Anatoly G Kuchin

List of Publications by Year
in descending order

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93 papers	852 citations	567281 15 h-index	610901 24 g-index
94 all docs	94 docs citations	94 times ranked	358 citing authors

#	Article	IF	Citations
1	Neutron diffraction studies of the magnetic phase transitions in Ce2Fe17 compound under pressure. Journal of Applied Physics, 2002, 92, 385-391.	2.5	51
2	Magnetic and structural properties of Ce2Fe17â^'xMnx compounds. Journal of Alloys and Compounds, 2000, 313, 7-12.	5.5	41
3	Magnetic properties of RNi5â^'xCux intermetallics. Journal of Magnetism and Magnetic Materials, 2006, 303, 119-126.	2.3	35
4	High pressure effect on magnetic properties and volume anomalies of Ce2Fe17. Journal of Applied Physics, 1999, 86, 6295-6300.	2.5	33
5	Original magnetic behaviour observed in RNi5â^'xCux alloys (R = Pr, Gd or Y). Journal of Magnetism and Magnetic Materials, 1996, 159, L309-L312.	2.3	30
6	Electronic structure, magnetic, and optical properties of the intermetallic compoundsR2Fe17(R=Pr,Gd). Physical Review B, 2006, 73, .	3.2	29
7	Metamagnetic behaviour and phase diagram of Lu2Fe17 under high pressure. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 876-878.	2.3	28
8	Neutron diffraction study of Lu2Fe17 under high pressure. Journal of Magnetism and Magnetic Materials, 2003, 258-259, 564-566.	2.3	28
9	Mechanisms controlling magnetic properties of pseudobinary compounds TbNi5â^'xMx (M=Cu or Al). Journal of Magnetism and Magnetic Materials, 2002, 238, 29-37.	2.3	23
10	Magnetovolume properties of Y2Fe17â^'xMx alloys (M=Si or Al). Journal of Alloys and Compounds, 1999, 289, 18-23.	5.5	22
11	Crystal and magnetic structure investigation ofTbNi5â^'xCux(x=0,0.5,1.0,1.5,2.0): Experiment and theory. Physical Review B, 2006, 74, .	3.2	22
12	TbxEr1â^'xNi5compounds: An ideal model system for competing Ising-XYanisotropy energies. Physical Review B, 2009, 79, .	3.2	21
13	Electronic structure and optical spectroscopy studies of HoNi₅ and ErNi₅ compounds doped with Cu. Physica Status Solidi (B): Basic Research, 2012, 249, 824-828.	1.5	21
14	Helimagnetic order in the re-entrant ferromagnet Ce2Fe15.3Mn1.7. Journal of Applied Physics, 2005, 97, 113909.	2.5	18
15	Sm2Fe17and Tm2Fe17: electronic structure, magnetic and optical properties. Journal of Physics Condensed Matter, 2007, 19, 116215.	1.8	17
16	Effect of pressure and Mn substitution on magnetic ordering of Ce 2 Fe 17-x Mn x (x=0,1). Applied Physics A: Materials Science and Processing, 2002, 74, s610-s612.	2.3	16
17	Ferromagnetism strengthening in the Lu2Fe17â^'xMnx system. Solid State Communications, 2008, 146, 446-449.	1.9	16
18	Real disordered crystal structure and Curie temperature of intermetallic compounds Y2Fe17â^'xMx (M=Si or Al). Journal of Alloys and Compounds, 2001, 315, 82-89.	5.5	15

