

International Conference Presentations

February 09, 2021

Laboratory of Nanoscale Electron Devices

Division of Electronics for Informatics

Graduate School of Information Science and Technology

Hokkaido University

Presented

2020

1. M. Yamanouchi, K. Jono, F. Shimohashi, and T. Uemura
“MnGa/Co₂MnSi bilayer for spin-orbit torque magnetization switching”,
[65th Annual Conference on Magnetism and Magnetic Materials, Abstracts, p.547, R2-07, Virtual Conference, November 2–6, \(2020\).](#)
2. K. Nakada, Y. Chikaso, T. Tanimoto, M. Inoue, K. Inubushi, and T. Uemura,
“Enhancement of magnetoresistance characteristics of Ge-rich Co₂Fe(Ga,Ge)-based current-perpendicular-to-plane giant magnetoresistance devices”,
[65th Annual Conference on Magnetism and Magnetic Materials, Abstracts, p.556, R3-12, Virtual Conference, November 2–6, \(2020\).](#)
3. K. Jono, F. Shimohashi, M. Yamanouchi, and T. Uemura,
“Spin-orbit-torque induced magnetization switching for an ultra-thin MnGa/Co₂MnSi bilayer”,
[2020 International Conference on Solid State Devices and Materials \(SSDM2020\), Extended Abstracts \(Downloaded from web site\), I-1-04, Virtual Conference, Sep. 27-30, 2020.](#)

2019

1. M. Yamanouchi, N.V. Bao, M. Inoue and T. Uemura,
“Effects of spin–orbit torque on domain wall motion in a Ta/ MnGa/NiAl structure”,
[64th Annual Conference on Magnetism and Magnetic Materials, Abstracts, pp.773, HB-07, LasVegas, USA, November 4 – 8, 2019.](#)
2. Z. Lin, D. Pan, M. Rasly and T. Uemura,
“Electrical spin injection into an AlGaAs/GaAs-based 2DEG system with a Co₂MnSi spin source up to room temperature”
[14th Joint MMM-Intermag Conference, Abstracts, p.86, AM-09, Washington DC, USA, Jan. 14-18, 2019.](#)

2018

1. D. Mouri, M. Inoue, K. Inubushi, T. Tanimoto, K. Nakada, M. Yamamoto, and T. Uemura,
“Origin of bi-quadratic interlayer exchange coupling in Co₂MnSi-based pseudo spin valves”
[2018 International Conference on Solid State Devices and Materials \(SSDM2018\), Extended Abstracts \(Downloaded from web site\), PS-9-08, Tokyo, Japan, Sep. 9-13, 2018.](#)
2. M. Inoue, D. Mouri, K. Inubushi, K. Nakada, M. Yamamoto, and T. Uemura,
“Mn-composition dependence of strength of bi-quadratic interlayer exchange coupling in Co₂MnSi-based pseudo spin-valves”,
[IEEE International Magnetism Conference 2018 \(INTERMAG 2018\), Digest Book, p.855, EC-08, Marina Bay Sands Convention Center, Singapore, April. 23-27, 2018.](#)

3. Z. Lin, D. Pan, M. Rasly and T. Uemura,
“Electrical spin injection into an AlGaAs/GaAs-based high-mobility two-dimensional electron system”,
[IEEE International Magnetism Conference 2018 \(INTERMAG 2018\), Digest Book, p.1616, HD-11, Marina Bay Sands Convention Center, Singapore, April. 23-27, 2018.](#)

2017

1. T. Uemura
“Coherent Manipulation of Nuclear Spins in GaAs using Electrical Spin injections”
[International Workshop on NanoScience and NanoOptics 2017, Sapporo, Japan, Nov. 2-3, 2017.](#)
[\[Invited Talk\]](#)
2. M. Inoue, B. Hu, K. Moges, K. Inubushi, K. Nakada, M. Yamamoto, and T. Uemura
“Influence of Mn composition in Co₂MnSi films on magnetoresistance characteristics of Co₂MnSi-based current-perpendicular-to-plane spin valves”,
[2017 International Conference on Solid State Devices and Materials \(SSDM2017\), Extended Abstracts \(Downloaded from web site\), pp.989-990, PS-12-11, Sendai, Japan, Sep. 19-22, 2017.](#)
3. M. Inoue, B. Hu, K. Moges, K. Inubushi, K. Nakada, M. Yamamoto, and T. Uemura
“Influence of Mn composition in Co₂MnSi films on magnetoresistance characteristics of Co₂MnSi-based giant magneto-resistance devices”,
[9th International School and Conference on Spintronics and Quantum Information Technology, Abstract Book, p. 85, A-33, Fukuoka, June 4-8, 2017.](#)
4. Z. Lin, M. Rasly, and T. Uemura
“Electrical Detection of Nuclear Spin-Echo Signals in an Electron Spin Injection System”,
[9th International School and Conference on Spintronics and Quantum Information Technology, Abstract Book, p. 177, B-38, Fukuoka, June 4-8, 2017.](#)
5. M. Rasly, Z. Lin, M. Yamamoto and T. Uemura
“Electrical control of nuclear spin polarization: Experimental and quantitative modeling”,
[IEEE Int'l Magnetism Conf. 2017 \(INTERMAG 2017\), Digests \(USB Memory\), GO-12, Dublin Convention Centre, Dublin, Ireland, April 24–28, 2017.](#)

2016

1. W. Nomura, T. Miyakawa, M. Yamamoto, and T. Uemura
“Fabrication of a Spin Injection Device Having a Top-gate Structure”,
[2016 International Conference on Solid State Devices and Materials \(SSDM2016\), Extended Abstracts \(Downloaded from web site\), pp.921-922, PS-12-07, Tsukuba, Japan, Sep. 27-29, 2016.](#)
2. T. Uemura
“Coherent manipulation of nuclear spins using spin injection from a half-metallic spin source”,
[SPIE Optics + Photonics 2016, Spintronics IX 9931-55, San Diego, United States, Aug. 28 – Sep. 1, 2016.](#)
[\[Invited Talk\]](#)
3. T. Uemura
“Highly efficient spin injection from a half-metallic spin source of Co₂MnSi and sensitive detection of nuclear spin states”,

The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), Technical Digest, p.243, Th2-T05-5, Nagoya, Japan, August 7 – 12, 2016. [Invited Talk]

4. T. Uemura
“Coherent Control of Nuclear Spins in Semiconductor using Electrical Spin Injection”,
2016 RCIQE International Seminar, Sapporo, Japan, March 8, 2016. [Invited Talk]
5. M. Rasly, Z. Lin, M. Yamamoto, and T. Uemura,
“Analysis of transient response of nuclear spins in GaAs with/without nuclear magnetic resonance”,
13th Joint MMM-Intermag Conference, Abstracts, pp. 278-279, CB-07, San Diego, CA, USA, Jan. 11-15, 2016.

2015

1. Masafumi Yamamoto and Tetsuya Uemura,
“Half-metallic Heusler alloys for the spin sources of spintronic devices”,
13th RIEC International Workshop on Spintronics, Sendai, Japan, November 18-20, 2015. [Invited Talk]
2. Kidist. Moges, B. Hu, H. Liu, T. Uemura and M. Yamamoto,
“Bias Voltage Dependence of the Spin-dependent Tunneling Conductance of Co₂(Mn,Fe)Si-Based Magnetic Tunnel Junctions Exhibiting Giant Tunneling Magnetoresistances”,
2015 International Conference on Solid State Devices and Materials (SSDM2015), Extended Abstracts (DVD, USB memory), pp.408-409, PS-12-5, Sapporo, Japan, Sep. 28-30, 2015.
3. B. Hu, Kidist. Moges, H. Liu, Y. Honda, T. Uemura and M. Yamamoto,
“Temperature Dependence of Spin-Dependent Tunneling Conductance of Magnetic Tunnel Junctions with Highly Spin-Polarized Electrodes”,
2015 International Conference on Solid State Devices and Materials (SSDM2015), Extended Abstracts (DVD, USB memory), pp.410-411, PS-12-6, Sapporo, Japan, Sep. 28-30, 2015.
4. Z. Lin, M. Yamamoto and T. Uemura,
“Transient Analysis of Oblique Hanle Signals Observed in GaAs”,
2015 International Conference on Solid State Devices and Materials (SSDM2015), Extended Abstracts (DVD, USB memory), pp.432-433, PS-12-17, Sapporo, Japan, Sep. 28-30, 2015.
5. T. Akiho, Y. Ebina, M. Yamamoto, and T. Uemura,
“Coherent control of nuclear spins using spin injection from half-metallic Co₂MnSi”,
21st International Conference on Electronic Properties of Two-Dimensional Systems, Abstracts, p.186, Tu-A2-4, Sendai, Japan, July 26-31, 2015.
6. T. Miyakawa, T. Akiho, Y. Ebina, M. Yamamoto, and T. Uemura,
“Gate control of spin-valve signal and Hanle signal in GaAs observed by a four-terminal nonlocal geometry”,
17th International Conference on Modulated Semiconductor Structures, Abstracts, p.158, Mo-PM-22, Sendai, Japan, July 26-31, 2015.
7. T. Uemura and M. Yamamoto,
“Manipulation of nuclear spins in GaAs using a half-metallic spin source of Co₂MnSi”,
IEEE Int’l Magnetism Conf. 2015 (INTERMAG 2015), Digests (USB Memory), CC-01, China National

Convention Center, Beijing, China, May 11–15, 2015. [Invited Talk]

