

2016=2559 (Oct 2015 – Sep 2015)

BL1.3W: SAXS 13 articles

วารสารระดับนานาชาติที่ดีพิมพ์ จากบุคลากร สข. ที่เป็นผู้แต่งร่วม

1. Anh, L. N., Loan, T. T., Duong, N. P., Soontaranon, S., Nga, T. T. V. and Hien, T. D. "Influence of Y and La Substitution on Particle Size, Structural and Magnetic Properties of Nanosized Nickel Ferrite Prepared by Using Citrate Precursor Method" *Journal of Alloys and Compounds* 647 (Oct 2015): 419-426. **Use BL1.3, BL8**
2. Chokprasombat, K., Koyvanich, K., Sirisathitku, C., Harding, P. and Rugmai, S. "Investigation of Surfactant Effect on Size Distribution of FePt-based Nanoparticles by Synchrotron SAXS and TEM" *Transactions of The Indian Institute of Metals* 69. 3 (Apr 2016): 733-740.
3. Galbraith, S. C., Flood, A. E., Rugmai, S. and Chirawatkul, P. "An Investigation of the Relationship Between Surface Roughness, Internal Crystal Perfection and Crystal Growth Rate" *Chemical Engineering & Technology* 39. 2 (Feb 2016): 199-207.
4. Hirun, N., Tantissaiyakul, V., Sangfai, T., Rugmai, S. and Soontaranon, S. "Nano-Structure, Phase Transition and Morphology of Gallic Acid and Xyloglucan Hydrogel" *Polymer Bulletin* 73 (Aug 2016): 2211-2226.
5. Kiatpongarp, W., Rugmai, S., Rolland-Sabate, A., Buleon, A. and Tongta, S. "Spherulitic Self-Assembly of Debranched Starch from Aqueous Solution and Its Effect on Enzyme Digestibility" *Food Hydrocolloids* 55 (2016): 235-243.
6. Phinjaroenphan, R., Kim, Y. Y., Ree, B. J., Isono, T., Lee, J., Rugmai, S., Kim, H., Maensiri, S., Kakuchi, T., Satoh, T., and Ree, M. "Complex Thin Film Morphologies of Poly(n-hexyl Isocyanate)(5k,10k)-Poly(ϵ -caprolactone)1-3(10k,17k) Miktoarm Star Polymers" *Macromolecules* 48 (2016): 5816-5833.
7. Pholnak, C., Sirisathitkul, C., Soontaranon, S. and Rugmai, S. "UV-Vis Absorption and Small Angle X-ray Scattering Spectra of Commercial Polyurethane Coating Filled with Zinc Oxide" *The National Academy Science Letters* 39. 2 (Apr 2016): 125-128.
8. Rattanata, N., Klaynongsruang, S., Leelayuwat, C., Limpaboon, T., Lulitanond, A., Boonsiri, P., Chio-Srichan, S., Soontaranon, S., Rugmai, S. and Daduang, J. "Gallic Acid Conjugated with Gold Nanoparticles: Antibacterial Activity and Mechanism of Action on Foodborne Pathogens" *International Journal of Nanomedicine* 11 (2016): 3347-3356.
9. Sarnphim, P., Soontaranon, S., Sirisathitkul, C., Koyvanich, K. and Chokprasombat, K. "Synchrotron SAXS Characterization of Nanoparticles Assembled at the Liquid-Air Interface" *University Politehnica Of Bucharest Scientific Bulletin-Series A-Applied Mathematics* 78. 3 (2016): 291-297.
10. Sirisathitkul, C., Pholnak, C., Chareonsuk, T., Panchawirat, P. and Rugmai, S. "Comparative SAXS, DSC and FT-IR Spectra of Polyurethane Coatings Filled with Hexagonal and Sword-like Zinc Oxide" *The Arabian Journal for Science and Engineering* 41. 6 (Jun 2016): 2339-2344.
11. Sunaryono, Taufiq, A., Rahman Putra, E. G., Okazawa, A., Watanabe, I., Kojima, N., Rugmai, S. and Soontaranon, S. "Small-Angle X-Ray Scattering Study on PVA/Fe₃O₄ Magnetic Hydrogels" *NANO: Brief Reports and Reviews* 11 (2016): 1650027.

