

Publications : 2010~2015

【2015】

1. R. Sakuma, H. Hashimoto, G. Kobayashi, T. Fujii, M. Nakanishi, R. Kanno, M. Takano, and Jun Takada
“High-rate performance of a bacterial iron-oxide electrode material for lithium-ion battery”
Materials Letters, **139**, 414-417, (2015).
2. T. Kunoh, T. Suzuki, T. Shiraishi, H. Kunoh and J. Takada
“Treatment of *Leptothrix* cells with ultrapure water poses a threat to their viability”
Biology, **4**, 50-66, (2015).
3. T. Suzuki, T. Tatsuki, D. Nakatsuka, H. Hashimoto, K. Tamura, H. Kunoh and J. Takada
“Use of iron powder to obtain high yields of *Leptothrix* sheaths in culture”
Minerals, **5**, 335-345, (2015).

【2014】

1. H. Ishihara, H. Hashimoto, E. Taketa, T. Suzuki, K. Mandai, H. Kunoh, and J. Takada
“Silicon-rich, iron oxide microtubular sheath produced by an iron-oxidizing bacterium, *Leptothrix* sp. strain OUMS1, in culture”
Minerals, **4**, 565-577, (2014).
2. H. Hashimoto, G. Kobayashi, R. Sakuma, T. Fujii, N. Hayashi, T. Suzuki, R. Kanno, M. Takano, and J. Takada
“Bacterial nanometric amorphous Fe-based oxide: a potential lithium-ion battery anode material”
ACS Applied Materials & Interfaces, **6** (8), 5374-8, (2014).
3. H. Hashimoto, M. Nakanishi, H. Asaoka, T. Maeda, Y. Kusano, T. Fujii, and J. Takada
“Preparation of yellowish-red Al-substituted α -Fe₂O₃ powders and their thermostability in color”

ACS Applied Materials & Interfaces, **6**, 20282-20289, (2014).

4. I. Safarik, J. Filip, K. Horska, M. Nowakowa, J. Tucek, M. Sarikova, H. Hashimoto, J. Takada, and R. Zboril
“Magnetically-modified natural biogenic iron oxides for organic xenobiotics removal”
Int. J. Environ. Sci. Technol., **12**, 673-682, (2015).

【2013】

1. T. Suzuki, H. Ishihara, K. Toyoda, T. Shiraishi, H. Kunoh, and J Takada
“Autolysis of bacterial cells leads to formation of empty sheath by *Leptothrix* spp.”
Minerals, **3**, 247-257, (2013).
2. H. Ishihara, T. Suzuki, H. Hashimoto, H. Kunoh, and J. Takada
“Initial parallel arrangement of extracellular fibrils holds a key for sheath frame construction by *Leptothrix* sp. strain OUMS1”
Minerals, **3**, 73-81, (2013).
3. H. Hashimoto, A. Itadani, T. Kudoh, S. Fukui, Y. Kuroda, M. Seno, Y. Kusano, Y. Ikeda, Y. Benino, T. Nanba, M. Nakanishi, T. Fujii, and J. Takada
“Nano-micrometer-architectural acidic silica prepared from iron oxide of *Leptothrix ochracea* origin”
ACS Applied Materials & Interfaces, **5** (11), 5194-200, (2013).

【2012】

1. T. Suzuki, H. Ishihara, M. Furutani, T. Shiraishi, H. Kunoh, and J. Takada
“A novel method for culturing of *Leptothrix* sp. strain OUMS1 in natural conditions”
Minerals, **2** (2), 118-128. (2012).
2. T. Suzuki, H. Hashimoto, H. Ishihara, N. Matsumoto, H. Kunoh, and J. Takada
“Two types of morphologically distinct fibers comprising *Gallionella ferruginea* twisted stalks”
Microbes and Environments, **27** (3), 338-341, (2012).
3. T. Suzuki, H. Hashimoto, A. Itadani, N. Matsumoto, H. Kunoh, and J. Takada

