

Gary S Collins

List of Publications by Year in descending order

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85
papers

634
citations

623188

14
h-index

794141

19
g-index

86
all docs

86
docs citations

86
times ranked

227
citing authors

#	ARTICLE	IF	CITATIONS
1	Perturbed ^{63}Zn angular correlations: A spectroscopy for point defects in metals and alloys. <i>Hyperfine Interactions</i> , 1990, 62, 1-34.	0.2	54
2	Vacancy migration and accretion in Ni observed by perturbed ^{63}Zn angular correlations. <i>Physical Review B</i> , 1985, 32, 4839-4848.	1.1	36
3	Atom Movement in In_3La Studied via Nuclear Quadrupole Relaxation. <i>Physical Review Letters</i> , 2004, 92, 225901.	2.9	29
4	Change of Diffusion Mechanism with Lattice Parameter in the Series of Lanthanide Indides Having L Structure. <i>Physical Review Letters</i> , 2009, 102, 155901.	2.9	24
5	Hydrogen and deuterium decoration of a vacancy complex in Ni. <i>Physical Review B</i> , 1986, 34, 502-505.	1.1	21
6	Composition-driven changes in lattice sites occupied by indium solutes in Ni_2Al_3 phases. <i>Physical Review B</i> , 2004, 70, .	1.1	21
7	Anomalous critical slowing down of spin fluctuations in Gd observed with ^{161}Dy Mössbauer effect. <i>Physical Review B</i> , 1984, 30, 6277-6284.	1.1	19
8	Structural, thermal and deformation-induced point defects in PdIn. <i>Hyperfine Interactions</i> , 2000, 130, 151-179.	0.2	19
9	Point defects in NiAl near the equiatomic composition. <i>Hyperfine Interactions</i> , 1990, 60, 655-658.	0.2	18
10	Formation of FeCo by mechanical alloying. <i>Scripta Metallurgica Et Materialia</i> , 1993, 29, 1319-1323.	1.0	18
11	Temperature- and composition-driven changes in site occupation of indium solutes in $\text{Gd}_{1+3x}\text{Al}_2\text{In}_{3x}$. <i>Physical Review B</i> , 2004, 69, .	1.1	18
12	Trivacancy recovery and formation of a cubic symmetry defect trap on ^{111}In impurities in Ni. <i>Hyperfine Interactions</i> , 1983, 15, 391-394.	0.2	17
13	Site Preference Model for Hyperfine Impurities in Compounds. <i>Hyperfine Interactions</i> , 2001, 136/137, 641-646.	0.2	17
14	PAC Probes as Diffusion Tracers in Solids. <i>Hyperfine Interactions</i> , 2005, 159, 1-8.	0.2	17
15	Diffusion in Intermetallic Compounds Studied Using Nuclear Quadrupole Relaxation. <i>Defect and Diffusion Forum</i> , 2005, 237-240, 195-200.	0.4	16
16	Nonstoichiometry in line compounds. <i>Journal of Materials Science</i> , 2007, 42, 1915-1919.	1.7	15
17	Mössbauer and PAC studies of nanocrystalline Fe. <i>Hyperfine Interactions</i> , 1994, 92, 949-953.	0.2	14
18	Disordering of FeAl by Mechanical Milling. <i>Materials Science Forum</i> , 1997, 235-238, 535-540.	0.3	14