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12. Mantaranon, N., Kotaki, M., Lim, C. T. and Chirachanchai, S. "In-situ Formation of Benzoxazines in Polyoxymethylene: A Simple Approach for Retarding Formaldehyde Generation and Tuning Mechanical Properties under Semi-interpenetrating Network" *RSC Advances* 6 (2016): 91468-91476.

13. Nopparut, A. and Amornsakchai, T. "Influence of Pineapple Leaf Fiber and its Surface Treatment on Molecular Orientation in, and Mechanical Properties of, Injection Molded Nylon Composites" *Polymer Testing* 52 (2016): 141-149.

BL2.2: TRXAS 3 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สข. ที่เป็นผู้แต่งร่วม

1. Kaewbuddee, D., Chanpiwat, P., Kidkhunthod, P. and Wantala, K. "Lead Adsorption Behaviors on Nanoscale Zero Valent Irons (nZVI) Coupled with Rice Husk MCM-41" *Sains Malaysiana* 45. 7 (2016): 1121-1133. **Use BL2.2, BL5.2**
2. Poo-Arporn, Y. and Palangsuntikul, R. "Situ X-ray Absorption Near Edge Structure Study of Amorphous-TiO₂ Phase Transformation" *Journal of Nanoscience and Nanotechnology* 16 (Jun 2016): 6551-6554.

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3. Yunphuttha, C., Porntheeraphat, S., Wongchaisuwat, A., Tangbunsuk, S., Marr, D.W.M. and Viravathana, P. "Characterization of La_{1-x}Sr_xMnO₃ Perovskite Catalysts for Hydrogen Peroxide Reduction" *Physical Chemistry Chemical Physics* 18 (2016): 16786—16793. **Use BL2.2, BL5.2, BL8**

BL3.2Ua: PES 18 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สข. ที่เป็นผู้แต่งร่วม

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2. Supruangnet, R., Christian, M., Peffen, J. C., Nakajima, H., Rattanasuporn, S., Photongkam, P., Jearanaikoon, N. and Busavaporn, W. "Chemical Modification of B₄C cap Layers on Pd/B₄C Multilayers" *Applied Surface Science* 367 (Mar 2016): 347-353. **Use BL3.2a-b**
3. Suwanwong, S., Eknapakul, T., Rattanachai, Y., Masingboon, Y., Rattanasuporn, S., Pattanakun, R., Nakajima, H., King, P.D.C. Hodak, S.K. and Meevasana, W. "The Dynamics of Ultraviolet-Induced Oxygen Vacancy at the Surface of Insulating SrTiO₃(001)" *Applied Surface Science* 355 (Nov 2015): 210-212. **BL3.2a, BL6a**
4. Talik, N. A., Woon, K. L., Yap, B. K., Wong, W. S., Whitcher, T. J., Chanlek, N., Nakajima, H., Saisopa, T. and Songsiriritthigul, P. "Highly Efficient Processable Molybdenum Trioxide as a Hole Blocking Interlayer for Superyellow Organic Light Emitting Diode" *Journal of Physics D Applied Physics* 49 (2016): 395105.
5. Tunmee, S., Supruangnet, R., Nakajima, H., Zhou, X., Arakawa, S., Suzuki, T., Kanda, K., Ito, H., Komatsu, K. and Saitoh, H. "Study of Synchrotron Radiation Near-Edge X-Ray Absorption Fine-Structure of Amorphous Hydrogenated Carbon Films at Various Thicknesses" *Journal of Nanomaterials* 2015 (2015): ID 276790.
6. Whitcher, T. J., Wong, W. S., Talik, A. N., Woon, K. L., Chanlek, N., Nakajima, H., Saisopa, T. and Songsiriritthigul, P. "Electrostatic Model of the Energy-Bending within Organic Semiconductors: Experiment and Simulation" *Journal of Physics: Condensed Matter* 28. 36 (Sep 2016): 365002.
7. Whitcher, T. J., Woon, K. L., Wong, W. S., Chanlek, N., Nakajima, H., Saisopa, T. and Songsiriritthigul, P. "Interfacial Behavior of Resistive Switching in ITO-PVK-Al WORM Memory Devices" *Journal of Physics D: Applied Physics* 49 (2016): 075104.

