

Professional Details of Dr Raghavn Gopalan

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3. Institution International Advanced Research Centre for
Powder Metallurgy and New Materials, ARCI,
4. Academic Qualification (Undergraduate Onwards)

	Degree	Year	Subject	University/Institution	% of marks
1.	B.Sc	1978	Maths and Physics	Madurai Kamaraj	83.6% (III Rank in Physics)
2.	M.Sc	1981	Physics	Madurai Kamaraj	79%
3.	M.Tech	1983	Materials Technology	Institute of Technology, Banaras Hindu University	9.2 GPA / First Rank
4.	Ph.D	1996	Physics (High Tc Superconductors)	Indian Institute of Technology, Madras	Best thesis Award at IIT Madras

5. Ph.D. thesis title, Guide's Name, Institute / Organisation/ University, Year of Award
Microstructural investigations and high critical current density melt textured High Tc YB₂-Cu₃O₇ Superconductors, Guide: Prof G Rangarajan (Physics) and Prof UV Raju (Materials Research Centre), Indian Institute of Technology, Madras, 1996

6. Professional Experience:

S. No.	Position held	Name of the Institute	From	To
1.	Regional Director	ARCI	Aug. 2019	Till date
2.	Adjunct Professor*	Indian Institute of Technology, Madras	Mar 2016	till date
3.	Associate Director	International Advanced Research Centre for powder Metallurgy and New Materials, ARCI	Dec 2015	Aug. 2019
4.	Scientist G	International Advanced Research Centre for powder Metallurgy and New Materials, ARCI	Oct 2010	Dec. 2015
5.	Adjunct / Special Researcher	National Institute for Materials Science, NIMS	Aug 2008	Sept.2010
6.	Scientist B-Scientist F	Defence Metallurgical Research Lab., DRDO	Aug. 1985	July 2008
7.	Visiting Scientist	National Institute for Materials Science, Japan	August 2003	July 2005

7 Professional Recognition / Award/ Prize/ Certificate, Fellowship received by the applicant.

S. No.	Name of award	Awarding Agency	Year
1.	51 most impactful Green Leaders (Global list)	World CSR	2019
2	Fellow of National Academy of Engineers, INAE	INAE	2018

3	National Excellence Award in Science & Technology	Indian Scientists for Analytical Society	2018
4.	Vasvik Industrial Award	Materials Engineering	2017
5.	Elected Fellow, Chennai Academy of Sciences	Academy of Science, Chennai	2017
6	Best reviewer comments appreciation	Elsevier Publications	2016
7	Elected Fellow, TAS	Telangana Academy of Sciences	2015
8.	MRSI Medal Award	Materials Research Society of India	2014
9.	Metallurgist of the Year Award	Ministry of Steel & Indian Institute of Metals	2013
10.	Technology Award	DMRL (DRDO)	2008
11.	MRSI best poster award	MRSI	2007
12.	National Science Day Medal Award	DMRL (DRDO)	2006
13.	Cited at NIMS, Japan as one of the 21 achievements in 21st Century (for contribution to nano composite magnets (2005))		2005
14.	UNESCO science citation recognition to give study support in Asia	UNESCO Australia study group	2005
15.	Prof Laskar Memorial Prize for best Ph.D thesis in Physics	IIT Madras	1996
16	Best paper award in DMRL	DMRL	1988
17.	International Advisory Committee Member for Rare Earth Magnets	REPM	2016
18	International Programme Committee Member for MMM conferences at Pittsburgh, USA and at Las Vegas, USA	USA	2017 & 2019
19.	Executive Member	Rare Earth Association of India	Till date
20	Joint Secretary	Magnetics Society of India	Till date
21.	Editorial Board Member	J. Materials Science and Engineering A&B	Till date
22	Member	Board of Studies, PSG college of Technology, Coimbatore	2018-till date
23	Member	Board of Research , Hindustan University, Chennai	2018-till date
24	Advisory Committee Member	TIDCO Nano science & Technology, TamilNadu Government	2017-till date
24	Member, Steering Committee on Energy Storage	TIFAC, New Delhi	2019-

