

2017=2560 (Oct 2016 – Sep 2017)

BL1.1W: MXT 2 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Chirawatkul, P., Khoonsap, S., Poomying, S., Kaewhan, C., Pinitsoontorn, S. and Maensiri, S. "Cation Distribution and Magnetic Properties of $\text{Co}_x\text{Mg}_{1-x}\text{Fe}_2\text{O}_4$ Nanoparticles" *Journal of Alloys and Compounds* 697 (Mar 2017): 249-256.
2. Khonkayan, K., Sansuk, S., Srijaranai, S., Tuntulani, T., Saiyasombat, C., Busavaporn, W. and Ngeontae, W. "New Approach for Detection of Chromate Ion by Preconcentration with Mixed Metal Hydroxide Coupled with Fluorescence Sensing of Copper Nanoclusters" *Journal Microchimica Acta* 184. 8 (Aug 2017): 2965-2974.

BL1.3W: SAXS 9 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Chong, J. C., Bidin, N., Lee, S. L., Sanagi, M. M., Ruqmai, S. and Soontaranon, S. "Optical Extinction Coefficients of Gold Nanoparticle Aggregates by Small Angle X-Ray Scattering (SAXS)" *Journal of Physical Science* 28 (2017): 61-71.
2. Loan, T. T., Nga, T. T. V., Duong, N. P., Soontaranon, S. and Hien, T. D. "Influence of Structure and Oxidation State on Magnetic Properties of $\text{Sr}_{1-x}\text{La}_x\text{Fe}_{12-x}\text{Co}_x\text{O}_{19}$ Nanoparticles Prepared by Sol-Gel Combustion Method" *Journal of Electric Materials* 46 (2017); 3396.
3. Muchils, K., Fauziyah, N. A., Soontaranon, S., Limpirat, W. and Pratapa, S. "Synchrotron WAXS and XANES Studies of Silica (SiO_2) Powders Synthesized from Indonesian Natural Sands" *Journal of Physics: Conference Series* 795 (2017): 012007 **USE BL1.3w, BL8**
4. Nguyen, T. C., Ruksakulpiwat, C., Ruqmai, S., Soontaranon, S. and Ruksakulpiwat, Y. "Crystallization Behavior Studied by Synchrotron Small-Angle X-Ray Scattering of Poly (Lactic Acid)/Cellulose Nanofibers Composites" *Composites Science and Technology* 143 (May 2017): 106-115.
5. Rungsawang, W., Jarumaneeroj, C., Petcharat, N., Soontaranon, S. and Ruqmai, S. "Phase-Separation of Heterophasic Polymer in Solution: A Model Case of Impact-Resistant Polypropylene Copolymer" *Journal of Applied Polymer Science* 134. 28 (Jun 2017): 45069.
6. Thanh, N. K., Loan, T. T., Anh, L. N., Duong, N. P., Soontaranon, S., Thammajak, N. and Hien, T. D. "Cation Distribution in CuFe_2O_4 Nanoparticles: Effects of Ni Doping on Magnetic Properties" *Journal of Applied Physics* 120 (2016): 142115. **USE BL1.3w+BL8**
7. Sarmphim, P., Soontaranon, S., Sirisathitkul, C., Harding, P., Kijamnajsuk, S., Chayasombat, B., Pinitsoontorn, S. and Chingunpitak, J. "FePt₃ Nanosuspension Synthesized from Different Precursors – a Morphological Comparison by SAXS, DLS and TEM" *Bulletin of the Polish Academy of Sciences, Technical Sciences* 65 (2017): 79-84.

วารสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สช.

8. Loan, T. T., Duong, N. P., Thanh, N. K., Anh, L. N., Nga, T. T. V. and Hien, T. D. "Crystal Structure, Cation Distribution and Oxidation State of Spinel Ferrite Nanoparticles: A Synchrotron XRD and XANES Study" *Journal of Nanoscience and Nanotechnology* 16 (2016): 7973-7977. **USE BL1.3w-BL8**
9. Thanh, N. K., Duong, N. P., Hung, D. Q., Loan, T. T., and Hien, T. D. "Structural and Magnetic Characterization of Copper Ferrites Prepared by Using Spray Co-Precipitation Method" *Journal of Nanoscience and Nanotechnology* 16 (2016): 7949-7954.

BL2.2: TRXAS 10 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Kangvansura, P., Chew, L. M., Saengsui, W., Santawaja, P., Poo-arporn, Y., Muhler, M., Schulz, H. and Worayyingong, A. "Product Distribution of CO₂ Hydrogenation by K- and Mn-Promoted Fe Catalysts Supported on N-functionalized Carbon Nanotubes" *Catalysis Today* 275 (Oct 2016): 59-65.
2. Nguyen, H. K. D., Nguyen, D. T., Hoang, D. N., Dao, D. S., Nguyen, T. T., Limpirat, W. and Hoang, L. L. "X-Ray Absorption Spectroscopies of Mg-Al-Ni Hydrotalcite Like Compound for Explaining the Generation of Surface Acid Sites" *Korean Journal of Chemical Engineering* 34. 2 (Feb 2017): 314-317.
3. Phongamwong, T., Chantaprasertporn, U., Witton, T., Numpilai, T., Poo-arporn, Y., Limpirat, W., Donphai, W., Dittanet, P., Chareonpanich, M. and Limthakul, J. "CO₂ Hydrogenation to Methanol Over CuO-ZnO-ZrO₂-SiO₂ Catalysts: Effects of SiO₂ Contents" *Chemical Engineering Journal* 316 (2017): 692-703.
4. Wisajorn, W., Poo-arporn, Y., Marin, P., Salvador Ordóñez, Assabumrungrat, S., Praserthdam, P., Saebea, D. and Soisawan, S. "Reduction of Carbon Dioxide via Catalytic Hydrogenation Over Copper-Based Catalysts Modified by Oyster Shell-Derived Calcium Oxide" *Journal of Environmental Chemical Engineering* 5 (Aug 2017): 3115-3121.

วารสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สช.

5. Kangvansura, P., Chew, L. M., Kongmark, C., Santawaja, P., Ruland, H., Xia, W., Schulz, H., Worayyingong, A. and Muhler, M. "Effects of Potassium and Manganese Promoters on Nitrogen-Doped Carbon Nanotube-Supported Iron Catalysts for CO₂ Hydrogenation" *Engineering* 3 (2017): 385-392.
6. Kiatphuengporn, S., Donphai, W., Jantaratana, P., Yigit, N., Fottinger, K., Rupprechter, G. and Chareonpanich, M. "Cleaner Production of Methanol from Carbon Dioxide Over Copper and Iron Supported MCM-41 Catalysts Using Innovative Integrated Magnetic Field-Packed Bed Reactor" *Journal of Cleaner Production* 142. Pt. 3 (Jan 2017): 1222-1233.
7. Chanapattharapol, K. C., Krachuanram, S. and Youngme, S. "Study of CO₂ Adsorption on Iron Oxide Doped MCM-41" *Microporous and Mesoporous Materials* 245 (Jun 2017): 8-15.
8. Thaweechai, T., Rattanasakulthong, W. and Thachepan, S. "Cobalt Phases in Co-Cu Mechanical Alloy and Their Thermal Behavior by X-ray Absorption Spectroscopy" *Science of Advanced Materials* 9. 2 (Feb 2017): 296-301.

