

2018=2561 (Oct 2017-Sep 2018)

BL1.1: MXT 5 articles

วารสารระดับนานาชาติที่ดีพิมพ์จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Ozkendir, O M., Gundogmus, H. and Saiyasombat, C. "Crystal and Electronic Structure of (Y,Pr)_xSm_{1-x}BO₃ Oxide" *The Journal of Electronic Materials* 47. 3 (2018): 2050-2056.
2. Prompa, K., Swatsitang, E., Saiyasombat, C. and Putjuso, T. "Very High Performance Dielectric and Non-Ohmics Properties of CaCu₃Ti₄.2O₁₂ Ceramics for X8R Capacitors" *Ceramics International* 44 (Aug 2018): 13267-13277.
3. Suwannaruang, T., Kamonsuangkasem, K., Kidkhunthod, P., Chirawatkul, P., Saiyasombat, C., Chanlek, N. and Wantala, K. "Influence of Nitrogen Content Levels on Structural Properties and Photocatalytic Activities of Nanorice-like N-doped TiO₂ with Various Calcination Temperatures" *Materials Research Bulletin* 105 (Sep 2018) 265 – 276. **Use BL1.1W, BL5.3**

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4. Rittirong, A. and Saenboonruang, K. "Comparative Measurement of Metal Contents in Raw and Cooked Rice Samples prepared in Different Rice Cookers using SR-XRF and Health Risk Assessment" *The Journal of Food Measurement and Characterization* 12 (2018): 2801-2808.
5. Gundogmus, H. "The Effect of Y Substitution on Bi-2212 Superconductor by Sol-Gel Method" *The Journal of Materials Science: Materials in Electronics* 28 (2017): 12598-12605.

BL1.2W: 1 articles

วารสารระดับนานาชาติที่ดีพิมพ์จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Promsawat, N., Promsawat, M., Junphuang, P., Luo, Z., Beeby, S., , Roiviriya, C., Pakawanit, P. and Pojprapai, S. "CNTs-Added PMNT/PDMS Flexible Piezoelectric Nanocomposite for Energy Harvesting Application" *Integrated Ferroelectrics*. **Use BL1.2W, BL6a**

BL1.3W: SAXS 9 articles

วารสารระดับนานาชาติที่ดีพิมพ์จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Auksornkul, S., Soontaranon, S., Kaewhan, C. and Prasassarakich, P. "Effect of the Blow-Up Ratio on Morphology and Engineering Properties of Threelayered Linear Low-Density Polyethylene Blown Films" *Journal of Plastic Film & Sheeting* 79 (Oct 2017): 46-59.
2. Khoonsap, S., Rugmai, S., Hung, W.S., Lee, K. R., Klinrsisuk, S. and Amnuaypanich, S. "Promoting Permeability-Selectivity Anti-Trade-Off Behavior in Polyvinyl Alcohol (PVA) Nanocomposite Membranes" *Journal of Membrane Science* 544 (Dec 2017): 287-296.
3. Thanh, N. K., Loan, T. T., Duong, N. P., Anh, L. N., Nguyet, D. T. T., Nam, N. H., Soontaranon, S., Klysubun, W. and Hien, T. D. "Cation Distribution Assisted Tuning of Magnetization in Nanosized Magnesium Ferrite" *Physica Status Solidi (a)*. **Use BL1.3W, BL8**
4. Yuenyao, A., Petchyam, N., Kamonsutthipaijit, N., Chaiyen, P. and Pakotiprapha, D. "Crystal Structure of the Flavin Reductase of *Acinetobacter Baumannii* p-hydroxyphenylacetate 3-hydroxylase (HPAH) and Identification of Amino acid Residues Underlying its Regulation by Aromatic Ligands" *Archives of Biochemistry and Biophysics* 653 (Jun 2018): 24-38.
5. Waesateh, K., Saiwari, S., Ismail, H., Othman, N., Soontaranon, S. and Hayeemasae, N. "Features of Crystallization Behavior of Natural Rubber/Halloysite Nanotubes using Synchrotron Wide Angle X-ray Scattering" *International Journal of Polymer Analysis and Characterization* 23 (2018): 260-270.

