

《センターより》

2018年度科学分析支援センター機器使用研究業績

教育学部

Kodama Y, Kawahara A, Miyagi A, Ishikawa T, Kawai-Yamada M, Kaneko Y, et al. Effects of inactivation of the cyAbrB2 transcription factor together with glycogen synthesis on cellular metabolism and free fatty acid production in the cyanobacterium *Synechocystis* sp. PCC 6803. *Biotechnol Bioeng*. 2018;115(12):2974–85.

Matsuoka K, Miura H, Karima S, Taketaka C, Ouno S, Moroi Y. Removal of alkali metal ions from aqueous solution by foam separation method. *J Mol Liq*. 2018;263:89–95.

Matsuoka K, Omori R, Yada S, Yoshimura T, Iwase H. Solubilization ability of N,N-dimethyl-N-alkyladamantylammonium bromide. *J Mol Liq*. 2018;260:131–7.

Sarkar A, Asaeda T, Wang Q, Kaneko Y, Rashid MH. Arbuscular mycorrhiza confers lead tolerance and uptake in *Miscanthus sacchariflorus*. *Chem Ecol*. 2018;34(5):454–69.

Sakamoto S, Somssich M, Nakata M, Unda F, Atsuwawa K, Kaneko Y, et al. Complete substitution of a secondary cell wall with a primary cell wall in *Arabidopsis*. *Nature Plants* 2018; 10: 777-783.

Kaneko Y, Tokunaga M, Tanaka K, Atsuwawa K, Nishimura M., Backscattered electron imaging and elemental analysis of rapidly frozen plant cells using variable accelerating voltage. *Microscopy* 2018; 67: 125-128.

Matsuoka K, Miura H, Karima S, Taketaka C, Ouno S, Moroi Y. Removal of alkali metal ions from aqueous solution by foam separation method. *J Mol Liq*. 2018;263:89–95.

理学部 基礎化学科

Ishii A, Shibata M, Ebina R, Nakata N. Synthesis and Photophysical Properties of Dibenzobarrelene-Incorporated 1,4-Diphenyl-1,3-pentadienes and a 5-Sila Derivative Having High Fluorescence Efficiency. *European J Org Chem*. 2018;2018(8):1011–8.

Nakata N, Hosoda N, Takahashi S, Ishii A. Chlorogermylenes and -stannylenes stabilized by diimidatosulfinate ligands: synthesis, structures, and reactivity. *Dalt Trans*. 2018;47(2):481–90.

Nakata N, Nakamura K, Ishii A. Highly Efficient and 1,2-Regioselective Method for the Oligomerization of 1-Hexene Promoted by Zirconium Precatalysts with [OSO]-Type Bis(phenolate) Ligands. *Organometallics*. 2018;37(15):2640–4.

Furukawa S, Fujita M, Kanatomi Y, Minoura M, Hatanaka M, Morokuma K, et al. Double aromaticity arising from σ - and π -rings. *Commun Chem.* 2018;1(1):1–7.

Furukawa S, Hayashi K, Yamagishi K, Saito M. Synthesis and properties of spiro-type heterasumanenes containing group 14 elements as bridging atoms. *Mater Chem Front.* 2018;2(5):929–34.

Saito M. Transition-Metal Complexes Featuring Dianionic Heavy Group 14 Element Aromatic Ligands. *Acc Chem Res.* 2018;51(1):160–9.

Saito M. Creation of exotic π -electron systems by introduction of heavy elements and expansion of the concept of aromaticity. *Bull Chem Soc Jpn.* 2018;91(7):1009–19.

Saito M, Matsunaga N, Hamada J, Furukawa S, Minoura M, Wegner S, et al. Heterobimetallic triple-decker complexes derived from a dianionic aromatic stannole ligand. *Dalton Trans.* 2018;47(27):8892–6.

Saito M, Shinokubo H, Sakurai H. Figuration of bowl-shaped π -conjugated molecules: properties and functions. *Mater Chem Front.* 2018;2(4):635–61.