BL3.2Ua: PES 18 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Khemasiri, N., Chananonawathorn, C., Klamchuen, A., Jessadaluka, S., Pankiew, A., Vuttivong, S., Eiamchai, P., Horprathom, M., Pornthreeraphat, S., Kasamechonchung, P., Tantisantisom, K., Boonkoom, T., Songsiririthigul, P., Nakajima, H. and Nukeawa, J. "Crucial Role of Reactive Pulse-Gas on Sputtered Zn₃N₂ Thin Film Formation" *RSC Advances* 6 (2016): 94905-94910. **BL3.2a-BL5.1**
2. Norarat, R., Jainontee, K., Thianthaisong, W., Sriwang, S., Nakajima, H., Chienthavorn, O., Guibert, E. and Whitlow, H. J. "MeV Ion Exposure Behaviour of PMMA Resist Polymer Studied by Synchrotron Light Spectroscopies" *Nuclear Instruments and Methods in Physics Research B* 404 (Aug 2017): 238-242. **BL3.2a-BL5.1**
3. Jiamprasertboon, A., Kongnok, T., Junghawan, S., Kidkhunthod, P., Chanlek, N. and Siritanon, T. "Investigation on Crystal Structures, Optical Properties, and Band Structure Calculations of In₂-xM_xTeO₆ (M = Ga, Bi, La)" *Journal of Alloys and Compounds* 702 (Apr 2017): 601-610. **BL3.2a-b, BL5.1-2**
4. Suwanpinij, P., Worabut, A., Supruangnet, R. and Dickert, H. H. "Analysis of Precipitation and Dissolution of the Microalloying Elements by X-Ray Absorption Spectroscopy (XAS)" *AIMS Materials Science* 4 (2017): 856-866. **BL3.2a-BL8**

5. Zhou, X., Suzuki, T., Nakajima, H., Komatsu, K., Kanda, K., Ito, H. and Saitoh, H. "Structural Analysis of Amorphous Carbon Films by Spectroscopic Ellipsometry, RBS/ERDA, and NEXAFS" *Applied Physics Letters* 110 (2017): 201902.

การสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สช.

6. Haniff, M.A.S.M., Hafiz, S.M., Huang, N.M., Rahman, S.A., Wahid, K.A.A., Syono, M.I. and Azid, I.A. "Piezoresistive Effect in Plasma-Doping of Graphene Sheet for High-Performance Flexible Pressure Sensing Application" *Applied Materials & Interfaces* 9 (Apr 2017): 15192-15201.
7. Kamali, K. Z. and Golsheikh, A. M. "Green and Facile Approach to Synthesis of Well-Dispersed Nitrogen-Doped Graphene without Using Surfactant or Stabilizer with Potential Application to Oxygen Reduction Reaction" *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 509 (2016): 574-582.
8. Lim, S. P., Lim, Y. S., Pandikumar, A., Lim, H. N., Ng, Y. H., Ramaraj, R., Bien, D. C. S., Abou-Zied, O. K. and Huang, N. M. "Gold–Silver@TiO₂ Nanocomposite-Modified Plasmonic Photoanodes for Higher Efficiency Dye-Sensitized Solar Cells" *Physical Chemistry Chemical Physics* 19 (2017): 1395-1407.
9. Marlinda, A. R., Pandikumar, A., Jayabal, S., Yusoff, N., Suriani, A. B. and Huang, N. M. "Voltammetric Determination of Nitric Oxide Using a Glassy Carbon Electrode Modified with a Nano hybrid Consisting of Myoglobin, Gold Nanorods, and Reduced Graphene Oxide" *Microchimica Acta* 183 (2016): 3077.
10. Maiaugree, W., Pimanpang, S., Jarernboon, W. and Amornkitbamrung, V. "Influence of Acid Modification Multiwall Carbon Nanotube Counter Electrodes on the Glass and Flexible Dye-Sensitized Solar Cell Performance" *International Journal of Photoenergy* ID 2853046.
11. Noor, A. M., Rameshkumar, P., Yusoff, N., Ming, H. N., Sajab, M. S. "Microwave Synthesis of Reduced Graphene Oxide Decorated with Silver Nanoparticles for Electrochemical Determination of 4-nitrophenol" *Ceramics International* 12 (2016): 22.
12. Sudrajat, H. and Babel, S. "A New, Cost-Effective Solar Photoactive System N-ZnO@Polyester Fabric for Degradation of Recalcitrant Compound in a Continuous Flow Reactor" *Materials Research Bulletin* 83 (Nov 2016): 369-378.
13. Sudrajat, H. and Babel, S. "A Novel Visible Light Active N-Doped ZnO for Photocatalytic Degradation of Dyes" *Journal of Water Process Engineering* 16 (Apr 2017): 309-319.
14. Sudrajat, H. and Sujaridworakun, P. "Low-Temperature Synthesis of δ-Bi₂O₃ Hierarchical Nanostructures Composed of Ultrathin Nanosheets for Efficient Photocatalysis" *Materials Design* 130 (Sep 2017): 501-511. **USE BL3.2a-BL8**
15. Sudrajat, H. "Template-Free, Simple Fabrication of C/N-doped Bi₂O₃ Nanospheres with Appreciable Photocatalytic Activity Under Visible Light" *Superlattices and Microstructures* 109 (Sep 2017): 229-239.
16. Sudrajat, H. "Reducing Agent-Free Formation of Cu(I) Nanoclusters on gC₃N₄ for Enhanced Photocatalysis" *Journal of Alloys and Compounds* in press. **USE BL3.2a-BL8**
17. Yusoff, N., Rameshkumar, P., Shahid, M. M., Huang, S. T. and Huang N. M. "Amperometric Detection of Nitric Oxide using a Glassy Carbon Electrode Modified with Gold Nanoparticles Incorporated into a Nano hybrid Composed of Reduced Graphene Oxide and Nafion" *Microchimica Acta* 184. 9 (Sep 2017): 3291-3299.
18. Talik, N. A., Yap, B. K., Tan, C. Y. and Whitcher, T. J. "In-Situ Analysis Energy level Alignment at Solution Processed HAT(CN)₆ / PVK(PVK:TAPC) Interface via XPS and UPS" *Current Applied Physics* 17. 8 (aug 2017): 1094-1099.

BL3.2Ub: PEEM 4 article

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Jiamprasertboon, A., Kongnok, T., Junghawan, S., Kidkhunthod, P., Chanlek, N. and Siritanon, T. "Investigation on Crystal Structures, Optical Properties, and Band Structure Calculations of In₂-xM_xTeO₆ (M = Ga, Bi, La)" *Journal of Alloys and Compounds* 702 (Apr 2017): 601-610. **BL3.2a-b, BL5.1-2**

2. Kanjanachuchai, S. and Photongkam, P. "Planar Self-Assembly of Submicron and Nanoscale Wires and Grooves on III-V(110) Surfaces" *Crystal Growth & Design* 17 (2017): 4413-4421.
3. Tunmee, S., Photongkam, P., Euaruksakul, C., Takamatsu, H., Zhou, X., Wongpanya, P., Komatsu, K., Kanda, K., Ito, H. and Saitoh, H. "Investigation of Pitting Corrosion of Diamond-Like Carbon Films Using Synchrotron-Based Spectromicroscopy" *Journal of Applied Physics* 120 (2016): 195303.
4. Zhou, X. L., Tunmee, S., Suzuki, T., Phothongkam, P., Kanda, K., Komatsu, K., Kawahara, S., Ito, H. and Saitoh, H. "Quantitative NEXAFS and Solid-State NMR Studies of sp₃/ (sp₂ + sp₃) Ratio in the Hydrogenated DLC Films" *Diamond & Related Materials* 73 (Mar 2017): 232-240.

