

# RN Saxena

## List of Publications by Year in descending order

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97  
papers

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623734

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97  
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97  
docs citations

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#	ARTICLE	IF	CITATIONS
1	Magnetic hyperfine field in the Heusler alloys $\text{Co}_2\text{YZ}$ ( $Y = \text{V, Nb, Ta, Cr}$ ; $Z = \text{Al, Ga}$ ). <i>Journal of Magnetism and Magnetic Materials</i> , 1996, 163, 313-321.	2.3	105
2	Hyperfine interaction measurements in $\text{LaCrO}_3$ and $\text{LaFeO}_3$ perovskites using perturbed angular correlation spectroscopy. <i>Physical Review B</i> , 2001, 63, .	3.2	92
3	Magnetic hyperfine interaction in $\text{CeMn}_2\text{Ge}_2$ and $\text{CeMn}_2\text{Si}_2$ measured by perturbed angular correlation spectroscopy. <i>Physical Review B</i> , 2004, 69, .	3.2	32
4	Spectrum of $\text{Tb}^{3+}$ ion in $\text{LaBr}_3$ crystal. <i>Journal of Luminescence</i> , 1973, 6, 125-130.	3.1	26
5	Delafossite oxides $\text{ABO}_2$ ( $A = \text{Ag, Cu}$ ; $B = \text{Al, Cr, Fe, In, Nd, Y}$ ) studied by perturbed-angular-correlation spectroscopy using a $^{111}\text{Ag}$ ( $^{125}\text{I}$ ) $^{111}\text{Cd}$ probe. <i>Physical Review B</i> , 1998, 58, 2563-2569.	3.2	25
6	Changes induced by the presence of Zn or Ni impurity at Cu sites in $\text{CuAlO}_2$ delafossite. <i>Solid State Communications</i> , 2003, 125, 175-178.	1.9	24
7	Influence of Cd impurity on the electronic properties of $\text{CuAlO}_2$ delafossite: first-principles calculations. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 5517-5528.	1.8	23
8	Magnetic hyperfine fields in the Heusler alloys $\text{Co}_2\text{YZ}$ ( $Y = \text{Sc, Ti, Hf, V, Nb}$ ; $Z = \text{Al, Ga, Si, Ge, Sn}$ ). <i>Hyperfine Interactions</i> , 1993, 80, 971-976.	0.5	21
9	Magnetic hyperfine field at highly diluted Ce impurities in the antiferromagnetic compound $\text{GdRh}_2\text{Si}_2$ studied by perturbed gamma-gamma angular correlation spectroscopy. <i>Journal of Alloys and Compounds</i> , 2012, 515, 44-48.	5.5	21
10	First-principles calculations of hyperfine fields in the $\text{CeIn}_3$ intermetallic compound. <i>Physical Review B</i> , 2001, 65, .	3.2	19
11	Local investigation of hyperfine interactions in pure and Co-doped $\text{ZnO}$ . <i>Journal of Magnetism and Magnetic Materials</i> , 2010, 322, 1195-1197.	2.3	19
12	Magnetic hyperfine fields in Heusler alloys $\text{CoYZ}$ ( $Y = \text{Ti, Zr}$ ; $Z = \text{Al, Ga, Sn}$ ). <i>Hyperfine Interactions</i> , 1987, 34, 431-434.	0.5	17
13	Investigation of the magnetic hyperfine field at the Y site in the Heusler alloys ( $Y = \text{Ti, V, Nb, Cr}$ ; $Z = \text{Tj}$ ) $\text{ETQq}_1$ 1 0.784314 rgBT/Overlo	1.8	16
14	The effect of hybridization on local magnetic interactions at highly diluted Ce ions in tetragonal intermetallic compounds $\text{RERh}_2\text{Si}_2$ ( $\text{RE} = \text{Ce, Pr, Nd, Gd, Tb, Dy}$ ). <i>Journal of Physics Condensed Matter</i> , 2012, 24, 416002.	1.8	15
15	Investigation of Hyperfine Interactions in $\text{CeIn}_3$ by TDPAC. <i>Hyperfine Interactions</i> , 2001, 133, 77-81.	0.5	14
16	Local investigation of magnetism at R and In sites in $\text{RNiIn}$ ( $R = \text{Gd, Tb, Dy, Ho}$ ) compounds. <i>Journal of Applied Physics</i> , 2007, 101, 09D510.	2.5	14
17	Temperature dependence of electric field gradient in $\text{LaCoO}_3$ perovskite investigated by perturbed angular correlation spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 6989-6997.	1.8	12
18	Electric quadrupole interactions in nano-structured $\text{SnO}_2$ as measured with PAC spectroscopy. <i>Hyperfine Interactions</i> , 2010, 197, 239-243.	0.5	11