Loukanov AR, Basnakian AG, Kawamura R, Udon H, Filipov CK, Savenka A V, et al. Light-Powered Nanoconverters Cytotoxic to Breast Cancer Cells. *J Phys Chem C.* 2018;122(14):7916–24.

Kobayashi N, Maruyama M, Mori Y, Fukukita S, Adachi H, Takano K, et al. Atomic-Scale Imaging of Surface and Hydration Structures of Stable and Metastable Acetaminophen Crystals by Frequency Modulation Atomic Force Microscopy. *J Phys Chem C.* 2018;122(38):21983–90.

Sato O, Sakai R. Synthesis and electrochemical properties of 2,2'-biguaiazulene-based 1,2-dithiin and thiophene. *Heterocycles.* 2018;96(7):1259–65.

Ishikawa K, Yago T, Wakasa M. Exploring the Structure of an Exchange-Coupled Triplet Pair Generated by Singlet Fission in Crystalline Diphenylhexatriene: Anisotropic Magnetic Field Effects on Fluorescence in High Fields. *J Phys Chem C.* 2018;122(39):22264–72.

石井昭彦, 中田憲男, ジベンゾバレレン骨格に組み込まれた 1-カルコゲノ-1,3-ブタジエン誘導体およびその関連化合物の合成と光物性 有機合成化学協会誌, 2018 年, 76(10), 1042-1054.

理学部 分子生物学科

Kujirai J, Nanba S, Kadowaki T, Oka Y, Nishiyama Y, Hayashi Y, et al. Interaction of the GntR-family transcription factor Sll1961 with thioredoxin in the cyanobacterium *Synechocystis* sp. PCC 6803. *Sci Rep.* 2018;8(1):1–11.

Kodama Y., Kawahara A., Miyagi A., Ishikawa T., Kawai-Yamada M., Kaneko Y., Takimura Y. and Hihara Y. (2018) Effects of inactivation of the cyAbrB2 transcription factor together with glycogen synthesis on cellular metabolism and free fatty acid production in the cyanobacterium *Synechocystis* sp. PCC 6803. *Biotechnology and Bioengineering* 115: 2974-2985

Toyota M, Spencer D, Sawai-Toyota S, Jiaqi W, Zhang T, Koo AJ, et al. Glutamate triggers long-distance, calcium-based plant defense signaling. *Sci (Washington, DC, United States)*. 2018;361(6407):1112–5.

Jimbo H, Yutthanasirikul R, Nagano T, Hisabori T, Hihara Y, Nishiyama Y. Oxidation of translation factor EF-Tu inhibits the repair of photosystem II. *Plant Physiol*. 2018;176(4):2691–9.

Kujirai J, Nanba S, Kadowaki T, Oka Y, Nishiyama Y, Hayashi Y, et al. Interaction of the GntR-family transcription factor Sll1961 with thioredoxin in the cyanobacterium *Synechocystis* sp. PCC 6803. *Sci Rep*. 2018;8(1):1–11.

理学部 生体制御学科

Ikenoya C, Takemi S, Kaminoda A, Aizawa S, Ojima S, Gong Z, et al. β-Oxidation in ghrelin-producing cells is important for ghrelin acyl-modification. *Sci Rep*. 2018;8(1):1–9.

Kinoshita H, Ohgane N, Fujino Y, Yabe T, Ovara H, Yokota D, et al. Functional roles of the Ripple-mediated suppression of segmentation gene expression at the anterior presomitic mesoderm in zebrafish. *Mech Dev*. 2018;152:21–31.

Miyazawa H, Okumura K, Hiyoshi K, Maruyama K, Kakinuma H, Amo R, et al. Optical interrogation of neuronal circuitry in zebrafish using genetically encoded voltage indicators. *Sci Rep*. 2018;8(1):1–10.