8. Projects executed / executing:

Year of Funding	Sponsoring Organization	Title of Project	Amount of Grant (Rs. In lakhs)
2018	BRICS- DST	Development of third generation rare earth permanent magnets Sm-Fe-N	40.00
2017	MHRD-DST	IMPRINT project on Polymer Thermoelectric materials	300.00
2017	Nano Mission, DST	National facility for Atom Probe Tomography	2500.00
2015	DST	Setting up a Technical Research Centre on Alternate Energy Materials & Systems	9154.00
2011	Nano Mission, DST	Thematic unit on Nano materials for automotive applications	1200.00
2011	DST-SERB	Development of Li-ion battery for electric vehicle applications	2000.00

2005	DRDO	Development of Advanced Magnetic Materials	3000.00
2003	MTRDC(DRDO)	Dev. Of SmCo5 magnets for travelling wave tube applications	25.00
2001	DRDL-RCI-HAL(K)	Dev. Of radial rings SmCo magnets for Prithivi Missile	20.00
2000	VSSC	Specialty SmCo5 magnets for Space Craft applications	25.00
1996	DRDL	Development of indigenous materials for Prithvi Missile Gyro applications	35.00
1992	DST	High critical current Density high Tc superconductors	20.00

9. **Publications (List of papers published in SCI Journals, in year wise descending order)**
(Google Scholar Citation index: h-index 23, i10-index 57)