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19	Impurities in Magnetic Materials Studied by PAC Spectroscopy. Defect and Diffusion Forum, 0, 311, 39-61.	0.4	11
20	Study of the effect of disorder on the local magnetism in Heusler alloys. Journal of Applied Physics, 2006, 99, 08J104.	2.5	10
21	Magnetic field at $^{140}\text{Ce}$ in Dy sites in $\text{DyX}$ compounds studied by perturbed angular correlation spectroscopy. Journal of Magnetism and Magnetic Materials, 2008, 320, e478-e480.	2.3	10
22	Effect of Ge substitution for Si on the magnetic hyperfine field in $\text{LaMn}_2\text{Si}_2$ compound measured by perturbed angular correlation spectroscopy with $^{140}\text{Ce}$ as probe nuclei. Journal of Applied Physics, 2013, 113, 17E124.	2.5	10
23	Magnetic behavior of $\text{LaMn}_2(\text{Si}(1-x)\text{Ge}_x)_2$ compounds characterized by magnetic hyperfine field measurements. Journal of Applied Physics, 2014, 115, 17E124.	2.5	10
24	The magnetic behavior of the intermetallic compound $\text{NdMn}_2\text{Ge}_2$ studied by magnetization and hyperfine interactions measurements. Journal of Applied Physics, 2015, 117, 17E304.	2.5	8
25	Directional Correlation of the Gamma Transitions in $\text{Ce}^{140}$ . Physical Review C, 1973, 7, 395-403.	2.9	7
26	Investigation of Hyperfine Interactions in $\text{GdNiIn}$ Compound. Hyperfine Interactions, 2004, 158, 157-161.	0.5	7
27	Characterization of $\text{ZnO}$ and $\text{Zn}_{0.95}\text{Co}_{0.05}\text{O}$ prepared by sol-gel method using PAC spectroscopy. Hyperfine Interactions, 2007, 178, 1-5.	0.5	7
28	Magnetic hyperfine interactions on Cd sites of the rare-earth cadmium compounds $\text{R}^{2+}\text{Cd}^{2+}$	3.2	7
29	Stable tetragonal phase and magnetic properties of Fe-doped $\text{HfO}_2$ nanoparticles. AIP Advances, 2017, 7, 056315.	1.3	7
30	Directional correlations of $\hat{I}^3$ -transitions in $^{134}\text{Xe}$ . Nuclear Physics A, 1974, 234, 357-364.	1.5	6
31	Electric quadrupole interactions in the $\text{CdTiO}_3$ perovskite. Journal of Physics and Chemistry of Solids, 1978, 39, 175-178.	4.0	6
32	Directional correlations of gamma transitions in $^{105}\text{Rh}$ . Journal of Physics G: Nuclear Physics, 1979, 5, 1169-1177.	0.8	6
33	Magnetic hyperfine field on Ta in the $\text{Co}_2\text{HfAl}$ and $\text{Co}_2\text{HfGa}$ Heusler alloys. Hyperfine Interactions, 1981, 9, 489-493.	0.5	6
34	Study of the local magnetic environment in $\text{LaMnO}_3$ perovskite by measuring hyperfine interactions. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1639-E1641.	2.3	6
35	TDPAC measurements in pure and Fe-doped $\text{In}_2\text{O}_3$ . Hyperfine Interactions, 2013, 221, 105-110.	0.5	6
36	Electric field gradient in nanostructured $\text{SnO}_2$ studied by means of PAC spectroscopy using $^{111}\text{Cd}$ or $^{181}\text{Ta}$ as probe nuclei. Hyperfine Interactions, 2013, 221, 129-136.	0.5	6