Wang Z, Nakayama Y, Tsuda S, Yamasu K. The role of gastrulation brain homeobox 2 (gbx2) in the development of the ventral telencephalon in zebrafish embryos. *Differ (Oxford, United Kingdom)*. 2018;99:28–40.

Yamaguchi S, Abe Y, Maejima S, Tsukahara S. Sexual experience reduces neuronal activity in the central part of the medial preoptic nucleus in male rats during sexual behavior. *Neurosci Lett*. 2018;685:155–9.

Kanaya M, Morishita M, Tsukahara S: Temporal expression patterns of genes related to sex steroid action in sexually dimorphic nuclei during puberty. *Frontiers in Endocrinology*, 9, 213, doi: 10.3389/fendo.2018.00213, 2018.

Maejima S, Abe Y, Yamaguchi S, Musatov S, Ogawa S, Kondo Y, Tsukahara S: VGF in the medial preoptic nucleus increases sexual activity following sexual arousal induction in male rats. *Endocrinology*, 159, 12, 3993-4005, 2018.

Ikenoya C, Takemi S, Kaminoda A, Aizawa S, Ojima S, Gong Z, et al. β -Oxidation in ghrelin-producing cells is important for ghrelin acyl-modification. *Sci Rep.* 2018;8(1):1–9.

Mikami T, Ito K, Diaz-Tartera HO, Hellstroem PM, Mochiki E, Takemi S, et al. Study of termination of postprandial gastric contractions in humans, dogs and *Suncus murinus*: role of motilin- and ghrelin-induced strong contraction. *Acta Physiol.* 2018;222(2):n/a.

Horita T, Koyama K, Takemi S, Tanaka T, Sakai T, Sakata I. GABAergic and glutamatergic neurons in the brain regulate phase II of migrating motor contractions in the *Suncus murinus*. *J Smooth Muscle Res.* 2018;54(0):91–99. doi: 10.1540/jsmr.54.91.

工学部 応用化学科

Kurokawa H, Namoto H, Horinouchi A, Sato M, Usui M, Ogihara H, et al. Dehydrogenation of n-butane to butenes and 1,3-butadiene over PtAg/Al₂O₃ catalysts in the presence of H₂. *J Mater Sci Chem Eng.* 2018;6(7):16–24.

Kudo S, Hirahara M, Ogihara H, Kurokawa H. Polyethylene blend prepared by ethylene or ethylene/1-hexene polymerization using Ni(II) and Fe(III) complexes immobilized into fluorotetrasilicic mica interlayer as catalyst. *Kobunshi Ronbunshu.* 2018;75(6):557–63.

I. Yanase, H. Chida, H. Kobayashi, Fabrication and negative thermal expansion properties of P-substituted ZrV₂O₇ sintered bodies, *Journal of the European Ceramic Society*, 38, 221-226 (2018).

I. Yanase, K. Sato, H. Kobayashi, T. Doe, T. Naka, CO₂ absorption property of Li₄SiO₄ in the presence of water vapor at room temperature, *Chemical Engineering Journal*, 356, 81-90 (2018).

T. Harada, K. Ouchi, Y. Sato, H. Hoshino, R. Tanaka, T. Fujihara, H. Kurokawa, M. Shibukawa, K. Ishimori, Y. Kameo, S. Saito, Safe and rapid development of capillary electrophoresis for ultratrace uranyl ions in radioactive samples by way of fluorescent probe selection for actinide ions from a chemical library, *Analytica Chimica Acta*, 1032, 188-196 (2018) .

Kodama K, Kanai H, Shimomura Y, Hirose T. Enantioseparation of Sulfoxides and Nitriles by Inclusion Crystallization with Chiral Organic Salts Based on L-Phenylalanine. *European J Org Chem.* 2018;2018(14):1726–9.

Hirose T, Qu S, Kodama K, Wang X. Organocatalyst system for disubstituted carbonates from cycloaddition between CO₂ and internal epoxides. *J CO₂ Util.* 2018;24:261–5.