8. Kidist Moges, H. Liu, T. Kawami, T. Uemura and M. Yamamoto,
“Half-metallic electronic structure of $\text{Co}_2(\text{Mn,Fe})\text{Si}$ electrodes investigated through tunneling spectroscopy for fully epitaxial magnetic tunnel junctions”
[IEEE Int’l Magnetism Conf. 2015 \(INTERMAG 2015\), Digests \(USB Memory\), GB-06, China National Convention Center, Beijing, China, May 11–15, 2015.](#)
9. B. Hu, H. Liu, T. Kawami, Kidist Moges, Y. Honda, T. Uemura and M. Yamamoto,
“Temperature dependence of spin-dependent tunneling resistances of Co_2MnSi -based and $\text{Co}_2(\text{Mn,Fe})\text{Si}$ -based magnetic tunnel junctions showing high tunneling magnetoresistances”,
[IEEE Int’l Magnetism Conf. 2015 \(INTERMAG 2015\), Digests \(USB Memory\), GB-11, China National Convention Center, Beijing, China, May 11–15, 2015.](#)

2014

1. Kidist Moges, Y. Honda, T. Uemura, M. Yamamoto Y. Miura and M. Shirai,
“Effect of nonstoichiometry on the half-metallicity of $\text{Co}_2(\text{Mn,Fe})\text{Si}$ thin films investigated through saturation magnetization”,
[59th Annual Conference on Magnetism and Magnetic Materials, Abstracts, pp. 48-49, AH-08, Honolulu, Hawaii, USA, November 3 – 7, 2014.](#)
2. T. Uemura, T. Akiho, Y. Ebina and M. Yamamoto,
“Electrical detection of nuclear magnetic resonance in GaAs using transient oblique Hanle effect measurements”,
[59th Annual Conference on Magnetism and Magnetic Materials, Abstracts, pp. 671-672, FW-10, Honolulu, Hawaii, USA, November 3 – 7, 2014.](#)
3. T. Uemura and M. Yamamoto,
“Efficient nuclear spin polarization and electrical detection of nuclear magnetic resonance in GaAs using half-metallic spin source”,
[The 3rd International Conference of Asian Union of Magnetism Societies, Abstracts, p. 263, VIII-25, Haikou, China, October 28 – November 2, 2014. \[Invited Talk\]](#)
4. T. Akiho, Y. Ebina, H.-x. Liu. M. Yamamoto, T. Uemura,
“Efficient Dynamic Nuclear Polarization Using Electrical Spin Injection from a Half-Metallic Spin Source”,
[32nd International Conference on the Physics of Semiconductors \(ICPS2014\), Abstracts, Spintronics & Spin phenomena II pp. 2-3, Austin convention center, Austin, Texas, USA, August 10–15, 2014.](#)
5. M. Yamamoto,
“Critical role of defect control for half-metallicity of Co-based Heusler alloy thin films”,
[The 6th IEEE International Nanoelectronics Conference 2014 \(IEEE INEC 2014\), Sapporo Japan, July 28–31. \[Invited Talk\]](#)
6. T. Uemura,
“Highly efficient spin injection and dynamic nuclear polarization using a half-metallic spin source”,

The 6th IEEE International Nanoelectronics Conference 2014 (IEEE INEC 2014), Sapporo Japan, July 28–31. [Invited Talk]

7. Y. Honda, H.-x. Liu, T. Uemura, and M. Yamamoto,
“Dependence of degree of temperature dependence of TMR ratio of Co₂MnSi/MgO/Co₂MnSi MTJs on Mn composition in Co₂MnSi electrodes”,
[IEEE Int’l Magnetism Conf. 2014 \(INTERMAG 2014\), Digests \(USB Memory\) p. 2407-2408, FS-07, International Congress Center Dresden, Dresden, Germany, May 4–8, 2014.](#)

2013

1. T. Akiho, M. Yamamoto, and T. Uemura,
“Spin-dependent transport properties of strained InGaAs channel investigated through all electrical spin injection and detection”,
[58th Annual Conference on Magnetism and Magnetic Materials, Abstracts, P. 716, HB-10, Denver, Colorado, USA, November 4 – 8, 2013.](#)
2. F. Shi, H. Liu, M. Yamamoto and P. Voyles
“Non-symmetric Interfaces in Symmetric Mn-Deficient Co₂MnSi/MgO/Co₂MnSi Magnetic Tunnel Junctions Investigated by High Resolution Scanning Transmission Electron Microscopy”,
[58th Annual Conference on Magnetism and Magnetic Materials, Abstracts, P. 658, GH-05, Denver, Colorado, USA, November 4 – 8, 2013.](#)
3. R. Fetzner, Y. Ohdaira, H. Naganuma, M. Oogane, Y. Ando, T. Taira, T. Uemura, M. Yamamoto, M. Aeschlimann and M. Cinchetti,
“Spin and symmetry properties of the buried Co₂MnSi/MgO interface.”
[58th Annual Conference on Magnetism and Magnetic Materials, Abstracts, P. 626, GB-14, Denver, Colorado, USA, November 4 – 8, 2013.](#)
4. T. Kawami, H. Liu, Y. Honda, K. M. Ayele, T. Uemura, F. Shi, P. M. Voyles and M. Yamamoto,
“Giant tunnel magnetoresistance in fully epitaxial Co₂(Mn,Fe)Si/MgO/Co₂(Mn,Fe)Si magnetic tunnel junctions”,
[58th Annual Conference on Magnetism and Magnetic Materials, Abstracts, P. 614, FX-03, Denver, Colorado, USA, November 4 – 8, 2013.](#)
5. Y. Ebina, T. Akiho, H. Liu, M. Yamamoto, and T. Uemura,
“Effect of CoFe insertion on spin injection properties of Co₂MnSi/CoFe/n-GaAs junctions”,
[58th Annual Conference on Magnetism and Magnetic Materials, Abstracts, P. 108, AX-01, Denver, Colorado, USA, November 4 – 8, 2013.](#)
6. F.-y. Shi, H.-x. Liu, M. Yamamoto, and P. Voyles,
“High Resolution Scanning Transmission Electron Microscopy Shows MnMn/O Termination at the Co₂MnSi/MgO Interface in a Magnetic Tunnel Junction”,
[2013 Material Research Society \(MRS\) Spring Meeting & Exhibit, Abstracts, DD 15.02, San Francisco, California, USA, April 1 – 5, 2013.](#)
7. T. Akiho, J.-h. Shan, K.-i. Matsuda, M. Yamamoto, and T. Uemura,
“Transient effects on oblique Hanle signals observed in ferromagnet/semiconductor heterojunctions with non-local four-terminal configuration”,

12th Joint MMM/Intermag Conf., Abstracts, p. 871, HR-04, Chicago, Illinois, USA, January 14 – 18, 2013.

8. H.-x. Liu, Y. Honda, K.-i. Matsuda, M. Arita, T. Uemura, and M. Yamamoto,
“Influence of interfacial structural properties on tunnel magnetoresistance in epitaxial magnetic tunnel junctions with Co₂MnSi electrode and MgO barrier”,
12th Joint MMM/Intermag Conf., Abstracts, p. 507, EI-09, Chicago, Illinois, USA, January 14 – 18, 2013.
9. F.-y. Shi, H.-x. Liu, M. Yamamoto, and P. Voyles,
“MnMn/O and CoCo/O terminations at Co₂MnSi/MgO interface in a magnetic tunnel junction investigated by high resolution scanning transmission electron microscopy”,
12th Joint MMM/Intermag Conf., Abstracts, p. 57, AI-01, Chicago, Illinois, USA, January 14 – 18, 2013.

2012

1. T. Akiho, J.-h. Shan, K.-i. Matsuda, M. Yamamoto, and T. Uemura,
“Electrical spin injection and electrical detection of dynamic nuclear polarization in ferromagnet/semiconductor heterojunctions”,
International Workshop on Spintronic Nano Materials 2012, Hokkaido Univ., Sapporo, Japan, November 5-6, 2012. **[Invited Talk]** (Presented on November 5, 2012)
2. H.-x. Liu, Y. Honda, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Enhanced coherent tunneling contribution in epitaxial magnetic tunnel junctions with a Co₂MnSi electrode and a MgO barrier due to improved interfacial structural properties”,
The 2nd Int’l Conf. of Asia Union of Magnetism Societies (ICAUMS 2012), The 36th Annual Conf. on Magnetism in Japan, Abstracts, p.28, 2pD-4, Nara Prefectural New Public Hall, Nara, Japan, October 2 – 5, 2012. (Presented on October 2, 2012)
3. Y. Honda, H.-x. Liu, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Temperature dependence of spin-dependent tunneling resistances of MgO-buffered Co₂MnSi/MgO/Co₂MnSi magnetic tunnel junctions”,
2012 Int’l Conf. on Solid State Devices and Materials (SSDM 2012), Extended Abstracts (USB Memory), p.1197-1198, K-6-4, Kyoto International Conference Center, Kyoto, Japan, September 25 – 27, 2012. (Presented on September 27, 2012)
4. J.-h. Shan, T. Akiho, K.-i. Matsuda, M. Yamamoto, and T. Uemura,
“Transient oblique Hanle signals observed in Co₂MnSi/CoFe/n-GaAs with non-local four-terminal configuration”,
2012 Int’l Conf. on Solid State Devices and Materials (SSDM 2012), Extended Abstracts (USB Memory), p.1219-1220, K-9-2, Kyoto International Conference Center, Kyoto, Japan, September 25 – 27, 2012. (Presented on September 27, 2012)
5. T. Uemura, G.-f. Li, J. Fujisawa, K. Kondo, K.-i. Matsuda, and M. Yamamoto,
“Tunnel barrier thickness dependence of Hanle-type signals in CoFe/MgO/n-Si and CoFe/MgO/n-Ge junctions investigated through three-terminal configuration”,
2012 Int’l Conf. on Solid State Devices and Materials (SSDM 2012), Extended Abstracts (USB Memory), p.1223-1224, K-9-4, Kyoto International Conference Center, Kyoto, Japan, September 25 – 27, 2012. (Presented on September 27, 2012)