BL5: SUT-Nano-SLRI

BL5.3: XPS 35 articles

วารสารระดับนานาชาติที่พิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Boonlakhorn, J., Kidkhunthod, P., Chanlek, N. and Thongbai, P. "Effects of DC Bias on Dielectric and Electrical Responses in (Y + Zn) Co-Doped CaCu₃Ti₄O₁₂ Perovskite Oxides" *The Journal of Materials Science: Materials in Electronics* 28. 6 (Mar 2017): 4695-4701.
2. Itthibenchapong, V., Srifa, A., Kaewmeesri, R., Kidkhunthod, P. and Faungnawakij, K. "Deoxygenation of Palm Kernel Oil to Jet Fuel-Like Hydrocarbons using Ni-MoS₂/Y-Al₂O₃ Catalysts" *Energy Conversion and Management* 134 (2017) 188–196. **BL5.1-BL5.2**
3. Hasin, P., Amornkitbamrung, V. and Chanlek, N. "Economical Nanocomposites of Cobalt or Nickel Species and Polyanilinederived N-doped Mesoporous Carbons for Dye-Sensitized Solar Cells as Counter Electrodes" *Journal of Catalysis* 351 (2017): 19 – 32.
4. Iamprasertkun, P., Tanggarnjanavalukul, C., Krittayavathananon, A., Khuntilo, J., Chanlek, N., Kidkhunthod, P. and Sawangphruk, M. "Insight into Charge Storage Mechanisms of Layered MnO₂ Nanosheets for Supercapacitor Electrodes: In situ Electrochemical X-Ray Absorption Spectroscopy" *Electrochimica Acta* 249 (Sep 2017): 26-32. **BL5.1-2**
5. Jiamprasertboon, A., Kongnok, T., Jungthawan, S., Kidkhunthod, P., Chanlek, N. and Siritanon, T. "Investigation on Crystal Structures, Optical Properties, and Band Structure Calculations of In₂-xM_xTeO₆ (M = Ga, Bi, La)" *Journal of Alloys and Compounds* 702 (Apr 2017): 601-610. **BL3.2a-b, BL5.1-2**
6. Jumpatam, J., Mooltang, A., Putasaeng, B., Kidkhunthod, P., Chanlek, N., Thongbai, P. and Maensiri, S. "Effects of Mg₂b Doping Ions on Giant Dielectric Properties and Electrical Responses of Na_{1/2}Y_{1/2}Cu₃Ti₄O₁₂ Ceramics" *Ceramics international* 42 (2016): 16287-16295. **Use BL5.3-BL5.2**
7. Jumpatam, J., Putasaeng, B., Chanlek, N., Kidkhunthod, P., Thongbai, P., Maensiri, S. and Chindaprasirt, P. "Improved Giant Dielectric Properties of CaCu₃Ti₄O₁₂ via Simultaneously Tuning the Electrical Properties of Grains and Grain Boundaries by F- Substitution" *RSC Advances* 7 (2017): 4092-4101. **Use BL5.1-BL5.2**
8. Jumpatam, J., Somphan, W., Putasaeng, B., Kidkhunthod, P., Chanlek, N., Thongbai, P. and Maensiri, S. "Nonlinear Electrical Properties and Giant Dielectric Response in Na_{1/3}Ca_{1/3}Y_{1/3}Cu₃Ti₄O₁₂ Ceramic" *Material Research Bulletin* 90 (Jun 2017): 8-14. **Use BL5.1-BL5.2**
9. Kaewmee, P., Manyam, J., Opaprakasit, P., Le, T. T. G., Chanlek, N. and Sreearunothai, P. "Effective Removal of Cesium by Pristine Graphene Oxide: Performance, Characterizations and Mechanisms" *RSC Advanced* 7 (2017): 38747-30756.
10. Khamkongkaeo, A., Mothaneeyachart, N., Sriwattana, P., Boonchuduang, T., Phetrattanarangsi, T., Thongchai, C., Sakkomsri, B., Pimsawat, A., Daengsakul, S., Phumying, S., Chanlek, N., Kidkhunthod, P. and Lohwongwatana, B. "Ferromagnetism and Diamagnetism Behaviors of MgO Synthesized via Thermal Decomposition Method" *Journal of Alloys and Compounds* 705 (May 2017): 668-674.
11. Khajonrit, J., Prasoetsopha, N., Sinprachim, T., Kidkhunthod, P., Pinitsoontorn, S. and Maensiri, S. "Structure, Characterization, and Magnetic/Electrochemical properties of Ni-doped BiFeO₃

Use BL5.1-BL5.2

12. Khemasiri, N., Chananonawathorn, C., Klamchuen, A., Jessadaluka, S., Pankiew, A., Vuttivong, S., Eiamchai, P., Horprathom, M., Pornthreeraphat, S., Kasamechonchung, P., Tantisantisom, K., Boonkoom, T., Songsiririthigul, P., Nakajima, H. and Nukeawa, J. "Crucial Role of Reactive Pulse-Gas on Sputtered Zn₃N₂ Thin Film Formation" *RSC Advances* 6 (2016): 94905-94910. **BL3.2a-BL5.1:PES**
13. Kosri, C., Deekamwong, K., Sophiphun, O., Osakoo, N., Chanlek, N., Fottinger, K. and Wittayakun, W. "Comparison of Fe/HBEA Catalysts from Incipient Wetness Impregnation with Various Loading on Phenol Hydroxylation" *Reaction Kinetics, Mechanisms and Catalysis* 121 (Aug 2017): 751-761.
14. Manadee, S., Sophiphun, O., Osakoo, N., Supamathanon, N., Kidkhunthod, P., Chanlek, N., Wittayakun, J. and Prayoonpokarach, S. "Identification of Potassium Phase in Catalysts Supported on Zeolite NaX and Performance in Transesterification of Jatropha Seed Oil" *Fuel Processing Technology* 156 (2017): 62-67. **USE BL5.1-2**
15. Meeporn, K., Chanlek, N. and Thongbai, P. "Effects of DC Bias on Non-Ohmic Sample-Electrode Contact and Grain Boundary Responses in Giantpermittivity La_{1.7}Sr_{0.3}Ni_{1-x}Mg_xO₄ Ceramics" *RSC Advances* 6 (2016): 91377-91385.
16. Norarat, R., Jainontee, K., Thianthaisong, W., Sriwang, S., Nakajima, H., Chienthavorn, O., Guibert, E. and Whitlow, H. J. "MeV Ion Exposure Behaviour of PMMA Resist Polymer Studied by Synchrotron Light Spectroscopies" *Nuclear Instruments and Methods in Physics Research B* 404 (Aug 2017): 238-242. **BL3.2a-BL5.1**
17. Osakoo, N., Pansakdanon, C., Sosa, N., Deekamwong, K., Keawkumay, C., Rongchap, W., Chanlek, N., Jitcharoen, J., Prayoonpokarach, S. and Wittayakun, J. "Characterization and Comprehension of Zeolite NaY/Mesoporous SBA-15 Composite as Adsorbent for Paraquat" *Materials Chemistry and Physics* 193 (2017): 470-476.
18. Phattharasupakun, N., Wuttiprom, J., Suktha, P., Iamprasertkun, P., Chanlek, N., Shepherd, C., Hadzifejzovic, E., Moloney, M.G., Foord, J. S. and Sawangphruk, M. "High-Performance Supercapacitors of Carboxylate-Modified Hollow Carbon Nanospheres Coated on Flexible Carbon Fibre Paper: Effects of Oxygen-Containing Group Contents, Electrolytes and Operating Temperature" *Electrochimica Acta* 238 (2017): 64-73.
19. Phokha, S., Hunpratub, S., Usher, B., Chanlek, N., Bootchanont, A., Maensiri, S. and Chindaprasirt, P. "Effect of Synthesis Temperature on the Magneto-Electrochemical Properties of LaFe_{0.9}Co_{0.1}O₃ Nanoparticles" *Journal of Alloys and Compounds* 708 (2017) 605-611. **USE BL5.1-2**
20. Plerdsranoy, P., Kaewsawan, D., Chanlek, N. and Utke, R. "Effects of Specific Surface Area and Pore Volume of Activated Carbon Nanofibers on Nanoconfinement and Dehydrogenation of LiBH₄" *International Journal of Hydrogen Energy* 42. 9 (Mar 2017): 6189-6201.
21. Poo-arporn, R. P., Pakpongpan, S., Waraho-Zhmayev, D., Poo-arporn, Y. and Surareungchai, W. "Development of Mevalonic Acid Biosensor Using Amperometric Technique Based on Nanocomposite of Nicotinamide Adenine Dinucleotide and Carbon Nanotubes" *Journal of The Electrochemical Society* 164 (2017): B349-B355.
22. Rattanathrum, P., Taddee, C., Chanlek, N., Thongbai, P. and Kamwanna, T. "Structural and Physical Properties of Ge-Doped CuCrO₂ Delafossite Oxide" *Ceramics International* 43 (aug 2017): S417-S422.
23. Thongthai, K., Pakawanit, P., Chanlek, N., Kim, J. H., Ananta, S. and Srilomsak, L. "Ag/Au/Pt Trimetallic Nanoparticles with Defects: Preparation, Characterization, and Electrocatalytic Activity in Methanol Oxidation" *Nanotechnology* 28 .37 Z2017): 375602.
24. Tuichai, W., Danwittayakul, S., Chanlek, N., Srepusharawoot, P., Thongbai, P. and Maensiri, S. "Origin(s) of the Apparent Colossal Permittivity in (In_{1/2}Nb_{1/2})_xTi_{1-x}O₂: Clarification on the Strongly Induced Maxwell-Wagner Polarization Relaxation by DC Bias" *RSC Advances* 7 (2017): 95-105.

