

Tomoya Nakatani

List of Publications by Year in descending order

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833
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| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Structure, magnetic property, and spin polarization of $\text{Co}_2\text{FeAl}_x\text{Si}_{1-x}$ Heusler alloys. Journal of Applied Physics, 2007, 102, . | 2.5 | 162 |
| 2 | Bulk and interfacial scatterings in current-perpendicular-to-plane giant magnetoresistance with $\text{Co}_2\text{Fe}(\text{Al}_{0.5}\text{Si}_{0.5})$ Heusler alloy layers and Ag spacer. Applied Physics Letters, 2010, 96, . | 3.3 | 143 |
| 3 | Large magnetoresistance in current-perpendicular-to-plane pseudospin valve using a $\text{Co}_2\text{Fe}(\text{Ge}_{0.5}\text{Ga}_{0.5})$ Heusler alloy. Applied Physics Letters, 2011, 98, . | 3.3 | 99 |
| 4 | Current-perpendicular-to-plane giant magnetoresistance of a spin valve using Co_2MnSi Heusler alloy electrodes. Journal of Applied Physics, 2009, 105, . | 2.5 | 46 |
| 5 | Co-Based Heusler Alloys for CPP-GMR Spin-Valves With Large Magnetoresistive Outputs. IEEE Transactions on Magnetics, 2012, 48, 1751-1757. | 2.1 | 44 |
| 6 | Spin-polarized tunneling spectroscopy of fully epitaxial magnetic tunnel junctions using $\text{Co}_2\text{Fe}(\text{Al}_{0.5}\text{Si}_{0.5})$ Heusler alloy e. Physical Review B, 2009, 79, . | 3.2 | 42 |
| 7 | Effect of Cr substitution for Fe on the spin polarization of $\text{Co}_2\text{Cr}_x\text{Fe}_{1-x}\text{Si}$ Heusler alloys. Journal of Applied Physics, 2007, 102, . | 2.5 | 35 |
| 8 | Microstructure, magnetic and transport properties of a Mn_2CoAl Heusler compound. Acta Materialia, 2019, 176, 33-42. | 7.9 | 35 |
| 9 | Structure and transport properties of current-perpendicular-to-plane spin valves using $\text{Co}_2\text{FeAl}_{0.5}\text{Si}_{0.5}$ and Co_2MnSi Heusler alloy electrodes. Journal of Applied Physics, 2010, 107, . | 2.5 | 31 |
| 10 | Interfacial resistance and spin-dependent scattering in the current-perpendicular-to-plane giant magnetoresistance using $\text{Co}_2\text{Fe}(\text{Al}_{0.5}\text{Si}_{0.5})$ Heusler alloy and Ag. Journal of Applied Physics, 2011, 109, . | 2.5 | 27 |
| 11 | Read sensor technology for ultrahigh density magnetic recording. MRS Bulletin, 2018, 43, 106-111. | 3.5 | 26 |
| 12 | Current-perpendicular-to-plane spin valves with a $\text{Co}_2\text{Mn}(\text{Ga}_{0.5}\text{Sn}_{0.5})$ Heusler alloy. Journal of Applied Physics, 2010, 108, 093916. | 2.5 | 23 |
| 13 | Co NMR experiment as a probe of electron doping in $\text{Co}_2\text{Fe}(\text{Al}_{0.5}\text{Si}_{0.5})$ Heusler alloy. Applied Physics Letters, 2010, 96, 101101. | 3.2 | 21 |
| 14 | Advanced CPP-GMR Spin-Valve Sensors for Narrow Reader Applications. IEEE Transactions on Magnetics, 2018, 54, 1-11. | 2.1 | 21 |
| 15 | Spin polarization of Co_2Fe alloys estimated by point contact Andreev reflection and tunneling magnetoresistance. Journal of Applied Physics, 2009, 105, . | 2.5 | 19 |
| 16 | Oscillatory antiferromagnetic interlayer exchange coupling in $\text{Co}_2\text{Fe}(\text{Al}_{0.5}\text{Si}_{0.5})/\text{Ag}/\text{Co}_2\text{Fe}(\text{Al}_{0.5}\text{Si}_{0.5})$ films and its application to trilayer magnetoresistive sensor. Applied Physics Letters, 2011, 99, . | 3.3 | 19 |
| 17 | High signal output in current-perpendicular-to-the-plane giant magnetoresistance sensors using In_2O_3 -based spacer layers. Applied Physics Express, 2015, 8, 093003. | 2.4 | 19 |