- Whitcher, T. J., Wong, W. S., Talik, A. N., Woon, K. L., Chanlek, N., Nakajima, H., Saisopa, T. and Songsiriritthigul, P. "Investigation Into the Gaussian Density of States Widths of Organic Semiconductors" *Journal of Physics D: Applied Physics* 49 (2016): 325106.

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- Abdul Rashid, N. M., Haw, C., Chiu, W., Khanis, N. H., Rohaizad, A., Khiewb, P. and Rahman, S. A. "Structural- and Optical-Properties Analysis of Single Crystalline Hematite (α -Fe₂O₃) Nanocubes Prepared by One-Pot Hydrothermal Approach" *CrystEngComm* 18 (2016): 4720-4732.
- Chang, B. Y. S., Mehmood, M. S., Pandikumar, A., Huang, N. M., Lim, H. N., Marlinda, Ab R., Yusoff, N. and Chiu, W. S. "Hydrothermally Prepared Graphene-Titania Nanocomposite for the Solar Photocatalytic Degradation of Methylene Blue" *Desalination and Water Treatment* 57 (2016): 238-245.
- Gan, J. K., Lim, Y. S., Huang, N. M. and Lim, H. N. "Effect of pH on Morphology and Supercapacitive Properties of Manganese Oxide/Polypyrrole Nanocomposite" *Applied Surface Science* 357 (Dec 2015): 479-486.
- Lim, S. P., Pandikumar, A., Lim, H. N. and Huang, N. M. "Essential Role of N and Au on TiO₂ as Photoanode for Efficient Dye-Sensitized Solar Cells" *Solar Energy* 125 (2016): 135-145.
- Noor, An'amt M., Rameshkumar, P., Huang, N. M. and Wei, L. S. "Visual and Spectrophotometric Determination of Mercury(II) Using Silver Nanoparticles Modified with Graphene Oxide" *Microchimica Acta* 183. 2 (Feb 2016): 597-613.
- Saroni, A., Goh, B. T., Alizadeh, M. and Rahman, S. A. "Composition Control of InN/WO₃ Nanocomposite by In-Situ Reactive Plasma Annealing" *Chemical Physics Letters* 656 (May 2016): 203-208.
- Sudrajat, H. and Babel, S. "Comparison and Mechanism of Photocatalytic Activities of N-ZnO and N-ZrO₂ for the Degradation of Rhodamine 6G" *Environmental Science and Pollution Research* 23. 10 (May 2016): 10177-10188.
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BL3.2Ub: PES 1 article

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สข. ที่เป็นผู้แต่งร่วม

- Supruangnet, R., Christian, M., Peffen, J. C., Nakajima, H., Rattanasuporn, S., Photongkam, P., Jearanaikoon, N. and Busayaporn, W. "Chemical Modification of B4C cap Layers on Pd/B4C Multilayers" *Applied Surface Science* 367 (Mar 2016): 347-353. **Use BL3.2a-b**

BL5: SUT-Nano-SLRI

BL5.1: XPS 8 articles

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- Rakmae, S., Keawkumay, C., Osakoo, N., Montalbo, K. D., de Leon, Rizalinda L., Kidkhunthod, P., Chanlek, N., Roessner, F., Prayoonpokarach, S. and Wittayakun, J. "Realization of Active Species in Potassium Catalysts on Zeolite NaY Prepared by Ultrasound-Assisted Impregnation with Acetate Buffer and Improved Performance in Transesterification of Palm Oil" *Feul* 184 (2016); 512-517
Use BL5.1-BL5.2

- Sonsupap, S., Kidkhunthod, P., Chanlek, N., Pinitsoontorn, S. and Maensiri, S. "Fabrication, Structure, and Magnetic Properties of Electrospun Ce_{0.96}Fe_{0.04}O₂ Nanofibers" *Applied Surface Science* 380 (Sep 2016); 16-22. **Use BL5.1, BL5.2**