1.	Ravi Gautam, D Prabhu, V Chandrasekaran, R Gopalan , G. Sundararajan "Influence of nanoprecipitates, solid solution and grain size on the magnetic and electrical properties of Fe-P-Si alloys", Journal of Magnetism and Magnetic Materials (in press, 2019)
2.	Sumit Ranjan Sahu, Vallabha Rao Rikka, M Jagannatham, Prathap Haridoss, Abhijit Chatterjee, R Gopalan , Raju Prakash "A novel synthesis of graphene sheets from single walled carbon nanohorns", IOP Science (in press , 2019)
3.	S Bhuvanewari, UV Varadaraju, R Gopalan , R Prakash, "Structural stability and superior electrochemical performance of Sc-doped LiMn2O4 spinel as cathode for lithium ion batteries", Electro Chimica Acta, Vol.301, pp.342-351, 2019
4.	PV Midhunlal, J Arout Chelvane, D Prabhu, R Gopalan , "Mn2V0. 5Co0. 5Z (Z= Ga, Al) Heusler alloys: High Tc compensated P-type ferrimagnetism in arc melted bulk and N-type ferrumagnetism in melt-spun ribbons", Journal of Magnetism and Magnetic Materials, Vol. 489, pp.165-298, 2019
5.	C Xu, H Wang, TL Zhang, A Popov, R Gopalan , CB Jiang, "Correlation of microstructure and magnetic properties in Sm(Co _{0.9} Fe _{0.1} Cu _{0.1} Zr _{0.033}) _{6.93} magnets solution-treated at different temperatures", Rare Metals, 38 (1), 20-28, 2019
6.	AG Popov, VS Gaviko, VV Popov, OA Golovnia, AV Protasov, EG Gerasimov, AV Ogurtsov, MK Sharin, R Gopalan , "Structure and Magnetic Properties of Heat-Resistant Sm(Co _{0.796-x} Fe _{0.177} Cu _x Zr _{0.027}) _{6.63} Permanent Magnets with High Coercivity", JOM, Vol.71 (2), pp.559-566, 2019
7.	VVN Phanikumar, Vallabha Rao Rikka, Bijoy Das, R Gopalan , BV Appa Rao, Raju Prakash, "Investigation on polyvinyl alcohol and sodium alginate as aqueous binders for lithium-titanium oxide anode in lithium-ion batteries", Ionics, Vol. 25, pp.2549-2561, 2019
8.	B Jayachandran, R Gopalan , T Dasgupta, D Sivaprahasam, "Elevated Temperature Behavior of CuPb ₁₈ SbTe ₂₀ /Nano-Ag/Cu Joints for Thermoelectric Devices", Journal of Electronic Materials Vol.48 (2), pp.1276-1285, 2019
9.	S Kavita, VV Ramakrishna, Poonam Yadav, Sravani Kethavath, NP Lalla, Tiju Thomas, Pramod Bhatt, R Gopalan , "Enhancement of martensite transition temperature and inverse magnetocaloric effect in Ni ₄₃ Mn ₄₇ Sn ₁₁ alloy with B doping", Journal of Alloys and Compounds, Vol. 795, pp.519-527, 2019
10.	AG Popov, OA Golovnia, AV Protasov, VS Gaviko, DA Kolodkin, R Gopalan "Coercivity kinetics upon step annealing of sintered Sm(Co _{0.88-x} Fe _x Cu _{0.09} Zr _{0.03}) ₇ magnets" Journal of Rare Earth, 2019 (In Press)
11.	Deepak Kumar Dinkar, Mithun Palit, R Gopalan , Bijoy Das "Magnetocaloric properties and critical exponents in anti-PbFCI type ZnMnSb room temperature ferromagnet prepared via different routes" Journal of Magnetism and Magnetic Materials Volume 489, 165437, 2019
12.	D Sivaprahasam, SB Chandrasekhar, S Kashyap, Ashutosh Kumar, R Gopalan , "Thermal conductivity of nanostructured Fe _{0. 04} Co _{0. 96} Sb ₃ skutterudite", Materials Letters, Materials Letters, Vol. 252, pp.231-234, 2019
13.	AR Dilipan, AK Srinithi, Ravi Gautam, U Gowtham, D Prabhu, V Chandrasekaran, R Gopalan , "Microstructure and Magnetic Properties of Anisotropic Strontium Hexaferrite Powders", IEEE Transactions on Magnetics, pp.1-5, 2019
14.	Bijoy Kumar Das, R Gopalan "Intercalation-based Layered Materials for Rechargeable Sodium-ion Batteries" Journal Layered Materials for Energy Storage and Conversion, Vol.34, pp.71, 2019
15.	Keerthana Muthamilselvan, M Mayarani, G Mohan Muralikrishna, Manjusha Battabyal, R Gopalan , "Tuning the optical and thermoelectric properties of SrTiO _{3-x} Sn _{0. 2} Fe _x O ₃ ", Materials Research Express, Materials Research Express, Vol. 6, pp.045-905, 2019

