Biography

Research interest:

- High correlated electron system (Kondo problem to Heavy Fermion)
- Magnetocaloric system
- Nano magnetic particle and ferro fluid system

PUBLICATION:

1. The effect of particle size on the characteristics of FeCo nanoparticles, solid state communications, Vol. 150, pp: 594-597, 2010

2. Spin-dependent tunneling characteristics in Fe/Mgo/Fe trilayes: First- principles calculation, solid state communications, Vol. 150, pp: 214-218, 2010

3. Percolation threshold near the second phase transition in diluted system of Gd2-x(La, Y)xIn, J.M.M.M, Vol. 321, pp:3990-3996, 2009

4. The effect of Heavy Fermion or F-semiconductor system on Gd-Intermetallic system, Transition B: Mechanical Engineering, Vol. 16, No. 1, pp: 15-21, 2009

5. Prevention of the second phase by diluted system of Gd2In, J.M.M.M, Vol310, e451-e453, 2007

6. The possibility of nanostructure character in approaching of Kondo effect, Journal of physics Conference series, Vol 92, 2007

7. Effect of lack of hybridization on Interchange of crystal and magnetic structures, Journal of engineering of Semnan University (especial issue: physics and mathematics) Vol. 4, No. 10, pp: 112-116, 2006

8. Two stages of Kondo effect and competition between RKKY and Kondo in Gd-based intermetallic compound, Physica B, 378-380, pp: 720-721, 2006

8. A new approach to spinel ferrites through mean field approximation, J.M.M.M, 304, e433-e435, 2006

9. Investigation and modeling of stable phase of crystal in Gd2X(X=Al, Ga, In) IMC, Amir Kabir Journal, Vol 65, pp: 23-28, 2006

10. Comment and calculation on duality exchange in Gd_2In, Journal of applied physics, 97, 10B113, 2005

11. Electronic standing waves on the surface of $Bi_2Sr_2CaCu_2O_{8+\delta}$, Physica C 408-410, pp: 764-767, 2004

12. Oxygen non-stoichiometry of bismuth-based $Bi_2Sr_2CaCu_2O_{8+x}$ (Bi-2212) high-temperature superconductor, Physica C, 391, pp: 289-297, 2003

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14. Possibility of Kondo effect in Gd-intermetallic-compound, Physics B, 281&282, pp: 178-180, 2000

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16. Stabilization of Reentrance AF.M on Gd_2Al system in a certain electron concentration, physica status solidi (b), Volume 208, Issue 2, pp: 465-472, 1998

17. Effect of composition on the magnetic behavior of Gd2X compound, J.Sci.Iran, Vol.9 No.3, 1998

18. Studies of two-dimensional MoGe superconductors in a magnetic field, phisica B: Cond. Mat., Vol. 197 , pp: 530-539, 1994

19. Super Para magnetism in RE-Compound, J.M.M.M, pp: 90-91, 1990

20. The two magnetic transition of the pseudo binary, Journal DE physique 49, 1988

21. The effect of disorder in the magnetic properties of the pseudo binary Compound $Gd_{2-x}La_xAl$, Physica status solidi Vol. 96, Issue 2, pp: 587-595, 1986

22. The magnetic properties of some R_5Pt_3 compound, J.M.M.M Volume 38, Issue 1, pp: 57-60, 1983

International conference:

1.Capacity of nanoscale metal/isolated/metal by electronic charge screening at the surface of their electrodes, MMM2010, 1389

2.How can SDW change the unstable FM to stable AFM in Gd-IMC, SCTE 2008, 1387

3.A critical composition at which the instable FM collaps to PM with Kondo lattice behavior, SCTE 2008, 1387

4.A critical point at which the magnetocaloric effect can de manifested, SCTE 2008, 1387