Shimoda T, Morishima T, Kodama K, Hirose T, Polyansky D. E, Manbeck G. F, Mackerman J. T, Fujita E. Photocatalytic CO₂ Reduction by Trigonal Bipyramidal Polypyridyl Cobalt(II) Complexes: Nature of Co(I) and Co(0) Complexes upon their Reactions with CO₂, CO or Proton. *Inorg Chem.* 2018; 57: 5486-5498.

Zhao Y, Wang X, Kodama K, Hirose T. Copper-Catalyzed Coupling Reactions of Aryl Halides and Phenols by 4,4'-Dimethoxy-2,2'-bipyridine and 4,7-Dimethoxy-1,10-phenanthroline, *ChemistrySelect* 2018; 3: 12620-12624.

Kinoshita H, Fukumoto H, Ueda A, Miura K. Syntheses of substituted benzosiloles and siloles by diisobutylaluminium hydride-promoted cyclization of 1-silyl-2-(2-silylethynyl)benzenes and 1,4-disilylalk-3-en-1-yne. *Tetrahedron*. 2018;74(14):1632–45.

工学部 機能材料工学科

Honda Z, Nomoto N, Fujihara T, Hagiwara M, Kida T, Sawada Y, et al. One-dimensional ferromagnetic array compound [Co₃(SBA)₂(OH)₂(H₂O)₂]_n, (SBA = 4-sulfobenzoate). *Solid State Sci.* 2018;80:155–60.

Sakai M, Takao H, Matsunaga T, Nishimagi M, Iizasa K, Sakuraba T, et al. Resonant Hall effect under generation of a self-sustaining mode of spin current in nonmagnetic bipolar conductors with identical characters between holes and electrons. *Jpn J Appl Phys.* 2018;57(3):033001/1–033001/13.

Ishikawa R, Ueno K, Shirai H. Fabrication of [CH(NH₂)₂]0.8Cs0.2PbI₃ perovskite thin films for n-i-p planar-structure solar cells by a one-step method using 1-cyclohexyl-2-pyrrolidone as an additive. *Chem Lett.* 2018;47(7):905–8.

Kasahara K, Hossain J, Harada D, Ichikawa K, Ishikawa R, Shirai H. Crystalline-Si heterojunction with organic thin-layer (HOT) solar cell module using poly(3,4-ethylenedioxothiophene):poly(styrene sulfonate)(PEDOT:PSS). *Sol Energy Mater Sol Cells.* 2018;181:60–70.

H. Shirai, Q. Liu, T. Ohki, R. Ishikawa and K. Ueno. Optical anisotropy and compositional ratio of conductive polymer PEDOT:PSS and their effect on photovoltaic performance of crystalline silicon • organic heterojunction solar cells, *Advances in Silicon Solar Cells*、Springer 137-159 2018

Youhei Numata, Yoshitaka Sanehira, Ryo Ishikawa, Hajime Shirai, Tsutomu Miyasaka, Thiocyanate Containing Two-Dimensional Cesium Lead Iodide Perovskite, Cs₂PbI₂(SCN)₂: Characterization, Photovoltaic Application, and Degradation Mechanism ACS Appl. Mater. Interfaces 2018104942363-42371 DOI 10.1021/acsami.8b15578

Youhei Numata, Ryo Ishikawa, Yoshitaka Sanehira, Atsushi Kogo, Hajime Shirai and Tsutomu Miyasaka., Nb-doped amorphous titanium oxide compact layer for formamidinium-based high efficiency perovskite solar cells by low-temperature fabrication J. Mater. Chem. A, 2018,6, 9583-9591 DOI:10.1039/C8TA02540A

Hayama R, Koyama T, Matsushita T, Hatano K, Matsuoka K. Preparation of functional monomers as precursors of bioprobes from a common styrene derivative and polymer synthesis. *Molecules* [Internet]. 2018;23(11):2875/1–2875/13. Available from: <http://www.mdpi.com/journal/molecules>

Matsuoka K, Matsushita T, Hatano T, Nemoto N, Arai H, Nomura H. Anti-midkine monoclonal antibody and cancer diagnosis immunoassay kit using it. Jpn. Kokai Tokkyo Koho. Saitama University, Japan; Inomu Prove K. K. ; 2018. p. 14pp.