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37	A method to determine contributions to the hyperfine field at Ce probes in magnetic hosts: Application to Ce impurities at RE sites in REAg (RE = Gd, Tb, Dy, Ho) compounds. Journal of Alloys and Compounds, 2016, 660, 148-158.	5.5	6
38	g factor and the half-life of the 250 keV state in <sup>77</sup> Se. Journal of Physics G: Nuclear Physics, 1984, 10, 1571-1577.	0.8	5
39	The low-temperature magnetism of cerium atoms in CeMn <sub>2</sub> Si <sub>2</sub> and CeMn <sub>2</sub> Ge <sub>2</sub> compounds. Journal of Physics Condensed Matter, 2004, 16, 6685-6693.	1.8	5
40	A Perturbed-Angular-Correlation Study of Hyperfine Interactions at <sup>181</sup> Ta in $\hat{I}_{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> . Hyperfine Interactions, 2004, 158, 371-375.	0.5	5
41	Investigation of hyperfine interactions in RMO <sub>3</sub> (R = La, Nd; M = Cr, Fe) antiferromagnetic perovskite oxides using PAC spectroscopy. Hyperfine Interactions, 2007, 178, 45-49.	0.5	5
42	Investigation of spin transition in GdCoO <sub>3</sub> by measuring the electric field gradient at Co sites. Journal of Magnetism and Magnetic Materials, 2008, 320, e32-e35.	2.3	5
43	Search for Room Temperature Ferromagnetism in Low-Concentration Transition Metal Doped ZnO Nanocrystalline Powders Using a Microscopic Technique. IEEE Transactions on Magnetics, 2010, 46, 1780-1783.	2.1	5
44	Magnetic hyperfine field at Nd sites in NdAg studied by perturbed angular correlation spectroscopy and ab-initio calculations. Journal of Magnetism and Magnetic Materials, 2010, 322, 1130-1133.	2.3	5
45	Temperature dependence of electric field gradients at Cd and Hf sites in cadmium perovskites. Hyperfine Interactions, 1978, 4, 615-621.	0.5	4
46	Lifetimes and g-factor measurements in the decay of the 399 keV isomeric state in <sup>197</sup> Pt and the quasiparticle-phonon coupling model. Physical Review C, 1982, 25, 1587-1594.	2.9	4
47	Gamma-gamma angular correlations in the decay of <sup>76</sup> As. Physical Review C, 1989, 39, 2379-2384.	2.9	4
48	Directional correlations of $\hat{I}^3$ transitions in <sup>142</sup> Ce. Physical Review C, 1990, 41, 2312-2319.	2.9	4
49	An irradiation rig for neutron transmutation doping of silicon in the IEA-R1 research reactor. Nuclear Instruments & Methods in Physics Research B, 1993, 83, 157-162.	1.4	4
50	X-ray and time differential perturbed angular correlation measurements in ZrCr <sub>2</sub> and ZrCr <sub>2</sub> H <sub>3</sub> Laves phase compounds. Journal of Alloys and Compounds, 1995, 224, 60-65.	5.5	4
51	Temperature Dependence of the Magnetic Hyperfine Field at <sup>140</sup> Ce on Gd Sites in GdAg Compound. Hyperfine Interactions, 2004, 158, 125-129.	0.5	4
52	Investigation of the magnetic hyperfine field at Gd and In sites in GdTIn (T=Ni, Pd, Cu) compounds. Physica B: Condensed Matter, 2007, 389, 168-171.	2.7	4
53	Hyperfine interactions at R and In sites in RNiIn (R = Gd, Tb, Dy, Ho) compounds measured by perturbed angular correlation spectroscopy. Hyperfine Interactions, 2007, 176, 101-106.	0.5	4
54	Investigation of hyperfine interactions in GdCrO <sub>3</sub> perovskite oxide using PAC spectroscopy. Hyperfine Interactions, 2010, 197, 53-58.	0.5	4

