

Asst. Prof. Mustafa Erkovan

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Current mail address: Yahyakaptan Mah. Şevval Sok No:10/6 İzmit, Kocaeli-TURKEY.

❖ **EDUCATION**

PhD. in Physics:

*Gebze Institute of Technology, TURKEY
December 2010*

Thesis:

*Characterizing Crystallographic and Magnetic
Properties of Ultra Thin Transition Metal Films*

Supervisor:

Ass. Prof. Osman Ozturk

MS. in Physics:

*Yıldız Technical University, TURKEY
June 2004*

Thesis:

Breaking Chrial Symmetry in Strong Interaction

Supervisors:

Prof. Emel Cingı & Ass. Prof. Abdurrahman Andic

BS. in Physics:

*Kocaeli University, TURKEY
June 2000*

❖ **WORK EXPERIENCE**

Asst. Prof.

September 2013- Cont. .

Sakarya University,

*Materials and Metallurgy Eng.&
Nanoscience and Nanoengineering Dept.
Sakarya-TURKEY*

Postdoc Researcher

June 2011- September 2012.

*Freie University Berlin Experimental
Physics, Technology Berlin-Germany*

Prof. Dr. Wolfgang Kuch Research Group

*Sample preparation with E Beam deposition,
Structural characterization of thin films with
AES, MEED, LEED and LEED I-V
Magnetic characterization with L and P
MOKE*

Graduate research assistant

Sept 2005- September 2013.

*Dept. of Physics, Gebze Institute of
Technology Kocaeli-TURKEY*

*Nanotechnology Lab., Sample Preparation
with Magnetron Sputtering & E-Beam
Deposition*

*Structural characterization of thin films with
XPS, XPD, LEED, UPS & magnetic
characterization with Electron Spin
Resonance techniques.*

Teaching Assistant

Sept 2005- September 2013

*Dept. of Physics, Gebze Institute of
Technology Kocaeli-TURKEY*

*Various undergrad level courses such as;
Electronic Lab. I-II , Analog and Digital
Electronic Circuits, Mathematical Methods-I
for Physicist, Physics- II, Electricity and
Magnetism, Classical Mechanics, Quantum
Mechanics I-II*

Research Projects

- 1. Grant:** *Helmoltz Centrum BESSY, Berlin Cyclotron Beam Time (10 January - 17 January 2014)*

Title: Investigation of Magnetic Properties and Exchange Coupling Properties of FeRh/Co Bilayer films

Contribution: *As a project researcher and, preparation of ultrathin films FeRh/Co films by magnetron sputtering and X-PEEM and XMCD experiment in BESSY.*
- 2. Grant:** *COST (December 2014- Cont.)*

Title: *Fabrication and characterization of nanostructured Pt and Pt alloys, and investigation of their hydrogen gas sensing properties*

Contribution: *As a researcher ,Pt and Pt alloys preparation in magnetron sputtering deposition technique and chemical characterization with XPS.*
- 3. Grant:** *Helmoltz Centrum BESSY, Berlin Cyclotron Beam Time (14 July - 21 July 2014)*

Title: *Revealing the difference of single- and polycrystalline Fe_xGd_{1-x}*

Contribution: *As a project proposed with AG Kuch group and, preparation of ultrathin films Fe_xGd_{1-x} films by magnetron sputtering and X-PEEM and XMCD experiment in BESSY.*
- 4. Grant:** *The Scientific and Technological Research Council of Turkey. (April 2014- March 2015)*

Title: Observation of Perpendicular magnetization and exchange bias effect on Ni/CoO films

Contribution: *As a project coordinator , preparation of ultra*

thin Ni/CoO films by magnetron sputtering. Magnetic characterization of the films with VSM and MOKE..