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- Kaiprommarat, S., Kongparakul, S., Reubroycharoen, P., Guan, G. and Samart, C. "Highly Efficient Sulfonic MCM-41 Catalyst for Furfural Production: Furan-Based Biofuel Agent" *Fuel* 174 (Jun 2016): 189-196.
- Khajonrit, J. Phumying, s. and Maensiri, S. "Structure and Magnetic/Electrochemical Properties of Cu-doped BiFeO₃ Nanoparticles Prepared by a Simple Solution Method" *Japanese Journal of Applied Physics* 55 (2016): 06GJ14. **Use BL5.1, BL5.2**
- Meeporn, K., Maensiri, S. and Thongbai, P. "Abnormally Enhanced Dielectric Permittivity Inpoly(vinylidene fluoride)/Nanosized-La₂NiO₄-I Films" *Applied Surface Science* 380 (Sep 2016): 67-72. **Use BL5.1, BL5.2**
- Ponhan, W., Amornkitbamrung, V. and Maensiri, S. "Ni-doped La_{0.5}Sr_{0.5}TiO₃ Nanofibers: Fabrication and Intrinsic Ferromagnetism" *Journal of Physics: Condensed Matter* 55 (2016): 06GJ13.
- Sinprachim, T., Phumying, S. and Maensiri, S. "Electrochemical Energy Storage Performance of Electrospun AgOx-MnOx/CNF Composites" *Journal of Alloys and Compounds* 677 (Aug 2016): 1-11. **Use BL5.1, BL5.2**
- Tran, T. T. V., Kaiprommarat, S., Kongparakul, S., Reubroycharoen, P., Guan, G., Nguyen, M. H. and Samart C. "Green Biodiesel Production from Waste Cooking Oil Using an Environmentally Benign Acid Catalyst" *Waste Management* 52 (2016): 637-374.

BL5.2: XAS 28 articles

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- Kaewbuddee, D., Chanpiwat, P., Kidkhunthod, P. and Wantala, K. "Lead Adsorption Behaviors on Nanoscale Zero Valent Irons (nZVI) Coupled with Rice Husk MCM-41" *Sains Malaysiana* 45. 7 (2016): 1121-1133. **Use BL2.2-5.2**
- Ketwong, P., Kidkhunthod, P. and Pookmanee, P. "Effect of Ethanol Assistance on Chemical Structure of Ferroelectric Bismuth Vanadate via Solvothermal Method" *Integrated Ferroelectrics* 175 (2016): 9-17.
- Kidkhunthod, P., Nilmoung, S., Mahakot, S., Rodporn, S., Phumying, S. and Maensiri, S. "A Structural Study and Magnetic Properties of Electrospun Carbon/Manganese Ferrite(C/MnFe₂O₄) Composite Nanofibers" *Journal of Magnetism and Magnetic Materials* 401 (Mar 2016): 436-442.
- Kidkhunthod, P., Bootchanont, A. and Barnes, A. C. "Structural Investigation of Gallate Glass Using L₃-edge Extended X-Ray Absorption Spectroscopy and Computer Simulation" *Journal of Non-Crystalline Solids* 448 (2016) 27-30. **Use BL5.2, BL8**
- Nilmoung, S., Kidkhunthod, P. and Maensiri, S. "Local Structure Determination of Carbon/Nickel Ferrite Composite Nanofibers Probed by X-ray Absorption Spectroscopy" *Journal of Nanoscience and Nanotechnology* 15 (Nov 2015): 9250-9255.
- Rakmae, S., Keawkumay, C., Osakoo, N., Montalbo, K. D., de Leon, Rizalinda L., Kidkhunthod, P., Chanlek, N., Roessner, F., Prayoonpokarach, S. and Wittayakun, J. "Realization of Active Species in Potassium Catalysts on Zeolite NaY Prepared by Ultrasound-Assisted Impregnation with Acetate Buffer and Improved Performance in Transesterification of Palm Oil" *Feul* 184 (2016); 512-517 **Use BL5.1-BL5.2**
- Sonsupap, S., Kidkhunthod, P., Chanlek, N., Pinitsoontorn, S. and Maensiri, S. "Fabrication, Structure, and Magnetic Properties of Electrospun Ce_{0.96}Fe_{0.04}O₂ Nanofibers" *Applied Surface Science* 380 (Sep 2016); 16-22. **Use BL5.1, BL5.2**