Matsuoka K, Nishikawa K, Goshu Y, Koyama T, Hatano K, Matsushita T, et al. Synthetic construction of sugar-amino acid hybrid polymers involving globotriaose or lactose and evaluation of their biological activities against Shiga toxins produced by Escherichia coli O157:H7. *Bioorg Med Chem*. 2018;26(22):5792–803.

Matsushita T, Matsuoka K, Hatano K, Nemoto N, Arai H. Preparation of water-soluble immunoglobulin-polysaccharide conjugates containing cushion protein for highly sensitive immunoassays. PCT Int. Appl. Saitama University, Japan .; 2018. p. 52pp.

Matsushita T, Tsuchibuchi K, Koyama T, Hatano K, Matsuoka K. A constraint scaffold enhances affinity of a bivalent N-acetylglucosamine ligand against wheat germ agglutinin. *Bioorg Med Chem Lett*. 2018;28(10):1704–7.

Guo Y, Fukushi K, Hirayama S, Machida H, Meng Q, Akasaka S, et al. Thermal stability of ordered multi-particle layers of long-chain phosphonate-modified nanodiamond with superior heat-resistance. *Colloids Surfaces, A Physicochem Eng Asp*. 2018;556:227–38.

Iizuka M, Nakagawa Y, Moriya Y, Satou E, Fujimori A. Comparison of structure/function correlational property of three kinds of gemini-type thixotropic surfactants capable of forming crystalline nanofiber based on hydrogen bonding-solid-state structure, two-dimensional molecular film forming, and epitaxial g. *Bull Chem Soc Jpn*. 2018;91(5):813–23.

Kasahara Y, Guo Y, Tasaki T, Meng Q, Iizuka M, Akasaka S, et al. Nanodispersion in transparent polymer matrix with high melting temperature contributing to the hybridization of heat-resistant organo-modified nanodiamond. *Polym Bull (Heidelberg, Ger)*. 2018;75(9):4145–63.

Nakagawa Y, Watahiki K, Satou E, Shibasaki Y, Fujimori A. Elucidation of origin of thixotropic-inducing properties of additive amphiphiles and creation of high-performance triamide amphiphile. *Langmuir*. 2018;34(40):11913–24.

Shidara Y, Yunoki T, Miura S, Shibasaki Y, Fujimori A. Effect of the isothermal crystallization method on amorphous block copolymers of aromatic polyamides and their packing behavior in two-dimensional films for screening of potential crystallization ability. *Polym Eng Sci*. 2018;58(11):2019–30.

Zhang X, Shidara Y, Yunoki T, Kasahara Y, Ohmura K, Iizuka M, et al. Nano-dispersion of organo-modified nanofiller in partially fluorinated matrix as the polymer/magnetic nanoparticle composites. *Polym Compos*. 2018;39(12):4496–512.

T. Nyuui, G. Matsuba, S. Sato, K. Nagai, A. Fujimori, "Correlation between gas transport properties and the morphology/dynamics of crystalline fluorinated copolymer membranes.", *J. Appl. Polym. Sci.*, 2018, 135(2), 45665.

M. Iizuka, A. Fujimori, "Fluorinated Polymer/Organo-modified Magnetic Nanoparticle Composite." *SPE Plastics Res. Online*, 2018, (3), 1-4. (DOI: 10.2417/spepro.006995)

Y. Shibasaki, T. Kotaki, T. Bito, R. Sasahara, N. Idutsu, A. Fujimori, S. Miura, Y. Shidara, N. Nishimura, Y. Oishi, "Synthesis of semicrystalline poly(guanamine)s based on 2-substituted-4,6-dichloro-1,3,5-triazine with alpha, omega-alkylene diamines, and the formation of cyclic tetramers.", *Polymer*, 2018, 146, 12-20.