5. Grant: *Sakarya University Scientific Research Project (April 2014- Cont.)*

Title: *Magnetic properties of polycrystalline Fe_xGd_{1-x} films*

Contribution: *As a project coordinator , preparation of ultrathin films Fe_xGd_{1-x} films by magnetron sputtering technique and magnetic characterization of the films with MOKE and VSM.*

6. Grant: *The Scientific and Technological Research Council of Turkey. (March 2013- February 2014)*

Title: *Investigation of exchange bias effect on Pt_xCo_{1-x}/CoO ultrathin films*

Contribution: *As a project coordinator, preparation of ultra thin Pt_xCo_{1-x}/CoO films by magnetron sputtering. Magnetic characterization of the films with MOKE and VSM.*

7. Grant: *The Scientific and Technological Research Council of Turkey. (2006-2009)*

Title: *Growth of ultra thin hetero-epitaxial films and their characterization of structural and physical properties XPS and XPD.*

Contribution: *As a researcher , preparation of ultra thin epitaxial films with magnetron sputtering and E-Beam deposition technique. X Ray Photoelectron Diffraction and Low Energy Electron Diffraction helped to identify crystal structure of the films. Ferromagnetic Resonance technique for magnetic characterization.*

8. Grant: *State Foundation. (2009-2012)*

Title: Nanospintronic and Nanomagnetism Research Center

Contribution: *As a researcher, I focus on grow magnetic multilayer films and developing a theoretical model which gives all magnetic parameters of magnetic multilayer structures from using ferromagnetic resonance technique. Designing a new UHV system which has thin film deposition part and in situ magnetic characterization part.*

9. Grant: State Foundation. (2006-2009)

Title: Nanotechnology Center Project

Contribution: *As a researcher.*

10. Grant: Gebze Institute of Technology Scientific Research Project (2006-2009)

Title: Organic Light Emitting Diode production and their electrical characterization

Contribution: *As a researcher.*

Others

1. 1993-1995 *Electronic Technician*
Senturk Electronic Comp. (worked with Siemens)

2. 1991-1993 *Electronic Internship*
Alcatel-Teletaş, İstanbul, Turkey
In Research and Development Dept.

❖ **AWARDS**

June 2000 *Certified best student with B.S. in Physics,*
Kocaeli University, TURKEY

January 2010

Turkey High Council of Education
postdoctoral scholarship for a year.

June 2012

Visitor Researcher Scholarship from Freie
University Berlin.

❖ **Master And PhD THESIS (As Supervisor)**

1. Umut Parlak

Master Thesis

Exchange Bias properties of Ni/CoO
Bilayer System (2014)

(He is PhD Student in Peter Grünberg
Institute Aachen, Germany)

2. M Emre Aköz

Master Thesis

Exchange Bias properties of Pt_xCo_{1-x}/Co
Ultra Thin Films (2015)

(He is PhD student at Gebze Technical
University)

❖ **PUBLICATIONS**

1. R. Topkaya, **M. Erkovan**, A. Öztürk, O. Öztürk, and M. Özdemir, B. Aktaş
Ferromagnetic Resonance Studies of Exchange Coupled Ultrathin Py/Cr/Py
Trilayers
Journal of Applied Physics, 108, 023910 (2010).
2. B. Aktaş, R.Topkaya, **M. Erkovan**, A. Öztürk, O. Öztürk, and M. Özdemir,
Interlayer Exchange Coupling in Ultrathin Py/Cr/Py Trilayers
Azarbaijan Journal Of Physics Fizika, Vol XVI, Number 2, 17-22 (2010).
3. **M. Erkovan**, S. T. Öztürk, R. Topkaya, M. Ozdemir, B. Aktas, O. Ozturk
Ferromagnetic Resonance Investigation Py/Cr Multilayer Systems
Journal of Applied Physics, 110, 023908 (2011).
4. M. Ozturk, E. Sinir, E. Demirci, **M. Erkovan**, O. Ozturk, N. Akdogan
Exchange Bias Properties of [CoO/Co]_n Magnetic Multilayers
Journal of Applied Physics, 112, 093391 (2012).
5. M. Y. Khan, C. Bin Wu, **M. Erkovan**, and W. Kuch,
Probing Antiferromagnetism in NiMn/Ni/(Co)/Cu₃Au(001) Single-Crystalline
Epitaxial Thin Films Journal of Applied Physics, 113, 023913 (2013).
6. **M. Erkovan**, E. Şentürk, Y. Şahin, M. Okutan

I-V Characteristics of Pt_xCo_{1-x} ($x=0.2, 0.5, 0.7$) Thin Films Journal of Nanomaterials, Vol. 2013, 579131 (2013).