25. Tuichai, W., Thongyong, N., Danwittayakul, S., Chanlek, N., Srepusharawoot, P., Thongbai, P. and Maensiri, S. "Very Low Dielectric Loss and Giant Dielectric Response with Excellent Temperature Stability of Ga³⁺ and Ta⁵⁺ co-doped Rutile-TiO₂ Ceramics" *Materials and Design* 123 (2017) 15–23.
26. Tuichai, W., Danwittayakul, S., Chanlek, N. and Thongbai, P. "Effects of Sintering Temperature on Microstructure and Giant Dielectric Properties of (V + Ta) Coedoped TiO₂ Ceramics" *Journal of Alloys and Compounds* 725 (2017): 310-317.
27. Wongrat, E., Chanlek, N., Channarong, C., Samransuksamer, B., Hongsith, N. and Choopun, S. "Low Temperature Ethanol Response Enhancement of ZnO Nanostructures Sensor Decorated with Gold Nanoparticles Exposed to UV Illumination" *Sensors and ActuatorsA: Physical* 251 (2016): 188-197.
28. Wongrat, E., Chanlek, N., Channarong, C., Thupthimchun, W., Samransuksamer, B. and Choopun, S. "Acetone Gas Sensors Based on ZnO Nanostructures Decorated with Pt and Nb" *Ceramics international* 43 (Aug 2017): S557-S566.
29. Yuenyad, C., Chitrakarn, T., Tirawanichakul, Y. and Nakajima, H. "Low Pressure DC-Plasma System for the Modification of Polymeric Membrane Surfaces" *Sains Malaysiana* 46 (2017): 783-793.

การสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สช.

30. Chongsri, K., Boonyaratthanakalin, K. and Pecharapa, W. "Substrate Placement Angle-Dependent Growth of Ga/F co-Doped ZnO Nanostructures Synthesized by Hydrothermal Process" *Ceramics international* 43 (Aug 2017): S523-S534.
31. Karaphun, A., Hunpratub, S., Phokha, S., Putjuso, T. and Swatsitang, E. "Effect of Co Cations and Oxygen Vacancy on Optical and Magnetic Properties of SrTi_{1-x}CoxO₃ Nanoparticles Prepared by the Hydrothermal Method" *Journal of Materials Science: Materials in Electronics*. 28 (Jun 2017): 8294-8303. **BL5.1-BL5.2**
32. Pakdee, U., Chiangga, S., Suwannatus, S. and Limsuwan, P. "Growth of MWCNTs on Flexible Stainless Steels without Additional Catalysts" *Journal of Nanomaterials* 2017 (2017): ID 5672728.
33. Pettong, T., Lamprasertkun, P., Krittayavathananon, A., Suktha, P., Sirisinudomkit, P., Seubsai, A., Chareonpanich, M., Kongkachuchay, P., Limtrakul, J. and Sawangphruk, M. "High-Performance Asymmetric Supercapacitors of MnCo₂O₄ Nanofibers and N-doped Reduced Graphene Oxide Aerogel" *ACS Applied Materials & Interface* 49 (2016): 34045-34053. **USE BL5.1-BL5.2**
34. Phoohinkong, W., Pavasupree, S., Wannagon, A., Boonyaratthanakalin, K., Mekprasart, W. and Pecharapa, W. "Electrochemical Properties of Nanopowders Derived from Ilmenite and Leucoxene Natural Minerals" *Ceramics International* 43 (Aug 2017): S717-S722. **USE BL5.1-BL8**
35. Sirisinudomkit, P., Iamprasertkun, P., Krittayavathananon, A., Pettong, T., Dittanet, P. and Sawangphruk, M. "Hybrid Energy Storage of Ni(OH)₂-Coated N-doped Graphene Aerogel//N-doped Graphene Aerogel for the Replacement of NiCd and NiMH Batteries" *Scientific Reports* 7. 1124 (2017). **USE BL5.1-BL5.2**

BL5.2: XAS 46 articles

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Boonlakhorn, J., Kidkhunthod, P., Putasaeng, B. and Thongbai, P. "Significantly Improved Non-Ohmic and Giant Dielectric Properties of CaCu_{3-x}ZnxTi₄O₁₂ Ceramics by Enhancing Grain Boundary Respons" *Ceramics international* 43 (Feb 2017): 2705-2711.
2. Boonlakhorn, J., Thongbai, P., Putasaeng, B., Kidkhunthod, P., Maensiri, S. and Chindaprasirt, P. "Microstructural Evolution, Non-Ohmic Properties, and Giant Dielectric Response in CaCu₃Ti₄xGe_{0.12} Ceramics" *Journal of the American Ceramic Society* 100. 8 (Aug 2017); 3478-3487.
3. Iamprasertkun, P., Tanggarnjanavalukul, C., Krittayavathananon, A., Khuntilo, J., Chanlek, N., Kidkhunthod, P. and Sawangphruk, M. "Insight into Charge Storage Mechanisms of Layered MnO₂ Nanosheets for Supercapacitor Electrodes: In situ Electrochemical X-Ray Absorption Spectroscopy" *Electrochimica Acta* 249 (Sep 2017): 26-32. **BL5.2, BL5.3**