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6. Boonna, S. and Tongta, S. "Structural Transformation of Crystallized Debranched Cassava Starch During Dual Hydrothermal Treatment in Relation to Enzyme Digestibility" *Carbohydrate Polymers* 191 (Jul 2018): 1-7.
7. Geng, G., Myers, R. J., Yu, Y. S., Shapiro, D. A., Winarski, R., Levitz, p. E., Kilcoyne, D. A. L. and Monteiro, P. J. M. "Synchrotron X-Ray Nanotomographic and Spectromicroscopic Study of the Tricalcium Aluminate Hydration in the Presence of Gypsum" *Cement and Concrete Research* 111 (Sep 2018): 130-137.
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9. Nakthong, N., Wongsagonsup, R. and Amornsakchai, T. "Characteristics and Potential Utilizations of Starch from Pineapple Stem Waste" *Industrial Crops & Products* 105 (2017): 74-82.

BL2.2: TRXAS 7 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สข. ที่เป็นผู้แต่งร่วม

1. Deerattrakul, V., Limphirat, W. and Kongkachuichay, P. "Influence of Reduction Time of Catalyst on Methanol Synthesis via CO₂ Hydrogenation using Cu-Zn/N-rGO Investigated by in situ XANES" *Journal of the Taiwan Institute of Chemical Engineers* 80 (Nov 2017): 495-502.
 2. Deerattrakul, V., Puengampholsrisook, P., Limphirat, W. and Kongkachuichay, P. "Characterization of Supported Cu-Zn/Graphene Aerogel Catalyst for Direct CO₂ Hydrogenation to Methanol: Effect of Hydrothermal Temperature on Graphene Aerogel Synthesis" *Catalysis Today* 314 (Sep 2018): 154-163.
 3. Kaewmala, S., Chantrasuwan, P., Wiriya, N., Srilomsak, S., Limphirat, W., Limthongkul, P. and Meethong, N. "Li₂MnO₃ Domain Size and Current Rate Dependence on the Electrochemical Properties of 0.5Li₂MnO₃·0.5LiCoO₂ Cathode Material" *Scientific Reports*.
 4. Numpilai, T., Witoon, T., Chanlek, N., Limphirat, W., Bonura, G., Chareonpanich, M. and Limtrakul, J. "Structure-Activity Relationships of Fe-Co/K-Al₂O₃ Catalysts Calcined at Different Temperatures for CO₂ Hydrogenation to Light Olefins" *Applied Catalysis A: General* 547 (Oct 2017): 219-229
- BL2.2-BL5.3**
5. Sriakkarin, C., Umchoo, W., Donphai, W., Poo-arporn, Y. and Chareonpanich, M. "Sustainable Production of Methanol from CO₂ over 10Cu-10Fe/ZSM-5 Catalyst in a Magnetic Field-assisted Packed Bed Reactor" *Catalysis Today* 314 (Sep 2018): 114-121. **USE BL2.2-BL5.3**
 6. Umchoo, W., Sriakkarin, C., Donphai, W., Warakulwit, C., Poo-arporn, Y., Jantaratana, P., Witoon, T. and Chareonpanich, M. "Green and Sustainable Methanol Production from CO₂ Over Magnetized Fe-Cu/Core-Shell and Infiltrate Mesoporous Silica-Aluminosilicates" *Energy Conversion and Management* 159 (Jan 2018): 342-352. **USE BL2.2-BL5.3**

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7. Chanapattarapol, K. C., Krachumram, S., Makdee, A., Unwiset, P. and Srikwanjai, S. "Preparation and Characterization of Ce_{1-x}Pr_xO₂ Supports and their Catalytic Activities" *Journal of Rare Earths* 35 (Dec 2017): 1197-1205.