#	ARTICLE	IF	CITATIONS
19	Jump Frequencies of Cd Tracer Atoms in L1 ₂ Lanthanide Gallides. Defect and Diffusion Forum, 0, 289-292, 725-732.	0.4	13
20	Simultaneous Measurement of Tracer Jump Frequencies on Different Sublattices in Ga ₇ Pd ₃ Using PAC. Defect and Diffusion Forum, 2007, 264, 27-32.	0.4	12
21	Defect recovery and trapping in plastically deformed Au studied by perturbed angular correlations of ¹¹¹ In. Physical Review B, 1983, 28, 2940-2946.	1.1	11
22	Comparison of Jump Frequencies of ¹¹¹ In/ ¹¹¹ Cd Tracer Atoms in Sn ₃ R and In ₃ R Phases Having the L1 ₂ Structure (R = Rare-Earth). Defect and Diffusion Forum, 0, 311, 159-166.	0.4	11
23	Formation of Ni ₃ Fe by mechanical alloying. Hyperfine Interactions, 1994, 92, 955-958.	0.2	10
24	Grain boundary sites in fcc metals studied by PAC. Hyperfine Interactions, 1993, 79, 761-764.	0.2	9
25	Comparison of defect recovery in proton irradiated, deformed and ion implanted nickel as observed by PAC of ¹¹¹ In. Hyperfine Interactions, 1983, 15, 387-390.	0.2	8
26	Application of PAC to study equilibrium point defects in intermetallic compounds. Hyperfine Interactions, 1993, 80, 1257-1261.	0.2	8
27	Nuclear quadrupole interactions of ¹¹¹ In/ ¹¹¹ Cd solute atoms in a series of rare-earth palladium alloys. Hyperfine Interactions, 2013, 221, 85-98.	0.2	8
28	Anomalous temperature dependence of the quadrupole coupling frequency of a lattice defect trapped to ¹¹¹ In in Pt. Hyperfine Interactions, 1983, 15, 395-399.	0.2	7
29	Equilibrium point defects in TiAl studied by PAC. Hyperfine Interactions, 1993, 79, 745-748.	0.2	7
30	Vacancy-Vacancy Interactions in NiAl. Defect and Diffusion Forum, 2001, 194-199, 383-388.	0.4	7
31	Diffusion of ¹¹¹ Cd probes in Ga ₇ Pt ₃ studied via nuclear quadrupole relaxation. Hyperfine Interactions, 2007, 178, 87-90.	0.2	7
32	Atomic Defects and Disorder in Mechanically-Milled Intermetallic Compounds. Materials Science Forum, 1996, 225-227, 275-280.	0.3	6
33	Site preferences of indium impurity atoms in intermetallics having Al ₃ Ti or Al ₃ Zr crystal structures. Hyperfine Interactions, 2007, 177, 15-19.	0.2	6
34	Thermal Defects in B ₂ Iron Aluminide. Materials Research Society Symposia Proceedings, 1998, 552, 1.	0.1	5
35	Charge Transfer Model for Quadrupole Interactions and Binding Energies of Point Defects with ¹¹¹ In/ ¹¹¹ Cd Probes in Cubic Metals. Hyperfine Interactions, 2003, 151/152, 77-91.	0.2	5
36	Jump Frequency of Cd Tracer Atoms in ¹²⁵ Mn. Defect and Diffusion Forum, 2005, 237-240, 396-401.	0.4	5

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37	High-temperature polymorph of In ₂ La. Journal of Alloys and Compounds, 2005, 387, 20-23.	2.8	5
38	Motion of Cadmium Tracer Atoms in Al ₁₁ R ₃ Phases (R=La,Ce,Pr). Defect and Diffusion Forum, 0, 289-292, 755-761.	0.4	5
39	The Solubility of Indium in Liquid Gallium Supercooled to 12 K. Defect and Diffusion Forum, 0, 323-325, 503-508.	0.4	5
40	Point Defects in Deformed Metals Studied by Perturbed Gamma-Gamma Angular Correlations. Materials Science Forum, 1987, 15-18, 783-788.	0.3	4
41	Pressure dependence of the hyperfine field of a Cd probe in a relaxed trivacancy complex in Ni. Physical Review B, 1992, 45, 4672-4675.	1.1	4
42	Vacancy Mobility in Nickel Aluminide Versus Composition. Materials Research Society Symposia Proceedings, 1998, 527, 203.	0.1	4
43	Segregation of Solutes in Two-Phase Mixtures. Hyperfine Interactions, 2001, 136/137, 653-658.	0.2	4
44	Vacancy Jumps in PdIn: Reconciling Nuclear Relaxation and Diffusion Measurements. Defect and Diffusion Forum, 2001, 194-199, 375-382.	0.4	4
45	Nuclear spin relaxation of ¹⁶¹ Dy in Gd above the Curie temperature observed with the Mössbauer effect. Hyperfine Interactions, 1983, 16, 617-620.	0.2	3
46	Hydrogen-Vacancy Interactions in Ni Studied by Perturbed Gamma-Gamma Angular Correlations. Materials Science Forum, 1987, 15-18, 681-684.	0.3	3
47	Production and migration of interstitials in deformed metals. Hyperfine Interactions, 1990, 60, 667-670.	0.2	3
48	Point Defects And The B2 To Fcc Transformation In Milled FeRh. Materials Research Society Symposia Proceedings, 1997, 481, 631.	0.1	3
49	Site Preferences of Hyperfine Impurities in Ni ₂ Al ₃ Phases. Hyperfine Interactions, 2001, 136/137, 647-652.	0.2	3
50	Nucleation of embryos of a second phase by individual impurity atoms. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 329-331, 920-924.	2.6	3
51	Relating PAC damping to EFG fluctuation rates through the PAC relaxation peak. Hyperfine Interactions, 2011, 199, 397-402.	0.2	3
52	Site occupation of indium and jump frequencies of cadmium in FeGa ₃ . Hyperfine Interactions, 2016, 237, 1.	0.2	3
53	Diffusion and Equilibration of Site-Preferences Following Transmutation of Tracer Atoms. , 0, 19, 61-79.		3
54	Hydrogen Decoration of Vacancy Defects in Platinum. , 1988, , 415-416.		3