| 18 | Current-perpendicular-to-the-plane giant magnetoresistance in spin-valves with AgSn alloy spacers. Journal of Applied Physics, 2015, 118, . | 2.5 | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Enhancement of current-perpendicular-to-plane giant magnetoresistive outputs by improving B2-order in polycrystalline Co ₂ (Mn _{0.6} Fe _{0.4})Ge Heusler alloy films with the insertion of amorphous CoFeBTa underlayer. <i>Acta Materialia</i> , 2018, 142, 49-57. | 7.9 | 19 |
| 20 | The effect of iron addition on the spin polarization and magnetic properties of Co ₂ CrGa Heusler alloy. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 225002. | 2.8 | 18 |
| 21 | Enhancement of current-perpendicular-to-plane giant magnetoresistance by insertion of amorphous ferromagnetic underlayer in Heusler alloy-based spin-valve structures. <i>Applied Physics Express</i> , 2017, 10, 013006. | 2.4 | 18 |
| 22 | Optically detected ferromagnetic resonance in diverse ferromagnets via nitrogen vacancy centers in diamond. <i>Journal of Applied Physics</i> , 2019, 126, . | 2.5 | 17 |
| 23 | Structural characterizations of Co ₂ MnSi/MgO/Co ₂ MnSi magnetic tunnel junctions by transmission electron microscopy. <i>Journal of Magnetism and Magnetic Materials</i> , 2010, 322, 357-361. | 2.3 | 13 |
| 24 | Temperature-dependence of current-perpendicular-to-the-plane giant magnetoresistance spin-valves using Co ₂ (Mn _{1-x} Fe _x)Ge Heusler alloys. <i>Journal of Applied Physics</i> , 2016, 119, 153903. | 2.5 | 13 |
| 25 | Band match enhanced current-in-plane giant magnetoresistance in epitaxial Co ₅₀ Fe ₅₀ /Cu multilayers with metastable bcc-Cu spacer. <i>APL Materials</i> , 2019, 7, . | 5.1 | 13 |
| 26 | Enhancement of current-perpendicular-to-plane giant magnetoresistance by insertion of Co ₅₀ Fe ₅₀ layers at the Co ₂ Mn(Ga _{0.5} Sn _{0.5})/Ag interface. <i>Journal of Applied Physics</i> , 2011, 109, . | 2.5 | 12 |
| 27 | Temperature dependence of magnetoresistive output of pseudo spin valves with Co ₂ Fe(Al _{1-x} Si _x) Heusler alloys and a Ag spacer. <i>Journal of Applied Physics</i> , 2013, 114, . | 2.5 | 12 |
| 28 | The effect of substitution of Fe with Cr on the giant magnetoresistance of current-perpendicular-to-plane spin valves with Co ₂ FeSi Heusler alloy. <i>Journal of Applied Physics</i> , 2011, 109, 043901-043901-6. | 2.5 | 10 |
| 29 | Magnetic, magnetoresistive and low-frequency noise properties of tunnel magnetoresistance sensor devices with amorphous CoFeBTa soft magnetic layers. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 095002. | 2.8 | 10 |
| 30 | Current-perpendicular-to-the-plane magnetoresistance from large interfacial spin-dependent scattering between Co ₅₀ Fe ₅₀ magnetic layer and In-Zn-O conductive oxide spacer layer. <i>Journal of Applied Physics</i> , 2015, 117, . | 2.5 | 8 |
| 31 | Elucidation of the strong effect of an interfacial monolayer on magnetoresistance in giant magnetoresistive devices with current perpendicular to the plane. <i>Physical Review B</i> , 2021, 103, . | 3.2 | 8 |
| 32 | Polycrystalline current-perpendicular-to-plane giant magnetoresistance pseudo spin-valves using Co ₂ Mn(Ga _{0.25} Ge _{0.75}) Heusler alloy. <i>Journal of Applied Physics</i> , 2013, 114, . | 2.5 | 6 |
| 33 | High magnetic field sensitivity in anti-ferromagnetically coupled 001-epitaxial [Co ₂ Fe(Al _{0.5} Si _{0.5})/Ag] _N multilayers. <i>Journal of Applied Physics</i> , 2018, 124, . | 2.5 | 6 |
| 34 | Prediction of half-metallic gap formation and Fermi level position in Co-based Heusler alloy epitaxial thin films through anisotropic magnetoresistance effect. <i>Physical Review Materials</i> , 2022, 6, . | 2.4 | 6 |
| 35 | The microstructural origin of the enhanced current-perpendicular-to-the-plane giant magnetoresistance by Ag/In-Zn-O/Zn spacer layer. <i>Journal of Applied Physics</i> , 2018, 124, . | 2.5 | 5 |