- “Silicon and phosphorus linkage with iron via oxygen in the amorphous matrix of *Gallionella ferruginea* stalks”
Applied and Environmental Microbiology, **78** (1), 236-241, (2012).
4. H. Hashimoto, A. Itadani, T. Fujii, M. Nakanishi, H. Asaoka, Y. Kusano, Y. Ikeda, Y. Kuroda, and J. Takada
“Nano-micro-architectural composites with acid properties: Magnetic iron oxides/amorphous silicate prepared from iron oxide produced by iron-oxidizing bacterium, *Leptothrix ochracea*”
Materials Research Bulletin, **48** (3), 1174–1177, (2013).
5. H. Hashimoto, A. Itadani, T. Kudoh, Y. Kuroda, M. Seno, Y. Kusano, Y. Ikeda, M. Nakanishi, T. Fujii, and J. Takada
“Acidic amorphous silica prepared from iron oxide of bacterial origin”
ACS Applied Materials & Interfaces, **5** (3), 518-23, (2013).
6. H. Hashimoto, H. Asaoka, T. Nakano, Y. Kusano, H. Ishihara, Y. Ikeda, M. Nakanishi, T. Fujii, T. Yokoyama, N.Horiishi, T. Nanba, and J. Takada
“Preparation, microstructure, and color tone of microtubule material composed of hematite/amorphous-silicate nanocomposite from iron oxide of bacterial origin”
Dyes and Pigments, **95**, 639-643, (2012).
7. H. Hashimoto, T. Fujii, S. Kohara, H. Asaoka, Y. Kusano, Y. Ikeda, M. Nakanishi, Y. Benino, T. Nanba, and J. Takada
“Amorphous structure of iron oxide of bacterial origin”
Materials Chemistry and Physics, **137** (2), 571–575, (2012).

【2011】

1. M. Furutani, T. Suzuki, H. Ishihara, H. Hashimoto, H. Kunoh, and J. Takada
“Initial assemblage of bacterial saccharic fibrils and element deposition to form an immature sheath in cultured *Leptothrix* sp. strain OUMS1”
Minerals, **1**, 157-166, (2011).
2. M. Sawayama, T. Suzuki, H. Hashimoto, T. Kasai, M. Furutani, N. Miyata, H. Kunoh, and J. Takada
“Isolation of a *Leptothrix* strain, OUMS1, from ocherous deposits in groundwater”
Current Microbiology, **63**, 173-180, (2011).

3. T. Suzuki, H. Hashimoto, H. Ishihara, T. Kasai, H. Kunoh, and J. Takada
“Structural and spatial associations between Fe, O, and C in the network structure of the *Leptothrix ochracea* sheath surface”
Applied and Environmental Microbiology, **77**, 7873-7875, (2011).
4. T. Suzuki, H. Hashimoto, N. Matsumoto, M. Furutani, H. Kunoh, and J. Takada
“Nanometer-scale visualization and structural analysis of the inorganic/organic hybrid structure of *Gallionella ferruginea* twisted stalks”,
Applied and Environmental Microbiology, **77**, 2877-2881, (2011).
5. M. Furutani, T. Suzuki, H. Ishihara, H. Hashimoto, H. Kunoh, and J. Takada
“Assemblage of bacterial saccharic microfibrils in sheath skeleton formed by cultured *Leptothrix* sp. strain OUMS1”
Journal of Marine Science Research & Development, **5**, (2011),
doi:10.4172/2155-9910.S5-001.
6. M. Furutani, T. Suzuki, H. Ishihara, H. Hashimoto, H. Kunoh, and J. Takada
“Initial assemblage of bacterial saccharic fibrils and element deposition to form an immature sheath in cultured *Leptothrix* sp. strain OUMS1”,
Minerals, **1**, 157–166, (2011).
7. T. Ema, Y. Miyazaki, I. Kozuki, T. Sakai, H. Hashimoto, and J. Takada
“Highly active lipase immobilized on biogenous iron oxide via an organic bridging group: the dramatic effect of the immobilization support on enzymatic function” ,
Green Chemistry, **13**, 3187-3195, (2011).

【2010】

1. T. Sakai, Y. Miyazaki, A. Murakami, N. Sakamoto, T. Ema, H. Hashimoto, M. Furutani, M. Nakanishi, T. Fujii, and J. Takada
“Chemical modification of biogenous iron oxide to create an excellent enzyme scaffold”
Organic and Biomolecular Chemistry, **8**, 336-338, (2010).