5.Charge – spin correlation in related to hybridization and spin fluctuation, MMM 2008, 1387
6.The possibility of nanostructure character in approaching of Kondo effect, Phonons2007, 1386
7.Phononic dispersion or/and band fluctuation on the Nanostructure by equation of state, Phonons 2007, 1386
8.Phonon spectra and reconstructive phase transition ', Phonons 2007,1386
9.How small how large the magnetic particle should be in the fixed drug dosage', TNT 2007, 1386
10.The possibility of super-paramagnetic character in nano-magnetic structure of FeXCo1-X, TNT 2007, 1386
11.Controlling the size of CdSe-nano particles by simultaneous application of high Ar/He gas pressure and fast evacuation', TNT 2007, 1386
12.Suggestion of an equation of state V (p) for Ti and Zr using U.I.E.S., 15th International conference on Solid Compounds of Transition Elements, 1385
13.DFT calculation on the electronic structure of the Gd3T (T=Ni, Pd) intermetalic compounds, 15th International conference on Solid Compounds of Transition Elements
14.Possibility of HF-formation on Gd-Bi-IMC, 15th International conference on Solid Compounds of Transition Elements, 1385
15.Prediction of existence of the Gd2Ga structure by modeling, 15th International conference on Solid Compounds of Transition Elements, 1385
16.The Reconstructive Crystal Structure and the Exchange Energy, MRS, 1385
17.Crystal and spin lattice relaxation in Gd-IMC, International conference on magnetism, 1385
18.Order ordering transition on Gd-IMC, International conference on magnetism, 1385
19prevention of second phase and evaluate of the high magnetic moment in Gd2In intermetalic compound, International conference on magnetism, 1385

20.Limiting of high critical magnetic field on Gd-IMC, International conference on magnetism,1385
21.Extended model for Ti phase transition in high pressure, 44th ehprg international conference, 1385
22.Response brain of runaway people to EEG measurement', IFTA, 1385
23.Boundaries of intelligence and runaway', 47th annual meeting, 1385
24Applied exchange of mean field on spinal ferrite, ISAMT/SOMMA, 1384
25.Dispersion of exchange or/and phonon dispersion on Kondo lattice on some Gd-IMC, ISAMT/SOMMA, 1384
26.Effect of lack of hybridization on interchange of crystal and magnetic structure, ISAMT/SOMMA,1384
27. Heavy fermion or F-Semiconductor system on Gd-Intermetallic System, ISAMT/SOMMA, 1384
28. Induced spin lattice relation and X-ray diffraction of Gd-IMC', ISAMT/SOMMA, 1384
29.Observation of two stage of Kondo effect and competition between RKKY and Kondo effect in the Gd-based intermetallic compound, The International Conference on Strongly Correlated Electron System, 1384
30.Kondo effect behavior in the Gd-based intermetallic compound, 20th general conference condensed matter division EPS, 1383
31.Possibility of HF behavior on Gd-IMC', International conference on magnetism, 1382
32.Co existence Kondo lattice and magnetic ordering Gd-IMC', International conference on magnetic and superconducting material MSM03, 1382
33.X ray diffraction and spin lattice relaxation Gd-IMC', International conference on magnetic and superconducting material MSM03, 1382
34.Psuedo fine particle effect on unstable phase transition of Gd2Al, International conference on magnetic and superconducting material MSM03, 1382
35.Heavy fermion f- semiconductor system on Gd intermetallic system, Eastmag-2001,1380
36.Dispersion of exchange or/and dispersion Kondo lattice on Gd-IMC, Eastmag-2001, 1380
37.In-situ study of x-ray line broadening of YBa2Cu3O6+x powder sample, Eastmag-2001, 1380
38.Boundary of the critical unstability on some Gd-IMC, Eastmag-2001,1380
39. Effect of annealing process of magnetic behavior on IMC, NMR2000, 1380
40. Competition of exchange interaction in a diluted system of Gd2-x(La, Y)xIn, NMR2000, 1379
41.The cause of double phase transition on Gd2X-IMC', NMR2000,1379
42.Possibility of Kondo lattice and magnetic ordering on Gd-intermetallic compound, CMD18-2000,1379
43. Stabilized of reentrant "AF.M" in critical magnetic field on Gd-IMC', CMD18-2000, 1379

Internal Confrence:

1. Review of RKKY and a comment on its importance approximation Fifth, *Annual Iranian Physics Conference*

2. The Position of "FE-B" Metallic glass in amorphous system and its magnetic contradiction, *Sixth Annual Iranian Physics Conference*