6. G.-f. Li, M. Miki, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
 “Tunnel barrier thickness dependence of Hanle-type signals in CoFe/MgO/n-Ge tunnel junctions investigated through three-terminal configuration”
[The 17th Int’l Conf. on Molecular Beam Epitaxy \(MBE 2012\), Abstracts, p.5, MoA-1-2, Nara Prefectural New Public Hall, Nara, Japan, September 23 – 28, 2012.](#) (Presented on September 24, 2012)
7. Ken-ichi Matsuda, Takaho Shinoki, Tomoyuki Taira, Tetsuya Uemura, and Masafumi Yamamoto,
 “Spin-polarization measurements for Co₂MnSi using Co₂MnSi/MgO/NbN epitaxial tunnel junctions”
[The 19th Int’l Conf. on Magnetism \(ICM2012\), Abstracts of ICM2012, p.351, SK06, BEXCO, Busan, Korea, July 8 – 13, 2012.](#) (Presented on July 13, 2012)
8. Ken-ichi Matsuda, Tetsuya Uemura, and Masafumi Yamamoto, “Possibility of Superconducting Proximity Effect of Equal-spin Triplet Components in NbN/Co₂Cr_{0.6}Fe_{0.4}Al/NbN Junctions”
[Int’l Conf. on Topological Quantum Phenomena \(TQP2012\), Abstracts of TQP2012, p.149, PB23, Nagoya University, Nagoya, Japan, May 16 – 20, 2012.](#) (Presented on May 19, 2012)
9. H.-x. Liu, Y. Honda, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
 “Temperature dependence of spin-dependent tunneling conductances of fully epitaxial Co₂MnSi-based magnetic tunnel junctions”,
[Int’l Magnetism Conf. 2012 \(INTERMAG 2012\), Digest \(USB Memory\), EB-10, Vancouver Convention Center, Vancouver, Canada, May 7-11, 2012.](#) (Presented on May 10, 2012)
10. T. Akiho, T. Uemura, K.-i. Matsuda, and M. Yamamoto,
 “Electrical spin injection from Co₂MnSi Heusler alloy into GaAs and electrical detection of dynamic nuclear polarization”,
[Int’l Magnetism Conf. 2012 \(INTERMAG 2012\), Digest \(USB Memory\), AD-03, Vancouver Convention Center, Vancouver, Canada, May 7-11, 2012.](#) (Presented on May 8, 2012)
11. T. Uemura, J. Fujisawa, K.-i. Matsuda, and M. Yamamoto,
 “MgO thickness dependence of spin accumulation signal in Co₅₀Fe₅₀/MgO/Si”,
[Int’l Magnetism Conf. 2012 \(INTERMAG 2012\), Digest \(USB Memory\), AD-06, Vancouver Convention Center, Vancouver, Canada, May 7-11, 2012.](#) (Presented on May 8, 2012)
12. G.-f. Li, T. Taira, H.-x. Liu, K. -i. Matsuda, T. Uemura, and M. Yamamoto,
 “Tunnel magnetoresistance in fully epitaxial CoFe/MgO/CoFe magnetic tunnel junctions on Ge(001) substrates via a MgO interlayer”
[5th Int’l Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Proceedings of GCOE-NGIT 2012, p. 287, N-05, Hokkaido University, Sapporo, Japan, January 16 - 18, 2012.](#) (Presented on January 16, 2012)
 Poster Presentation
13. H.-x. Liu, T. Taira, Y. Honda, K. -i. Matsuda, T. Uemura, M. Yamamoto, Y. Miura, and M. Shirai
 “Spin transport properties of fully epitaxial magnetic tunnel junctions of CoFe/MgO/CoFe ultrathin layer/Co₂MnSi”
[5th Int’l Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Proceedings of GCOE-NGIT 2012, p. 289, N-06, Hokkaido University, Sapporo, Japan, January 16 - 18, 2012.](#) (Presented on January 16, 2012)
 Poster Presentation

2011

1. H.-x. Liu, T. Taira, Y. Honda, K. -i. Matsuda, T. Uemura, M. Yamamoto, Y. Miura, and M. Shirai,
“Spin-dependent transport properties of fully epitaxial magnetic tunnel junctions of CoFe/MgO/CoFe ultrathin layer/Co₂MnSi”,
[56th Annual Conf. on Magnetism & Magnetic Materials, Abstracts, p. 260, DE-01, Scottsdale, Arizona, USA, October 30- November 3, 2011.](#) (Presented on November 1, 2011)
Oral Presentation
2. G.-f. Li, T. Taira, H.-x. Liu, K. -i. Matsuda, T. Uemura, and M. Yamamoto,
“Fabrication of epitaxial magnetic tunnel junctions with a Co₂MnSi thin film and a MgO barrier on Ge(001) substrates via a MgO interlayer”,
[56th Annual Conf. on Magnetism & Magnetic Materials, Abstracts, p. 251, DE-04, Scottsdale, Arizona, USA, October 30- November 3, 2011.](#) (Presented on November 1, 2011)
Oral Presentation
3. Y. Honda, S. Hirata, H.-x. Liu, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Almost identical oscillations in tunneling resistances as a function of barrier thickness for parallel and antiparallel configurations for fully epitaxial magnetic tunnel junctions with a MgO barrier”,
[56th Annual Conf. on Magnetism & Magnetic Materials, Abstracts, p. 426, FP-01, Scottsdale, Arizona, USA, October 30- November 3, 2011.](#) [Best Poster Award] (Presented on November 2, 2011)
Poster Presentation
4. T. Akiho, T. Uemura, H. Harada, K.-i., Matsuda, and M. Yamamoto,
“Non-local electrical detection of Hanle signals in Co₂MnSi/Co₅₀Fe₅₀/n-GaAs Schottky tunnel junctions”,
[56th Annual Conf. on Magnetism & Magnetic Materials, Abstracts, p. 471, GB-12, Scottsdale, Arizona, USA, October 30- November 3, 2011.](#) (Presented on November 3, 2011)
Oral Presentation
5. T. Uemura, T. Akiho, M. Harada, K.-i. Matsuda, and M. Yamamoto,
“Effect of GaAs Surface Structure on Tunneling Anisotropic Magnetoresistance in Epitaxial Co₅₀Fe₅₀/n-GaAs Junctions”,
[2011 Int’l Conf. on Solid State Devices and Materials, Extended Abstracts \(USB memory\), p. 448 – 449, P-12-9, Nagoya, Japan, September 28-30, 2011.](#) (Presented on September 29, 2011)
Oral Presentation
6. G.-f. Li, T. Taira, H.-x. Liu, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Fabrication of fully epitaxial magnetic tunnel junctions with CoFe electrodes and a MgO barrier on Ge(001) substrates via a MgO interlayer”,
[2011 Int’l Conf. on Solid State Devices and Materials, Extended Abstracts \(USB memory\), p. 1448 – 1449, N-6-3, Nagoya, Japan, September 28-30, 2011.](#) (Presented on September 30, 2011)
Oral Presentation
7. T. Akiho, M. Harada, T. Uemura, K.-i. Matsuda, and M. Yamamoto,
“Effect of MgO Barrier Insertion on Spin-dependent Transport Properties of CoFe/n-GaAs”,
[2011 Int’l Conf. on Solid State Devices and Materials, Extended Abstracts \(USB memory\), p. 1460 – 1461, N-7-4, Nagoya, Japan, September 28-30, 2011.](#) (Presented on September 30, 2011)
Oral Presentation

8. M. Yamamoto, T. Uemura, and K.-i. Matsuda,
 “Spin-dependent tunneling characteristics of Heusler alloy/MgO heterostructures”,
[5th Int’l Workshop on Spin Currents, Abstracts, CA-1, p. 41, Sendai, Japan, July 25-28, 2011.](#) **[Invited Talk]** (Presented on July 27, 2011)
 Oral Presentation
9. T. Akiho, M. Harada, T. Uemura, K.-i. Matsuda, and M. Yamamoto,
 “Spin injection from Co₅₀Fe₅₀ into GaAs at room temperature”,
[5th Int’l Workshop on Spin Currents, Abstracts, P2-22, p. 122, Sendai, Japan, July 25-28, 2011.](#) (Presented on July 27, 2011)
 Poster Presentation
10. Y. Honda, S. Hirata, H.-x. Liu, K.-i. Matsuda, T. Uemura, and M. Yamamoto
 “Oscillations in spin-dependent tunneling resistances as a function of MgO barrier thickness in epitaxial magnetic tunnel junctions with Heusler alloy Co₂MnSi electrodes”,
[5th Int’l Workshop on Spin Currents, Abstracts, P2-36, p. 136, Sendai, Japan, July 25-28, 2011.](#) (Presented on July 27, 2011)
 Poster Presentation
11. T. Kadono, V. R. Singh, V. K. Verma, K. Ishigami, G. Shibata, A. Fujimori, D. Asakura, T. Koide, G.-f. Li, T. Ishikawa and M. Yamamoto,
 “Effect of chemical composition in Co₂MnSi thin films facing an MgO barrier on magnetic states of Mn and Co atoms”,
[5th Int’l Workshop on Spin Currents, Abstracts, P1-11, p. 71, Sendai, Japan, July 25-28, 2011.](#) (Presented on July 26, 2011)
 Poster Presentation
12. T. Uemura, M. Harada, T. Akiho, K.-i. Matsuda, and M. Yamamoto,
 “Electrical detection of spin injection from Co₅₀Fe₅₀ into GaAs at room temperature”,
[15th Int’l Conf. on Modulated Semiconductor Structures \(MSS 15\), Tu-P-87, Tallahassee, FL, USA, July 25-29, 2011.](#)(Presented on July 26, 2011)
 Poster Presentation
13. T. Akiho, M. Harada, T. Uemura, K.-i. Matsuda, and M. Yamamoto,
 “Spin-dependent transport properties of Co₂MnSi/MgO/n-GaAs tunnel junctions”,
[Int’l Magnetism Conf. 2011 \(INTERMAG 2011\), Digest\(USB Memory\), BP-03, Taipei, Taiwan, April 25-29, 2011.](#) (Presented on April 26, 2011)
 Poster Presentation
14. T. Uemura, M. Harada, T. Akiho, K.-i. Matsuda, and M. Yamamoto,
 “Electrical injection and detection of spin-polarized electrons in an epitaxial Co₅₀Fe₅₀/n-GaAs junction”,
[Int’l Magnetism Conf. 2011\(INTERMAG 2011\), Digests \(USB Memory\), BP-08, Taipei, Taiwan, April 25-29, 2011.](#) (Presented on April 26, 2011)
 Poster Presentation
15. G.-f. Li, T. Taira, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
 “Epitaxial growth of Heusler alloy Co₂MnSi/MgO heterostructure on Ge(001) substrate”,