BL3.2Ua: PES 7 articles

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1. Whitcher, T. J., Wong, W. S., Talik, A. N., Woon, K. L., Rusydi, A., Chanlek, N., Nakajima, H., Saisopa, T. and Songsiriritthigul, P. "Energy Level Alignment of Blended Organic Semiconductors and Electrodes at the Interface" *Current Applied Physics* 18 (sep 2018): 982-992.

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2. Hamzan, N. B., Ramly, M. M. B., Huang, N. M., Rahman, S. A. and Goh, B. T. "Growth of High Density NiSi/SiC Core-Shell Nanowires by Hot-Wire Chemical Vapour Deposition for Electrochemical Applications" *Materials Characterization* 132 (Oct 2017); 187-198.
3. Khanis, N. H., Ritikos, R., Chiu, W. S., Haw, C. Y., Adul Rashid, N. M., Chia, M. Y., Khiew, P. S. and Rahman, S. A. "SnO₂ Nanoparticles Decorated 2D Wavy Hierarchical Carbon Nanowalls with Enhanced Photoelectrochemical Performance" *Journal of Nanomaterials*
4. Rafieh, A. I., Ekanayake, P., Abdullah, I. H., Nakajama, H., Lim, C. M. and Nazeeruddin, M. K. "Doping and Energy Band Modulation of Nanoporous Electrodes for Enhancing Power Conversion Efficiency of Dye-Sensitized Solar Cells" *Materials Research Bulletin* 95 (Nov 2017): 436-443.
5. Ramly, M. M., Hamzan, N., Nazarudin, N. F. F., Qian, G., Aspanut, Z., Rahman, S. A. and Goh, B. T. "Growth of Si-Based Core-Shell Nanowires through Gases Decomposition Reactions with Tunable Morphologies, Compositions, and Electrochemical Properties" *Journal of Materials Science: Materials in Electronics* 29 (Apr 2018): 5597-5612.
6. Sudrajat, H. "Chemical State and Local Structure of V Species Incorporated in d-Bi₂O₃ Photocatalysts" *Journal of Materials Science* **BL3.2Ua, BL8**
7. Sudrajat, H., Hartuti, S. and Park, J. "A Newly Constructed Photoactive System, Fe(III)-C/N-Bi₂O₃, for Efficient Visible Light Photocatalysis" *Journal of Alloys and Compounds*

BL3.2Ub: PEEM 5 articles

วารสารระดับนานาชาติที่ดีพิมพ์จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

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2. Konthunhot, N., Tunmee, S., Zhou, X., Komatsu, K., Photongkam, P., Saitoh, H. and Wongpanya, P. "The Correlation Between Optical and Mechanical Properties of Amorphous Diamond-Like Carbon Films Prepared by Pulsed Filtered Cathodic Vacuum arc Deposition" *Thin Solid Films* 653 (May 2018): 317-325.
3. Punburi, P., Tareelap, N., Srisukhumbowornchai, N., Euaruksakul, C. and Yordsri, V. "Correlation between Electron Work Functions of Multiphase Cu-8Mn-8Al and de-Alloying Corrosion" *Applied Surface Science* 439 (May 2018): 1040-1046.
4. Tocci, M., Losio, M., Suwanpinij, P. and Pola, A. "Experimental Investigation on the Formation of Cr-Containing Dispersoids in an AlSi₃ Alloy by X-Ray Synchrotron Radiation" *Journal of Alloys Compounds* inpress. **BL3.2b-BL8**
5. Zhou, X. L., Arakawa, S., Tunmee, S., Komatsu, K., Kanda, K., Ito, H. and Saitoh, H. "Structural Analysis of Amorphous Carbon Films by BEMA Theory Based on Spectroscopic Ellipsometry Measurement" *Diamond & Related Materials* 79 (Oct 2017): 46-59.

