

構造熱科学研究センター業績リスト(2016)
Publications from
the Research Center for Structural Thermodynamics

[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 Charge-Transfer Phase Transition of a Cyanide-Bridged Fe^{II}/Fe^{III} Coordination Polymer
K. Zhang, S. Kang, Z. Yao, K. Nakamura, T. Yamamoto, Y. Einaga, N. Azuma, Y. Miyazaki, M. Nakano, S. Kanegawa, and O. Sato
Angew. Chem. Int. Ed. **55**(20), 6047–6050 (2016).
- O-2 Studies on the Magnetic Ground State of a Spin Möbius Strip
G. N. Newton, N. Hoshino, T. Matsumoto, T. Shiga, M. Nakano, H. Nojiri, W. Wernsdorfer, Y. Furukawa, and H. Oshio
Chem. Eur. J. **22**(40), 14205–14212 (2016).
- O-3 Terahertz Absorption Spectroscopy Study of Structural Changes in D-Penicillaminato Cu^I₈Cu^{II}₆ Clusters Induced by Water Desorption
H. Suzuki, C. Otani, N. Yoshinari, and T. Konno
Inorg. Chem. Front. **3**, 274–278 (2016).
- O-4 Magnetocaloric Effect of High-Spin Cluster with Ni₉W₆ Core
M. Gajewski, R. Pełka, M. Fitta, Y. Miyazaki, Y. Nakazawa, M. Bałanda, M. Reczyński, B. Nowicka, and B. Sieklucka
J. Magn. Magn. Mater. **414**, 25–31 (2016).
- O-5 Magnetocaloric Effect in Mn₂-pyrazole-[Nb(CN)₈] Molecular Magnet by Relaxation Calorimetry
R. Pełka, M. Gajewski, Y. Miyazaki, S. Yamashita, Y. Nakazawa, M. Fitta, D. Pinkowicz, and B. Sieklucka
J. Magn. Magn. Mater. **419**, 435–441 (2016).
- O-6 The Mixing Behavior of Alkanes Adsorbed on Hexagonal Boron Nitride
M. Forster, J. E. Parker, A. Inaba, C. A. Murray, N. A. Strange, J. Z. Larese, and T. Arnold
J. Phys. Chem. C **120**(45), 25796–25805 (2016).

- O-7 Mechanocaloric Properties of Poly(dimethylsiloxane) and Ethylene-Propylene Rubbers
T. Matsuo, N. Azuma, Y. Toriyama, and T. Yoshioka
J. Therm. Anal. Calorim. **123**(3), 1817–1824 (2016).
- O-8 Rotational Dynamics of Li^+ Ions Encapsulated in C_{60} Cages at Low Temperatures
H. Suzuki, M. Ishida, M. Yamashita, C. Otani, K. Kawachi, Y. Kasama, and E. Kwon
Phys. Chem. Chem. Phys. (2016) in press.
- O-9 Polymer Morphological Change Induced by Terahertz Irradiation
H. Hoshina, H. Suzuki, C. Otani, M. Nagai, K. Kawase, A. Irizawa, and G. Isoyama
Sci. Rep. **6**, 27180 (2016) (6 pages).
- O-10 A Strongly Polarized Organic Conductor
H. Akutsu, K. Ishihara, J. Yamada, S. Nakatsuji, S. S. Turner, and Y. Nakazawa
CrystEngComm **18**(42), 8151–8154 (2016).
- O-11 New Family of Six Stable Metals with a Nearly Isotropic Triangular Lattice of Organic Radical Cations and Diluted Paramagnetic System of Anions: $\kappa(\kappa_{\perp})\text{-(BDH-TTP)}_4\text{MX}_4\text{-Solv}$, where $\text{M} = \text{Co}^{\text{II}}, \text{Mn}^{\text{II}}$; $\text{X} = \text{Cl}, \text{Br}$, and $\text{Solv} = (\text{H}_2\text{O})_5, (\text{CH}_2\text{X}_2)$
A. A. Bardin, H. Akutsu, and J. Yamada
Cryst. Growth Des. **16**(3), 1228–1246 (2016).
- O-12 Enantiopure and Racemic Radical-Cation Salts of $\text{B}(\text{malate})_2^-$ Anions with BEDT-TTF
J. R. Lopez, L. Martin, J. D. Wallis, H. Akutsu, Y. Nakazawa, J. Yamada, T. Kadoya, S. J. Coles, and C. Wilson
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- O-13 Rotational Tunneling of Methyl Groups and the Electronic Heat Capacity of $\text{EtMe}_3\text{Sb}[\text{Pd}(\text{dmit})_2]_2$ under Magnetic Fields
S. Yamashita, M. Yoshizumi, H. Akutsu, Y. Nakazawa, K. Ueda, and R. Kato
Int. J. Mod. Phys. B **30**(13), 1642007 (2016).
- O-14 Quadratic Temperature Dependence of Electronic Heat Capacities in the κ -Type Organic Superconductors
S. Imajo, S. Yamashita, H. Akutsu, and Y. Nakazawa
Int. J. Mod. Phys. B **30**(13), 1642014 (2016) (7 pages).
- O-15 Thermodynamics of the d -Wave Pairing in Organic Superconductors
S. Kruchinin, A. Zolotovskiy, S. Yamashita, and Y. Nakazawa
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- O-16 Thermodynamic Evidence of d -Wave Superconductivity of the Organic Superconductor λ -(BETS)₂GaCl₄
S. Imajo, N. Kanda, S. Yamashita, H. Akutsu, Y. Nakazawa, H. Kumagai, T. Kobayashi, and A. Kawamoto
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- O-17 Anisotropic Field Dependence of the Superconducting Transition in the Magnetic Molecular Superconductor κ -(BETS)₂FeBr₄
S. Fukuoka, S. Yamashita, Y. Nakazawa, T. Yamamoto, and H. Fujiwara
J. Phys. Soc. Jpn. (2016) in press.
- O-18 Construction of Relaxation Calorimetry for 10¹⁻² Micro-gram Samples and Heat Capacity Measurements of Organic Complexes
S. Imajo, S. Fukuoka, S. Yamashita, and Y. Nakazawa
J. Therm. Anal. Calorim. **123**(3), 1871–1876 (2016).
- O-19 Cooling-Rate-Controlled Heat Capacity Measurements of Organic Superconductor (TMTSF)₂ClO₄
S. Morishita, R. Yoshimoto, S. Fukuoka, S. Yamashita, H. Akutsu, and Y. Nakazawa
J. Therm. Anal. Calorim. **123**(3), 1877–1881 (2016).
- O-20 Thermal Anomaly around the Superconductive Transition of κ -(BEDT-TTF)₂Cu(NCS)₂ with External Pressure and Magnetic Field Control
Y. Muraoka, S. Imajo, S. Yamashita, H. Akutsu, and Y. Nakazawa
J. Therm. Anal. Calorim. **123**(3), 1891–1897 (2016).
- O-21 Peculiarities of Thermal Expansion of Quasi-Two-Dimensional Organic Conductors κ -(BEDT-TTF)₂Cu[N(CN)₂]Cl
A. V. Dolbin, M. V. Khlistuck, V. B. Eselson, V. G. Gavrilko, N. A. Vinnikov, R. M. Basnukaeva, V. V. Danchuk, V. A. Konstantinov, and Y. Nakazawa
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- O-22 Thermodynamic Properties of Antiferromagnetic Ordered States of π - d Interacting Systems of κ -(BETS)₂FeX₄ (X = Br, Cl)
S. Fukuoka, S. Yamashita, Y. Nakazawa, T. Yamamoto, H. Fujiwara, T. Shirahata, and K. Takahashi
Phys. Rev. B **93**(24), 245136 (2016) (7 pages).