8. Witoon, T., Kachaban, N., Donphai, W., Kidkhunthod, P., Faungnawakij, K., Chareopanich, M. and Limtrakul, J. "Tuning of Catalytic CO₂ Hydrogenation by Changing Composition of CuO–ZnO–ZrO₂ Catalysts" *Energy Conversion and Management* 118 (2016) 21–31
9. Wongsaprom, K., Sonsupap, S., Maensiri, S. and Kidkhunthod, P. "Room-Temperature Ferromagnetism in Fe-Doped In₂O₃ Nanoparticles" *Applied Physics A: Materials Science & Processing* 121 (Oct 2015): 239-244.

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10. Bootchanont, A., Rujirawat, S., Yimnirun, R., Guo, R. and Bhalla, A. "Local Structure Study of Phase Transition Behavior in Ba(Ti,Sn)O₃ Perovskite by X-ray Absorption Fine Structure" *Ceramics international* 42, 7 (May 2016): 8151-8154. **Use BL5.2-8**
11. Khajonrit, J. Phumying, S. and Maensiri, S. "Structure and Magnetic/Electrochemical Properties of Cu-doped BiFeO₃ Nanoparticles Prepared by a Simple Solution Method" *Japanese Journal of Applied Physics* 55 (2016): 06GJ14. **Use BL5.1, BL5.2**
12. Hunpratub, S., Karaphun, A., Phokha, S. and Swatsitang, E. "Optical and Magnetic Properties of La_{1-x}Ga_xFeO₃ Nanoparticles Synthesized by Polymerization Complex Method" *Applied Surface Science* 380 (Sep 2016): 52-59.
13. Luadthong, C., Khemthong, P., Nualpaeng, W. and Faungnawakij, K. "Copper Ferrite Spinel Oxide Catalysts for Palm Oil Methanolysis" *Applied Catalysis A: General* 525 (2016): 68-75.
14. Manh, D. H., Tung, D. K., Phong, L. T. H., Phuc, N. X., Phong, P. T., Jutimosik, J. and Yimnirun, R. "Complementary Studies of Phase Formation During Fabrication of Fe_{0.65}Co_{0.35} Nanoparticles by Mechanical Alloying" *Journal of Electronic Materials* 45, 5 (May 2016): 2501-2507.
15. Meeporn, K., Maensiri, S. and Thongbai, P. "Abnormally Enhanced Dielectric Permittivity Inpoly(vinylidene fluoride)/Nanosized-La₂NiO₄-I Films" *Applied Surface Science* 380 (Sep 2016): 67-72. **Use BL5.1, BL5.2**
16. Phokha, S., Klinkaewnarong, J., Hunpratub, S., Boonserm, K., Swatsitang, E. and Maensiri, S. "Ferromagnetism in Fe-doped MgO Nanoparticles" *Journal of Materials Science Materials in Electronics* 27 (Jan 2016): 33-39.
17. Phokha, S., Pinitsoontorn, S., Rujirawat, S. and Maensiri, S. "Polymerized Complex Synthesis and Effect of Ti Dopant on Magnetic Properties of LaFeO₃ Nanoparticles" *Journal of Nanoscience and Nanotechnology* 15, 11 (Nov 2015): 9171-9177.
18. Phokha, S., Pinitsoontorn, S., Rujirawat, S. and Maensiri, S. "Polymer Pyrolysis Synthesis and Magnetic Properties of LaFeO₃ Nanoparticles" *Physica B* 476 (Nov 2015) 55–60.
19. Ponhan, W., Amornkitbamrung, V. and Maensiri, S. "Ni-doped La_{0.5}Sr_{0.5}TiO₃ Nanofibers: Fabrication and Intrinsic Ferromagnetism" *Journal of Physics: Condensed Matter* 55 (2016): 06GJ13.
20. Rivera, K. K. P., de Luna, M. D. G., Suwannaruang, T. and Wantala, K. "Photocatalytic Degradation of Reactive Red 3 and Alachlor Over Uncalcined Fe–TiO₂ Synthesized via Hydrothermal Method" *Desalination and Water Treatment* 57 (2016): 22017-22028.
21. Sinprachim, T., Phumying, S. and Maensiri, S. "Electrochemical Energy Storage Performance of Electrospun AgOx-MnOx/CNF Composites" *Journal of Alloys and Compounds* 677 (Aug 2016): 1-11. **Use BL5.1, BL5.2**
22. Sophiphun, O., Demir, D., Föttinger, K., Ruppel, G., Loiha, S., Neramittagapong, A., Prayoonpokarach, S. and Wittayakun, J. "Decrement of Coke from Phenol Hydroxylation on Iron on Zeolite Beta by Employing Dealuminated Support" *Reaction Kinetics Mechanisms and Catalysis* 117, 2 (Apr 2016): 705-713.
23. Subjalearndee, N. and Intasanta, V. "Thermal Relaxation in Combination with Fiberglass Confined Interpenetrating Networks: a Key Calcination Process for As-Desired Free Standing Metal Oxide Nanofibrous Membranes" *RSC Advances* 6 (2016): 86798-86807.