7. E. Demirci, M. Öztürk, U. Ulucan, N. Akdoğan, E. Sınır, O. Öztürk, **M. Erkovan**
Temperature – Dependent Exchange Bias Properties of Pt_xCo_{1-x}/CoO Bilayers Thin Solid Films, 550, 595-601 (2014).
8. **M. Erkovan**, S. Tokdemir Öztürk, D. Taşkın Gazioğlu, R. Topkaya, O. Öztürk
FMR Study of Co/Ti Bilayer Films Acta Physica Polonica A, 125 (2014).
9. Y. Şahin, S. Öztürk, A. Kösemen, N. Kılınc, **M. Erkovan**, Z. Z Öztürk
Electrical Conduction and NO_2 Gas Sensing Properties of ZnO Nanorods Applied Surface Science, 330, 90-96 (2014).
10. **M. Erkovan**, Y. A. Shokr, D. Schiestl, C. Bin Wu, W Kuch
Influence of Ni_xMn_{1-x} thickness and composition on the Curie temperature of Ni in Ni_xMn_{1-x}/Ni bilayers on $Cu_3Au(001)$ Journal of Magnetism and Magnetic Materials, 373, 151-154 (2015).
11. N. Akdoğan, A. Yağmur, M. Öztürk, E. Demirci, O. Öztürk, **M. Erkovan**
Interface Induced Manipulation of Perpendicular Exchange Bias in Pt/Co/(Pt, Cr)/CoO Thin Films Journal of Magnetism and Magnetic Materials, 373, 120-123 (2015).
12. U. Parlak, M. E .Aköz, S. Tokdemir Öztürk, **M. Erkovan**
Thickness Dependent magnetic Properties of Polycrystalline Nickel Thin Films Acta Physica Polonica A, 127,4, (2015).
13. M. E .Aköz, U. Parlak, Y. Şahin, D. Tavşan, O. Öztürk, **M. Erkovan**
Manipulation of Exchange Coupling in Py/Co/Cr Multilayer Thin Films Acta Physica Polonica A, 127,4, (2015).
14. A. Kösemen, Y. Şahin, S. Öztürk, E. Şentürk, M. Okutan, **M. Erkovan**
Effect on Thickness of Ti Spacer Layer on Dielectric Properties of Co-Ti Multilayer Thin Films Materials Science in Semiconductor Processing, 30, (2015).
15. Y. A. Shokr, **M. Erkovan**, C. Bin Wu, B. Zhang O. Sanding, W. Kuch
Temperature-Induced Sign Change of the Magnetic Interlayer Coupling in Ni/Ni₂₅Mn₇₅/Ni Trilayers on $Cu_3Au(001)$ Journal of Applied Physic, J. Appl. Phys. **117**, 175302, (2015).
16. Ö Tamer, Y Atalay, D Avcı, Y Zorlu, B Çoşut, Y Yerli , **M. Erkovan**,
Synthesis X Ray Structure, Spectroscopic Characterization And Nonlinear Optical Properties of Triaqua (1,10-PHENANTHROLİNE-2,9- dicarboxylato) Manganese (II) Dihydrate: A Combined And Theoretical Study Ni/Ni₂₅Mn₇₅/Ni Trilayers on $Cu_3Au(001)$ Journal of Molecular Structure, 1100 (2015).

16. **M. Erkovan** M. E. Aköz, M. Öztürk, E. Demirci, U. Parlak, N. Akdoğan, O. Öztürk,
Probing Exchange Bias Properties of Pt_xCo_{1-x}/CoO Bilayers, Journal of Superconductivity and Novel Magnetism , accepted, 2015.
17. Z. Alpaslan Kösemen, A. Kösemen, S. Öztürk, B. Canım Kurbey, S. E. San, Y. Yerli, **M. Erkovan**, A. V. Tunç
Performance Improvement of Organic Field Effect Transistors by Using Gel Dielectric and Molecular Doping, Hydrogen Energy, Accepted, 2015

❖ **BOOK and BOOK CHAPTERS:**

1. B. Aktaş, R. Topkaya, **M. Erkovan**, M. Özdemir

Magnetic Characterization of Exchange Coupled Ultrathin Magnetic Multilayers by Ferromagnetic Resonance Technique, Nanostructured Materials for Magnetoelectronics, Springer Series in Materials Science, Vol.175, Berlin, Germany, 2013.

