

Recent papers about iron-based superconductors

“Review of Fe chalcogenide as the simplest Fe-based superconductor”

Y. Mizuguchi and Y. Takano, J. Phys. Soc. Jpn. 79, 102001 (2010).

“Superconductivity at 27K in tetragonal FeSe under high pressure”

Y. Mizuguchi, F. Tomioka, S. Tsuda, T. Yamaguchi and Y. Takano, Appl. Phys. Lett. 93, 152505 (2008).

“Superconductivity in S-substituted FeTe”

Y. Mizuguchi, F. Tomioka, S. Tsuda, T. Yamaguchi and Y. Takano, Appl. Phys. Lett. 94, 012503 (2009).

“Crystal structure of the new FeSe_{1-x} superconductor”

S. Margadonna, Y. Takabayashi, M. T. MacDonald, K. Kasperkiewicz, Y. Mizuguchi, Y. Takano, A. N. Fitch, E. Suard and K. Prassides, Chem. Commun. 2008, 5607.

“Evidence for Unconventional Superconductivity in Arsenic-Free Iron-Based Superconductor FeSe: A Se-77-NMR Study”

H. Kotegawa, S. Masaki, Y. Awai, H. Tou, Y. Mizuguchi and Y. Takano, J. Phys. Soc. Jpn. 77, 113703 (2008).

“Precise Pressure Dependence of the Superconducting Transition Temperature of FeSe: Resistivity and Se-77-NMR Study”

S. Masaki, H. Kotegawa, Y. Hara, H. Tou, K. Murata, Y. Mizuguchi and Y. Takano, J. Phys. Soc. Jpn. 78, 063704 (2009).

“Pressure evolution of the low-temperature crystal structure and bonding of the superconductor FeSe (T_c=37 K)”

S. Margadonna, Y. Takabayashi, Y. Ohishi, Y. Mizuguchi, Y. Takano, T. Kagayama, T. Nakagawa, M. Takata and K. Prassides, Phys. Rev. B 80, 064506 (2009).

“Moisture-induced superconductivity in FeTe_{0.8}S_{0.2}”

Y. Mizuguchi, K. Deguchi, S. Tsuda, T. Yamaguchi and Y. Takano, Phys. Rev. B 81, 214510 (2010).

“Evolution of superconductivity by oxygen annealing in FeTe_{0.8}S_{0.2}”

Y. Mizuguchi, K. Deguchi, S. Tsuda, T. Yamaguchi and Y. Takano, Europhys. Lett. 90, 57002 (2010).

“Anion height dependence of T_c for the Fe-based superconductor”

Y. Mizuguchi, Y. Hara, K. Deguchi, S. Tsuda, T. Yamaguchi, K. Takeda, H. Kotegawa, H. Tou and Y. Takano, *Supercond. Sci. Technol.* 23, 054013 (2010).

“Fabrication of the iron-based superconducting wire using Fe(Se, Te)”

Y. Mizuguchi, K. Deguchi, S. Tsuda, T. Yamaguchi, H. Takeya, H. Kumakura and Y. Takano, *Appl. Phys. Express* 2, 083004 (2009).

“Substitution effects on FeSe superconductor”

Y. Mizuguchi, F. Tomioka, S. Tsuda, T. Yamaguchi and Y. Takano, *J. Phys. Soc. Jpn.* 78, 074712 (2009).

“Evidence of local structure inhomogeneity in $\text{FeSe}_{1-x}\text{Te}_x$ from extended x-ray absorption fine structure”

B. Joseph, A. Iadecola, A. Puri, L. Simonelli, Y. Mizuguchi, Y. Takano and N. L. Saini, *Phys. Rev. B* 82, 020502 (2010).

“Determination of the local structure in $\text{FeSe}_{0.25}\text{Te}_{0.75}$ single crystal by polarized EXAFS”

A. Iadecola, B. Joseph, L. Simonelli, Y. Mizuguchi, Y. Takano and N. L. Saini, *Europhys. Lett.* 90, 67008 (2010).

“Weak Superconducting Fluctuations and Small Anisotropy of the Upper Critical Fields in an $\text{Fe}_{1.05}\text{Te}_{0.85}\text{Se}_{0.15}$ Single Crystal”

T. Kida, M. Kotani, Y. Mizuguchi, Y. Takano, M. Hagiwara, *J. Phys. Soc. Jpn.* 79, 074706 (2010).

“Analysis on photoemission spectrum of superconducting FeSe”

R. Yoshida, T. Wakita, H. Okazaki, Y. Mizuguchi, S. Tsuda, Y. Takano, H. Takeya, K. Hirata, Y. Kato, T. Muro, M. Okawa, K. Ishizaka, S. Shin, H. Harima, M. Hirai, Y. Muraoka and T. Yokoya, accepted for publication in *Physica C*

“ ^{77}Se -NMR study of Co-substituted FeSe”

H. Kotegawa, Y. Hara, S. Masaki, H. Tou, Y. Mizuguchi and Y. Takano, accepted for publication in *Physica C*

“Air-exposure effects of superconductivity in $\text{Fe}(\text{Te},\text{S})$ ”

K. Deguchi, Y. Mizuguchi, S. Ogawara, T. Watanabe, S. Tsuda, T. Yamaguchi and Y. Takano, accepted for publication in *Physica C*.