24. Swatsitang, E., Karaphun, A., Phokha, S. and Putjuso, T. "Characterization and Magnetic Properties of BaSn₁₂FexO₃ Nanoparticles Prepared by a Modified Sol–Gel Method" *The Journal of Sol-Gel Science and Technology (JSST)* 77 (Jan 2016): 78-84.
25. Swatsitang, E., Phokha, S., Hunpratub, S., Usher, B., Bootchanont, A., Maensiri, S. and Chindaprasirt, P. "Characterization and Magnetic Properties of Cobalt Ferrite Nanoparticles" *Journal of Alloys and Compounds* 664 (Apr 2016) 792-797.
26. Witoon, T., Chalorngtham, J., Dumrongbunditkul, P., Chareonpanich, M. and Limtrakul, J. "CO₂ Hydrogenation to Methanol over Cu/ZrO₂ Catalysts: Effects of Zirconia Phases" *Chemical Engineering Journal* 293 (2016): 327-336.
27. Wongmaneeung, R., Tipakontitkul, R., Jantaratana, P., Bootchanont, A., Jutimoosik, J., Yimnirun, R. and Ananta, S. "Structure and Phase Formation Behavior and Dielectric and Magnetic Properties of Lead Iron Tantalate-Lead Zirconate Titanate Multiferroic Ceramics" *Materials Research Bulletin* 75 (2016): 91-99.
28. Yunphuttha, C., Porntheeraphat, S., Wongchaisuwat, A., Tangbunsuk, S., Marr, D.W.M. and Viravathana, P. "Characterization of La_{1-x}Sr_xMnO₃ Perovskite Catalysts for Hydrogen Peroxide Reduction" *Physical Chemistry Chemical Physics* 18 (2016): 16786–16793. **Use BL2.2, BL5.2, BL8**

BL6a: DXL 2 articles

วารสารระดับนานาชาติที่ตีพิมพ์จากบุคลากร สช. ที่เป็นผู้แต่ง

1. Suwanwong, S., Eknapakul, T., Rattanachai, Y., Masingboon, Y., Rattanasuporn, S., Pattanakun, R., Nakaiima, H., King, P.D.C. Hodak, S.K. and Meevasana, W. "The Dynamics of Ultraviolet-Induced Oxygen Vacancy at the Surface of Insulating SrTiO₃(001)" *Applied Surface Science* 355 (Nov 2015): 210-212. **BL3.2a, BL6a**
2. Jaikaew, W., Patanakul, R. and Schulte, A. "Electrical Cable-based Copper Disk Electrodes as Oxidase Biosensor Platforms with Cathodic H₂O₂ Readout" *Electroanalysis* (2016):.

BL6b: XRF 1 article

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1. Kimsamran, P., Wonprasaid, S., Tancharakorn, S. and Tantanuch, W. "Analysis of Phosphorus, Potassium and Calcium Accumulation in Grape Leaves by Synchrotron Radiation X-Ray Fluorescence" *International Journal of Advances in Agricultural and Environmental Engineering* 3 (2016): 82-86.

BL8: XAS 44 articles

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