❖ **PRESANTATIONS**

International

1. **M. Erkovan**, N. Doğan, A. Cemil Başaran, O. Öztürk, B. Aktaş, Structure of PtCo multilayer prepared by plasma sputtering and magnetic characterization, International Conference on Nanoscale Magnetism (ICNM-2007), June 25-29, Istanbul, Turkey 2007.
2. O. Öztürk, **M. Erkovan**, A. C Başaran, Magnetic anisotropy of PtCo alloy thin films (30 nm) deposited on the surface of native oxidized Si (100), The Second Workshop on Anisotropic Science and Technology of Materials and Devices, June 22-25, Gebze-Kocaeli, Turkey, 2008.
3. **M. Erkovan**, O. Öztürk, A C Başaran, Magnetic Co thin films preparation by sputtering system, The Second Workshop on Anisotropic Science and Technology of Materials and Devices, June 22-25, Gebze-Kocaeli, Turkey, 2008.
4. **M. Erkovan** and O. Ozturk, Magnetic Co and PtCo alloys thin films preparation by sputtering system, Condensed Matter Physics Conference of Balkan Countries, May 26-28, Mugla, Turkey, 2008.
5. B. Aktas, **M. Erkovan**, R. Topkaya , M. Özdemir , O. Öztürk, FMR investigations on exchange coupled Py/Cr/Py trilayer films, 20th International Colloquium on Magnetic Films and Surfaces, Berlin, Germany, 2009.

6. B. Aktaş, A. N. Koçbay, R. Topkaya, M. Özdemir, **M. Erkovan**, O. Öztürk, Magnetic properties of exchange coupled soft Py/Cr/Py thin trilayer films, 19th Soft Magnetic Materials Conference, September 6-9, Torino, Italy, 2009.
7. **M. Erkovan**, O. Ozturk, Comprehensive photoelectron diffraction study on ultrathin film of CoxPt1-x, Thin Film ECASIA'09 Conference, Antalya, Turkey, 2009.
8. **M. Erkovan** and O.Öztürk, Magnetic characterization of PtxCo1-x alloy thin films, International Conference on Nanoscale Magnetism (ICNM-2010), September 28-October 2, Gebze-Kocaeli, Turkey, 2010.
9. B. Aktaş, R. Topkaya, **M. Erkovan**, O. Öztürk, M. Özdemir, Interlayer exchange coupling in multilayers, International Conference on Nanoscale Magnetism (ICNM-2010), September 28-October 2, Gebze Turkey, 2010.
10. Y. Şahin, M. Okutan, **M. Erkovan**, Investigation of electrical properties of PtxCo1-x thin films with four point probe technique, Turkish Physics Society 28. International Physics Conference, September 6-9, Muğla-Turkey, 2011.
11. **M. Erkovan**, Y. Shork, D. Scheilst, M. Y Khan, C. Bin Wu, and W Kuch, Influence of Top Ni Layer on Exchange Bias and Blocking Temperature in Ni/NiMn/Ni Trilayer, DFG Spring Meeting, March 11-15, Germany, 2013.
12. **M. Erkovan**, S. Tokdemir Öztürk, D. Taşkın Gazioğlu, R. Topkaya, O. Öztürk, FMR Study Of Co/Ti Bilayer Thin Films, 3rd Intr. Adv. Appl. Physics and Material Science Congress (APMAS-2013), April 24-28, Antalya-Turkey, 2013.
13. U. Parlak, H. Sözeri, O. Öztürk, M. E. Aköz, **M. Erkovan**, Magnetic properties of Py/Co/Cr/Co/Py multilayer system, International Conference of Nanoscale Magnetism (ICNM-2013), September 2-6, Istanbul, Turkey, 2013.
14. M. Öztürk, E. Sınır, E. Demirci, **M. Erkovan**, O. Öztürk and N. Akdoğan, Temperature dependent studies of exchange biased [Co/CoO]_n multilayers, International Conference on Nanoscale Magnetism (ICNM-2013), September 2-6, Istanbul, Turkey, 2013.
15. E. Demirci, M. Öztürk, E. Sınır, U. Ulucan, N. Akdoğan, O. Öztürk and **M. Erkovan**, Temperature-dependent exchange bias properties of polycrystalline Pt_xCo_{1-x}/CoO bilayers, International Conference on Nanoscale Magnetism (ICNM-2013), September 2-6, Istanbul, Turkey, 2013.
16. A. Yağmur, M. Öztürk, E. Demirci, **M. Erkovan**, O. Öztürk and N. Akdoğan, Manipulation of exchange bias in Pt/Co/M/CoO/Pt multilayers (M=Pt, Cr), International Conference on Nanoscale Magnetism (ICNM-

2013), September 2-6, Istanbul, Turkey, 2013.