16.	Duraisamy Sivaprahasam, Subramaniam Harish, R Gopalan , Govindhan Sundararajan "Automotive Waste Heat Recovery by Thermoelectric Generator Technology" Journal Bringing Thermoelectricity into Reality , pp.163, 2018.
17.	DK Dinkar, B Das, R Gopalan , BS Dehiya, "Effects of surfactant on the structural and magnetic properties of hydrothermally synthesized NiFe ₂ O ₄ nanoparticles", Materials Chemistry and Physics , Vol. 218, pp.70-76, 2018
18.	AG Popov, OA Golovnia, AV Protasov, VS Gaviko, R Gopalan , C Jiang, T Zhang, "Peculiar Kinetics of Coercivity of Sintered Sm(Co _{0.78} Fe _{0.10} Cu _{0.10} Zr _{0.02}) ₇ Magnet Upon Slow Cooling", IEEE Transactions on Magnetics , Vol. 54 (6), pp.1-7, 2018
19.	Vallabha Rao Rikka, Sumit Ranjan Sahu, Abhijit Chatterjee, Parlapalli Venkata Satyam, Raju Prakash, MS Ramachandra Rao, R Gopalan , Govindan Sundararajan, "In Situ/ex Situ Investigations on the Formation of the Mosaic Solid Electrolyte Interface Layer on Graphite Anode for Lithium-Ion Batteries", The Journal of Physical Chemistry C , Vol. 122 (50), pp.28717-28726, 2018
20.	Sumit Ranjan Sahu, D Parimala Devi, VVN Phanikumar, T Ramesh, N Rajalakshmi, G Praveena, R Prakash, Bijoy Das, R Gopalan , "Tamarind seed skin-derived fiber-like carbon nanostructures as novel anode material for lithium-ion battery", Ionics , Vol. 24 (11), pp.3413-3421, 2018
21.	Pavana SV Mocherla, D Prabhu, MB Sahana, Neha Y Hebalkar, R Gopalan , MS Ramachandra Rao, C Sudakar, "High temperature magnetic studies on Bi _{1-x} Ca _x Fe _{1-y} Ti _y O _{3-δ} nanoparticles: Observation of Hopkinson-like effect above T _N ", Journal of Applied Physics , Vol. 124 (7), pp.073-904, 2018
22.	VV Ramakrishna, S Kavita, R Gautam, T Ramesh, R Gopalan , "Investigation of structural and magnetic properties of Al and Cu doped MnBi alloy", Journal of Magnetism and Magnetic Materials , Vol. 458, pp.23-29, 2018
23.	S Natarajan, SB Moodakare, V Shanmugam, P Haridoss, R Gopalan , "Infrared Spectroscopy Signatures of Aluminum Segregation and Partial Oxygen Substitution by Sulfur in LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ ", ACS Applied Energy Materials , Vol. 1 (6), pp.2536-2545, 2018
24.	Manjusha Battabyal, Priyadarshini Balasubramanian, PM Geethu, L Pradipkanti, Dillip K Satapathy, R Gopalan , "Tailoring the optical phonon modes and dielectric properties of nanocrystalline SrTiO ₃ via Yb doping", Materials Research Express , Vol. 5 (4), pp.046-301, 2018
25.	Vikrant Trivedi, Manjusha Battabyal, Priyadarshini Balasubramanian, G Mohan Muralikrishna, Pawan Kumar Jain, R Gopalan , "Microstructure and doping effect on the enhancement of the thermoelectric properties of Ni doped Dy filled CoSb ₃ skutterudites", Sustainable Energy & Fuels , Vol. 2 (12), pp.2687-2697, 2018