Y. Shibasaki, T. Mori, A. Fujimori, M. Jikei, H. Sawada, Y. Oishi, "Poly(amide–ether) Thermoplastic Elastomers Based on Monodisperse Aromatic Amide Hard Segments as Shape-Memory and Moisture-Responsive Materials.", *Macromolecules*, 2018, 51(23), 9430-9441.

Y. Shidara, T. Yunoki, A. Fujimori, "Preparation and Its Functionality of Fluorinated Polymer/Magnetic Nanoparticle Composites with Well-Dispersion of Organo-Modified Nanofiller", in Chapter 4 of "Advances in Nanotechnology" volume 21, Nova Science Publishers, 2018, pp. 175–213.

Y. Nakagawa, A. Fujimori, "Proposals for Densely Packed Rearrangement and Screening Techniques of the Potential Crystallization Ability for Organic Polymers That Possess Bulky Aromatic Rings", in Chapter 2 of "Organic Polymers: Advances in Research and Applications", Nova Science Publishers, 2018, pp.97-140.

T. Yunoki, S. Hirayama, A. Fujimori, "Topological "Interfacial" Polymer Chemistry", in Chapter 2 of "Polymer Research: Communicating Current Advances, Contributions, Applications and Educational Aspects", A. Méndez-Vilas Ed., Formatec, 2018, pp.76–87.

小堀稔文、福田 武司、鎌田 憲彦、フレキシブル基板上有機薄膜太陽電池における電子輸送層の検討、電気学会論文誌 A(基礎・材料・共通部門誌)、IEEJ Transactions on Fundamentals and Materials Vol. 138, No. 8, pp. 428-434, 2018. DOI: 10.1541/ieejfms.138.428

中川由人, 藤森厚裕, "高修飾率有機化アルミニシリケートによる耐熱型結晶性透明ナノハイブリッド材料の作製", 『高耐熱樹脂の開発事例集 –パワーデバイス、ディスプレイ、電動車両への応用に向けて-』, 第4章 第5節, 技術情報協会, 2018, 175-191.

工学部 環境共生学科

Qingyue Wang and Jayanto kumar Sarkar, Investigations of the pyrolysis behaviors of coconut shell and husk waste biomasses, *International Journal of Energy Production and Management*, Vol.3 (1), 34-43 (2018).

Hong Qiang , Zhou Shumin, Zhao Hui, Peng Jiaxian, Li Yang, Shang Yu, Wu Minghong, Zhang Wei, Lu Senlin, Li Shuijun, Yu Shen, Wang Weiqian, Qingyue Wang, Allergenicity of recombinant Humulus japonicus pollen allergen 1 after combined exposure to ozone and nitrogen dioxide, Environmental Pollution, Vol. 234, 707-715 (2018).

Arisaka T, Otsuka M, Hasegawa Y. Investigation of carrier scattering process in polycrystalline bulk bismuth at 300 K. *J Appl Phys* (Melville, NY, United States). 2018;123(23):235107/1–235107/10.

Hasegawa Y, Otsuka M. Temperature dependence of dimensionless figure of merit of a thermoelectric module estimated by impedance spectroscopy. *AIP Adv.* 2018;8(7):075222/1–075222/11.

Vandaele, M Otsuka, Y Hasegawa and J P Heremans Confinement effects, surface effects, and transport in Bi and Bi_{1-x}Sbx semiconducting and semimetallic nanowires, *Journal of Physics: Condensed Matter* 30, 403001 (2018)

Achchillage E, Dilrukshi A, Fujino T, Motegi S. Behavior of bentonite in an aqueous electrolytic solution - evaluation of electrolytic aggregation for adsorption capacity of Cd²⁺ ions onto bentonite. *Water Sci Technol.* 2018;77(12):2841–50.