17. **M. Erkovan**, O. Erdemir, E. Demirci, M. Öztürk, N. Akdoğan, O. Öztürk, Tuning exchange bias properties of Pt_xCo_{1-x}/CoO bilayers with Pt concentration and Temperature, 15th European Conference on Surface and Interface Analysis (ECASIA'13), October 13-18, Sardinia, Italy, 2013.
18. O. Öztürk, **M. Erkovan**, E. Demirci, O. Erdemir, M. Öztürk, N. Akdoğan, Exchange Bias Tuning with Temperature and Pt Ratios in Pt_xCo_{1-x}/CoO Bilayer, AVS 60th International Symposium, October 27-November 1, Long Beach-California, USA, 2013.
19. **M. Erkovan**, M. E. Aköz, U. Parlak, T. Yılmaz, Thickness dependence of magnetic properties of cobalt thin films, The International Advances in Applied Physics and Materials Science Congress (APMAS-2014), April 24-27, Fethiye-Mugla, Turkey, 2014.
20. **M. Erkovan**, U. Parlak, Y. Şahin, M. E. Aköz, Manipulation of exchange coupling in Py/Co/Cr multilayer thin films, The International Advances in Applied Physics and Materials Science Congress (APMAS-2014), April 24-27, Fethiye-Mugla, Turkey, 2014.
21. U. Parlak, M. E. Aköz, O. Öztürk, **M. Erkovan**, Spin reorientation transition of ultrathin polycrystalline nickel films, The International Advances in Applied Physics and Materials Science Congress (APMAS-2014), April 24-27, Fethiye-Mugla, Turkey, 2014.
22. M. E. Aköz, U. Parlak, E. Demirci, M. Öztürk, N. Akdoğan, O. Öztürk, **M. Erkovan**, Exchange bias properties of Pt_xCo_{1-x}/CoO bilayer thin films, International Conference of Superconductivity and Magnetism (ICSM-2014), April 27-May 02, Antalya, Turkey.
23. M. Öztürk, A. Yağmur, E. Demirci, **M. Erkovan**, O. Öztürk and N. Akdoğan, Interface induced manipulation of perpendicular exchange bias in Co/CoO thin films, International Conference of Superconductivity and Magnetism (ICSM-2014), April 27-May 02, Antalya, Turkey, 2014.
24. E. Demirci, M. Öztürk, E. Sınır, U. Ulucan, O. Erdemir, N. Akdoğan, O. Öztürk and **M. Erkovan**, Temperature-dependent exchange bias properties of polycrystalline Pt_xCo_{1-x}/CoO bilayers, International Conference of Superconductivity and Magnetism (ICSM-2014), April 27-May 02, Antalya, Turkey, 2014.
25. A. Sönmez, M. Öztürk, E. Demirci, **M. Erkovan**, U. Parlak, M. E. Aköz, O. Öztürk and N. Akdoğan, Exchange bias properties of $[Ni/CoO]_n$ multilayers, International Conference of Superconductivity and Magnetism (ICSM-2014), April 27-May 02, Antalya, Turkey, 2014.
26. A. Canlı, **M. Erkovan**, U. Parlak, O. Öztürk, E. Demirci, M. Öztürk and N. Akdoğan, Manipulation of perpendicular exchange bias in PtCo/CoO

multilayers, International Conference of Superconductivity and Magnetism (ICSM-2014), April 27-May 02, Antalya, Turkey, 2014.