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19	Electronic, Magnetic, and Structural Properties of the Alloys Y2(Fe1â^'xMx)17, where M = Al and Si. Physica Status Solidi A, 1996, 155, 479-483.	1.7	14
20	Real crystal structure and magnetic state of Ce2Fe17 compounds. Physica B: Condensed Matter, 2004, 350, E99-E102.	2.7	14
21	Enhancement of the magnetocaloric effect in the system. Solid State Communications, 2010, 150, 1580-1583.	1.9	14
22	Optical conductivity and magnetic parameters of the intermetallic compounds R2Fe17â^'xMx (R=Y, Ce,) Tj ETQq0 0 0 rgBT /Overlock 10	5.5	13
23	Effect of Cu-doping on the electronic structure and optical properties of LaNi5. Journal of Alloys and Compounds, 2011, 509, 5238-5241.	5.5	13
24	Magnetic properties of the Ce2Fe17â^'xMnx helical magnets up to high magnetic fields. Journal of Magnetism and Magnetic Materials, 2007, 313, 1-7.	2.3	12
25	Ce valence in intermetallic compounds by means of XANES spectroscopy. Zeitschrift FÃ¼r Kristallographie, 2010, 225, .	1.1	12
26	Magnetic field induced phase transition in Ce 2 Fe 17-x Mn x compounds. Applied Physics A: Materials Science and Processing, 2002, 74, s577-s579.	2.3	11
27	Magnetic states in the Ce2Fe17â^'xMnxHy hydrides. Journal of Alloys and Compounds, 2005, 392, 44-49.	5.5	11
28	Electronic structure and magnetic properties of RNi5â^'xCux alloys (R=Y, La, Ce). Low Temperature Physics, 2006, 32, 1140-1146.	0.6	11
29	Effect of pressure on the magnetic properties of YNi5, LaNi5, and CeNi5. Low Temperature Physics, 2011, 37, 138-143.	0.6	11
30	Magnetism and structure of near-stoichiometric Tm2Fe17+ compounds. Journal of Alloys and Compounds, 2014, 599, 26-31.	5.5	11
31	Influence of lattice volume on magnetic states of Ce2Fe16MnDy compounds (y=0,1,2.3). Journal of Applied Physics, 2006, 100, 013903.	2.5	10
32	Predictable magnetocaloric effect in the Ce2Fe17â^'xMnxHy hydrides. Journal of Alloys and Compounds, 2013, 563, 130-134.	5.5	10
33	Cobalt-related features of spectral and magnetic properties of RNi4Co (R=Ho, Er). Journal of Magnetism and Magnetic Materials, 2014, 368, 87-90.	2.3	10
34	Change of magnetic state in a Ce2Fe16Mn single crystal upon hydrogenation. Journal of Alloys and Compounds, 2004, 365, 80-83.	5.5	9
35	Magnetic phase diagrams of Ce2Fe17â^'xMnxâ€“H system: A magnetization study. Journal of Alloys and Compounds, 2005, 404-406, 155-159.	5.5	9
36	Optical absorption and structure of energy bands of GdNi5 â^' xCu x intermetallic compounds. Physics of Metals and Metallography, 2009, 107, 173-178.	1.0	9

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37	Magnetocaloric effect in the Ce2Fe17â^'xMnx helical magnets. Journal of Alloys and Compounds, 2011, 509, 6763-6767.	5.5	9
38	Pressure-induced ferromagnetic phase in Ce2Fe16Mn1 compound. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 950-952.	2.3	8
39	Specific features of the behavior of the optical properties of TbNi5 â^' x Cu x intermetallic compounds. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2008, 104, 360-365.	0.6	8
40	Magnetic properties of the Lu2Fe17â^'xMnx single crystals. Journal of Magnetism and Magnetic Materials, 2010, 322, 2215-2218.	2.3	8
41	Remarkable increase of Curie temperature in doped GdFeSi compound. Intermetallics, 2021, 133, 107183.	3.9	8
42	Effect of random local crystal fields on the magnetic properties of rare-earth RNi5â^'xCux compounds. Physica Status Solidi (B): Basic Research, 1996, 197, 447-451.	1.5	7
43	Magnetovolume anomalies in Ce2Fe17â^'xMnx. Low Temperature Physics, 2001, 27, 275-277.	0.6	7
44	Magnetic structure of Ce2Fe17 â^' x Mn x intermetallic compounds. Physics of the Solid State, 2010, 52, 922-926.	0.6	7
45	Correlation of magnetic properties with the local features of the electronic and crystal structure in the Ce2Fe17 â^' x Mn x intermetallide: XAFS data analysis. JETP Letters, 2011, 94, 187-191.	1.4	7
46	Electronic structure and optical properties of TbNi5â^'xCux. Physica B: Condensed Matter, 2012, 407, 3600-3603.	2.7	7
47	Influence of aluminum impurity on the electronic structure and optical properties of the TbNi5 intermetallic compound. Physics of the Solid State, 2013, 55, 385-388.	0.6	7
48	Optical properties of CeNi5 and CeNi4M (M=Al, Cu) compounds. Journal of Alloys and Compounds, 2011, 509, 557-559.	5.5	6
49	Magnetic and Structural Properties of GdFe_{1â€“x}Ti _x Si. IEEE Magnetics Letters, 2019, 10, 1-4.	1.1	6
50	The localization of magnetic moment in PrNi4Cu ferromagnet. Physica B: Condensed Matter, 2000, 276-278, 580-581.	2.7	5
51	Electronic structure of the intermetallic compounds Ce2Fe17 and Ce2Fe15.3 M 1.7 (M = Al, Si): Experiment and theory. Physics of the Solid State, 2007, 49, 99-106.	0.6	5
52	A study of the real structure of intermetallic compounds R2Fe17 (R=Ce,Lu) using neutron powder diffraction, NMR and NGR methods. Physica B: Condensed Matter, 2000, 276-278, 570-571.	2.7	4
53	Magnetism of the singlet-singlet system PrNi5â^'xCux. Journal of Alloys and Compounds, 2004, 368, 75-78.	5.5	4
54	Influence of copper impurities on the evolution of the electronic structure and optical spectra of the LuNi5 compound. Physics of the Solid State, 2015, 57, 866-870.	0.6	4