Int'l Magnetism Conf. 2011 (INTERMAG 2011), Digest(USB Memory), HC-06, Taipei, Taiwan, April 25-29, 2011. (Presented on April 29, 2011)

Oral Presentation

16. H.-x. Liu, T. Taira, K.-i. Matsuda, T. Uemura and M. Yamamoto,
“High tunnel magnetoresistance in fully epitaxial CoFe-buffered Co₂MnSi/MgO/Co₂MnSi magnetic tunnel junctions”,
4th Int'l Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Proceedings of GCOE-NGIT 2011, p. 283, N-05, Hokkaido University, Sapporo, Japan, January 18 - 19, 2011. (Presented on January 18, 2011)
Poster Presentation
17. G.-f. Li, T. Taira, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Epitaxial growth of Heusler alloy Co₂MnSi thin films on MgO-buffered Ge substrate”,
4th Int'l Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Proceedings of GCOE-NGIT 2011, p. 281, N-04, Hokkaido University, Sapporo, Japan, January 18 - 19, 2011. (Presented on January 18, 2011)
Poster Presentation

2010

1. K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Superconducting proximity effect of spin-triplet pairs in NbN/Co₂Cr_{0.6}Fe_{0.4}Al/NbN junctions”,
55th Annual Conf. on Magnetism & Magnetic Materials, Abstracts (CD-ROM), p. 28, AE-10, Atlanta, Georgia, USA, November 14-18, 2010. (Presented on Nov. 15, 2010)
Oral Presentation
2. T. Taira, H.-x. Liu, S. Hirata, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Giant tunnel magnetoresistance in half-metallic Co₂MnSi-based fully epitaxial magnetic tunnel junctions”,
55th Annual Conf. on Magnetism & Magnetic Materials, Abstracts (CD-ROM), pp. 118-119, BH-10, Atlanta, Georgia, USA, November 14-18, 2010. (Presented on Nov. 15, 2010)
Oral Presentation
3. M. Yamamoto, T. Marukame, T. Ishikawa, T. Taira, K.-i. Matsuda, and T. Uemura,
“Giant oscillations of spin-dependent tunneling resistances as a function of MgO barrier thickness in fully epitaxial magnetic tunnel junctions of Co₂Cr_{0.6}Fe_{0.4}Al/MgO/Co₂Cr_{0.6}Fe_{0.4}Al”,
55th Annual Conf. on Magnetism & Magnetic Materials, Abstracts (CD-ROM), p. 165, CB-01, Atlanta, Georgia, USA, November 14-18, 2010. (Presented on Nov. 16, 2010)
Oral Presentation
4. Y. Miura, M. Shirai, T. Saito, T. Katayama, T. Ishikawa, M. Yamamoto, D. Asakura and T. Koide,
“Structural and magnetic properties at Co₂MnSi/MgO(001) interfaces studied by x-ray magnetic circular dichroism and first-principles calculations”,
55th Annual Conf. on Magnetism & Magnetic Materials, Abstracts (CD-ROM), p. 165, CB-02, Atlanta, Georgia, USA, November 14-18, 2010. (Presented on Nov. 16, 2010)
Oral Presentation
5. H.-x. Liu, T. Taira, Y. Honda, K.-i. Matsuda, T. Uemura, and M. Yamamoto,

- “Highly spin-polarized tunneling characteristics at room temperature in magnetic tunnel junctions with a half-metallic Heusler-alloy spin source and a MgO barrier”,
[55th Annual Conf. on Magnetism & Magnetic Materials, Abstracts \(CD-ROM\)](#), pp. 370-371, ET-11, Atlanta, Georgia, USA, November 14-18, 2010. (Presented on Nov. 17, 2010)
 Poster Presentation
6. H.-x. Liu, T. Taira, Y. Honda, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
 “Highly spin-polarized tunneling in Heusler-alloy-based magnetic tunnel junctions with a Co₂MnSi upper electrode and a MgO barrier”,
[2010 Int’l Conf. on Solid State Devices and Materials \(SSDM 2010\), Extended Abstract \(USB-MEMORY\)](#), p. 1122 – 1123, F-6-4, Tokyo, Japan, September 22-24, 2010. (Presented on September 24, 2010)
 Oral Presentation
7. M. Harada, T. Uemura, T. Akiho, K.-i. Matsuda, and M. Yamamoto,
 “Electrical detection of a non-local signal in Co₂MnSi/MgO/n-GaAs tunnel junctions”,
[6th Int’l Conf. on the Physics and Application of Spin Related Phenomena in Semiconductors \(PASPS-VI\), Abstracts](#), pp. 259-260, P2-46, Tokyo, Japan, August 1-4, 2010. (Presented on August 3, 2010)
 Poster Presentation
8. T. Taira, S. Hirata, T. Ishikawa, K.-i. Matsuda, T. Uemura, M. Yamamoto,
 “Spin-dependent tunneling characteristics of Co₂MnGe/MgO/Co₂MnGe magnetic tunnel junctions”,
[11th Joint MMM/Intermag Conf., Digests \(CD-ROM\)](#), p. 1192, ET-03, Washington DC, USA, January 18 - 22, 2010. (Presented on January 21, 2010)
 Poster Presentation
9. T. Uemura, M. Harada, K.-i. Matsuda, and M. Yamamoto,
 “Strong bias-voltage dependence of tunneling anisotropic magneto-resistance in epitaxial ferromagnet/n-GaAs junctions”,
[11th Joint MMM/Intermag Conf., Digests \(CD-ROM\)](#), p. 1225, EU-17, Washington DC, USA, January 18 - 22, 2010. (Presented on January 21, 2010)
 Poster Presentation
10. T. Ishikawa, H.-x. Liu, T. Taira, K.-i. Matsuda, T. Uemura, M. Yamamoto,
 “Effect of the Mn composition in Co₂MnSi electrodes on tunnel magnetoresistance characteristics of Co₂MnSi/MgO/Co₂MnSi magnetic tunnel junctions”,
[11th Joint MMM/Intermag Conf., Digest \(CD-ROM\)](#), p. 1888, HH-04, Washington DC, USA, January 18 - 22, 2010. (Presented on January 22, 2010)
 Oral Presentation
11. T. Taira, S. Hirata, G.-f. Li, K.-i. Matsuda, T. Uemura, and M. Yamamoto
 “Tunneling spectroscopy of Co₂MnGe/MgO/Co₂MnGe magnetic tunnel junctions”
[The 3rd Int’l Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Proceedings of GCOE-NGIT](#), p: 230, N-06, Hokkaido University, Sapporo, Japan, January 18-20, 2010. (Presented on January 18, 2010)
 Poster Presentation
12. G.-f. Li, T. Taira, S. Hirata, Y. Honda, K. -i. Matsuda, T. Uemura, and M. Yamamoto,
 “Effect of nonstoichiometry on saturation magnetization of Heusler alloy Co₂MnGe thin film”,

The 3rd Int'l Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Proceedings of GCOE-NGIT, p: 228, N-05, Hokkaido University, Sapporo, Japan, January 18-20, 2010. (Presented on January 18, 2010)

Poster Presentation

13. H.-x. Liu, T. Ishikawa, K. -i. Matsuda, T. Uemura and M. Yamamoto,
“Tunnel magnetoresistance characteristics of Heusler-alloy-based magnetic tunnel junctions having an upper Co_2MnSi electrode with various Mn compositions and having a $\text{Co}_{50}\text{Fe}_{50}$ lower electrode”,
The 3rd Int'l Symposium on Global COE Program of Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation, Proceedings of GCOE-NGIT 2010, p. 225, N-03, Hokkaido University, Sapporo, Japan, January 18-20, 2010. (Presented on January 18, 2010)
Poster Presentation