27. Mustafa Öztürk, Ahmet Yağmur, Erdem Demirci, **Mustafa Erkovan**, Osman Öztürk and Numan Akdoğan, Structural and magnetic properties of exchange biased Pt/Co/(Pt,Cr)/CoO multilayers, 4th National Crystallographic Meeting, May 17-19, Diyarbakır, Turkey, 2014.
28. Ayşe Sönmez, Mustafa Öztürk, Erdem Demirci, **Mustafa Erkovan**, Umut Parlak, Osman Öztürk and Numan Akdoğan, Structural and magnetic properties of exchange biased [Ni/CoO]_n multilayers, 4th National Crystallographic Meeting, May 17-19, Diyarbakır, Turkey, 2014.
29. A. Canlı, **M. Erkovan**, U. Parlak, O. Öztürk, E. Demirci, M. Öztürk and N. Akdoğan, Tuning exchange bias in PtCo/CoO multilayers, 4th National Crystallographic Meeting, May 17-19, Diyarbakır, Turkey, 2014.
30. **M. Erkovan**, M. E. Aköz, E. Demirci, M. Öztürk, U. Parlak, N. Akdoğan, O. Öztürk, The Effect of Ni Thickness on Exchange Bias Properties of Ni/CoO Bilayers, 2nd International Conference on Surfaces, Coating and Nanostructured Materials (NANOSMAT USA), May 19-22, Texas, The USA, 2014.
31. **M. Erkovan**, M. E. Aköz, E. Demirci, M. Öztürk, U. Parlak, N. Akdoğan, O. Öztürk, Tuning exchange bias properties of Pt_xCo_{1-x}/CoO bilayers with Pt concentration, 2nd International Conference on Surfaces, Coating and Nanostructured Materials (NANOSMAT USA), May 19-22, Texas, The USA, 2014.
32. O. Öztürk, M. Türksoy Öcal, U. Parlak, M. E. Aköz, **M. Erkovan**, Influence magnetic properties of epitaxial PtCo alloy films on different substrates, 15th Joint Vacuum Conference (JVC 15), June 15-20, Vienna, Austria, 2014.
33. O. Öztürk, M. Türksoy Öcal, S. Tokdemir Öztürk, **M. Erkovan**, Tuning Magnetic Properties of Polycrystalline PtCo Alloy Films by Pt Concentration, 15th Joint Vacuum Conference (JVC 15), June 15-20, Vienna, Austria, 2014.
34. M. E. Aköz, E. Demirci, U. Parlak, M. Öztürk, N. Akdoğan, O. Öztürk, **M. Erkovan**, Investigation of exchange bias effect for Pt_xCo_{1-x}/CoO bilayer thin films by Pt concentration, The European Conference Physics of Magnetism 2014 (PM'14), June 23-27, Poznan, Poland, 2014.
35. U. Parlak, E. Demirci, M. E. Aköz, M. Öztürk, N. Akdoğan, O. Öztürk, S. Tokdemir Öztürk, **M. Erkovan**, Perpendicular exchange bias properties of Ni/Pt/CoO films, The European Conference Physics of Magnetism 2014 (PM'14), June 23-27, Poznan, Poland, 2014.
36. **M. Erkovan**, U. Parlak, M. E. Aköz, E. Demirci, M. Öztürk, N. Akdoğan, O. Öztürk, Exchange bias properties of X/CoO (X: PtCo, Co, Ni) films,

- 11th International Conference on Nanosciences & Nanotechnologies (NN14), July 8-11, Thessaloniki, Greece, 2014.
37. E. Demirci, M. Öztürk, **M. Erkovan**, O. Öztürk and N. Akdoğan, Temperature-dependent exchange bias properties of Pt/Co/Pt/Cr₂O₃ thin film, 11th International Conference on Nanosciences and Nanotechnologies (NN14) July 8-11, Thessaloniki, Greece, 2014.
38. M. Öztürk, A. Yağmur, E. Demirci, **M. Erkovan**, O. Öztürk and N. Akdoğan, Tuning exchange bias in Pt/Co/(Pt,Cr)/CoO thin films, 11th International Conference on Nanosciences and Nanotechnologies (NN14), July 8-11, Thessaloniki, Greece, 2014.
39. N. Akdoğan, A. Yağmur, M. Öztürk, E. Demirci, O. Öztürk and **M. Erkovan**, Interface induced manipulation of perpendicular exchange bias in Pt/Co/(Pt,Cr)/CoO thin films, 11th International Conference on Nanosciences and Nanotechnologies (NN14), July 8-11, Thessaloniki, Greece, 2014.
40. A. Canlı, **M. Erkovan**, U. Parlak, O. Öztürk, E. Demirci, M. Öztürk and N. Akdoğan, Manipulation of exchange bias in PtCo/CoO multilayers, 12th Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) Users' Meeting, November 26-27, Amman, Jordan, 2014.
41. Mustafa Öztürk, Ahmet Yağmur, Erdem Demirci, **Mustafa Erkovan**, Osman Öztürk and Numan Akdoğan, Structural and magnetic properties of exchange biased Co/(Pt,Cr)/CoO thin films, 12th Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) Users' Meeting, November 26-27, Amman, Jordan, 2014.
42. Aköz M.E., Erkovan M Pt Concentration Effect on Exchange Bias Properties of Pt_xCo_{1-x} /CoO Bilayer Systems, Spin Physics and Spin Chemistry Conf. St.Petersburg, Russia, 2015.
43. Synthesis, and IR, Raman and EPR spectra of manganese (II) complex: An experimental and theoretical study, Atalay Y., Yerli Y., Erkovan M., Tamer O., Avci D. Spin Physics and Spin Chemistry Conf. St.Petersburg, Russia, 2015.
44. Erkovan M., Parlak U., Öztürk S.T., Aköz M.E., Demirci E., Öztürk M., Akdoğan N., Öztürk O. Thickness Dependent on Exchange Bias Properties of Ni /CoO Bilayer Systems, Spin Physics and Spin Chemistry Conf. St.Petersburg, Russia, 2015.
45. Tamer O., Avci D., Atalay Y., Erkovan M., Cosut B A combined crystallographic, spectroscopic, and computational study of novel cobalt(II) complex Spin Physics and Spin Chemistry Conf. St.Petersburg, Russia, 2015