4. Iamprasertkun, P., Krittayavathananon, A., Seubsai, A., Chanlek, N., Kidkhunthod, P., Sangthong, W., Maensiri, S., Yimnirun, R., Nilmoung, S., Pannopard, P., Ittisanronnachai, S., Kongpatpanich, K., Limtrakul, J. and Sawangphruk, M. "Charge Storage Mechanisms of Manganese Oxide Nanosheets and N-doped Reduced Graphene Oxide Aerogel for High-Performance Asymmetric Supercapacitors" *Scientific Reports* 249 (sep 2017): 26-32.
5. Itthibenchapong, V., Srifa, A., Kaewmeesri, R., Kidkhunthod, P. and Faungnawakij, K. "Deoxygenation of Palm Kernel Oil to Jet Fuel-Like Hydrocarbons using Ni-MoS₂/Y-Al₂O₃ Catalysts" *Energy Conversion and Management* 134 (2017) 188–196. **BL5.2, BL5.3**
6. Jiamprasertboon, A., Kongnok, T., Jungthawan, S., Kidkhunthod, P., Chanlek, N. and Siritanon, T. "Investigation on Crystal Structures, Optical Properties, and Band Structure Calculations of In₂-xM_xTeO₆ (M = Ga, Bi, La)" *Journal of Alloys and Compounds* 702 (Apr 2017): 601-610. **BL3.2a-b, BL5.2, BL5.3**
7. Jumpatam, J., Somphan, W., Boonlakhorn, J., Putasaeng, B., Kidkhunthod, P., Thongbai, P. and Maensiri, S. "Non-Ohmic Properties and Electrical Responses of Grains and Grain Boundaries of Na₁/2Y₁/2Cu₃Ti₄O₁₂ Ceramics" *Journal of the American Ceramic Society* 100 (Jun 2017): 157-166.
8. Jumpatam, J., Putasaeng, B., Chanlek, N., Kidkhunthod, P., Thongbai, P., Maensiri, S. and Chindaprasirt, P. "Improved Giant Dielectric Properties of CaCu₃Ti₄O₁₂ via Simultaneously Tuning the Electrical Properties of Grains and Grain Boundaries by F- Substitution" *RSC Advances* 7 (2017): 4092-4101. **Use BL5.1-BL5.2**
9. Jumpatam, J., Somphan, W., Putasaeng, B., Kidkhunthod, P., Chanlek, N., Thongbai, P. and Maensiri, S. "Nonlinear Electrical Properties and Giant Dielectric Response in Na₁/3Ca₁/3Y₁/3Cu₃Ti₄O₁₂ Ceramic" *Material Research Bulletin* 90 (Jun 2017): 8-14. **Use BL5.1-BL5.2**
10. Jumpatam, J., Mooltang, A., Putasaeng, B., Kidkhunthod, P., Chanlek, N., Thongbai, P. and Maensiri, S. "Effects of Mg²⁺ Doping Ions on Giant Dielectric Properties and Electrical Responses of Na₁/2Y₁/2Cu₃Ti₄O₁₂ Ceramics" *Ceramics international* 42 (2016): 16287-16295. **Use BL5.1-BL5.2**
11. Kanchiang, K. Pakawanit, P. and Yimnirun, R. "Local Structure Analysis of Lead Zinc Niobate-Barium Titanate Ceramic by X-Ray Absorption Spectroscopy and Density Functional Calculation" *Chinese Physics Letters* 34. 8 (2017): 086102.
12. Khajonrit, J., Prasoetsopha, N., Sinprachim, T., Kidkhunthod, P., Pinitsoontorn, S. and Maensiri, S. "Structure, Characterization, and Magnetic/Electrochemical properties of Ni-doped BiFeO₃ Nanoparticles" *Advances in Natural Sciences: Nanoscience and Nanotechnology* 8 (2017): 015010. **Use BL5.1-BL5.2**
13. Kanjanasooontorn, N., Permsirivanich, T., Numpilai, T., Witoon, T., Chanlek, N., Niamlaem, M., Warakulwit, C. and Limtrakul, J. "Structure-Activity Relationships of Hierarchical Meso-Macroporous Alumina Supported Copper Catalysts for CO₂ Hydrogenation: Effects of Calcination Temperature of Alumina Support" *Catalysis Letters* 146 (2016): 1943.
14. Kidkhunthod, P. "Structural Studies of Advanced Functional Materials by Synchrotron-Based X-Ray Absorption Spectroscopy: BL5.2 at SLRI, Thailand" *Advances in Natural Sciences: Nanoscience and Nanotechnology* 8 (2017): 035007.
15. Klysubun, W., Kidkhunthod, P., Taraworakarn, P., Sombunchoo, P., Kongmark, C., Limpijumnong, S., Rujirawat, S., Yimnirun, R., Tumcharern, G. and Faungnawani, K. "SUT-NANOTEC-SLRI Beamline for X-Ray Absorption Spectroscopy" *Journal of synchrotron Radiation* 24 (May 2017): 035007.
16. Laorodphan, N., Pooddee, P., Kidkhunthod, P., Kunthadee, P., Tapala, W. and Puntharod, R. "Boron and Pentavalent Vanadiumlocal Environments in Binary Vanadium Borate Glasses" *Journal of Non-Crystalline Solids* 451 (2016): 118-124.
17. Manadee, S., Sophiphun, O., Osakoo, N., Supamathanon, N., Kidkhunthod, P., Chanlek, N., Wittayakun, J. and Prayoonpokarach, S. "Identification of Potassium Phase in Catalysts Supported on

Zeolite NaX and Performance in Transesterification of Jatropha Seed Oil" *Fuel Processing Technology* 156 (2017): 62-67. **USE BL5.1-2**

18. Mermana, J., Sutthivaiyakit, P., Blaise, C., Gagne, F., Charnsethikul, S., Kidkhunthod, P. and Sutthivaiyakit, S. "Photocatalysis of S-Metolachlor in Aqueous Suspension of Magnetic Cerium-Doped mTiO₂ Core–Shell Under Simulated Solar Light" *Environmental Science and Pollution Research* 33 (2017): 45-55.
19. Myers, R. J., Geng, G., Li, J., Rodriguez, E. D., Ha, J., Kidkhunthod, P., Sposito, G., Lammers, L. N., Kirchheim, A. P. and Monteiro, P. J. M. "The Role of Adsorption Phenomena in Cubic Tricalcium Aluminate Dissolution" *Langmuir* 33 (2017): 45-55.
20. Nilmoung, S., Sinprachim, T., Kotutha, I., Kidkhunthod, P., Yimnirun, R., Rujirawat, S. and Maensiri, S. "Electrospun Carbon/CuFe2O₄ Composite Nanofibers with Improved Electrochemical Energy Storage Performance" *Journal of Alloys and Compounds* 688 pt.A (Dec 2016): 1131-1140.
21. Nachaithong, T., Kidkhunthod, P., Thongbai, P. and Maensiri, S. "Surface Barrier Layer Effect in (In + Nb) co-doped TiO₂ Ceramics: An Alternative Route to Design Low Dielectric Loss" *Journal American Ceramic Society* (2017): 1-8.
22. Nuraini, U., Agustianawati, d., Yahya, e., Cahyono, Y., Kidkhunthod, P. and Suasmoro, S. "The Influence of Local Distortion on the Electrical Properties of the (1-x) (K0.5Na0.5)NbO₃-x(Ba0.8C0.2)TiO₃ System" *Ceramics International* 43 (Mar 2017): 3664-3669.
23. Phaktapha, P., Jutimoosik, J., Bootchanont, A., Kidkhunthod, P., Rujirawat, S. and Yimnirun, R. "Temperature Dependent Local Structure in BaTiO₃ Single Crystal" *Integrated Ferroelectrics* 177 (2017): 74-78.
24. Phokha, S., Hunpratub, S., Usher, B., Chanlek, N., Bootchanont, A., Maensiri, S. and Chindaprasirt, P. "Effect of Synthesis Temperature on the Magneto-Electrochemical Properties of LaFe0.9Co0.1O₃ Nanoparticles" *Journal of Alloys and Compounds* 708 (2017) 605-611. **USE BL5.1-2**
25. Sindhupakorn, B., Thienpratham, S. and Kidkhunthod, P. "A Structural Study of Bone Changes in Knee Osteoarthritis by Synchrotron-Based X-Ray Fluorescence and X-Ray Absorption Spectroscopy Techniques" *Journal of Molecular Structure* 1146 (Oct 2017): 254-258.
26. Sirisinudomkit, P., Iamprasertkun, P., Krittayavathananon, A., Pettong, T., Dittanet, P., Kidkhunthod, P. and Sawangphruk , M. "Hybrid Energy Storage of Battery-Type Nickel Hydroxide and Supercapacitor-Type Graphene: Redox Additive and Charge Storage Mechanism" *Sustainable Energy Fuels* 1 (2017): 275-279.
27. Sriphan, S., Kiravittaya, S., Kidkhunthod, P. and Bongkarn, T. "Insight into an Atomic Arrangement of [KNbO₃]0.9 – [BaNi0.5Nb0.5O₃]0.1 Powder Formed at Various Calcination Temperatures by X-Ray Absorption Spectroscopy" *Results in Physics* 7 (2017): 1550-1555.
28. Suponok, K., Jutimoosik, J., Bootchanont, A., Kidkhunthod, P., Ngamjarurojana, A., Rujirawat, S. and Yimnirun, R. "Phase Formation Investigation in PZT Materials by Synchrotron X-Ray Absorption Spectroscopy Techniques" *Integrated Ferroelectrics* 177 (2017): 69-73.
29. Suwan, M., Premjit, P., Thavorniti, P., Kidkhunthod, P. and Supothina, S. "Synthesis of Near Infrared-Reflective Mo-Doped Sm₂Ce₂O₇ Yellow Pigment and Near Infrared-Reflective Glazes" *Journal of Ceramic Processing Research* 17 (2017): 1-16.
30. Tharamas, R., Jutimoosik, J., Bootchanont, A., Kidkhunthod, P., Rujirawat, S., Ye, Z. G. and Yimnirun, R. "Effect of Electric Field on Local Structure of PZT Single Crystal Studied by X-Ray Absorption Spectroscopy Technique" *Integrated Ferroelectrics* 177 (2017): 137-142.
31. Yong, N., Naenkieng, D., Kidkhunthod, P., Chanlek, N., Thammaiak, N. and Siritanon, T. "Thermoelectric Properties of Al and Mn Double Substituted ZnO" *Ceramics International* 43 (Feb 2017): 1695-1702.

วารสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สข.

32. De Luna, M. D., Millana, M. J., Yodsa-Nga, A. and Wantala, K. "Gas phase Catalytic Oxidation of VOCS using Hydrothermally Synthesized Nest-like K-OMS 2 Catalyst" *Sains Malaysiana* 46 (2017): 275–283.
33. Jaiban, P., Buntham, S. Watcharapasorn, A. "Dielectric Properties of $(1-x)Sr_{0.92}La_{0.08}TiO_3-(x)CaMn_{0.98}Nb_{0.02}O_3$ Ceramics Under Violet Light Irradiation" *Materials Letters* 193 (Apr 2017): 133-137.
34. Jaiban, P. and Watcharapasorn, A. "Effects of Mg Doping on Electrical Properties of $Ba0.7Ca0.3TiO_3$ Ceramics" *Materials Today Communications* 11 (Jun 2017) 184–190.
35. Jaiban, P., Watcharapasorn, A., Yimnirun, R., Guo, R., Bhalla, A. S. "Effects of Donor and Acceptor Doping on Dielectric and Ferroelectric Properties of $Ba0.7Ca0.3TiO_3$ Lead-Free Ceramics" *Journal of Alloys and Compounds* 695 (Feb 2017): 1329-1335.
36. Karaphun, A., Hunpratub, S., Phokha, S., Putjuso, T. and Swatsitang, E. "Effect of Co Cations and Oxygen Vacancy on Optical and Magnetic Properties of $SrTi1-xCoxO_3$ Nanoparticles Prepared by the Hydrothermal Method" *Journal of Materials Science: Materials in Electronics*. 28 (Jun 2017): 8294-8303. **BL5.1-BL5.2**
37. Karaphun, A., Hunpratub, S., Phokha, S., Putjuso, T. and Swatsitang, E. "Characterization and Magnetic Properties of $SrTi1-xNixO_3$ Nanoparticles Prepared by Hydrothermal Method" *Physica B* 504 (2017): 31-38.
38. Nakseedee, P., Tanboonchuy, V., Khemthong, P., Grisdanurak, N. and Liao, C-H. "Role of Cu on Zero Valent Bimetallic CuAFe in Arsenic Removal with Gas Bubbling" *Environmental Progress & Sustainable Energy* 36. 5 (Sep 2017): 1449-1457.
39. Pettong, T., Lamprasertkun, P., Krittayavathananon, A., Suktha, P., Sirisinudomkit, P., Seubsai, A., Chareonpanich, M., Kongkachuchay, P., Limtrakul, J. and Sawangphruk, M. "High-Performance Asymmetric Supercapacitors of $MnCo_{2}O_4$ Nanofibers and N-doped Reduced Graphene Oxide Aerogel" *ACS Applied Materials & Interface* 49 (2016): 34045-34053. **USE BL5.1-BL5.2**
40. Sirisinudomkit, P., Iamprasertkun, P., Krittayavathananon, A., Pettong, T., Dittanet, P. and Sawangphruk, M. "Hybrid Energy Storage of $Ni(OH)_2$ -Coated N-doped Graphene Aerogel//N-doped Graphene Aerogel for the Replacement of NiCd and NiMH Batteries" *Scientific Reports* 7. 1124 (2017). **USE BL5.1-BL5.2**
41. Srikaow, A., Smith, S. M., Uraisin, K., Suttiponparnit, K., Kongmark, C. and Chuacham, C. "Catalytic Remediation of Phenol Contaminated Wastewater Using Cu-Zn Hydroxide Nitrate" *RSC Advances* 6 (2016): 36766-36774.
42. Suktha, P., phattharasupakun, N., Dittanet, P. and Sawangphruk, M. "Charge Storage Mechanisms of Electrospun Mn_3O_4 Nanofibres for High-Performance Supercapacitors" *RSC Advances* 7 (2017): 9958-9963.
43. Swatsitang, E., Karaphun, A., Phokha, S., Hunpratub, S. and Putjuso, T. "Investigation of Structural, Morphological, Optical, and Magnetic Properties of Sm-doped $LaFeO_3$ Nanopowders Prepared by Sol-Gel Method" *Journal of Sol-Gel Science and Technology* 81 (Feb 2017): 483-492.
44. Wongpratat, U., Maensiri, S. and Swatsitang, E. "Effect of Mg Substitution on Magnetic Properties of $Co_{1-x}MgxFe_2O_4$ Nanoparticles Investigated by EXAFS Analysis" *Ceramics International* 43 (Aug 2017): S351-S358.
45. Wutthiprom, J., Phattharasupakun, N. and Sawangphruk, M. "Turning Carbon Black to Hollow Carbon Nanospheres for Enhancing Charge Storage Capacities of $LiMn_2O_4$, $LiCoO_2$, $LiNiMnCoO_2$, and $LiFePO_4$ Lithium-Ion Batteries" *ACS Omega* 2 (2017): 3730–3738.
46. Yotburut, B., Thongbai, P., Yamwong, T. and Maensiri, S. "Synthesis and Characterization of Multiferroic Sm-Doped $BiFeO_3$ Nanopowders and their Bulk Dielectric Properties" *Journal of Magnetism and Magnetic Materials* 437 (sep 2017): 51-61.

BL6a: DXL 3 articles

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Krajangsang, T., Inthisang, S., Sritharathikhun, J., Hongsingthong, A., Limmanee, A., Kittisontirak, S., Chinnavornrungsee, P., Phatthanakun, R. and Sriprapa, K. "An Intrinsic Amorphous Silicon Oxide and Amorphous Silicon Stack Passivation Layer for Crystalline Silicon Heterojunction Solar Cells" *Thin Solid Films* 628 (Apr 2017): 107-111.
2. Promsawat, N., Promsawat, M., Janphuang, P., Marungsri, B., Luo, Z. and Pojprapai, S. "Investigation of the Effect of Temperature on Aging Behavior of Fe-doped Lead Zirconate Tita" *Functional Materials Letters* 10 (2017): 1750026.
3. Promsawat, M., Marungsri, B., Promsawat, N, Janphuang, P., Lou, Z. and Pojprapai, S. "Effects of Temperature on Aging Degradation of Soft and Hard Lead Zirconate Titanate Ceramics" *Ceramics International* 43 (Sep 2017): 9709-9714.

BL7.2W: MX 2 articles

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Songsiriritthigul, C., Suebka, S., Chen, C+J., Fuengfuloy, P. and Chuawong, P. "Crystal Structure of the N-terminal Anticodonbinding Domain of the Nondiscriminating Aspartyl-tRNA Synthetase from Helicobacter pylor" *Acta Crystallographica Section F* 73 (2017): 62-69.