- O-23 AC Calorimetry System Using Commercially Available Microchip Device and its Application for Tiny Single Crystals of Molecule-Based Compounds, M. Murase
S. Yamashita, R. Yoshimoto, S. Imajo, Y. Nakazawa, K. Ueda, and R. Kato
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- O-24* 種々の疎水基を有する両親媒性ランダム共重合体の水溶液中での会合・ミセル化挙動
藤本麻里, 佐藤尚弘
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- O-25 Structural Analysis of Hydrophobe-Uptake Micelle of an Amphiphilic Alternating Copolymer in Aqueous Solution
K. Morishima, K. Terao, and T. Sato
Langmuir **32**(31), 7875–7881 (2016).
- O-26 Reversible Vesicle-Spherical Micelle Transition in a Polyion Complex Micellar System Induced by Changing the Mixing Ratio of Copolymer Components
R. Takahashi, T. Sato, K. Terao, and S. Yusa
Macromolecules **49**(8), 3091–3099 (2016).
- O-27 Colloidal Droplets of the Concentrated Phase in Aqueous Methanol Solutions of a Hydrophilically Modified Poly(dimethylsiloxane)
T. Okuhara and T. Sato
Polym. J. **48**(3), 247–251 (2016).
- O-28 Local and Global Conformations of the Flower Micelle and Flower Necklace Formed by an Amphiphilic Alternating Copolymer in Aqueous Solution
K. Uramoto, R. Takahashi, K. Terao, and T. Sato
Polym. J. **48**(8), 863–867 (2016).
- O-29 Competition between the Micellization and the Liquid–Liquid Phase Separation in Amphiphilic Block Copolymer Solutions
T. Sato and R. Takahashi
Polym. J. (2016) in press.
- R-1* 双安定な多重機能性を示す一次元ロジウム–セキノナト錯体の構造物性相関
満身 稔, 宮崎裕司, 北河康隆
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- R-2* 強い電子間相互作用を示す分子性化合物の熱力学的研究(2015 年度日本熱測定学会
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中澤康浩
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- T-1* エンゲル・リード 物理化学(下)(T. Engel and P. Reid 著;Physical Chemistry (3rd
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稲葉 章(訳)B5 版, 608 頁
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- T-2* アトキンス 物理化学要論(第 6 版)(P. W. Atkins and J. de Paula 著;Elements of Physical
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- M-1* XY スピンで作るイジング鎖
中野元裕
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- M-2* 一次元ロジウム(I)–セミキノナト錯体の熱容量と相転移
宮崎裕司, 中野元裕
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- M-3* κ 型 BEDT-TTF 塩で反強磁性揺らぎとプロトンスピンの相互作用によって生じる極低温熱
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吉元 諒, 山下智史, 坪 広樹, 中澤康浩
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- M-4* 散乱とレオロジーはマリアージュできない?
佐藤尚弘
高分子 **65**(3), 115–118 (2016).
- M-5* 高分子と散乱法
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