BL4.1: IR 7 articles

วารสารระดับนานาชาติที่ดีพิมพ์จากบุคลากร สช. ที่เป็นผู้แต่งร่วม

1. Hengpratom, T., Lowe, G. M., Thumanu, K., Suknasang, S., Tiomyom, K. and Eumkeb, G. "Oroxylum Indicum (L.) Kurz Extract Inhibits Adipogenesis and Lipase Activity in Vitro" *BMC Complementary and Alternative Medicine* 18 (Jun 2018): 177.

2. Limsitthichaikoon, S., Khampaenjiraroach, B., Damrongrungruang, T., Limphirat, W., Thapphasaraphong, S. and Pripem, A. "Topical Oral Wound Healing Potential of Anthocyanin Complex: Animal and Clinical Studies" *Therapeutic Delivery* 9 (May 2018): 359-374.
3. Pocasap, P., Weerapreeyakul, N., Tanthanuch, W. and Thumanu, K. "Sulforaphene in *Raphanus Sativus* L. var. *Caudatus* Alef Increased in Late-Bolting Stage as Well as Anticancer Activity" *Asian Pacific Journal of Tropical Biomedicine*.
4. Pocasap, P., Weerapreeyakul, N., and Thumanu, K. "Structures of Isothiocyanates Attributed to Reactive Oxygen Species Generation and Microtubule Depolymerization in HepG2 Cells" *Biomedicine & Pharmacotherapy* 101 (2018): 698–709.
5. Sirichaiwetchakoon, K., Lowe, G. M., Thumanu, K. and Eumkeb, G. "The Effect of *Pluchea indica* (L.) Less. Tea on Adipogenesis in 3T3-L1 Adipocytes and Lipase Activity" *Evidence-Based Complementary and Alternative Medicine* v. 2018 doi.org/10.1155/2018/4108787
6. Siritapetawee, J., Talabrin, C., Vanichtanankul, J., Songsirittithiqui, C., Thumanu, K., Chen, CJ. and Komanasin, N. "Characterization of the Binding of a Glycosylated Serine Protease from *Euphorbia cf. Lactea* Latex to Human Fibrinogen" *Biotechnology and Applied Biochemistry* 64 (Nov 2017): 862-870. **USE BL4.1, BL7.2**
7. Siriwarin, B., Weerapreeyakul, N., Tanthanuch, W. and Thumanu, K. "Biomolecular Changes and DNA Targeting Effect of Sesamol in Human Lung Adenocarcinoma (SK-LU-1) Cells by FTIR Microscopy" *Asian Pacific Journal of Tropical Biomedicine* 8 (2018): 377-386.