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55	Influence of microdeformations on magnetic phase transitions in the (Tm Pr1-)2Fe17 system. Journal of Alloys and Compounds, 2017, 726, 330-337.	5.5	4
56	Concentration dependence of the density of states in the Pauli paramagnets YNi5â˜'xCux. Low Temperature Physics, 2001, 27, 662-665.	0.6	3
57	Optical properties of RNi5 intermetallic compounds (R = Y, La, Ce). Optics and Spectroscopy (English) Tj ETQq1 1 0.784314 rgBT /Overlo	0.6	3
58	Magnetic and structural properties of Lu₂(Fe,Mn)₁₇H_yhydrides. Journal of Physics Condensed Matter, 2009, 21, 306002.	1.8	3
59	Instability of the ferromagnetic ground state in Lu2Fe17â˜'XMnX [xâ€‰=â€‰0.5, 0.7]. Journal of Applied Physics, 2012, 111, 07E310.	2.5	3
60	Magnetic and structural properties of the Ce2Fe17â˜'xMnxHy (x=0, 0.35, 0.5) hydrides. Journal of Alloys and Compounds, 2012, 542, 222-227.	5.5	3
61	Magnetic Phase Diagrams of Tm₂Fe_{19-x}Mn_x and Tm₂Fe_{17+Î´} Systems. Solid State Phenomena, 2014, 215, 123-126.	0.3	3
62	Evolution of the electronic structure and optical spectra of intermetallides DyNi5 â˜' x Cu x under changes of concentration. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2015, 118, 357-363.	0.6	3
63	Effect of manganese doping on the electronic structure and optical properties of Ce2Fe17-x Mn x (x =) Tj ETQq1 1 0.784314 rgBT /Over	1.5	3
64	Magnetic and structural properties of Y2Fe15Â·3Si1Â·7alloy under high pressure. High Pressure Research, 2000, 17, 193-200.	1.2	2
65	The influence of high pressure on the structural and magnetic properties of Y2Fe17â˜'x M x (M=Si, Al;) Tj ETQq1 1 0.784314 rgBT /Overl	0.6	2
66	Praseodymium Valence State in PrFe[sub 10]Mo[sub 2], PrNi[sub 5], and PrNi[sub 4]M Intermetallic Compounds (M = Cu, Al, Ga). Physics of the Solid State, 2005, 47, 424.	0.6	2
67	Magnetism of the intermetallic compound Ce2Fe17 in the crystalline and amorphous states. Physics of Metals and Metallography, 2008, 106, 566-576.	1.0	2
68	Magnetic and structural properties of the Lu2Fe17Hy hydrides. Journal of Alloys and Compounds, 2009, 480, 23-24.	5.5	2
69	Optical Properties and Electronic Structure of LaNi_{5-X}Cu_x (x=0â€“1.2) Intermetallic System. Solid State Phenomena, 2010, 168-169, 529-532.	0.3	2
70	Optical spectroscopy and electronic structure of compounds HoNi5 â˜' x Al x (x = 0, 1, 2). Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2013, 115, 690-695.	0.6	2
71	Magnetic phase transitions in Y 1â˜'x Tb x Mn 6 Sn 6 , La 1â˜'x Sm x Mn 2 Si 2 , Lu 2 (Fe 1â˜'Ñ... Mn x) 17 , and La(Fe) Tj ETQq1 1 0.784 383, 196-202.	2.3	2
72	Inhomogeneous Magnetic State of Ð¡Ðµ2Fe17 Evidenced by MÃ¶ssbauer Spectroscopy. Physics of the Solid State, 2018, 60, 1718-1726.	0.6	2