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55	Stacking fault defects in hep cobalt studied by PAC. Hyperfine Interactions, 1990, 60, 659-662.	0.2	2
56	Indium metal nanoclusters studied by PAC. Hyperfine Interactions, 1993, 80, 1117-1120.	0.2	2
57	Atomic diffusion in strain fields near solutes. Hyperfine Interactions, 1993, 79, 755-760.	0.2	2
58	The martensitic phase transition in NiTi. Hyperfine Interactions, 1993, 80, 995-998.	0.2	2
59	Stochastic Vacancy Motion in B2 Intermetallics Detected by PAC. Materials Research Society Symposia Proceedings, 1998, 527, 209.	0.1	2
60	Polymorphic Phase Transformation in In ₂ La and CeIn ₂ . Hyperfine Interactions, 2004, 158, 305-308.	0.2	2
61	Diffusion in La _n Co _{3n+2} Phases Studied by Perturbed Angular Correlation. Defect and Diffusion Forum, 0, 323-325, 453-458.	0.4	2
62	PAC Probes as Diffusion Tracers in Solids. , 2005, , 443-450.		2
63	Defects in Laser Surface-Melted Metals Studied by Pac. Materials Research Society Symposia Proceedings, 1986, 82, 53.	0.1	1
64	Cage motion of a probe atom in a vacancy complex in Pt. Hyperfine Interactions, 1990, 60, 651-653.	0.2	1
65	Hydrogen binding in vacancy clusters in platinum. Hyperfine Interactions, 1993, 79, 749-753.	0.2	1
66	A New Approach to Study Vacancy Defects in High-Temperature Intermetallic Compounds. Materials Research Society Symposia Proceedings, 1994, 364, 59.	0.1	1
67	Search for Nucleation of Phase Embryos in Binary Alloys by Impurity Atoms. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2000, 55, 129-133.	0.7	1
68	Diffusion in Binary and Pseudo-Binary L ₁ ₂ Indides, Stannides, Gallides and Aluminides of Rare-Earth Elements as Studied Using Perturbed Angular Correlation of ¹¹¹ In/Cd. Defect and Diffusion Forum, 0, 323-325, 447-452.	0.4	1
69	Segregation of solute atoms to interphase boundaries in GdNi ₂ . Hyperfine Interactions, 2017, 238, 1.	0.2	1
70	Electrolytic loading of hydrogen in metals studied by PAC. Hyperfine Interactions, 1990, 60, 663-666.	0.2	0
71	Laser surface-melting of metals studied by PAC. Hyperfine Interactions, 1990, 61, 1339-1342.	0.2	0
72	Equilibrium Defects and Concentrations in Nickel Aluminide. Materials Research Society Symposia Proceedings, 1998, 552, 1.	0.1	0

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73	Stochastic Model of PAC Nuclear Relaxation Caused by Defects Hopping on a Simple Cubic Lattice. Hyperfine Interactions, 2001, 136/137, 627-632.	0.2	0
74	Influences of Lattice Sinks and Defect Interactions on Solutes in Compounds. Materials Research Society Symposia Proceedings, 2002, 719, 8191.	0.1	0
75	High-Temperature Polymorph of In ₂ La. ChemInform, 2005, 36, no.	0.1	0
76	Determination of the crystal structures of In ₇₀ -Ni ₃₀ and In ₇₀ -Pd ₃₀ using perturbed angular correlation. Hyperfine Interactions, 2013, 221, 73-78.	0.2	0
77	Impurity Diffusion in Highly-Ordered Intermetallic Compounds Studied by Nuclear Quadrupole Interactions. , 0, 2, 95-105.		0
78	Solute-solute interactions in intermetallic compounds. Hyperfine Interactions, 2017, 238, 1.	0.2	0
79	Atom Motion in Solids Following Nuclear Transmutation. , 0, 27, 186-196.		0
80	Simulation of Intrinsic Defects and Cd Site Occupation in LaIn ₃ and LuIn ₃ . , 0, 27, 40-49.		0
81	Diffusion of ¹¹¹ Cd probes in Ga ₇ Pt ₃ studied via nuclear quadrupole relaxation. , 2008, , 333-336.		0
82	Site preferences of indium impurity atoms in intermetallics having Al ₃ Ti or Al ₃ Zr crystal structures. , 2008, , 143-147.		0
83	Nuclear quadrupole interactions of ¹¹¹ In/Cd solute atoms in a series of rare-earth palladium alloys. , 2012, , 179-192.		0
84	Determination of the crystal structures of In ₇₀ -Ni ₃₀ and In ₇₀ -Pd ₃₀ using perturbed angular correlation. , 2012, , 167-172.		0
85	Polymorphic Phase Transformation in In ₂ La and CeIn ₂ . , 2005, , 305-308.		0