BL5: SUT-Nano-SLRI

BL5.2: XAS 43 articles

วารสารระดับนานาชาติที่ตีพิมพ์ จากบุคลากร สข. ที่เป็นผู้แต่งร่วม

1. Bootchanont, A., Sailuam, W., Sutikulsombat, S., Temprom, L., Chanlek, N., Kidkhunthod, P., Suwanna, P. and Yimnirun, R. "Synchrotron X-Ray Absorption Spectroscopy Study of Local Structure in Strontium-Doped Hydroxyapatite" *Ceramics International* 43. 14 (Oct 2017): 11023-11027. **USE BL5.2-BL5.3**
2. Boonlakhorn, J., Kidkhunthod, P., Chanlek, N. and Thongbai, P. "(Al³⁺, Nb⁵⁺) Co-Doped CaCu₃Ti₄O₁₂: An Extended Approach for Acceptor–Donor Heteroatomic Substitutions to Achieve High–Performance Giant–Dielectric Permittivity" *Journal of the European Ceramic Society* 38 (jan 2018): 137-143. **USE BL5.2-BL5.3**
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5. Daengsakul, S., Saengplot, S., Kidkhunthod, P., Pimsawat, A. and Maensiri, S. "Synchrotron-based XAS on Structure Investigation of La_{0.99-x}Sr_x(Na, K, Ba)_{0.01}MnO₃ Nanoparticles : Evidence of Magnetic Properties" *Journal of Magnetism and Magnetic Materials* 451 (Apr 2018): 435-442.
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8. Khajonrit, J., Wongpratrat, U., Kidkhunthod, P., Pinitsoontorn, S. and Maensiri, S. "Effects of Co Doping on Magnetic and Electrochemical Properties of BiFeO₃ Nanoparticles" *Journal of Magnetism and Magnetic Materials* 449 (2018): 423–434.
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10. Krittayavathananon, A., Pettong, T., Kidkhunthod, P. and Sawangphruk, M. "Insight into the Charge Storage Mechanism and Capacity Retention Fading of MnCo₂O₄ used as Supercapacitor Electrodes" *Electrochimica Acta* 258 (Dec 2017): 1008-1015.
11. Laorodphan, N., Kidkhunthod, P., Khajonrit, J., Montreeuppathum, A., Chanlek, N., Pinitsoontorn, S. and Maensiri, S. "Effect of B₂O₃ Content on Structure-Function of Vanadium-Lithium-Borate Glasses Probed by Synchrotron-Based XAS and Vibrating Sample Magnetometry Technique" *Journal of Non-Crystalline Solids* 497 (2018): 56-62. **Use BL5.2-BL5.3**
12. Lektrakoonara, P., Yong, N., Kidkhunthod, P., Waehayee, A. and Siritanon, T. "Structure and Electrochemical Properties of Acid-Leached LiMn₂-xTi_xO₄" *Journal of Materials Science: Materials in Electronics* 29 (Jul 2018): 12089-99.
13. Ma, N., Phattharasupakun, N., Wutthiprom, J., Tanggarnjanavalukul, C., Wuanprakhon, P., Kidkhunthod, P. and Sawangphruk, M.. "High-Performance Hybrid Supercapacitor of Mixed-Valence Manganese Oxide/Ndoped Graphene Aerogel Nanoflower Using an Ionic Liquid with a Redox Additive as the Electrolyte: In Situ Electrochemical X-Ray Absorption Spectroscopy" *Electrochimica Acta* 271 (May 2018); 110-119.
14. Makdee, A., Unwiset, P., Chanapatttharapol, K. C. and Kidkhunthod, P. "Effects of Ce Addition on the Properties and Photocatalytic Activity of TiO₂, Investigated by X-Ray Absorption Spectroscopy" *Materials Chemistry and Physics* 213 (2018) 431-443.
15. Maluangnont, T., Dararat, C., Kulrat, T., Soontontaweesub, S., Anothaiwalaikul, T., Bunprechawong, P., Chanda, R., Kanchanawarin, J., Kidkhunthod, P. and Sooknoi, T. "Production of Liquid Fuel from Palmitic Acid Over Nanocrystalline CeO₂-Based Catalysts with Minimal use of H₂" *Catalysis Communications* 102 (Dec 2017) 123–126.
16. Nachaithong, T., Tuichai, W., Kidkhunthod, P., Chanlek, N., Thongbai, P. and Maensiri, S. "Preparation, Characterization, and Giant Dielectric Permittivity of(Y³⁺and Nb⁵⁺) co-doped TiO₂ Ceramics" *Journal of the European Ceramic Society* **in press**. **USE BL5.2-BL5.3**
17. Nuraini, U., Triyuliana, N. A., Mashuri, M., Kidkhunthod, P. and Suasmoro, S. "Local Distortion Determination of the (1 – x) (K_{0.5}Na_{0.5}) NbO₃ – x (Ba_{0.8}Sr_{0.2})TiO₃ System and Their Influence on the Electrical Properties" *The Journal of Materials Science: Materials in Electronics*. 29 (Jan 2018): 1139-1145.
18. Pakawanit, P., Yimnirun, R., Laosiritaworn, Y. and Kanchiang, K. "Effect of Gold Nanoparticles on Lead Zinc Niobate–Barium Titanate Structure by X-ray Absorption Spectroscopy" *Ferroelectrics*
19. Pannak, P., Songsasen, A., Foytong, W., Kidkhunthod, P. and Sirisaksoontorn, W. "Homogeneous Distribution of Nanosized ZnO in Montmorillonite Clay Sheets for the Photocatalytic Enhancement in Degradation of Rhodamine B" *Research on Chemical Intermediates*
20. Priprem, A., Lee, Y. C., Limphirat, W., Tiyaworanan, S., Saodaeng, K., Chotitumnavee, J. and Kowtragoon, N. "Eucalyptus Ash Alters Secondary Protein Conformation of Human Grey Hair and Facilitates Anthocyanin Dyeing" *PLoS One*
21. Priprem, A., Damrongrungruang, T., Limsittichaikoon, S., Khampaenjiraroach, B., Nukulkit, C., Thapphasaraphong, S. and Limphirat, W. "Topical Niosome Gel Containing an Anthocyanin Complex: a Potential Oral Wound Healing in Rats" *AAPS PharmSciTech*
22. Pramual, K., Intasanta, V., Chirachanchai, S., Chanlek, N., Kidkhunthod, P. and Pangon, A. "Urethane-Linked Imidazole-Cellulose Microcrystals: Synthesis and their Dual Functions in Adsorption and Naked Eye Sensing with Colorimetric Enhancement of Metal Ions" *ACS Sustainable Chemistry & Engineering's* 6 (2018): 3686-3695. **USE BL5.2-BL5.3**

