

熱・エントロピー科学研究センター業績リスト(2019)
Publications from
the Research Center for Thermal and Entropic Science

[Articles are classified according to original paper (mark O), review article (R), book (B), translation (T) and miscellaneous (M). An asterisk attached to mark-letter indicates that the article has been published in Japanese.]

- O-1 Magnetocapacitance Effect and Magnetostriction by the Field-Induced Spincrossover in [Mn^{III}(taa)]
Y. Otsuki, S. Kimura, S. Awaji, and M. Nakano
AIP Adv. **9**(8), 085219 (2019) (4 pages).
- O-2 Counter-Anion-Regulated Mixed-Valency of Cobalt(II/III) Centers in a Metallosupramolecular Framework
A. Hashimoto, N. Yoshinari, M. Nakano, and T. Konno
Chem. Asian J. **14**(22), 4013–4016 (2019).
- O-3 Detailed Analysis of the Crystal Structures and Magnetic Properties of a Dysprosium(III) Phthalocyaninato Sextuple-Decker Complex: Weak f-f Interactions Suppress Magnetic Relaxation
Y. Horii, K. Katoh, K. Sugimoto, R. Nakanishi, B. K. Breedlove, and M. Yamashita
Chem. Eur. J. **25**(12), 3098–3104 (2019).
- O-4 Versatile Coordination Architectures of Products Generated by the *In Situ* Reaction of a Doubly Bis(2-pyridyl)pyrazolate Bridged Dinuclear Copper(II) Complex with Tetracyanoethylene
R. Ishikawa, S. Ueno, Y. Hamatake, Y. Horii, Y. Miyazaki, M. Nakano, T. Noda, M. Uematsu, and S. Kawata,
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- O-5 Energy Budget of *Drosophila* Embryogenesis
Y. Song, J. O. Park, L. Tanner, Y. Nagano, J. D. Rabinowitz, and S. Y. Shvartsman
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- O-6 Rotational Motion and Nuclear Spin Interconversion of H₂O Encapsulated in C₆₀ Appearing in the Low-Temperature Heat Capacity
H. Suzuki, M. Nakano, Y. Hashikawa, and Y. Murata
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- O-7 Mechanism of Chain Polymerization in Self-Assembled Monolayers of Diacetylene on the Graphite Surface
D. Takajo and K. Sudoh
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- O-8 Temperature Dependence of Spherical Electron Transfer in a Nanosized [Fe₁₄] Complex
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Nat. Commun. **10**, 5510 (2019) (9 pages).
- O-9 The Thermodynamic Properties and Molecular Dynamics of [Li⁺@C₆₀](PF₆[−]) Associated with Structural Phase Transitions
H. Suzuki, M. Ishida, C. Otani, K. Kawachi, Y. Kasama, E. Kwon, Y. Miyazaki, and M. Nakano
Phys. Chem. Chem. Phys. **21**(29), 16147–16153 (2019).
- O-10 Mobility of Hydrated Alkali Metal Ions in Metallosupramolecular Ionic Crystals
N. Yoshinari, S. Yamashita, Y. Fukuda, Y. Nakazawa, and T. Konno
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- O-11 Above Room Temperature Spin Crossover in Thioamide-Functionalised 2,6-Bis(pyrazol-1-yl)pyridine Iron(II) Complexes
M. Attwood, H. Akutsu, L. Martin, D. Cruickshank, and S. S. Turner
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- O-12 2D Molecular Superconductor to Insulator Transition in the β''-(BEDT-TTF)₂[(H₂O)(NH₄)₂M(C₂O₄)₃]·18-crown-6 Series (M = Rh, Cr, Ru, Ir)
A. L. Morritt, J. R. Lopez, T. J. Blundell, E. Canadell, H. Akutsu, Y. Nakazawa, S. Imajo, and L. Martin
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- O-13 Gap Symmetry of the Organic Superconductor λ -(BETS)₂GaCl₄ Determined by Magnetic-Field-Angle-Resolved Heat Capacity
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- O-14 Phonon Glass Induced by Electron Correlation
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- O-15 Construction of a Thermal Conductivity Measurement System for Small Single Crystals of Organic Conductors
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- O-16 Thermal Expansion of Organic Superconductor α -(BEDT-TTF)₂NH₄Hg(SCN)₄
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- O-17 Electron Transport in Carbon Nanotubes with Adsorbed Chromium Impurities
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- O-18 Effects of Electron Correlations and Chemical Pressures on Superconductivity of β'' -Type Organic Compounds