BL8: XAS 39 articles

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Doydora, S., Hesterberg, D. and Klysubun, W. "Phosphate Solubilization from Poorly Crystalline Iron and Aluminum Hydroxides by AVAIL Copolymer" *Soil Science Society of America Journal* inpress
2. Eriksson, A. K., Hilier, S., Hesterberg, D., Klysubun, W., Ulen, B. and Gustafsson, J. P. "Evolution of Phosphorus Speciation with Depth in an Agricultural Soil Profile" *Geoderma* 280 (2016): 29-37.
3. Eriksson, A. K., Hesterberg, D., Klysubun, W. and Gustafsson, J. P. "Phosphorus Dynamics in Swedish Agricultural Soils as Influenced by Fertilization and Mineralogical Properties: Insights Gained from Batch Experiments and XANES Spectroscop" *Science of the Total Environment* 566-567 (Oct 2016): 1410-1419.
4. Gaur, A., Klysubun, W., Soni, B., Shrivastava, B. D., Prasad, J. and Srivastava, K. "Identification of Different Coordination Geometries by XAFS in Copper(II) Complexes with Trimesic Acid" *Journal of Molecular Structure* 1121 (Oct 2016): 119-127.
5. Le, N. T. H., Thanh, T. D., Pham, V. T., Lam, V. D., Manh, D. H., Anh, T. X., Le, T. K. C., Thammaijak, N., Hong, L. V., and Yu, S. C. "Structure and High Photocatalytic Activity of (N, Ta)-Doped TiO₂ Nanoparticles" *Journal of Applied Physics* 120 (2016): 142110.
6. Muchils, K., Fauziyah, N. A., Soontaranon, S., Limpirat, W. and Pratapa, S. "Synchrotron WAXS and XANES Studies of Silica (SiO₂) Powders Synthesized from Indonesian Natural Sands" *Journal of Physics: Conference Series* 795 (2017): 012007 **USE BL1.3w, BL8**
7. Nantharak, W., Wattanathana, W., Klysubun, W., Rimpongpisarn, T., Veranitisagul, C., Koonsaeng, N. and Laobuthee, A. "Effect of Local Structure of Sm₃þ in MgAl₂O₄:Sm₃þ Phosphors Prepared by Thermal Decomposition of Triethanolamine Complexes on their" *Journal of Alloys and Compounds* 701 (2017): 1019-1026.
8. Ozkendir, O. M., Ates, S., Celik, G. and Klysubun, W. "Influence of Boron Substitution on the Crystal and Electronic Properties of LiCrO₂ Battery Cathode" *Metallurgical and Materials Transections A* 48. 6 (Jun 2017): 2993-2998.
9. Phongamwong, T., Donphai, W., Prasitchoke, P., Rameshan, C., Barrabes, N., Klysubun, W., Rupprechter, G. and Chareonpanich, M. "Novel Visible-Light-Sensitized Chl-Mg/P25 Catalysts for Photocatalytic Degradation of Rhodamine B" *Applied Catalysis B: Environmental* 207 (Jun 2017): 326-334.
10. Sahab, C., Tumcharern, G., Chirawatkul, P., Ruangpornvisuti, V., Ekgasit, S., Wanichweacharungruang, S., Tuntulani, T., Palaga, T. and Tomapatanaget, B. "Self-Assembly of Gd³⁺/SDS/HEPES Complex and Curcumin Entrapment for Enhanced Stability, Fluorescence Image in Cellular System" *Colloids and Surfaces B: Biointerfaces* 156 (Aug 2017): 254-261.

11. Suwanpinij, P., Worabut, A., Supruangnet, R. and Dickert, H. H. "Analysis of Precipitation and Dissolution of the Microalloying Elements by X-Ray Absorption Spectroscopy (XAS)" *AIMS Materials Science* 4 (2017): 856-866. **BL3.2a-BL8**
12. Tangwatanakul, W., Sirisathitkul, C., Limphirat, W. and Yimnirun, R. "Synchrotron X-ray Absorption of Iron Oxide (Fe2O3) Nanoparticles: Effects of Reagent Concentration and Sonication in Co-precipitation Synthesis" *Chinese Journal of Physics* 55 (Jun 2017): 845-852.
13. Thanh, N. K., Loan, T. T., Anh, L. N., Duong, N. P., Soontaranon, S., Thammajak, N. and Hien, T. D. "Cation Distribution in CuFe2O4 Nanoparticles: Effects of Ni Doping on Magnetic Properties" *Journal of Applied Physics* 120 (2016): 142115. **USE BL1.3w, BL8**
14. Wattanathana, W., Veranitisagui, C., Wannapaiboon, S., Klysubun, W., Koonsaeng, N. and Laobuthee, A. "Samarium Doped Ceria (SDC) Synthesized by a Metal Triethanolamine Complex Decomposition Method: Characterization and an Ionic Conductivity Study" *Ceramics International* 43 (Sep 2017): 9823-9830.

การสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สช.

15. Donphai, W., Witoon, T., Faungnawakij, K. and Chareonpanich, M. "Carbon-Structure Affecting Catalytic Carbon Dioxide Reforming of Methane Reaction Over Ni-Carbon Composites" *Journal of CO₂ Utilization* 16 (2016) 245–256.
16. Hung, N. V., Thang, C. S., Due, N. B., Vuong, D. Q. and Tien, T. S. "Temperature Dependence of Theoretical and Experimental Debye-Waller Factors, Thermal Expansion and XAFS of Metallic Zinc" *Physica B: physics of Condensed Matter* 521 (Sep 2017): 198-203.
17. Imyen, T., Yigit, N., Dittanet, P., Barrabes, N., Fottingger, K., Rupprechter, G. and Kongkachuchay, P. "Characterization of Cu-Zn/Core-Shell Al-MCM-41 as a Catalyst for Reduction of NO: Effect of Zn Promoter" *Industrial & Engineering Chemistry Research* 55 (2016): 13050-13061.
18. Intarasiri, S., Bootkul, D., Tippawan, U. and Songsiriritthigul, P. "Color Improvement of Rubies by Ion Beam Techniques" *Suface & Coatings Technology* 306A (Nov 2016): 205-210.
19. Loan, T. T., Duong, N. P., Thanh, N. K., Anh, L. N., Nga, T. T. V. and Hien, T. D. "Crystal Structure, Cation Distribution and Oxidation State of Spinel Ferrite Nanoparticles: A Synchrotron XRD and XANES Study" *Journal of Nanoscience and Nanotechnology* 16 (2016): 7973-7977. **USE BL1.3w+BL8**
20. Monarumit, S., Satitkune, S. and Wongkokua, W. "Role of Ilmenite Micro-Inclusion on Fe Oxidation States of Natural Sapphires" *Journal of Physics: Conf. Series* 860 (2017): 012074.
21. Mongkhonsin, B., Nakbanpote, W., Hokura, A., Nuengchamnong, N. and Maneechai, S. "Phenolic Compounds Responding to Zinc and/or Cadmium Treatments in Gynura Pseudochina (L.) DC. Extracts and Biomass" *Plant Physiology and Biochemistry* 109 (2016): 549-560.
22. Nguyen, H. K. D. and Nguyen, D. T. "Preparation of Meso-Structured Silica-Calcium Mixed Oxide (MSCMO) Catalyst for Converting Vietnamese Rubber Seed Oil to Biodiesel" *Journal of Porous Materials* 34. 2 (Feb 2017): 314-319.
23. Poochai, C. "Highly Active Dealloyed Cu@Pt Core-Shell Electrocatalyst Towards 2-Propanol Electrooxidation in Acidic Solution" *Applied Surface Science* 396 (Feb 2017): 1793-1801.
24. Phoohinkong, W., Pavasupree, S., Wannagon, A., Boonyarattanakalin, K., Mekprasart, W. and Pecharapa, W. "Electrochemical Properties of Nanopowders Derived from Ilmenite and Leucoxene Natural Minerals" *Ceramics International* 43 (Aug 2017): S717-S722. **USE BL5.1-BL8**
25. Phoohinkong, W., Pavasupree, S., Wannagon, A., Sanguanpak, S., Boonyarattanakalin, K., Mekprasart, W. and Pecharapa, W. "Characterization and X-Ray Absorption Spectroscopy of Ilmenite Nanoparticles Derived from Natural Ilmenite ore via Acidassisted Mechanical Ball-Milling Process" *Advances in Natural Sciences: Nanoscience and Nanotechnology* 8 (2017): 035012.
26. Phoohinkong, W., Foophow, T. and Pecharapa, W. "Synthesis and Characterization of Copper Zinc Oxide Nanoparticles Obtained via Metathesis Process" *Advances in Natural Sciences: Nanoscience and Nanotechnology* 8 (2017): 035003.