26.	PV Midhunlal, J Arout Chelvane, D Prabhu, R Gopalan , "Near total magnetic moment compensation with high curie temperature in Mn ₂ V _{0.5} Co _{0.5} Z (Z= Ga, Al) Heusler alloys Journal of Physics D: Applied Physics , Vol.51(7), pp.075002, 2018
27.	K Dhanapal, D Prabhu, R Gopalan , V Narayanan, A Stephen, "Role of Cu layer thickness on the magnetic anisotropy of pulsed electrodeposited Ni/Cu/Ni tri-layer", Materials Research Express , Vol. 4 (7), pp.075-040, 2017
28.	M Sathiya, J Thomas, D Batuk, V Pimenta, R Gopalan , JM Tarascon, "Dual Stabilization and Sacrificial Effect of Na ₂ CO ₃ for Increasing Capacities of Na-Ion Cells Based on P2-Na _x MO ₂ Electrodes", Chemistry of Materials , Vol. 29 (14), 5948-5956, 2017
29.	Pavana SV Mocherla, MB Sahana, R Gopalan , MS Ramachandra Rao, BRK Nanda, C Sudakar, "Microstrain engineered magnetic properties in Bi _{1-x} Ca _x Fe _{1-y} Ti _y O _{3-δ} nanoparticles: deviation from Néel's 1/d size-dependent magnetization behaviour", Materials Research Express , Vol. 4 (10), 1pp.06-106, 2017
30.	S Vasu, MB Sahana, C Sudakar, R Gopalan , G Sundararajan, "In-situ carbon encapsulation of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ using pillared ethylene glycol trapped in the metal hydroxide interlayers for enhanced cyclic stability", Electrochimica Acta , Vol. 251, pp.363-377, 2017
31.	Sumit Ranjan Sahu, Vallabha Rao Rikka, M Jagannatham, Prathap Haridoss, Abhijit Chatterjee, R Gopalan and Raju Prakash , "Synthesis of graphene sheets from single walled carbon nanohorns: novel conversion from cone to sheet morphology", Materials Research express , Vol. 4, pp.3, 2017
32.	Pavana SV Mocherla, MB Sahana, R Gopalan , MS Ramachandra Rao, BRK Nanda, C Sudakar, "Microstrain engineered magnetic properties in Bi _{1-x} Ca _x Fe _{1-y} Ti _y O _{3-δ} nanoparticles: deviation from Néel's 1/d size-dependent magnetization behaviour", Materials Research Express , Vol. 4 (10), 1pp.06-106, 2017
33.	R Gautam, D Prabhu, V Chandrasekaran, R Gopalan , G Sundararajan, "Effect of Si addition on AC and DC magnetic properties of (Fe-P)-Si alloy", AIP Advances , Vol. 6 (5), pp.055-921, 2016
34.	Vallabha Rao Rikka, Sumit Ranjan Sahu, Rajappa Tadeipalli, Ravi Bathe, Thyagarajan Mohan, Raju Prakash, Gade Padmanabham, R Gopalan , "Microstructure and mechanical properties of pulse laser welded stainless steel and aluminum alloys for lithium-ion cell casings", J Mater Sci Eng B , Vol. 6 (9-10), pp.218-225, 2016
35.	Vallabha Rao Rikka, Sumit Ranjan Sahu, Rajappa Tadeipalli, Ravi Bathe, Thyagarajan Mohan, Raju Prakash, Gade Padmanabham, R Gopalan , "Microstructure and mechanical properties of pulse laser welded stainless steel and aluminum alloys for lithium-ion cell casings", J Mater Sci Eng B , Vol. 6 (9-10), pp.218-225, 2016
36.	S Harish, D Sivaprahasam, M Battabyal, R Gopalan , "Phase stability and thermoelectric properties of Cu ₁₀ .5Zn ₁ .5Sb ₄ S ₁₃ tetrahedrite", Journal of Alloys and Compounds , Vol. 667, pp.323-328, 2016