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55	Absence of room temperature ferromagnetism in transition metal doped ZnO nanocrystalline powders from PAC spectroscopy. <i>Hyperfine Interactions</i> , 2010, 197, 77-81.	0.5	4
56	Study of hyperfine interactions in GdIn <sub>3</sub> . <i>Journal of Applied Physics</i> , 2013, 113, 17E133.	2.5	4
57	Locally symmetric oxygen vacancy around Cd impurities in $\text{CeO}_2$ . <i>Physical Review B</i> , 2021, 104, .		
58	Gamma-gamma directional correlations for transitions in Kr <sup>84</sup> . <i>Physical Review C</i> , 1980, 21, 1531-1537.	2.9	3
59	g-Factor of the 53 keV $5/2^+$ state in <sup>197</sup> Pt measured by the TDPAC method. <i>Hyperfine Interactions</i> , 1981, 9, 93-97.	0.5	3
60	Directional correlation measurements for gamma transitions in Te <sup>127</sup> . <i>Physical Review C</i> , 1985, 31, 593-601.	2.9	3
61	Directional correlations of $\hat{I}^3$ transitions in Xe <sup>135</sup> following the decay of <sup>135</sup> I. <i>Physical Review C</i> , 1991, 43, 2586-2590.	2.9	3
62	Directional correlation of $\hat{I}^3$ transitions in Ge <sup>72</sup> following the decay of Ga <sup>72</sup> . <i>Physical Review C</i> , 1994, 50, 733-740.	2.9	3
63	Hyperfine Interactions in CeT <sub>2</sub> Ge <sub>2</sub> (T = Mn, Co) Heavy Fermions Compounds Measured by TDPAC. <i>Hyperfine Interactions</i> , 2001, 136/137, 345-349.	0.5	3
64	Installation of the IMPAC technique in the Pelletron laboratory. <i>Brazilian Journal of Physics</i> , 2003, 33, 291-293.	1.4	3
65	Electronic structure of the n-type doped AgInO <sub>2</sub> and CuAlO <sub>2</sub> delafossites: similarities and differences. <i>Brazilian Journal of Physics</i> , 2004, 34, 611-613.	1.4	3
66	Different nature of magnetism at cerium sublattices in CeMn <sub>2</sub> Si <sub>2</sub> and CeMn <sub>2</sub> Ge <sub>2</sub> compounds. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 633-634.	2.3	3
67	Magnetic hyperfine fields at Gd and in sites in GdPdIn compound. <i>Hyperfine Interactions</i> , 2007, 176, 75-79.	0.5	3
68	Characterization of magnetic phase transitions in PrMn <sub>2</sub> Ge <sub>2</sub> compound investigated by magnetization and hyperfine field measurements. <i>AIP Advances</i> , 2017, 7, 056211.	1.3	3
69	Low temperature synthesis of pure and Fe-doped HfSiO <sub>4</sub> : Determination of Si and Fe fractions by neutron activation analysis. <i>Radiation Physics and Chemistry</i> , 2019, 155, 287-290.	2.8	3
70	DFT-based calculations of the magnetic hyperfine interactions at Cd sites in RCd (R = rare earth) compounds with the FP-LAPW ELK code. <i>AIP Advances</i> , 2021, 11, .	1.3	3
71	PAC Measurements on New Ferromagnetic Compound Pd <sub>2</sub> TiSn. <i>Hyperfine Interactions</i> , 2001, 133, 83-87.	0.5	2
72	Implantation of <sup>111</sup> In-probe Nuclei with Nuclear Reactions <sup>108</sup> Pd(6, <sup>7</sup> Li, xn) <sup>111</sup> In using Pelletron Tandem Accelerator: Study of Local Magnetism in Heusler Alloys. <i>Hyperfine Interactions</i> , 2004, 158, 223-227.	0.5	2