2009

1. S. Imai, K.-i. Matsuda, T. Ishikawa, T. Uemura, M. Yamamoto,
“Fabrication and Transport Properties of $\text{NbN}/\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}/\text{NbN}$ Lateral Junctions”,
9th Int'l Conf. on Materials and Mechanisms of Superconductivity (M2S-IX) (USB Memory), PS-G-589, Shinjuku, Tokyo, Japan, September 7 – 12, 2009. (Presented on September 11, 2009)
Poster Presentation
2. M. Yamamoto, T. Ishikawa, T. Taira, T. Marukame, K.-i. Matsuda, and T. Uemura,
“Spin-dependent tunneling in half-metallic Heusler alloy-based magnetic tunnel junctions with a MgO barrier”,
Int'l Conf. on Magnetism (ICM2009), Abstracts, p.155, Tu-JPH6-01, Karlsruhe, Germany, July 26 – 31, 2009. **[Invited Talk]** (Presented on July 28, 2009)
Oral Presentation
3. K.-i. Matsuda, S. Imai, T. Ishikawa, T. Uemura, and M. Yamamoto,
“Transport properties of a junction consisting of two NbN electrodes coupled by a Co-based Heusler alloy $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ channel”,
Int'l Conf. on Magnetism (ICM2009), Abstracts, p.55, Mo-A-5.4-13, Karlsruhe, Germany, July 26 – 31, 2009. (Presented on July 27, 2009)
Poster Presentation
4. T. Ishikawa, N. Itabashi, T. Taira, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Spin-dependent electronic structure of Heusler alloy Co_2MnSi upper electrodes in magnetic tunnel junctions”,
Int'l Conf. on Magnetism (ICM2009), Abstracts, p.54, Mo-A-5.4-05, Karlsruhe, Germany, July 26 – 31, 2009. (Presented on July 27, 2009)
Poster Presentation
5. S. Hirata, T. Taira, T. Ishikawa, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Tunneling spectroscopy of magnetic tunnel junctions with Heusler alloy Co_2MnGe electrodes and a MgO barrier”,
Int'l Conf. on Magnetism (ICM2009), Abstracts, p.54, Mo-A-5.4-07, Karlsruhe, Germany, July 26 – 31, 2009. (Presented on July 27, 2009)
Poster Presentation

6. T. Taira, S. Hirata, T. Ishikawa, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
 “Spin-dependent tunneling characteristics of fully epitaxial $\text{Co}_2\text{MnGe}/\text{MgO}/\text{Co}_2\text{MnGe}$ magnetic tunnel junctions”,
[20th Int’l Colloquium on Magnetic Films and Surfaces \(ICMFS2009\), Abstracts, p.381, P-We30, Berlin, Germany, July 20 – 24, 2009.](#) (Presented on July 22, 2009)
 Poster Presentation
7. M. Harada, T. Uemura, Y. Imai, K.-i. Matsuda, and M. Yamamoto,
 “Tunneling anisotropic magneto-resistance in an epitaxial $\text{Co}_2\text{MnSi}/\text{n-GaAs}$ junction”,
[The 14th Int’l Conf. on Modulated Semiconductor Structures \(MSS-14\), Abstract, p. 195, M5e, Kobe, July 19 – 24, 2009.](#) (Presented on July 22, 2009)
 Oral Presentation
8. T. Uemura, Y. Imai, M. Harada, K.-i. Matsuda, and M. Yamamoto,
 “Tunneling Anisotropic Magneto-resistance in an Epitaxial $\text{CoFe}/\text{n-GaAs}$ Junction”,
[IEEE Int’l Magnetism Conf. 2009, Digests \(CD-ROM\), BQ-13, Sacramento, CA, USA, May 4 – 8, 2009.](#)
 (Presented on May 5, 2009)
 Poster Presentation
9. K. Sawada, T. Uemura, M. Masuda, K.-i. Matsuda, and M. Yamamoto,
 “Simulation of tunneling magnetoresistance used to detect domain-wall structure and motion in a ferromagnetic wire”,
[IEEE Int’l Magnetism Conf. 2009, Digests \(CD-ROM\), BD-07, Sacramento, CA, USA, May 4 – 8, 2009.](#)
 (Presented on May 5, 2009)
 Oral Presentation

2008

1. T. Ishikawa, N. Itabashi, T. Taira, K.-i. Matsuda, T. Uemura and M. Yamamoto,
 “Tunneling spectroscopy of fully epitaxial $\text{Co}_2\text{MnSi}/\text{MgO}/\text{Co}_2\text{MnSi}$ magnetic tunnel junctions”,
[2008 Material Research Society \(MRS\) Fall Meeting, Abstracts \(CD-ROM\), L5.1, Boston, MA, USA, Dec. 1 – 5, 2008.](#) (Presented on Dec. 3, 2008)
2. N. Itabashi, T. Ishikawa, K. Yonemura, K.-i. Matsuda, T. Uemura and M. Yamamoto,
 “Tunneling conductance characteristics for $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}/\text{MgO}/\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ magnetic tunnel junctions”,
[2008 Material Research Society \(MRS\) Fall Meeting, Abstracts \(CD-ROM\), L2.10, Boston, MA, USA, Dec. 1 – 5, 2008.](#) (Presented on Dec. 2, 2008)
3. M. Yamamoto, T. Ishikawa, K.-i. Matsuda, and T. Uemura,
 “Spin-polarized tunneling in fully epitaxial magnetic tunnel junctions with Heusler alloy thin films and a MgO barrier”
[2008 Material Research Society \(MRS\) Fall Meeting, Abstracts \(CD-ROM\), L2.6, Boston, MA, USA, Dec. 1 – 5, 2008. \[Invited Talk\]](#) (Presented on Dec. 2, 2008)
4. T. Taira, T. Ishikawa, K.-i. Matsuda, T. Uemura and M. Yamamoto,
 “Tunnel magnetoresistance characteristics of post-deposition-annealed $\text{Co}_2\text{MnGe}/\text{MgO}/\text{CoFe}$ tunnel junctions”,
[2008 Material Research Society \(MRS\) Fall Meeting, Abstracts\(CD-ROM\),L2.1,Boston, MA, USA, Dec. 1](#)

– 5, 2008. (Presented on Dec. 2, 2008)

5. N. Itabashi, T. Ishikawa, K. Yonemura, K.-i. Matsuda, T. Uemura and M. Yamamoto, “Spin-dependent electronic structures of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ electrodes investigated through tunneling spectroscopy”, [53rd Magnetism and Magnetic Materials Conf., Abstracts \(CD-ROM\)](#), pp. 480-481, GT-03, Austin, TX, USA, Nov. 10 – 15, 2008. (Presented on Nov. 14, 2008)
6. A. Gloskovskii, G. H. Fecher, S. Chadov, S. Ouardi, B. Balke, C. A. Jenkins, C. Felser, T. Ishikawa, M. Yamamoto, K. Inomata, Y. Yamashita, H. Yoshikawa, S. Ueda, and K. Kobayashi, “High energy high resolution photoemission spectroscopy of Heusler compounds”, [53rd Magnetism and Magnetic Materials Conf., Abstracts \(CD-ROM\)](#), pp. 301-302, ED-09, Austin, TX, USA, Nov. 10 – 15, 2008. (Presented on Nov. 13, 2008)
7. K. Yonemura, T. Ishikawa, N. Itabashi, K.-i. Matsuda, T. Uemura and M. Yamamoto, “Tunneling spectroscopy of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}/\text{MgO}/\text{CoFe}$ magnetic tunnel junctions”, [53rd Magnetism and Magnetic Materials Conf., Abstracts \(CD-ROM\)](#), p. 301, ED-07, Austin, TX, USA, Nov. 10 – 15, 2008. (Presented on Nov. 13, 2008)
8. T. Nakatani, Y. Takahashi, K. Hono, T. Ishikawa, and M. Yamamoto, “Structural characterizations of $\text{Co}_2\text{MnSi}/\text{MgO}/\text{Co}_2\text{MnSi}$ magnetic tunnel junctions”, [53rd Magnetism and Magnetic Materials Conf., Abstracts \(CD-ROM\)](#), p. 300, ED-05, Austin, TX, USA, Nov. 10 – 15, 2008. (Presented on Nov. 13, 2008)
9. T. Taira, T. Ishikawa, K.-i. Matsuda, T. Uemura, and M. Yamamoto, “Spin-dependent tunneling characteristics of $\text{Co}_2\text{MnGe}/\text{MgO}/\text{CoFe}$ tunnel junctions”, [53rd Magnetism and Magnetic Materials Conf., Abstracts \(CD-ROM\)](#), p. 230, DD-02, Austin, TX, USA, Nov. 10 – 15, 2008. (Presented on Nov. 12, 2008)
10. T. Ishikawa, N. Itabashi, T. Taira, K.-i. Matsuda, T. Uemura and M. Yamamoto, “Half-metallic electronic structure of Co_2MnSi electrodes proved by tunneling spectroscopy”, [53rd Magnetism and Magnetic Materials Conf., Abstracts\(CD-ROM\)](#), p. 232, DD-07, Austin, TX, USA, Nov. 10 – 15, 2008. (Presented on Nov. 12) **[Invited Talk]**
11. M. Yamamoto, T. Uemura, and K.-i. Matsuda, “Fabrication of fully epitaxial magnetic tunnel junctions with half-metallic Heusler alloy thin films and a MgO tunnel barrier”, [The 10th Int’l Joint Symposium between Hokkaido University and Chungnam National University, Sapporo](#), Oct. 22-24, 2008. (Presented on Oct. 23, 2008) **[Invited Talk]**
12. N. Itabashi, T. Ishikawa, K.-i. Matsuda, T. Uemura, and M. Yamamoto, “Spin-dependent tunneling spectroscopy of fully epitaxial magnetic tunnel junctions with Heusler alloy $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ electrodes and a MgO barrier”, [25th Int’l Conf. on Low Temp. Physics, Official Conf. Book](#), p. 258, PD-Mo244, Amsterdam, The Netherlands, Aug. 6-13, 2008. (Presented on Aug. 11, 2008)
13. K.-i. Matsuda, Y. Akimoto, T. Uemura, and M. Yamamoto, “Transport Properties of Nb/PdNi bilayers and Nb/PdNi/Nb Josephson junctions”,

25th Int'l Conf. on Low Temp. Physics, Official Conf. Book, p. 25, PB-Th118, Amsterdam, The Netherlands, Aug. 6-13, 2008. (Presented on Aug. 7, 2008)