“Structural Phase Transitions and Superconductivity in $\text{Fe}_{1+\delta}\text{Se}_{0.57}\text{Te}_{0.43}$ at Ambient and Elevated Pressures”

N. C. Gresty, Y. Takabayashi, A. Y. Ganin, M. T. MacDonald, J. B. Claridge, D. Giap, Y. Mizuguchi, Y. Takano, T. Kagayama, Y. Ohishi, M. Takata, M. J. Rosseinsky, S. Margadonna and K. Prassides, *J. Am. Chem. Soc.* 131, 16944 (2009).

“Local density of states and superconducting gap in the iron chalcogenide superconductor $\text{Fe}_{1+d}\text{Se}_{1-x}\text{Te}_x$ observed by scanning tunneling spectroscopy”

T. Kato, Y. Mizuguchi, H. Nakamura, T. Machida, H. Sakata and Y. Takano, *Phys. Rev. B* 80, 180507 (2009).

“Upper Critical Fields of the 11-System Iron-Chalcogenide Superconductor $\text{FeSe}_{0.25}\text{Te}_{0.75}$ ”

T. Kida, T. Matsunaga, M. Hagiwara, Y. Mizuguchi, Y. Takano and K. Kindo, *J. Phys. Soc. Jpn.* 78, 113701 (2009).

“Successive Phase Transitions under High Pressure in $\text{FeTe}_{0.92}$ ”

H. Okada, H. Takahashi, Y. Mizuguchi, Y. Takano and H. Takahashi, *J. Phys. Soc. Jpn.* 78, 083709 (2009).

“Electronic Structure of Superconducting FeSe Studied by High-Resolution Photoemission Spectroscopy”

R. Yoshida, T. Wakita, H. Okazaki, Y. Mizuguchi, S. Tsuda, Y. Takano, H. Takeya, K. Hirata, T. Muro, M. Okawa, K. Ishizaka, S. Shin, H. Harima, M. Hirai, Y. Muraoka and T. Yokoya, *J. Phys. Soc. Jpn.* 78, 034708 (2009).

“Pressure studies on FeSe family superconductors”

Y. Mizuguchi, F. Tomioka, K. Deguchi, S. Tsuda, T. Yamaguchi and Y. Takano, accepted for publication in *Physica C*.

“Mössbauer studies on FeSe and FeTe”

Y. Mizuguchi, T. Takabayashi, S. Tsuda, T. Yamaguchi and Y. Takano, accepted for publication in *Physica C*.

“FeTe as a candidate material for new iron-based superconductor”

Y. Mizuguchi, F. Tomioka, S. Tsuda, T. Yamaguchi and Y. Takano, *Physica C* 469, 1027 (2009).

“Transport property of iron-based superconducting wire using $\text{FeTe}_{0.5}\text{Se}_{0.5}$ ”

T. Ozaki, K. Deguchi, Y. Mizuguchi, H. Kumakura, Y. Takano, to be published in IEEE. (arXiv:1008.1447)

“Superconductivity in $\text{FeTe}_{1-x}\text{S}_x$ induced by alcohol”

K. Deguchi, Y. Mizuguchi, T. Ozaki, S. Tsuda, T. Yamaguchi, Y. Takano, arXiv:1008.0666.

“Single crystal growth and structural characterization of $\text{FeTe}_{1-x}\text{S}_x$ ”

Y. Mizuguchi, K. Deguchi, T. Ozaki, M. Nagao, S. Tsuda, T. Yamaguchi and Y. Takano, to be published in IEEE. (arXiv:1008.2493)

“Superconductivity in oxygen-annealed $\text{FeTe}_{1-x}\text{S}_x$ single crystal”

Y. Mizuguchi, Y. Kawasaki, K. Deguchi, T. Ozaki, M. Nagao, S. Tsuda, T. Yamaguchi and Y. Takano, arXiv:1009.3315.

“鉄系超伝導線材の試作”

水口佳一, 高野義彦, まてりあ Vol. 48, No. 10, 520 (2009).

“新鉄系超伝導体 $\text{FeTe}_{1-x}\text{S}_x$ の発見”

水口佳一, 高野義彦, NIMS-NOW Vol. 7, No. 4, 08 (2009).

“新鉄系超伝導物質 FeSe と FeTe”

水口佳一, 高野義彦, 金属 Vol. 79, No. 4 (2009).