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- O-19 Electrolyte-Gating-Induced Metal-like Conduction in Nonstoichiometric Organic Crystalline Semiconductors under Simultaneous Bandwidth Control
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- O-20 Suppression of Jahn-Teller Distortion by Chemical Pressure of SiO₂ and Local Structure Analysis of CuFe₂O₄ Nanoparticles
K. Fujiwara, S. Kimura, S. Miyano, T. Ide, and Y. Ichiyanagi
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- O-21 Ultrafast Dynamics of Heliorhodopsins
S. Tahara, M. Singh, H. Kuramochi, W. Shihoya, K. Inoue, O. Nureki, O. Bèjà, Y. Mizutani, H. Kandori, and T. Tahara
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- O-22 Distortion and a Strong Hydrogen Bond in the Retinal Chromophore Enable Sodium Ion Transport by the Sodium Ion Pump KR2
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- O-23 Soft-Chromophore Featured Liquid Porphyrins and their Utilization toward Liquid-Electret Applications
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- O-25 Does Local Chain Conformation Affect the Chiral Recognition Ability of an Amylose Derivative? Comparison between Linear and Cyclic Amylose Tris(3,5-dimethylphenylcarbamate)
A. Ryoki, Y. Kimura, S. Kitamura, K. Maeda, and K. Terao,
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- O-26 Self-Assembly of Amphiphilic Amylose Derivatives in Aqueous Media
Y. Kameyama, S. Kitamura, T. Sato, and K. Terao,
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- O-27 Lyotropic Liquid Crystallinity of Linear and Star Poly(quinoxaline-2,3-diyl)s: Isotropic-Liquid Crystal Phase Equilibria in Tetrahydrofuran
H. Hasegawa, K. Terao, T. Sato, Y. Nagata, and M. Suginome,
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- O-28 Lyotropic Liquid Crystallinity of Linear and Cyclic Amylose Derivatives: Amylose Tris(*n*-octadecylcarbamate) in Tetrahydrofuran and 2-Octanone
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- O-29 Single-Chain Conformation of Carboxylated Schizophyllan, a Triple Helical Polysaccharide, in Dilute Alkaline Aqueous Solution
Y. Tomofuji, K. Yoshiba, B. E. Christensen, and K. Terao,
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- O-30 Complex Formation of a Triple-Helical Peptide with Sodium Heparin
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- R-1* 燃焼熱測定の現在と未来
長野八久
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- R-2 Magnetic and Electronic Properties of π -d Interacting Molecular Magnetic Superconductor κ -(BETS)₂FeX₄ (X = Cl, Br) Studied by Angle-Resolved Heat Capacity Measurements
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- R-3* 微小試料用高感度熱量計を用いた磁場角度回転熱容量測定による電子物性研究
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- R-4* 多糖誘導体のキラル分離能における高分子性一分子認識能と分子形態(らせん構造, 剛直性)の相関一
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- B-1* 高熱伝導材料の開発 ～さらなる熱伝導率の向上のために～ 第 10 章 放熱材料の熱伝導特性の評価, 解析技術 第 7 節 微小単結晶を用いた熱伝導測定技術
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- M-1* エントロピーの物質科学 ー化学熱力学への誘い
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- M-2* 言葉の玉手箱 キーワード解説
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- M-3* エントロピーとは何か？ 宇宙のエントロピーは増大する
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- M-4* エントロピーがもたらす圧力
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- M-5* ゴム弾性の熱力学 ー無秩序性は如何にして力を生み出すか
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- M-6* 温度とは何か？
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- M-7* エントロピーが化学変化の向きを決定する
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- M-8* エントロピーがもたらす水への溶け易さと溶け難さ
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- M-9* 多糖の構造変化と水和との関係
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M-12* 第 74 回カロリメトリーコンファレンス (Calorimetry Conference 2019) 報告

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M-13* 分子科学技術のネットワーク化と共有への期待

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M-14* Cu-Zn フェライトナノ微粒子の磁気特性と医療応用

藤原康暉, 木村慎司, 宮野俊太, 井手太星, 臼井章仁, 斉藤春夫, 細貝良行, 一柳優子
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M-15* 学問への畏敬

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