14. T. Ishikawa, N. Itabashi, K. Matsuda, T. Uemura, and M. Yamamoto,
“Spin-dependent tunneling conductance in fully epitaxial $\text{Co}_2\text{MnSi}/\text{MgO}/\text{Co}_2\text{MnSi}$ tunnel junctions”,
[IEEE Int'l Magnetism Conf. Europe 2008, Technical Digests \(CD-ROM\)](#), p. 33, AC-07, Madrid, Spain, May 4-8, 2008. (Presented on May 5, 2008)
15. M. Masuda, T. Uemura, K.-i. Matsuda and M. Yamamoto,
“Fabrication and characterization of magnetic tunnel junction field sensors with a Co_2MnSi thin film”,
[IEEE Int'l Magnetism Conf. Europe 2008, Technical Digests \(CD-ROM\)](#), p. 269, BD-04, Madrid, Spain, May 4-8, 2008. (Presented on May 5, 2008)
16. M. Yamamoto, T. Uemura, and K.-i. Matsuda,
“Heusler alloy-based fully epitaxial magnetic tunnel junctions with a MgO barrier”,
[2008 RCIQE Int'l Seminar on “Advanced Semiconductor Materials and Devices”](#), Collected Abstracts, pp. 29-37, Sapporo, Japan, March 3-4, 2008. (Presented on March 4, 2008) **[Invited Talk]**

2007

1. M. Yamamoto, T. Marukame, T. Ishikawa, K. Matsuda, and T. Uemura,
“Highly spin-polarized tunneling in Heusler alloy-based fully epitaxial magnetic tunnel junctions with a MgO tunnel barrier,”
[52nd Magnetism and Magnetic Materials Conf., Abstracts](#), p.204, DB-01, Tampa, Florida, USA, Nov. 5-9, 2007. (Presented on Nov. 7, 2007) **[Invited Talk]**
2. M. Yamamoto, T. Marukame, T. Ishikawa, K. Matsuda, and T. Uemura,
“Oscillations in tunneling resistance as a function of MgO barrier thickness in fully epitaxial magnetic tunnel junctions of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}/\text{MgO}/\text{Co}_{50}\text{Fe}_{50}$,”
[52nd Magnetism and Magnetic Materials Conf., Abstracts](#), p. 14, AB-11, Tampa, Florida, USA, Nov. 5-9, 2007. (Presented on Nov. 6, 2007)
3. T. Ishikawa, S. Hakamata, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Spin-dependent tunneling in fully epitaxial $\text{Co}_2\text{MnSi}/\text{MgO}/\text{Co}_2\text{MnSi}$ magnetic tunnel junctions”,
[52nd Magnetism and Magnetic Materials Conf., Abstracts](#), p. 13, AB-07, Tampa, Florida, USA, Nov. 5-9, 2007. (Presented on Nov. 6, 2007)
4. T. Saito, T. Katayama, A. Emura, N. Sumida, N. Matsuoka, T. Ishikawa, T. Uemura, M. Yamamoto, D. Asakura, and T. Koide,
“Electronic and magnetic properties of Heusler alloy Co_2MnSi epitaxial ultrathin films facing a MgO barrier investigated by X-ray magnetic circular dichroism”,
[52nd Magnetism and Magnetic Materials Conf., Abstracts](#), p.116, BQ-06, Tampa, Florida, USA, Nov. 5-9, 2007. (Presented on Nov. 6, 2007)
5. S. Kawagishi, T. Uemura, Y. Imai, K.-i. Matsuda, and M. Yamamoto,
“Electrical characterization of epitaxial $\text{Co}_2\text{MnSi}/\text{MgO}/\text{n-GaAs}$ tunnel junctions”,
[52nd Magnetism and Magnetic Materials Conf., Abstracts](#), p.38, AG-09, Tampa, Florida, USA, Nov. 5-9, 2007. (Presented on Nov. 6, 2007)

6. K.-i. Matsuda, Y. Akimoto, T. Uemura, and M. Yamamoto,
 “Magnetic and transport properties of superconductor/ferromagnet bilayer microbridges”,
[52nd Magnetism and Magnetic Materials Conf., Abstracts,p.489, HQ-10, Tampa, Florida, USA, Nov. 5-9, 2007.](#)(Presented on Nov. 9, 2007)
7. T. Uemura, T. Yano, Y. Imai, K. Matsuda, and M. Yamamoto,
 “Epitaxial growth and characterization of Co₂MnSi thin films on GaAs with MgO interlayer”,
[The 13th Int’l Conf. on Modulated Semiconductor Structures, pp. 172-173, Genova, Italy, July 15-20, 2007.](#)
 (Presented on July 17, 2007)
8. T. Uemura, T. Marukame, K.-i. Matsuda, and M. Yamamoto,
 “Four-state Magnetic Random Access Memory and Ternary Content Addressable Memory using
 CoFe-based Magnetic Tunnel Junctions”,
[37th Int’l Symposium on Multiple-Valued Logic, CD-ROM, pp. 49-1 – 49-6, Oslo, Norway, May 13-16, 2007. \(IEEE Computer Society\).](#) (Presented on May 15, 2007)
9. M. Yamamoto, T. Marukame, T. Ishikawa, K. Matsuda and T. Uemura,
 “Highly spin-polarized tunneling in fully epitaxial magnetic tunnel junctions with a Co-based full-Heusler
 alloy thin film and a MgO barrier”,
[71stAnnual Meeting 2007 of the German Physical Society and DPG-Spring Meeting of the Division
 Condensed Matter, Verhandlungen, p. 487, MA22.2,Regensburg, Germany, March 26-30, 2007. \[Invited
 Talk\]](#)
10. T. Uemura, T. Marukame, K. Matsuda, and M. Yamamoto,
 “Four-state magnetoresistance in epitaxial CoFe-based magnetic tunnel junction”,
[10th Joint MMM/Intermag Conf., Abstracts, p. 47, AP-08, Baltimore, USA, Jan. 7–11, 2007.](#)
11. T. Marukame, T. Ishikawa, S. Hakamata, K. Matsuda, T. Uemura and M. Yamamoto,
 “Fabrication of fully epitaxial Co₂Cr_{0.6}Fe_{0.4}Al/MgO/Co₂Cr_{0.6}Fe_{0.4}Al”,
[10th Joint MMM/Intermag Conf., Abstracts, p. 209, DD-07, Baltimore, USA, Jan. 7–11, 2007.](#)
12. S. Hakamata, T. Ishikawa, T. Marukame, K. Matsuda, T. Uemura, M. Arita and M. Yamamoto,
 “Dependence of magnetoresistance characteristics of magnetic tunnel junctions with a Heusler alloy thin
 film of either Co₂MnGe or Co₂MnSi on film composition”,
[10th Joint MMM/Intermag Conf., Abstracts,p. 443, GD-10, Baltimore, USA, Jan. 7–11, 2007.](#)
13. M. Yamamoto, T. Uemura and K.-i. Matsuda,
 “Spin-polarized tunneling in fully epitaxial magnetic tunnel junctions with a full-Heusler alloy thin film”,
[The 4th Int’l Symposium on Ubiquitous Knowledge Network Environment, Collected Papers, pp. 131-145,
 Sapporo, Japan, March. 5-7, 2007. \[Keynote Talk\]](#)
14. T. Marukame, T. Ishikawa, S. Hakamata, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
 “High tunnel magnetoresistance in fully epitaxial Co₂Cr_{0.6}Fe_{0.4}Al/MgO/Co₅₀Fe₅₀ magnetic tunnel junctions
 with exchange biasing”,
[The 4th Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop,
 Collected Papers, p. 45, Sapporo, Japan, March 5 – 7, 2007.](#)
15. T. Ishikawa, T. Marukame, K.-i. Matsuda, T. Uemura, and M. Yamamoto,

“Spin-dependent tunneling in fully epitaxial $\text{Co}_2\text{MnSi}/\text{MgO}/\text{Co}_{50}\text{Fe}_{50}$ magnetic tunnel junctions”,
The 4th Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop,
Collected Papers, p. 46, Sapporo, Japan, March 5 – 7, 2007.

16. S. Hakamata, T. Ishikawa, T. Marukame, K.-i. Matsuda, T. Uemura, and M. Yamamoto,
“Improved tunnel magnetoresistance characteristics of magnetic tunnel junctions with a Heusler alloy Co_2MnGe thin film”,
The 4th Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop,
Collected Papers, p. 47, Sapporo, Japan, March 5 – 7, 2007.
17. S. Yasuda, M. Masuda, T. Uemura, and M. Yamamoto,
“Fabrication of magnetic tunnel junction field sensors using a Co_2MnSi thin film”,
The 4th Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop,
Collected Papers, p. 48, Sapporo, Japan, March 5 – 7, 2007.
18. T. Yano, T. Uemura, K. Matsuda, and M. Yamamoto,
“Epitaxial growth and characterization of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ thin films on GaAs with MgO interlayer”,
The 4th Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop,
Sapporo, Collected Papers, p. 49, Japan, March 5 – 7, 2007.
19. H. Niwa, K. Matsuda, Y. Akimoto, T. Uemura, and M. Yamamoto,
“Magnetic and transport properties of Nb/Pd_{0.85}Ni_{0.15} bilayer structures”,
The 4th Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop,
Collected Papers, p. 50, Sapporo, Japan, March 5 – 7, 2007.
20. M. Yamamoto, T. Uemura, and K.-i. Matsuda,
“Spin-dependent tunneling in fully epitaxial magnetic tunnel junctions with a Heusler alloy thin film and a MgO barrier”,
The 2nd RIEC Int’l Workshop on Spintronics–MgO-based Magnetic Tunnel Junctions–, Abstracts, Sendai,
Japan, Feb. 15-16, 2007. **[Invited Talk]** (Presented on Feb. 16, 2007)