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73	Spin transitions of Co ions in $R\text{CoO}_3$ ( $R=\text{Gd}, \text{Tb}$ ) investigated by measuring the electric field gradient at R and Co sites. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	2
74	Characterization of nanostructured $\text{HfO}_2$ films using Perturbed Angular Correlation (PAC) technique. <i>Hyperfine Interactions</i> , 2010, 198, 41-45.	0.5	2
75	Magnetic hyperfine field in antiferromagnetic $\text{RGa}_2$ ( $R = \text{Ce}, \text{Pr}, \text{Nd}, \text{Sm}, \text{Gd}, \text{Tb}, \text{Dy}, \text{Ho}, \text{Er}$ ) studied by perturbed angular correlation spectroscopy using $\text{Cd}^{111}$ . <i>Journal of Applied Physics</i> , 2013, 113, 17E139.	2.5	2
76	Investigation of the magnetic hyperfine field at R and Zn sites in $\text{RZn}$ ( $R=\text{Gd}, \text{Tb}, \text{Dy}$ ) compounds using perturbed gamma-gamma angular correlation spectroscopy with $^{140}\text{Ce}$ and $^{111}\text{Cd}$ as probe nuclei. <i>Journal of Applied Physics</i> , 2013, 113, 17E136.	2.5	2
77	Effects of an external magnetic field on the hyperfine parameters in $\text{RE}_2\text{O}_3$ ( $\text{RE} = \text{Gd}, \text{Er}$ ) nanoparticles measured by perturbed angular correlation spectroscopy. <i>AIP Advances</i> , 2020, 10, 015039.	1.3	2
78	Ionic Size Induced Defects in Lead Titanate-Zirconate Perovskite Studied by TDPAC Method. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1998, 53, 318-322.	1.5	1
79	Study of Hyperfine Fields in $\text{CeIn}_3$ by Electronic Structure Calculations. <i>Hyperfine Interactions</i> , 2001, 136/137, 743-747.	0.5	1
80	Measurement of Quadrupole Interactions in $\text{LaMO}_3$ ( $M = \text{Cr}, \text{Fe}, \text{Co}$ ) Perovskites by TDPAC. <i>Hyperfine Interactions</i> , 2001, 136/137, 509-513.	0.5	1
81	Temperature dependence of the magnetic hyperfine field at cerium impurity in Co. <i>Hyperfine Interactions</i> , 2007, 176, 69-73.	0.5	1
82	Study of hyperfine interactions in the intermetallic compound $\text{CePd}_2\text{Si}_2$ using PAC technique with $^{111}\text{Cd}$ as probe nuclei. <i>Hyperfine Interactions</i> , 2007, 176, 81-85.	0.5	1
83	Temperature dependence of electric field gradient in $\text{TbCoO}_3$ . <i>Hyperfine Interactions</i> , 2007, 178, 7-11.	0.5	1
84	Hyperfine interaction study of $\text{CeRh}_2\text{Si}_2$ with perturbed $\hat{I}^3-\hat{I}^3$ angular correlation spectroscopy using $\text{C}^{111}\text{d}$ and $\text{C}^{140}\text{e}$ probes. <i>Journal of Applied Physics</i> , 2010, 107, 09E141.	2.5	1
85	A weak magnetism observed in $\text{SnO}_2$ doped with Fe by means of Perturbed Gamma-Gamma Angular Correlation and Mössbauer Spectroscopy. <i>Physics Procedia</i> , 2012, 28, 90-94.	1.2	1
86	Study of electric quadrupole interactions at $^{111}\text{Cd}$ on Zn sites in $\text{RZn}$ ( $R = \text{Ce}, \text{Gd}, \text{Tb}, \text{Dy}$ ) compounds using the PAC spectroscopy. <i>Hyperfine Interactions</i> , 2013, 221, 59-64.	0.5	1
87	Hyperfine field at Mn in the intermetallic compound $\text{LaMnSi}_2$ measured by PAC using $^{111}\text{Cd}$ nuclear probe. <i>Hyperfine Interactions</i> , 2015, 231, 95-99.	0.5	1
88	Magnetic interactions at Ce impurities in $\text{REMn}_2\text{Ge}_2$ ( $\text{RE}=\text{La}, \text{Ce}, \text{Pr}, \text{Nd}$ ) compounds. <i>Physica B: Condensed Matter</i> , 2018, 536, 137-141.	2.7	1
89	Magnetic field at Ce impurities in La sites of $\text{La}_{0.5}\text{Ba}_{0.5}\text{MnO}_3$ double perovskites. <i>AIP Advances</i> , 2019, 9, .	1.3	1
90	Local inspection of magnetic properties in $\text{GdMnIn}$ by measuring hyperfine interactions. <i>AIP Advances</i> , 2021, 11, .	1.3	1

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91	Synthesis and characterization of Fe <sub>3</sub> O <sub>4</sub> -HfO <sub>2</sub> nanoparticles by hyperfine interactions measurements. AIP Advances, 2021, 11, .	1.3	1
92	Measurement of Quadrupole Interactions in La <sub>1-x</sub> Sr <sub>x</sub> CoO <sub>3</sub> Perovskites Using TDPAC Technique. Hyperfine Interactions, 2004, 158, 401-405.	0.5	0
93	Study of hyperfine interactions in pure and Co-doped CeO <sub>2</sub> nanoparticles by PAC spectroscopy using <sup>111</sup> Cd. Hyperfine Interactions, 2010, 197, 233-237.	0.5	0
94	Study of hyperfine interactions in the tetragonal GdRh <sub>2</sub> Si <sub>2</sub> using PAC spectroscopy. Hyperfine Interactions, 2013, 221, 53-58.	0.5	0
95	Anomalous behavior of the magnetic hyperfine field at <sup>140</sup> Ce impurities at La sites in LaMnSi <sub>2</sub> . AIP Advances, 2018, 8, 055702.	1.3	0
96	Electric Field Gradient at Nb Site in the Intermetallic Compounds Nb <sub>3</sub> X (X = Al, In, Si, Ge, Sn) Measured by PAC. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2000, 55, 41-44.	1.5	0
97	The effect of Er doping on local structure of magnetite nanoparticles. Hyperfine Interactions, 2021, 242, 1.	0.5	0