27. Prasatkhettragarn, A., Sriboonpeng, C., Jantaratana, P., Vittayakorn, N., Thammajak, N., Jutimoosik, J. Maensiri, S. and Yimnirun, R. "Local Structure, Electrical and Magnetic Properties of Fe-doped Sr₂(Ni,Mo) O₆ Double Perovskite" *Ceramics International* 43 (Aug 2017): S140-S144.
28. Sudrajat, H. "Cu(II)/Bi₂O₃ Photocatalysis for Toxicity Reduction of Atrazine in Water Environment under Different Light Wavelengths" *Environmental Processes* 4 (Jun 2017); 439-449.
29. Sudrajat, H. "Reducing Agent-Free Formation of Cu(I) Nanoclusters on gC₃N₄ for Enhanced Photocatalysis" *Journal of Alloys and Compounds* in press. **USE BL3.2a-BL8**
30. Sudrajat, H. and Sujaridworakun, P. "Low-Temperature Synthesis of δ-Bi₂O₃ Hierarchical Nanostructures Composed of Ultrathin Nanosheets for Efficient Photocatalysis" *Materials Design* 130 (Sep 2017): 501-511. **USE BL3.2a-BL8**
31. Sudrajat, H. and Sujaridworakun, P. "Insights into Structural Properties of Cu Species Loaded on Bi₂O₃ Hierarchical Structures for Highly Enhanced Photocatalysis" *Journal of Catalysis* 352 (2017) 394 - 400.
32. Suwanpinij, P., Dickekrt, H. H. and Sricharoenchai, P. "Precipitation Simulation and X-Ray Absorption Spectroscopy for Hot Rolled V-HSLA Steel." *Acta Metallurgica Slovaca* 22 (2016): 249-258.
33. Vidayanti, V., Choesin, D. N., Iriawati, I. "Phytoremediation of Chromium: Distribution and Speciation of Chromium in *Typha Angustifolia*" *International Journal of Plant Biology* 8 (2017): 6870.
34. Wattanawikkam, C. and Pecharapa, W. "sonochemical Synthesis, Characterization and Photocatalytic Activity of Perovskite ZnTiO₃ Nanopowders" *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control* 63. 10 (Oct 2016): 1663-1667.
35. Wattanawikkam, C., Pecharapa, W. and Ishihara, K. N. "X-Ray Absorption Spectroscopy Analysis and Magnetic properties of M-Doped TiO₂ Nanoparticles (M=Co, Mn, Ni and Zn) Prepared by Co-Precipitation Method" *Ceramics International* 43 (Aug 2017): S397-S402.
36. Werner, F., Mueller, C. W., Thieme, J., Gianoncelli, A., Rivard, C., Hoschen, C. and Prietzel, J. "Micro-Scale Heterogeneity of Soil Phosphorus Depends on Soil Substrate and Depth" *Scientific Reports* 7 (2017).
37. Wisawapipat, W., Charoensri, K. and Runglertrakoolchai, J. "Solid-Phase Speciation and Solubility of Phosphorus in an Acid Sulfate Paddy Soil during Soil Reduction and Reoxidation as Affected by Oil Palm Ash and Biochar" *Journal of Agricultural and Food Chemistry* 65 (2017): 704-710.
38. Wisawapipat, W. and Kretzchmar, R. "Solid Phase Speciation and Solubility of Vanadium in Highly Weathered Soil" *Environmental Science & Technolgy* 51 (2017): 8254-8262.
39. Wolfbeisser, A., Sophiphun, O., Bernardi, J., Wittayakun, J., Fottinger, K. and Rupprechter, G. "Methane Dry Reforming Over Ceria-Zirconia Supported Ni Catalysts" *Catalysis Today* 277 (Nov 2016): 234-245.

IR end station: 7 articles

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Dunkhunthod, B., Thumanu, K. and Eumkeb, G. "Application of FTIR Microspectroscopy for Monitoring and Discrimination of the Anti-Adipogenesis Activity of Baicalein in 3T3-L1 Adipocytes" *Vibrational Spectroscopy* 89 (Mar 2017): 92-101.
2. Junhom, C., Weerapeeyakul, N., Tantranuch, W. and Thumanu, K. "Partial Least Squares Regression and Fourier Transform Infrared (FTIR) Microspectroscopy for Prediction of Resistance in Hepatocellular Carcinoma HepG2 Cells" *Experimental Cell Research* 351 (Feb 2017): 82-90.
3. Priprem, A., Johns, J. R., Limsiththichaikoon, S., Limphirat, W., Mahakunakorn, P. and Johns, N.P. "Intranasal Melatonin Nanosomes: Pharmacokinetic, Pharmacodynamics and Toxicity Studies" *Therapeutic Delivery* 8 (2017): 373-390.
4. Thanh, T. L., Thumanu, K., Wongkaew, S., Boonkerd, N., Teamroong, N., Phansak, P. and Buensanteai, N. "Salicylic Acid-Induced Accumulation of Biochemical Components associated with

- Resistance Against Xanthomonas Oryzae pv. oryzae in Rice" *Journal of Plant Interactions* 120 (2017): 108-120.
5. Thumanu, K., Wongchalee, D., Sompong, M., Phansak, P., Thanh, T. L., Namanusart, w., Vechklang, K., Kaewnum, S. and Buensanteai, N. "Synchrotron-Based FTIR Microspectroscopy of Chili Resistance Induced by Bacillus Subtilis Strain D604 Against Anthracnose Disease" *Journal of Plant interactions* 12 (2017): 255-263.

การสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สช.

6. Batpho, K., Boonsuptip, W. and Rachtanapun, C. "Antimicrobial Activity of Collagen Casing Impregnated with Nisin Against Foodborne Microorganisms Associated with Ready-to-Eat Sausage" *Food Control* 73B (Mar 2017): 1342-1352.

TSC: 6 articles

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Aim-O, P., Wongsawang, D., Phruksarojanakun, P. and Tancharakorn, S. "Identification Monte Carlo Simulation of Innovative Neutron and Photon Shielding Material Composing of High Density Concrete, Waste Rubber, Lead and Boron Carbide" *Journal of Physics: Conf. Series* 860 (2017): 012043.
2. Fongkaew, I., T-Thienprasert, J. and Limpijumnong, S. "Identification of Mn Site in Mn-Doped SrTiO₃: First Principles Study" *Ceramics International* 43 (Aug 2017): S381-S385.
3. Sailuam, W., Sarasamak, K., Mendez Polenco, M. A. "Pressure Induced Phase Transformations of LiGaO₂ First Principles Study" *Ceramics International* 43 (Aug 2017): S376-S380.

การสารระดับนานาชาติที่ตีพิมพ์ จากนักวิจัยจากสถาบันอื่น ที่เขียนกิตติกรรมประกาศให้ สช.

4. Eknapakul, T., Fongkaew, I., Siriroj, S., Vidyasagar, R., Denlinger, J. D., Bawden, L., Mo, S-K. and King, P.D.C. "Nearly-Free-Electron System of Monolayer Na on the Surface of Single-Crystal HfSe₂" *Physical Review B* 94 (2016): 201121.
5. Na Phattalung, S., Limpijumnong, S. and Yu, J. "Passivated Co-doping Approach to Bandgap Narrowing of Titanium Dioxide with Enhanced Photocatalytic Activity" *Applied Catalysis B: Environmental* 200 (Jan 2017): 1-9.
6. Reunchan, P., Umezawa, N., Janotti, A., T-Thienprasert, J. and Limpijumnong, S. "Energetics and Optical Properties of Nitrogen Impurities in SrTiO₃ from Hybrid Density-Functional Calculations" *Physical Review B* 95 (May 2017): 205204.

Laboratory: 1 article

การสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Mayamae, J., Vittayakorn, W., Sukkha, U., Bongkarn, T., Muanghlua, R. and Vittayakorn, N. "High Piezoelectric Response in Lead Free 0.9BaTiO₃-(0.1-x)CaTiO₃-xBaSnO₃ Solid Solution" *Ceramics International* 43 (Aug 2017): S121-S128.