2006

1. H. Kijima, T. Ishikawa, T. Marukame, H. Koyama, K.-i. Matsuda, T. Uemura, and M. Yamamoto
“Epitaxial growth of full-Heusler alloy Co_2MnSi thin films on MgO-buffered MgO substrates”,
IEEE Int’l Magnetism Conf. 2006, Technical Digests, p. 377, DW-06, San Diego, CA, USA, May 2006.
2. T. Ishikawa, T. Marukame, H. Niwa, K.-i. Matsuda, T. Uemura and M. Yamamoto,
“Exchange bias effect on full-Heusler alloy $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ epitaxial thin films”,
IEEE Int’l Magnetism Conf. 2006, Technical Digests, p. 577, FC-05, San Diego, CA, USA, May 2006.
3. T. Marukame, T. Ishikawa, H. Kijima, W. Sekine, K.-i. Matsuda, T. Uemura, and M. Yamamoto;
“Highly spin-polarized tunneling in fully epitaxial magnetic tunnel junctions using full-Heusler alloy $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ thin film and MgO tunnel barrier”,
IEEE Int’l Magnetism Conf. 2006, Technical Digests, p. 723, GB-02, San Diego, CA, USA, May 2006.
4. T. Uemura, T. Yano, K.-i. Matsuda, and M. Yamamoto,
“Structural and magnetic properties of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ thin films epitaxially grown on GaAs with and without MgO interlayer”,

- 19th Int'l Colloquium on Magnetic Films and Surfaces (ICMFS 2006), Colloquium Digest, pp. 20-21, Sendai, Japan, Aug. 14-18, 2006. (Presented on Aug. 15, 2006)
5. H. Kijima, T. Ishikawa, T. Marukame, K.-i. Matsuda, T. Uemura and M. Yamamoto, "Tunnel magnetoresistance in fully epitaxial $\text{Co}_2\text{MnSi}/\text{MgO}/\text{Co}_{50}\text{Fe}_{50}$ magnetic tunnel junctions", 19th Int'l Colloquium on Magnetic Films and Surfaces (ICMFS 2006), Colloquium Digest, pp. 436-437, Sendai, Japan, Aug. 14-18, 2006. (Presented on Aug. 17, 2006)
 6. M. Yamamoto, T. Marukame, K.-i. Matsuda and T. Uemura, "Spin-dependent conductance versus voltage characteristics of fully epitaxial magnetic tunnel junctions with a Co-based full-Heusler alloy thin film and a MgO barrier", 19th Int'l Colloquium on Magnetic Films and Surfaces (ICMFS 2006), Colloquium Digest, pp. 440-441, Sendai, Japan, Aug. 14-18, 2006. (Presented on Aug. 17, 2006)
 7. T. Marukame, T. Ishikawa, H. Kijima, K.-i. Matsuda, T. Uemura and M. Yamamoto, "MgO barrier thickness dependence of tunnel magnetoresistance in fully epitaxial magnetic tunnel junctions with $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ thin film", 19th Int'l Colloquium on Magnetic Films and Surfaces (ICMFS 2006), Colloquium Digest, pp. 448-449, Sendai, Japan, Aug. 14-18, 2006. (Presented on Aug. 17, 2006)
 8. T. Ishikawa, T. Marukame, H. Kijima, K.-i. Matsuda, T. Uemura and M. Yamamoto, "Epitaxial growth of Co-based full-Heusler alloy thin films of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$, Co_2MnGe and Co_2MnSi on MgO-buffered MgO substrate", 19th Int'l Colloquium on Magnetic Films and Surfaces (ICMFS 2006), Colloquium Digest, pp. 450-451, Sendai, Japan, Aug. 14-18, 2006. (Presented on Aug. 17, 2006)
 9. H. Kijima, T. Ishikawa, T. Marukame, K.-i. Matsuda, T. Uemura and M. Yamamoto, "Fabrication of fully epitaxial magnetic tunnel junctions using Co_2MnSi thin film and MgO tunnel barrier", Int'l Conf. on Magnetism (ICM2006), Abstracts, p. 30, Kyoto, Japan, 22 Aug. 2006. (Presented Aug. 22, 2006)
 10. T. Marukame, H. Kijima, T. Ishikawa, K.-i. Matsuda, T. Uemura and M. Yamamoto, "Spin-dependent transport properties of fully epitaxial $\text{Co}_2\text{MnSi}/\text{MgO}/\text{CoFe}$ tunnel junctions", Int'l Conf. on Magnetism (ICM2006), Abstracts, p. 198, Kyoto, Japan, Aug. 20-25, 2006. (Presented Aug. 21, 2006)
 11. T. Uemura, T. Yano, K.-i. Matsuda, and M. Yamamoto, "Analysis of magnetic anisotropy for $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ thin films epitaxially grown on GaAs", Int'l Conf. on Magnetism (ICM2006), Abstracts, p. 313, Kyoto, Japan, Aug. 20-25, 2006. (Presented Aug. 22, 2006)
 12. T. Ishikawa, S. Hakamata, T. Marukame, K.-i. Matsuda, T. Uemura and M. Yamamoto, "Fabrication of exchange-biased epitaxial magnetic tunnel junctions with a Co-based full-Heusler alloy thin film", Int'l Conf. on Magnetism (ICM2006), Abstracts, p. 582, Kyoto, Japan, Aug. 20-25, 2006. (Presented Aug. 25, 2006)
 13. K.-i. Matsuda, H. Niwa, Y. Akimoto, T. Uemura, and M. Yamamoto,

- “Magnetic and Transport Properties of Nb/PdNi Bilayers”,
IEEE Int’l Conf. on Appl. Supercond., CD-ROM, 2MM04, Seattle, USA, Aug.27–Sept. 1, 2006.
14. T. Uemura and M. Yamamoto,
“Design and analysis of magnetic random access memory consisting of magnetic tunnel junction and tunnel diode”,
15th Int’l Workshop on Post-Binary ULSI Systems, Proceedings, pp. 55-60, Singapore, May 17, 2006.
 15. T. Marukame, T. Ishikawa, K. -i. Matsuda, T. Uemura and M. Yamamoto,
“Epitaxially grown Co₂MnGe thin films and application to fully epitaxial magnetic tunnel junctions”,
2006 RCIQE Int. Seminar for 21st Century COE Program: “Quantum Nanoelectronics for Meme-Media-Based Information Technologies (IV)”, Collected Abstracts,p.83, Sapporo, Japan, February 9-10, 2006.
 16. T. Uemura, T. Sone, K. -i. Matsuda, and M. Yamamoto;
“Characterization of anisotropic tunnel magneto-resistance in (Ga,Mn)As/AlAs/(Ga,Mn)As magnetic tunnel junctions”,
2006 RCIQE Int. Seminar for 21st Century COE Program: “Quantum Nanoelectronics for Meme-Media-Based Information Technologies (IV)”, Collected Abstracts, p.89, Sapporo, Japan, February 2006.
 17. K. -i. Matsuda, H. Niwa, Y. Akimoto, T. Uemura, and M. Yamamoto,
“Effect of ferromagnetic-layer thickness on the critical current in Nb/Pd_{1-x}Ni_x/Nb Josephson π -junctions”,
2006 RCIQE Int. Seminar for 21st Century COE Program: “Quantum Nanoelectronics for Meme-Media-Based Information Technologies (IV)”, Collected Abstracts, p.95, Sapporo, Japan, February 9-10, 2006.
 18. M. Yamamoto, T. Uemura and K.-i. Matsuda,
“Epitaxially grown full-Heusler alloy thin films and application to magnetic tunnel junctions”,
The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Collected Papers, pp.79-92, Sapporo, Japan, February 27 – March 1, 2006.
 19. T. Marukame, T. Ishikawa, K.-i. Matsuda, T. Uemura, and M. Yamamoto;
“Tunnel magnetoresistance characteristics of fully epitaxial magnetic tunnel junctions using Co₂MnGe thin film”,
The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.51, Sapporo, Japan, February 27 – March 1, 2006.
 20. T. Ishikawa, T. Marukame, K. -i. Matsuda, T. Uemura, and M. Yamamoto;
“Epitaxial growth and characterization of full-Heusler alloy Co₂MnGe thin films”,
The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.52, Sapporo, Japan, February 27 – March 1, 2006.
 21. H. Kijima, H. Koyama, K. -i. Matsuda, T. Uemura, and M. Yamamoto;
“Epitaxial growth of full-Heusler alloy Co₂MnSi thin films on MgO substrates by magnetron sputtering”,
The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers,p.53, Sapporo, Japan, February 27 – March 1, 2006.