37.	S Kavita, VV Ramakrishna, A Srinivasan, R Gopalan , "Structural and magnetic properties of the low temperature phase MnBi with ball milling", Materials Research Express , Vol. 3 (5), pp.056-102, 2016
38.	M Battabyal, B Priyadarshini, L Pradipkanti, DK Satapathy, R Gopalan , "Phase stability and lattice thermal conductivity reduction in CoSb ₃ skutterudites, doped with chalcogen atoms", Aip Advances , Vol. 6 (7), pp.075-308, 2016
39.	P Balasubramanian, M Battabyal, D Sivaprahasam, R Gopalan , "On the formation of phases and their influence on the thermal stability and thermoelectric properties of nanostructured zinc antimonide", Journal of Physics D: Applied Physics , Vol. 50 (1), pp.015602, 2016
40.	S Koppoju, V Chandrasekaran, R Gopalan , "52.7 kOe high coercivity in Sm(Co _{0.9} Cu _{0.1}) _{4.8} melt-spun ribbons", AIP Advances , Vol.5 (7), 077118, 2015
41.	Koppoju Suresh, R Gopalan , AK Singh, G Bhikshamaiah, V Chandrasekaran, K Hono, "Corrigendum to "Coercivity of Sm (Co _{0.9} Cu _{0.1}) _{4.8} melt-spun ribbons", [J. Alloys Compd. 436 (2007) 358–363] & Journal of Alloys and Compounds 100 (641), pp.162, 2015
42.	S Jafari, A Beitollahi, Yekta B Eftekhari, T Ohkubo, R Gopalan , G Herzer, K Hono, "The Effect of Phosphorous on Microstructure and Magnetic Properties of Fe Based Alloys", Journal of Metallurgical And Materials Engineering (Journal of School of Engineering) , Vol.26, pp.85-97, 2015
43.	Suresh Koppoju, R Gopalan , AK Singh, G Bhikshamaiah, V Chandrasekaran, K Hono, "Coercivity of Sm (Co _{0.9} Cu _{0.1}) _{4.8} melt-spun ribbons (vol 436, pg 358, 2007)", Journal Of Alloys And Compounds Vol.641, pp.162-162, 2015
44.	S Kavita, UMR Seelam, D Prabhu, R Gopalan , "On the temperature dependent magnetic properties of as-spun Mn–Bi ribbons", Journal of Magnetism and Magnetic Materials , Vol. 377, pp.485-489, 2015
45.	M Battabyal, B Priyadarshini, D Sivaprahasam, NS Karthiselva, R Gopalan , "The effect of Cu ₂ O nanoparticle dispersion on the thermoelectric properties of n-type skutterudites", Journal of Physics D: Applied Physics Vol.48 (45), pp.455309, 2015
46.	Medha Veligatla, Shravana Katakam, Santanu Das, Narendra Dahotre, R Gopalan , D Prabhu, D Arvindha Babu, Haein Choi-Yim, Sundeep Mukherjee, "Effect of iron on the enhancement of magnetic properties for cobalt-based soft magnetic metallic glasses", Metallurgical and Materials Transactions A , Vol. 46 (3), pp.1019-1023, 2015
47.	SK Manna, DB Prabhu, R Gopalan , V Srinivas, "AC Magnetic Properties and Core Loss Behavior of Fe–P Soft Magnetic Sheets", IEEE Transactions on Magnetics , Vol.50 (11), pp.1-4, 2014