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73	Non-monotonic variation of Curie temperature in (Tm Pr1-)2Fe16.5Cr0.5. Journal of Alloys and Compounds, 2019, 791, 225-231.	5.5	2
74	Evolution of the optical properties of DyNi5 â˜' x Al x compounds in dependence of aluminum concentration. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 106, 845-850.	0.6	1
75	Magnetic Anisotropy of Helical and Collinear Magnets R₂Fe_{17-X}Mn_x. Solid State Phenomena, 0, 168-169, 192-195.	0.3	1
76	Optical properties and electronic structure of YNi5 â˜' x Cu x intermetallic compounds. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2011, 111, 808-813.	0.6	1
77	Interplay between Local Electronic Structure, Crystalline Structure and Magnetic Ordering in Intermetallic Compounds Ce₂Fe_{17â˜'x}Mn_x. Solid State Phenomena, 0, 190, 251-254.	0.3	1
78	Specific features of the electronic structure and spectral properties of NdNi5 â˜' x Cu x compounds. Physics of the Solid State, 2013, 55, 2191-2195.	0.6	1
79	Unusual stability of ground ferrimagnetic state in Tm2Fe17 under pressure. Journal of Magnetism and Magnetic Materials, 2018, 460, 188-192.	2.3	1
80	Unusual weak increase of Curie temperature and lattice parameters in Pr2Fe16.5Zr0.5. Journal of Physics: Conference Series, 2019, 1389, 012129.	0.4	1
81	The system PrNi5â˜'xCux with two lowest singlet states. Physica B: Condensed Matter, 2005, 359-361, 932-934.	2.7	0
82	Role of Electronic Band Structure and Lattice Parameters in Magnetism of the R₂(Fe,M)₁₇, Đœ = Si, Al Compounds. Solid State Phenomena, 0, 152-153, 41-44.	0.3	0
83	XAFS and XRD studies of local structure peculiarities in magnetic R2Fe17â˜'xMnx(R = Ce, Lu) intermetallics. Journal of Physics: Conference Series, 2013, 430, 012104.	0.4	0
84	Effect of copper and cobalt impurities on the electronic structure and optical spectra of the intermetallic compound PrNi5. Physics of the Solid State, 2014, 56, 1933-1938.	0.6	0
85	Non-Monotonic Variation of Magnetocaloric Effect in the Tm₂(Fe,Mn)₁₇ and Tm₂Fe₁₆-Tm₂Fe₁₉ Systems. Materials Science Forum, 2016, 845, 13-16.	0.3	0
86	Magnetic properties of the Tm2Fe17â˜'xMnx single-crystals. Journal of Magnetism and Magnetic Materials, 2016, 410, 1-4.	2.3	0
87	Magnetic properties of Tm2Fe16 under pressure. EPJ Web of Conferences, 2018, 185, 04018.	0.3	0
88	MÃ¶ssbauer study of Đ¡Đµ2Fe17 compound in different magnetic states. Physica B: Condensed Matter, 2018, 545, 190-196.	2.7	0
89	The Influence of Copper Impurity on the Electronic Structure and Optical Properties of TmNi5 Compound. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2018, 124, 784-788.	0.6	0
90	Competing anisotropy in the (TmxPr1-x)2Fe17 system. EPJ Web of Conferences, 2018, 185, 04023.	0.3	0

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91	Magnetic and magnetothermal properties of the GdTi0.05Fe0.95-Mn Si canted ferrimagnets. Intermetallics, 2021, 137, 107304.	3.9	0
92	HEAT CAPACITY AND SURFACE RESISTANCE OF YNI(5â^'X)CuX. , 2000, , .		0
93	Effect of Chromium Substitution for Iron on the Magnetic and Structural Properties of (TmxPr1â€“) Tj ETQq1 1 0.784314 rgBT /Overlock	1.0	0