22. H. Koyama, H. Kijima, K. -i. Matsuda, T. Uemura, and M. Yamamoto;
 “Fabrication of fully epitaxial magnetic tunnel junctions using full-Heusler alloy Co_2MnSi thin film”,
[The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.54, Sapporo, Japan, February 27 – March 1, 2006.](#)
23. W. Sekine, T. Marukame, K. -i. Matsuda, T. Uemura, and M. Yamamoto,
 “Dependence of tunnel magnetoresistance on MgO tunnel barrier thickness in epitaxial magnetic tunnel junctions using Heusler alloy thin film”,
[The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.55, Sapporo, Japan, February 27 – March 1, 2006.](#)
24. T. Yano, T. Uemura, K. -i. Matsuda, and M. Yamamoto,
 “Epitaxial growth of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ thin films on GaAs substrate by magnetron sputtering”,
[The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.66, Sapporo, Japan, February 27 – March 1, 2006.](#)
25. T. Sone, T. Uemura, K. -i. Matsuda, and M. Yamamoto;
 “Anisotropic tunnel magneto-resistance in (Ga,Mn)As/AlAs/(Ga,Mn)As magnetic tunnel junctions”,
[The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.67, Sapporo, Japan, February 27 – March 1, 2006.](#)
26. H. Niwa, K.-i. Matsuda, Y. Akimoto, T. Uemura, and M. Yamamoto;
 “Magnetic and Structural Properties of $\text{Pd}_{1-x}\text{Ni}_x$ Thin Films for Superconductor / Ferromagnet / Superconductor π -Josephson junction devices”,
[The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.68, Sapporo, Japan, February 27 – March 1, 2006.](#)
27. S. Yasuda, T. Uemura, K. -i. Matsuda, and M. Yamamoto;
 “Fabrication of microfluidic channel integrated with MOSFET”,
[The 3rd Int’l Symp. on Ubiquitous Knowledge Network Environment, Quantum Nanoelectronics Workshop, Collected Papers, p.69, Sapporo, Japan, February 27 – March 1, 2006.](#)

2005

1. T. Marukame, T. Kasahara, K. Matsuda, T. Uemura and M. Yamamoto,
 “High Tunnel Magnetoresistance in Epitaxial $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}/\text{MgO}/\text{CoFe}$ Tunnel Junctions”,
[IEEE Int’l Magnetism Conf., Digests, p. 235, Nagoya, Japan, April 4-8, 2005.](#)
2. T. Uemura, R. Miura, T. Sone, K. Matsuda, and M. Yamamoto,
 “Analysis of anisotropic tunnel magneto-resistance of GaMnAs/AlAs/GaMnAs magnetic tunnel junction”,
[12th Int’l Conf. on Modulated Semiconductors \(MSS 12\), Abstract, THU-PC1, Albuquerque, New Mexico, USA, July 10-15, 2005.](#)
3. T. Marukame, T. Ishikawa, K. -i. Matsuda, T. Uemura and M. Yamamoto;
 “Tunnel magnetoresistance in epitaxial magnetic tunnel junctions using full-Heusler alloy Co_2MnGe thin film and MgO tunnel barrier”,
[50th Annual Conf. on Magnetism & Magnetic Materials, Abstract, p. 18, AC-09, San Jose, CA, USA, Oct. 30 – Nov. 3, 2005.](#)

4. T. Ishikawa, T. Marukame, K. -i. Matsuda, T. Uemura and M. Yamamoto;
 “Structural and magnetic properties of epitaxially grown full-Heusler alloy Co_2MnGe thin films deposited using magnetron sputtering”,
[50th Annual Conf. on Magnetism & Magnetic Materials, Abstract, p. 370, GD-04, San Jose, CA, USA, Oct. 30 – Nov. 3, 2005.](#)
5. T. Marukame, T. Kasahara, K. Matsuda, T. Uemura and M. Yamamoto,
 “Fabrication of fully epitaxial magnetic tunnel junctions using full-Heusler alloy $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ ”,
[2005 RCIQE Int. Seminar for 21st Century COE Program: “Quantum Nanoelectronics for Meme-Media-Based Information Technologies \(III\)”, Collected Abstracts, pp. 119-120, Sapporo, Japan, Feb. 8-10, 2005.](#)
6. M. Yamamoto, T. Uemura, and K. Matsuda,
 “Fully epitaxial magnetic tunnel junctions using full-Heusler alloy thin film”,
[2nd Int. Workshop on Ubiquitous Knowledge Network Environment, Proceedings, pp.289-299, Sapporo, Japan, March. 16-18, 2005](#)
7. T. Marukame, T. kasahara, K. Matsuda, T. Uemura, and M. Yamamoto,
 “Epitaxial growth and characterization of full-Huesler alloy $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ thin films for magnetic tunnel junctions”,
[2nd Int. Workshop on Ubiquitous Knowledge Network Environment, Proceedings, pp.383-389, Sapporo, Japan, March. 16-18, 2005.](#)

2004

1. T. Marukame, K.-i. Matsuda, T. Uemura and M. Yamamoto,
 “Epitaxial growth of Fe/MgO/Fe heterostructures on SrTiO_3 substrates by magnetron sputtering”,
[49th Annual Conf. on Magnetism and Magnetic Materials, Abstracts, p. 329, Jacksonville, Florida, USA, Nov. 7-11, 2004.](#)
2. T. Uemura, K. Sekine, K. Matsuda and M. Yamamoto,
 “Structural and Magnetic Properties of LaSrMnO_3 Thin Films Sputtered on SrTiO_3 -buffered Si Substrates”,
[49th Annual Conf. on Magnetism and Magnetic Materials, Abstracts, p. 54, Jacksonville, Florida, USA, Nov. 7-11, 2004.](#)
3. T. Uemura, Y. Takagi, K. Sekine, K. Matsuda, and M. Yamamoto,
 “Magnetic and Electrical Properties of $(\text{La}, \text{Sr})\text{MnO}_3$ Sputtered on SrTiO_3 -buffered Si Substrate”,
[2004 Int'l Conf. on Solid State Devices and Materials, Extended Abstracts, pp. 600-601, Tokyo, Japan, Sept. 15-17, 2004.](#)
4. K. Matsuda, T. Kasahara, T. Marukame, T. Uemura and M. Yamamoto,
 “Epitaxial growth of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ Heusler alloy films on MgO (001) substrate”,
[“Satellite Session on Quantum Nano Electronics for Meme-Media-Based Information Technologies”, 7th Hokkaido University-Seoul National University Joint Symposium, Collected Abstracts, pp. 69-70, Sapporo, Japan, July 8-9, 2004.](#)
5. T. Marukame, M. Yamamoto, T. Uemura and K. Matsuda,
 “Epitaxial growth of Fe/MgO/Fe heterostructures by magnetron sputtering”,
[“Satellite Session on Quantum Nano Electronics for Meme-Media-Based Information Technologies”, 7th](#)

Hokkaido University-Seoul National University Joint Symposium, Collected Abstracts, pp. 71-72, July 8-9, Sapporo, Japan, 2004.

6. T. Uemura and M. Yamamoto,
“Multilevel Magnetic Random Access Memory Consisting of Magnetic Tunnel Junction and Resonant Tunnel Diode”,
“Satellite Session on Quantum Nano Electronics for Meme-Media-Based Information Technologies”, 7th Hokkaido University-Seoul National University Joint Symposium, Collected Abstracts, pp. 77-78, Sapporo, Japan, July 8-9, 2004.
7. T. Kasahara, K. Matsuda, T. Marukame, T. Uemura and M. Yamamoto,
“Preparation and characterization of $\text{Co}_2\text{Cr}_{0.6}\text{Fe}_{0.4}\text{Al}$ Heusler alloy thin films grown on MgO substrate by magnetron sputtering”,
2004 RCIQE Int. Seminar for 21st Century COE Program: “Quantum Nanoelectronics for Meme-Media-Based Information Technologies (II)”, Collected Abstracts, p. 144, Sapporo, Japan, Feb. 9-11, 2004.
8. T. Uemura, S. Honma, T. Marukame, and M. Yamamoto,
“Demonstration of Functional Magnetic Tunnel Junction with Negative Differential Resistance”,
2004 RCIQE Int. Seminar for 21st Century COE Program: “Quantum Nanoelectronics for Meme-Media-Based Information Technologies (II)”, Collected Abstracts, p. 150, Feb. 9-11, Sapporo, Japan, 2004.
9. T. Uemura, K. Sekine, K. Matsuda and M. Yamamoto,
“Characterization of $(\text{La}, \text{Sr})\text{MnO}_{3-\delta}$ Films Deposited by Magnetron Sputtering on Si Substrate”,
2004 RCIQE Int. Seminar for 21st Century COE Program: “Quantum Nanoelectronics for Meme-Media-Based Information Technologies (II)”, Collected Abstracts, p. 151, Sapporo, Japan, Feb. 9-11, 2004.

2003

1. T. Uemura, S. Honma, T. Marukame, and M. Yamamoto;
“Demonstration of Enhanced Tunneling Magneto Resistance Ratio for a Magnetic Tunnel Junction Connected in Parallel with a Tunnel Diode”,
2003 Int'l Conf. on Solid State Devices and Materials, Extended Abstracts, pp. 618-619, Tokyo, Japan, Sept. 16-18, 2003.
2. K. Uesugi, M. Kurimoto, I. Suemune, M. Yamamoto, T. Uemura H. Machida and N. Shimoyama;
“Observation of Large Room-temperature Negative Differential Resistance in GaAsNSe/GaAs and GaAsNSb/GaAs Superlattices Grown on (001) GaAs”,
The 11th Int'l. Conf. on Modulated Semiconductor Structures (MSS11), Workbook, pp. 266-267, Nara, Japan, July 14-18, 2003.
3. T. Uemura and M. Yamamoto;
“Proposal of Four-Valued MRAM based on MTJ/RTD Structure”,
33rd Int'l Symp. on Multiple-Valued Logic, Proceedings, pp. 273-278, Tokyo, Japan, May 16-19, 2003.
4. T. Uemura, T. Marukame, and M. Yamamoto,
“Proposal and Analysis of a Ferromagnetic Triple-Barrier Resonant-Tunneling Spin Filter”,

Int'l Magnetism Conf. (INTERMAG2003), Proceedings, GD-03, Boston, Massachusetts, U.S.A., March 30-April 3, 2003.

5. M. Yamamoto and T. Uemura,
“Proposal and Experimental Demonstration of Novel MRAM Cell Using Magnetic Tunnel Junction in Combination with Negative Differential Resistance Device”,
[1st Int. Workshop on Ubiquitous Knowledge Network Environment, Proceedings, pp. 469-480, Sapporo, Japan, Nov. 25-27, 2003.](#)
6. T. Marukame, T. Uemura, and M. Yamamoto,
“Analysis of a Triple Barrier Structure Consisting of Ferromagnetic and Non-magnetic Quantum Wells”,
[2003 RCIQE Int. Seminar on “Quantum Nanoelectronics for Mem-Media-Based Information Technologies”, Collected Abstracts, p. 128, Feb. 12-14, 2003, Sapporo, Japan.](#)