab Rahman, "Evolution of Mircostructure properties of polycrystalline holmium manganite (HoMnO3) synthesized via mechanical alloying, Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

20. Muhammad Syazwan Mustaffa, **Raba'ah Syahidah Azis**, Jumiah Hassan, Ismayadi Ismail, Samihannu Kanagesan, Nor Hapishah Abdullah, Idza Riati Ibrahim, "*Structural, microstructural and electrical properties of nickel zinc ferrite ($Ni_{0.6}Zn_{0.4}Fe_2O_4$) via single sample sintering route*", Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

21. Jumiah Hassan, Kew Xin Yi, Wong Yick Jeng, Chen Soo Kien, Ismayadi Ismail, **Raba'ah Syahidah Azis**. "*Dielectric study of Pentabismuth Trititanoferrrite (III) $Bi_5FeTi_3O_{15}$*", Workshop on Advanced Materials and Technology Nanodelivery (WAMN2016), Mesmera Ballroom 1, The Everly, Putrajaya, 24-25th August 2016.

22. Nor Nadhirah Che Muda, **Raba'ah Syahidah Azis**, Jumiah Hassan, Abdul Halim Shaari and Sakinah Sulaiman, "*Structural and magnetic hysteresis of $BaFe_{12}O_{19}$ steel waste based via ammonium nitrate salt method*", Fundamental Science Congress (FSC2016), 9-10 August 2016, Faculty Science, UPM.

23. S. Sulaiman, **R.S.Azis**, J.Hassan, A.Zakaria, and N.N.C.Muda, *"The effect of porosity on magnetic behavior of $SrFe_{12}O_{19}$ nanoparticles vary by pH via sol-el auto combustion technique"*, Fundamental Science Congress (FSC2016), 9-10 August 2016, Faculty Science, UPM.

24. A.H.Azizan and **R.S.Azis**, "*The study of structural and magnetic properties of aluminium substituted yttrium iron garnet prepared via sol-gel citrate combustion technique"*, Fundamental Science Congress (FSC2016), 9-10 August 2016, Faculty Science, UPM.

2015

25. N.Daud, **R.S.Azis**, M. Hashim, K.A. Matori, J.Hassan, N.M.M.Shahrani, *"Study of transition metals ion substitution on the structure and magnetic properties of $SrM_{0.5}Fe_{11.5}O_{19}$ (M: Ti^{4+}, Co^{2+}, Ni^{2+}, Cu^{2+} and Zn^{2+}) Derived From Steel Waste Product Via Mechanical Alloying",* 5th International Conference of Solid State Science and Technology 2015, 13-15 December 2015, Bayview Hotel Langkawi.

26. Nuraine Mariana Md. Shahrani, **Raba'ah Syahidah Azis**, Mansor Hashim and Zulkifly Abbas, "Influence of Sintering Temperature on Evolution of Structure and Magnetic Properties of $Y_3Fe_5O_{12}$ (YIG) Nanoparticles", 5th International Conference of Solid State Science and Technology 2015, 13-15 December 2015, Bayview Hotel Langkawi.

27. Nor Nadhirah Che Muda, **Raba'ah Syahidah Azis**, Mansor Hashim, Jumiah Hassan, Azmi Zakaria And Norlaily Mohd Saiden, "The Formation Of High Content Fe_2o_3 From Steel Waste Materials", 5th International Conference of Solid State Science and Technology 2015, 13-15 December 2015, Bayview Hotel Langkawi.

28. Sakinah Sulaiman, **Rabaah Syahidah Azis** , Jumiah Hassan, Azmi Zakaria and Nor Nadhirah Che Muda, "The Influence Of Ph In $Srfe_{12}o_{19}$ Nanoparticles Synthesized By Sol Gel Method", 5th International Conference of Solid State Science and Technology 2015, 13-15 December 2015, Bayview Hotel Langkawi.

29. Sakinah Sulaiman, Raba'ah Syahidah Azis, Jumiah Hassan and Nor Nadhirah Che Muda, "Effects of pH And Crystallite Size Of Srfe12o19 Nanoparticles Synthesized By Sol Gel Method", Fundamental Science Congress 2015, 27-28 October 2015, Faculty of Veterinary Medicine, Universiti Putra Malaysia.