| 36 | Effects of (Ni _{0.8} Fe _{0.2}) ₁₀₀ Cr seed layer on microstructure, magnetic properties, and giant magnetoresistance of [FeCoNi/Cu] multilayer films. <i>Journal of Applied Physics</i> , 2021, 129, . | 2.5 | 5 |

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|----|--|-----|-----------|
| 37 | Direct observation of magneto-Peltier effect in current-in-plane giant magnetoresistive spin valve. Applied Physics Letters, 2019, 115, 092406. | 3.3 | 4 |
| 38 | Improved current-perpendicular-to-plane giant magnetoresistance outputs by heterogeneous Ag-In:Mn-Zn-O nanocomposite spacer layer prepared from Ag-In-Zn-O precursor. Journal of Applied Physics, 2019, 126, . | 2.5 | 4 |
| 39 | Thickness dependence of degree of B2 order of polycrystalline Co ₂ (Mn _{0.6} Fe _{0.4})Ge Heusler alloy films measured by anomalous X-ray diffraction and its impacts on current-perpendicular-to-plane giant magnetoresistance properties. Scripta Materialia, 2020, 189, 63-66. | 5.2 | 4 |
| 40 | Study on FeCr thin film for a spintronic material with negative spin polarization. Journal of Magnetism and Magnetic Materials, 2022, 557, 169474. | 2.3 | 4 |
| 41 | Large linear sensitivity of asymmetric structured giant magnetoresistive device with metastable bcc-Cu spacer and auxiliary biquadratic coupling through Rh spacer. Journal Physics D: Applied Physics, 2021, 54, 255004. | 2.8 | 3 |
| 42 | Analysis of an all-in-plane spin-torque oscillator using injection locking to an external microwave magnetic field. Applied Physics Express, 2021, 14, 053001. | 2.4 | 3 |
| 43 | Systematic investigation of the effect of layer thickness on the linear sensing characteristics of asymmetric structured CoFe/Rh/CoFe/Cu/CoFe fully epitaxial CIP-GMR based magnetic sensors. Journal of Magnetism and Magnetic Materials, 2021, 538, 168321. | 2.3 | 3 |
| 44 | Analysis method of a spin-torque oscillator using dc resistance change during injection locking to an external microwave magnetic field. Applied Physics Letters, 2021, 119, . | 3.3 | 3 |
| 45 | Layer thickness effects and microstructure of CPP-GMR spin-valves with Ag/InZnO/Zn conductive oxide-based spacer layers. , 2017, , . | | 2 |
| 46 | The effect of NiFeCr seed layer composition on the giant magnetoresistance properties of [FeCoNi/Cu] multilayers. Journal of Magnetism and Magnetic Materials, 2022, 560, 169562. | 2.3 | 2 |
| 47 | Enhanced CPP-GMR effect by improved B2-order of Co ₂ (Mn _{0.6} Fe _{0.4})Ge Heusler layer deposited on amorphous CoFeB/Ta underlayer: A quantitative estimation of site-disordering by anomalous x-ray diffraction. , 2017, , . | | 1 |
| 48 | Analysis of magnetotransport properties and microstructure in current-perpendicular-to-plane pseudo spin-valves using Co ₂ Fe(Ga _{0.5} Ge _{0.5}) Heusler alloy and Ag/Mg-Ti-O/Ag-based spacer. Journal of Applied Physics, 2018, 123, 233903. | 2.5 | 1 |
| 49 | Spin-scattering asymmetry at half-metallic-ferromagnet ferromagnet interface. Physical Review B, 2021, 104, . | 3.2 | 1 |
| 50 | Analysis of current-in-plane giant magnetoresistance using Co ₂ FeAl _{0.5} Si _{0.5} half-metallic Heusler alloy. Journal Physics D: Applied Physics, 0, , . | 2.8 | 1 |
| 51 | Study on CPP-GMR with Heusler Alloys for Magnetic Read Sensors of Hard Disk Drives. Materia Japan, 2013, 52, 99-107. | 0.1 | 0 |
| 52 | Analysis of a Spin-Torque Oscillator Using Injection Locking to an External Microwave Field. , 2021, , . | | 0 |
| 53 | Epitaxial all-bcc-Co ₅₀ Fe ₅₀ /Cu/Co ₅₀ Fe ₅₀ current-in-plane giant magnetoresistive spin-valves on Si(001) substrate. Journal of Magnetism and Magnetic Materials, 2022, 551, 169154. | 2.3 | 0 |