48.	EH Mohan, V Siddhartha, R Gopalan , TN Rao, D Rangappa, "Urea and sucrose assisted combustion synthesis of LiFePO ₄ /C nano-powder for lithium-ion battery cathode application", AIMS Materials Science 1 (4), 191-201, 2014
49.	D Rangappa, EH Mohan, V Siddhartha, R Gopalan , TN Rao, "Preparation of LiMn ₂ O ₄ Graphene Hybrid Nanostructure by Combustion Synthesis and Their Electrochemical Properties", Material Science , Vol. 1, pp.174-183, 2014
50.	S Anandan, TN Rao, R Gopalan , Y Ikuma, "Fabrication of visible-light-driven N-doped ordered mesoporous TiO ₂ photocatalysts and their photocatalytic applications", Journal of nanoscience and nanotechnology , Vol. 14 (4), pp.3181-3186, 2014
51.	Subramani Bhuvaneswari, Parakandy Muzhikara Pratheeksha, Srinivasan Anandan, Dinesh Rangappa, R Gopalan , Tata Narasinga Rao, "Efficient reduced graphene oxide grafted porous Fe ₃ O ₄ composite as a high performance anode material for Li-ion batteries", Physical Chemistry Chemical Physics , Vol. 16 (11), pp.5284-5294, 2014
52.	MB Sahana, S Vasu, N Sasikala, S Anandan, H Sepehri-Amin, C Sudakar, R Gopalan , "Raman spectral signature of Mn-rich nanoscale phase segregations in carbon free LiFe _{1-x} Mn _x PO ₄ prepared by hydrothermal technique", RSC Advances 4 (110), pp.64429-64437, 2014
53.	S Mallesh, S Kavita, R Gopalan , V Srinivas, "On the Question of Thermal Stability and Magnetic Properties of Mn _{0.6} Zn _{0.4} Fe ₂ O ₄ Nanoparticles Prepared by Sol-Gel Method", IEEE Transactions on Magnetics , Vol. 50 (11), pp.1-4, 2014
54.	S Jafari, A Beitollahi, B Eftekhari Yekta, Keiu Kanada, T Ohkubo, R Gopalan , Giselher Herzer, K Hono, "Microstructural and magnetic properties study of Fe–P rolled sheet alloys", Journal of Magnetism and Magnetic Materials , Vol. 358, pp.38-43, 2014
55.	SB Chandrasekhar, D Prabhu, M Gopinath, V Chandrasekaran, M Ramakrishna, V Uma, R Gopalan , "High saturation magnetization in Fe–0.4 wt% P alloy processed by a two-step heat treatment", Journal of Magnetism and Magnetic materials , Vol.345, pp.239-242, 2013
56.	NVR Rao, R Gopalan , V. Chandrasekaran, KG Suresh, "Large low-field inverse magnetocaloric effect near room temperature in Ni _{50-x} Mn _{37+x} In ₁₃ Heusler alloys" Applied Physics A , Vol.99(1), pp.265-70, 2010
57.	B Rajini Kanth, NV Ramarao, AK Panda, R Gopalan , A Mitra, PK Mukhopadhyay, "Effect of annealing on the martensitic transformation of a CoNiAl ferromagnetic shape memory alloy", Journal of Alloys and Compounds Vol. 491 (1-2), pp.22-25, 2010
58.	A Srinivas, T Karthik, R Gopalan , V Chandrasekaran, "Improved magnetoelectricity by uniaxial magnetic field pressed and sintered composites in BaTiO ₃ (x)–BaFe ₁₂ O ₁₉ (1–x) system (x= 0.8, 0.6)", Materials Science and Engineering: B Vol.172 (3), pp.289-293, 2010