30. Nor Nadhirah Che Muda, Raba'ah Syahidah Azis, Mansor Hashim, Jumiah Hassan, Azmi Zakaria and Norlaily Mohd Saiden, "The Formation of High Content Fe2O3 From Steel Waste Materials", Fundamental Science Congress 2015, 27-28 October 2015, Faculty of Veterinary Medicine, Universiti Putra Malaysia.

2014

31. N.Daud, **R.S.Azis**, M.Hashim and K.A.Matori, *"Preparation of Strontium Hexagonal Ferrites Sr1-xNdxFe12O19 From Steel Waste Product By using Mechanical Alloying"*, 28th Regional Conference on Solid State Science and Technology 2014, 25-27 November 2014.

32. Nuraine Mariana Md. Shahrani, **Raba'ah Syahidah Azis**, M.Hashim, *"Synthesis and Characterization of Yttrium Iron Garnet Derived By Steel Waste Product Via High Energy Ball Milling",* 28th Regional Conference on Solid State Science and Technology 2014, 25-27 November 2014.

33. Rodziah Nazlan, Mansor Hashim, **Rabaah Syahidah Azis**, Idza Riati Ibrahim, Fadzidah Mohd Idris, Wan Norailiana Wan Ab. Rahman, Nor Hapishah Abdullah, Ismayadi Ismail, *"Indium Substitution Role in Microstructure-Dependent Magnetic Property Evolution of Yttrium Iron Garnet"*, 28th Regional Conference on Solid State Science and Technology 2014, 25-27 November 2014.

34. Muhammad Misbah Muhammad Zulkimi, Mansor Hashim, Ismayadi ismail, **Raba'ah Syahidah Azis**, Idza Riati Ibrahim, Rodziah Nazlan, Wan Norailiana Wan Ab Rahman, Nor hapishah Abdullah, Fadzidah Mohd Idris, Mohd Shamsul Ezzad Shafie and Muhammad Syazwan Mustaffa, *"Evolving Microstructure, Physical Properties and Their Relationship in Co0.5Zn0.5Fe2O4"*, 28th Regional Conference on Solid State Science and Technology 2014, 25-27 November 2014.

35. Muhammad Syazwan Mustaffa, mansor Hashim, Ismayadi Ismail, Samikannu Kanagesan, **Raba'ah Syahidah Azis**, Muhammad Misbah Muhammad Zulkimi, "Elucidation of Parallel Microstructure and Physical Properties Evolution in Ni0.6Zn0.4Fe2O4", 28th Regional Conference on Solid State Science and Technology 2014, 25-27 November 2014.

36. N.Daud, **R.S.Azis**, M.Hashim and K.A.Matori, *"Magnetic Properties of Sr1-xNdxFe12O19 derived by Steel waste Product By Using Mechanical Alloying",* Workshop on Advanced Materials and Nanotechnology 2014 (WAMN2014), UPM, Malaysia, 25-26 August 2014.

37. Nuraine Mariana Md. Sharani, **Raba'ah Syahidah Azis** and Mansor Hashim, *"Infrared Study of the Steel Waste Product Yield From Magnetic Separation Technique",* Workshop on Advanced Materials and Nanotechnology 2014 (WAMN2014), UPM, Malaysia, 25-26 August 2014.

38. N.Daud, **R.S.Azis**, M.Hashim, K,A,Matori, *"Elemental Analysis and Magnetic Properties of* $Sr_{1-x}Nd_xFe_{12}O_{19}$ *by Steel Waste Product By Using Mechanical Alloying"*, Abstract Book, The Regional Fundamental Science Congress 2014, 19-20 August 2014. Abstract Book, The Regional Fundamental Science Congress 2014, 19-20 August 2014.

39. Nuraine Mariana Md Sharani, **Raba'ah Syahidah Azis**, Mansor Hashim, *"Study the Iron Environments of Magnetic Particles in Steel Waste Product Yield By Magnetic Separation Technique",* Abstract Book, The Regional Fundamental Science Congress 2014, 19-20 August 2014.

2012

40. M.Zulkimi, M.Hashim, **R.S.Azis**, I. Ismayadi, *"Exposition of parallel micrsostructure and physical properties evolution in* $Co_{0.5}Zn_{0.5}Fe_2O_4$*"*, Abstract book, Fundamental Science Congress, UPM, 17-18th July 2012.

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