23. Siritapetawee, J., Limphirat, W., Nantapong, N. and Songthamwat, D. "Fabrication of Silver Chloride Nanoparticles Using a Plant Serine Protease in Combination with Photo-Activation and Investigation of their Biological Activities" *Biotechnology and applied Biochemistry* in press
24. Srifa, A., Kaewmeesri, R., Fang, C., Itthibenchapong, V. and Faungnawakij, K. "NiAl₂O₄ Spinel-Type Catalysts for Deoxygenation of Palm oil to Green Diesel" *Chemical Engineering Journal* 345 (Aug 2018): 107-113.
25. Sriplai, N., Koowattanasuchat, S., Kidkhunthod, P., Chanlek, N., Eichhorn, S. J. and Pinitsoontorn, S. "Magnetic behavior of novel alloyed L10-phase Co_{1-x}Fe_xPt nanoparticles" *Journal of Alloys and Compounds* 739 (Mar 2018): 19-29.
26. Sodtipinta, J., Ieosakulrat, C., Poonyayant, N., Kidkhunthod, P., Chanlek, N., Amornsakchai, T. and Pakawatpanurut, P. "Interconnected Open-Channel Carbon Nanosheets Derived from Pineapple Leaf Fiber as a Sustainable Active Material for Supercapacitors" *Industrial Crops & Products* 104 (Oct 2017): 13-20. **USE BL5.2-BL5.3**
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28. Tanggarnjanavalukul, C., Phattharasupakun, N., Wutthiprom, J., Kidkhunthod, P. and Sawangphruk, M. "Charge Storage Mechanisms of Birnessite-type MnO₂ Nanosheets in Na₂SO₄ Electrolytes with Different pH Values: In situ Electrochemical X-Ray Absorption Spectroscopy Investigation" *Electrochimica Acta* 273 (2018): 17-25.
29. Unwiset, P., Makdee, A., Chanapattarapol, K. C. and Kidkhunthod, P. "Effect of Cu Addition on TiO₂ Surface Properties and Photocatalytic Performance: X-Ray Absorption Spectroscopy Analysis" *Journal of Physics and Chemistry of Solids* 120 (sep 2018): 231-240.
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31. Jaiban, P., Watcharapasorn, A., Yimnirun, R., Guo, R., Bhalla, A. S. "Dielectric, Ferroelectric and Piezoelectric Properties of (Ba_{0.7}Ca_{0.3})Ti_{1-x}Cu_xO_{3-x} Ceramics" *Journal of Alloys and Compounds* 759 (Aug 2018): 120-127.
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BL5.3: XPS 36 articles

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BL6a: DXL 5 articles

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BL6b: XRF 1 articles

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BL7.2: MX 3 articles

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BL8: XAS 30 articles

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