3. Application of the RKKY-on-two-magnetic transition of R_2X, *Eight – Annual Iranian Physics Conference*

4. Percolation problem in the diluted system of $Gd_{2-x}La_xIn$, *Ninth – Annual Iranian Physics Conference*

5. Effect of magnetization RE" on the crystal structure, *8th symposium of the society of crystallography*

6. Study of the x-ray-line Broadening of CuO superconducting material, *9th symposium of the society of crystallography*

7. Duality character of conduction electron and instability of magnetic behavior, *5 th symposium of condense matter 1379-Kermanshah-Iran*

8. Character of conduction electron and instability crystal structure, *10th symposium of the society of crystallography – Zahedan-Iran*

9. Induced spin lattice relaxation and x-ray diffraction, *10th symposium of the society of crystallography – Zahedan-Iran*

10. Systematic study on correlation and self interaction of c.e, *11th symposium of the society of crystallography*

11. The reason of change of the stability of Gd-A (A to be the elements of a column of periodic table) crystal phase structure, 14^{th} *symposium of the society of crystallography*

12. Investigation of the effect of exchange interaction on the stability or change of crystal phase structure using Wien2k program, 14^{th} *symposium of the society of crystallography*

13 .Study ofmagnetic and crystal structure of Gd_3Pt and Gd_2Pt, 14^{th} *symposium of the society of crystallography*

14. The effect of change in oxygen amount on the superconductivity of BiSr2CaCu2O(8+x) compound in the temperature range of 20-820 degrees centigrade, 14^{th} *symposium of the society of crystallography*

15. If the John-Teller effect could be the basic mechanism in the changing region of

superconductivity and crystal phase transition, 14th *symposium of the society of crystallography*

16. The critical limit for change of crystal-magnetic structure when substituting the elements of a column of the periodic table, 14th *symposium of the society of crystallography*

17. The reason of the existing difference between attenuated magnetic systems of intermetallic compoundswith two distinct elements, *8th symposium of condense matter (Physics Society of Iran)*

18. The effect of short range exchange interaction in the paramagnetic region of the density function theory, *8th symposium of condense matter (Physics Society of Iran)*

19. Investigation of the change of electronic state density and the deviation from the Vegard rule and occurrence of John-Teller effect in the changing region of superconductivity and crystal phase transition, *8th symposium of condense matter (Physics Society of Iran)*

20. The intermetallic electronic structure ofGd_3Pt and $Gd_2Pt$and the calculation of Curie temperature for Gd3Pt, 8th *symposium of condense matter (Physics Society of Iran)*

21. Investigation of instability of Gd_5Bi_3 because of the increase of magnetic ion in Gd-Bi intermetallic compound, *8th symposium of condense matter (Physics Society of Iran)*

22. Calculations on the electronic structure of Gd_3T intermetallic compounds using the DFT theory, *Conference of physics of Iran*

23. The effect of inter-systemic pressure on the phase changes of superconductivity structure in comparison with the external hydrostatic pressure, *Conference of physics of Iran*

24. The effect of exchange-correlation energy on the change and stability of crystal structure, *Conference of physics of Iran*

25. Investigation of formation and existence of a crystal-magnetic structure and the phase stability of the Gd_2Tl intermetallic compound, 13th *symposium of condense matter*

26. The effect of change in free electrons percent on the formation of nano magnetic particles of some Gd compounds, 13th *symposium of condense matter*

27. Investigation of the appearing of titanium structural phases caused by the pressure at constant temperature, 13th *symposium of condense matter*

28. The Probability of SDW phenomenon in Gd_2Al intermetallic compound compared to Y_2Al, 15th *symposium of the society of crystallography*

29. The reason why the CdSe nanoparticles get viscose and rod-like when synthesized with

Octadicin and TOPO,15th *symposium of the society of crystallography*

30. If the super-paramagnism to be a basic parameter of nanomagnetic particles, 15th *symposium of the society of crystallography*

31. Quantum dots and the biological applications, *1st international seminar on nanotechnology applications*

32. Nanomagnetic particles and the modern medicine, *1st international seminar on nanotechnology applications*

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TRANSLATION TO PERSIAN

1. Special relativity By: French

2. Liquid State By: Pryde

3. Statistical Mechanics By:R.K.Pathria