戦略的研究部門 グリーン・環境領域

Tozawa Y, Takei S, Oshima M, Hirose S, Kawata M, Sekino K, et al. Method for producing HSL protein having improved catalytic activity for 2-oxoglutaric acid-dependently oxidizing 4-HPPD inhibitor comprising basic amino acid as histidine, lysine or arginine. *PCT Int. Appl. National Agriculture and Food Research Organization, Japan; Saitama University; SDS Biotech K.K. ;* 2018. p. 69pp.

戦略的研究部門 ライフ・ナノバイオ領域

Rawangkan A, Wongsirisin P, Namiki K, Iida K, Kobayashi Y, Shimizu Y, et al. Green tea catechin is an alternative immune checkpoint inhibitor that inhibits PD-L1 expression and lung tumor growth. *Molecules [Internet].* 2018;23(8):2071/1–2071/12. Available from: <http://www.mdpi.com/journal/molecules>

科学分析支援センター

Honda Z, Nomoto N, Fujihara T, Hagiwara M, Kida T, Sawada Y, et al. One-dimensional ferromagnetic array compound [Co₃(SBA)₂(OH)₂(H₂O)₂]_n, (SBA = 4-sulfobenzoate). *Solid State Sci.* 2018;80:155–60.

Ohno K, Kusano Y, Kaizaki S, Nagasawa A, Fujihara T. Chromism of Tartrate-Bridged Clamshell-like Platinum(II) Complex: Intramolecular Pt-Pt Interaction-Induced Luminescence Vapochromism and Intermolecular Interactions-Triggered Thermochromism. *Inorg Chem.* 2018;57(22):14159–69.

Ohno K, Yoshida T, Nagasawa A, Fujihara T. Syn and anti conformers of diammonium aquabis(malonato)oxidovanadate(IV) in an anhydrate crystal. *Acta Crystallogr Sect E Crystallogr Commun.* 2018;74(5):664–7.

Sugaya T, Fujihara T, Naka T, Furubayashi T, Matsushita A, Isago H, et al. Observation of the First Spin Crossover in an Iron(II) Complex with an S6 Coordination Environment: Tris[bis(N,N-diethylamino)carbeniumdithiocarboxylato]iron(II) Hexafluorophosphate. *Chem - A Eur J*. 2018;24(68):17853.

Sugaya T, Fujihara T, Naka T, Furubayashi T, Matsushita A, Isago H, et al. Observation of the First Spin Crossover in an Iron(II) Complex with an S6 Coordination Environment: Tris[bis(N,N-diethylamino)carbeniumdithiocarboxylato]iron(II) Hexafluorophosphate. *Chem - A Eur J*. 2018;24(68):17955–63.

Takahashi Y, Fujihara T, Kobayashi N, Nakabayashi S, Miskolczy Z, Biczok L. Electron transfer kinetics of methylviologen included in 4-sulfonatocalix[n]arenes at glassy carbon electrode; adiabaticity and activation energy. *Chem Phys Lett*. 2018;708:222–7.

Iizuka R, Numakura R, Michimura S, Katano S, Kosaka M. Magnetic properties of rare-earth sulfide YbAgS₂. *Phys B Condens Matter* (Amsterdam, Netherlands). 2018;536:314–6.

Michimura S, Nishikawa U, Shimizu A, Kosaka M, Numakura R, Iizuka R, et al. Influence of Pt substitution on magnetic properties of multipolar ordering compounds Ce(Pd,Pt)₃S₄. *Phys B Condens Matter* (Amsterdam, Netherlands). 2018;536:1–5.

Numakura R, Iizuka R, Michimura S, Katano S, Kosaka M. Single crystal growth and physical properties of the new ternary compound Eu₂Mg₄Si₃. *Phys B Condens Matter* (Amsterdam, Netherlands). 2018;536:262–6.