National

1. **M. Erkovan**, A. C. Başaran, O. Öztürk, Preparation and magnetic characterization of $\text{Co}_x \text{Pt}_{1-x}$ ($x=0.4,0.5,0.6$) thin films, 4th Nanoscience and Nanotechnology Conference (NanoTR 4), June 9-14, Istanbul, Turkey, 2008.
2. **M. Erkovan**, Nanotechnology and Nanotechnology Research in Turkey , Namik Kemal University, Turkey 2009.
3. B. Aktaş, **M. Erkovan**, R. Topkaya, M. Özdemir, O. Öztürk, FMR investigations on exchange coupled Py/Cr/Py trilayer films, 5th National Nanotechnology and Nanoscience Conference (NanoTR 5), Eskişehir, Turkey, 2009.
4. **M. Erkovan**, B. Aktaş R. Topkaya, M. Özdemir, O. Öztürk, FMR investigations on exchange coupled Co/Ti/Co trilayer films, 5th National Nanotechnology and Nanoscience Conference (NanoTR 5), Eskişehir, Turkey, 2009.
5. **M. Erkovan**, M. Okutan, A. Kösemen, O. Öztürk, AC Dielectric spectroscopy of multilayer thin film dependency on Cr thickness, 5th National Nanotechnology and Nanoscience Conference (NanoTR 5), Eskişehir, Turkey, 2009.
6. **M. Erkovan**, S. Tokdemir Öztürk, Y. Şahin, O. Öztürk, Photoelectron Diffraction Study on Different Thickness L1_0 CoPt Alloys, 6th National Nanotechnology and Nanoscience Conference (NanoTR 6), Izmir, Turkey, 2010.
7. B. Aktaş, R. Topkaya, **M. Erkovan**, Interlayer exchange coupling in Py/Cr/Py multilayers, 6th National Nanotechnology and Nanoscience Conference, İstanbul, Turkey, 2010.
8. E. Sınır, M. Ozturk, E. Demirci, **M. Erkovan**, O. Ozturk, N. Akdoğan Structural and Exchange bias properties of $[\text{CoO}/\text{Co}]_n$ magnetic multilayers, 3rd Turkish Crystallographic Meeting, Izmir, Turkey, 2012.
9. Mustafa Öztürk, Ekrem Sınır, Erdem Demirci, **Mustafa Erkovan**, Osman Öztürk and Numan Akdoğan, Exchange bias properties of $[\text{Co}/\text{CoO}]_n$ multilayers, 9th Nanoscience and Nanotechnology Conference (NanoTR 9), June 24-28, Erzurum, Turkey, 2013.
10. E. Demirci, M. Öztürk, E. Sınır, U. Ulucan, O. Erdemir, N. Akdoğan, O. Öztürk and **M. Erkovan**, Temperature-dependent exchange bias properties of polycrystalline $\text{Pt}_x\text{Co}_{1-x}/\text{CoO}$ bilayers, 9th Nanoscience and Nanotechnology Conference (NanoTR 9), June 24-28, Erzurum, Turkey, 2013.
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