59.	DM Rajkumar, M Manivel Raja, R Gopalan , AK Singh, V Chandrasekaran, KG Suresh, "Effect of Fe addition on microstructure and magnetocaloric effect in Gd ₅ Si _x Ge ₃ . 9- xFe _{0.1} alloys with varying Si/Ge ratio", Intermetallics , Vol.18 (4), pp.518-522, 2010
60.	R Gopalan , T Ohkubo, K Hono, "High coercivity FePt-C bulk magnet processed by spark plasma sintering and hot deformation", Journal of Magnetism and Magnetic Materials Vol.322 (21), pp.3423-3427, 2010
61.	DM Rajkumar, M Manivel Raja, R Gopalan , AK Singh, V Chandrasekaran, KG Suresh, "Effect of Fe addition on microstructure and magnetocaloric effect in Gd ₅ Si _x Ge ₃ . 9- xFe _{0.1} alloys with varying Si/Ge ratio", Intermetallics , Vol.18 (4), pp.518-522, 2010
62.	K Suresh, R Gopalan , DV Sridhara Rao, AK Singh, G Bhikshamaiah, K Muraleedharan, V Chandrasekaran, "Microstructure and coercivity variation in melt-spun Sm-Co-Fe-Zr ribbons", Intermetallics Vol.18 (11), pp.2244-2249, 2010
63.	I Babita, R Gopalan , S Ram, "Magnetic, phase transformation and magnetocaloric studies in ferromagnetic Ni ₅₅ Mn ₂₀ Ga ₂₅ Heusler alloy", Journal of Physics: Conference Series Vol.144 (1), pp.012066, 2009
64.	NV Rama Rao, R Gopalan , J Arout Chelvane, V Chandrasekaran, KG Suresh, "Coupled magnetostructural transformations in melt-spun ribbon: An electron spin resonance study", Journal of Applied Physics , Vol. 105 (12), pp.123904, 2009
65.	R Gopalan , K Hono, A Yan, O Gutfleisch, "Direct evidence for Cu concentration variation and its correlation to coercivity in Sm (Co _{0.74} Fe _{0.1} Cu _{0.12} Zr _{0.04}) _{7.4} ribbons", Scripta Materialia , Vol. 60 (9), pp.764-767, 2009
66.	P Saravanan, R Gopalan , D Sivaprahasam, V Chandrasekaran, "Effect of sintering temperature on the structure and magnetic properties on SmCo ₅ /Fe nanocomposite magnets prepared by spark plasma sintering" Intermetallics , Vol.17(7), pp.517-522, 2009.
67.	A Srinivas, R Gopalan , V Chandrasekharan, "Room temperature multiferroism and magnetoelectric coupling in BaTiO ₃ -BaFe ₁₂ O ₁₉ system" Solid State Communications 149 (9-10), 367-370, 2009
68.	R Gopalan , K Hono, A Yan, O Gutfleisch, "Direct evidence for Cu concentration variation and its correlation to coercivity in Sm (Co _{0.74} Fe _{0.1} Cu _{0.12} Zr _{0.04}) _{7.4} ribbons", Scripta Materialia , Vol. 60 (9), pp.764-767, 2009
69.	P Saravanan, M Premkumar, AK Singh, R Gopalan , V Chandrasekaran, "Study on morphology and magnetic behavior of SmCo ₅ and SmCo ₅ /Fe nanoparticles synthesized by surfactant-assisted ball milling", Journal of Alloys and Compounds , Vol. 480 (2), pp.645-649, 2009
70.	R Gopalan , H Sepehri-Amin, K Suresh, T Ohkubo, K Hono, T Nishiuchi, N Nozawa, S Hiroswa, "Anisotropic Nd-Fe-B nanocrystalline magnets processed by spark plasma sintering and in situ hot pressing of hydrogenation-decomposition-desorption-recombination powder", Scripta Materialia , Vol. 61 (10), pp.978-981, 2009
71.	NVR Rao, R Gopalan , V Chandrasekaran, KG Suresh, "Microstructure, magnetic properties and magnetocaloric effect in melt-spun Ni-Mn-Ga ribbons", Journal of Alloys and Compounds , Vol. 478 (1-2), pp.59-62, 2009
72.	P Saravanan, R Gopalan , R Priya, P Ghosal, V Chandrasekaran, "Textured resin-bonded Sm (Co, Fe, Cu) 5 nanostructured magnets exploiting magnetic field and surfactant-assisted milling", Journal of Alloys and Compounds , Vol. 477 (1-2), pp.322-327, 2009
73.	K Suresh, T Ohkubo, YK Takahashi, K Oh-Ishi, R Gopalan , K Hono, T Nishiuchi, N Nozawa, S Hiroswa, "Consolidation of hydrogenation-disproportionation-desorption-recombination processed Nd-Fe-B magnets by spark plasma sintering", Journal of Magnetism and Magnetic Materials , Vol. 321 (22), pp.3681-3686, 2009
74.	A Annadurai, AK Nandakumar, S Jayakumar, MD Kannan, M Manivel Raja, S Bysak, R Gopalan , V Chandrasekaran, "Composition, structure and magnetic properties of sputter deposited Ni-Mn-Ga ferromagnetic shape memory thin films", Journal of Magnetism and Magnetic Materials , Vol. 321 (6), pp.630-634, 2009
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10. Details of patents.

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6.	Fabrication of bulk nanocrystalline Fe-C alloy by spark plasma sintering of mechanically milled powder, HW Zhang, K Hono, T Mukhai, R Gopalan (<i>Japanese patent filed</i>)

11. Books / Reports/ Chapters/ General articles etc.

S. No.	Title	Author's Name	Publisher	Year of Publication
1.	Chapter Title - "Intercalation-based Layered Materials for Rechargeable Sodium-ion Batteries" Book Title - Layered Materials for Energy Storage and Conversion	Bijoy Kumar Das and R. Gopalan	RSC	2019
2.	Chapter Title - Automotive waste heat recovery by thermoelectric generator technology Book Title - Bringing thermoelectricity into reality	Duraisamy Sivaprahasam, Subramaniam Harish, Raghavan Gopalan and Govindhan Sundararajan	INTECH open. UK	2018
3.	Chapter Title - Recent Developments in Electrode Materials for Lithium-Ion Batteries for Energy Storage application Book Title - Handbook of Advanced Ceramics and Composites	M. B. Sahana and R. Gopalan	-Springer Nature	2019