

PROFORMA FOR BIO-DATA

1. Name and full correspondence address : **Dr Raghavan Gopalan,**
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3. Institution International Advanced Research Centre for
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4. Date of Birth 07/11/1960
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6. Category Gen/SC/ST/OBC General
7. Whether differently abled (Yes / No) No

8. 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 $YB_2Cu_3O_7$ Superconductors, Guide: Prof. G. Rangarajan (Physics) and Prof. UV Raju (Materials Research Centre), Indian Institute of Technology, Madras, 1996				
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6. Professional Experience:

S. No.	Position held	Name of the Institute	From	To
1.	Technology Advisor	International Advanced Research Centre for powder Metallurgy and New Materials, ARCI	June 2024	Till date
2.	Professor	Indian Institute of Technology Madras	Dec 2022	Dec 2023
3.	Regional Director	International Advanced Research Centre for powder Metallurgy and New Materials, ARCI	Aug - 2019	Nov 2023
4.	Adjunct Professor	Indian Institute of Science, Bengaluru	Apr - 2022	Till date
5.	Distinguished Professor (DVP) Visiting	PSG College of Technology, Coimbatore	Jul - 2021	Till date
6.	Adjunct Professor	Indian Institute of Technology, Madras	Mar - 2016	Till date
7.	Associate Director	International Advanced Research Centre for powder Metallurgy and New Materials, ARCI	Dec - 2015	Aug. 2019
8.	Scientist G	International Advanced Research Centre for powder Metallurgy and New Materials, ARCI	Oct - 2010	Dec. 2015
9.	Adjunct / Special Researcher	National Institute for Materials Science, NIMS	Aug - 2008	Sept.2010
10.	Visiting Scientist	National Institute for Materials Science, Japan	Aug - 2003	July 2005
11.	Scientist B – Scientist F	Defence Metallurgical Research Lab, DRDO	Aug - 1985	July 2008

8. Projects executed / executing:

Year of Funding	Sponsoring Organization	Title of Project	Amt of Grant (Rs. In lakhs)
2022	DST	Setting up a Technical Research Centre on Alternate Energy Materials & Systems	2500.00
2022	SERB	Advanced Processing Technology Development for Rare Earth Magnets for Automotive and EV Applications	4000.19
2021	INDIA RUSSIA JOINT RESEARCH CALL 2021	Investigation and Development of All-Phosphate Dual-Ion Solid-State Batteries	120.00
2021	DST – INDO UZBEKISTAN BILATERAL	Development and implementation of micro-and nanoscale (granulated) semiconductor thermoelectric materials	14.56
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 Nanomaterials 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 SmCo ₅ magnets for travelling wave tube applications	25.00
2001	DRDL-RCI-HAL(K)	Dev. Of radial rings SmCo magnets for Prithvi Missile	20.00
2000	VSSC	Specialty SmCo ₅ 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 T _c superconductors	20.00

7. Professional Recognition / Award/ Prize/ Certificate, Fellowship received by the applicant.		
S. No.	Name of the award	Awarding Agency / Year
1	INAE Chair Professorship	INAE - 2023
2	Lifetime Achievement Award	Rare Earths Association of India - 2022
3	National Project Excellence Award	Project Management Associates, India - 2021
4	51 most impactful Green Leaders (Global list)	World CSR – 2019
5	National Excellence Award in Science & Technology	Indian Scientists for Analytical Society – 2018
6	Vasvik Industrial Award in Material Engineering	Vasvik Trust, Mumbai – 2017
7	MRSI Medal Award	Materials Research Society of India – 2014
8	Metallurgist of the Year Award	Ministry of Steel, Govt. of India – 2013
9	MRSI best poster award	Materials Research Society of India (MRSI) – 2007
10	DMRL (DRDO) Technology Award for Development of Sm ₂ Co ₁₇ magnets	Defence Metallurgical Research Laboratory (DRDO) – 2007 & 2008
11	National Science Day (Sir CV Raman day) Medal Award	DMRL (DRDO) – 2006
12	Cited at NIMS, Japan as one of the 21 achievements in 21st Century (for contribution to nanocomposite magnets)	NIMS, Japan – 2005
13	UNESCO science citation recognition to give study support in Asia	UNESCO Australia study group - 2005
14	Best Ph.D. thesis award in Physics (Prof Laskar Memorial Prize)	Indian Institute of Technology, Madras, Chennai – 1996
15	Best paper award for publication in 'Nature'	Defence Metallurgical Research Laboratory (DRDO) – 1988
16	I Rank in M.Tech. (Materials Technology)	Banaras Hindu University, Varanasi - 1985

S. No.	Name of the Fellowship	Awarding Agency / Year
1	IIM Honorary Fellow	Indian Institute of Metals – 2020
2	Honorary Fellow, ISAS	Indian Society for Analytical Scientists (ISAS) – 2020
3	Elected fellow of Electron Microscope Society of India	Electron Microscope Society of India – 2020
4	Fellow of National Academy of Engineers, INAE	Indian National Academy of Engineers – 2018
5	Elected Fellow, Chennai Academy of Sciences	Academy of Science, Chennai – 2016
6	Fellow of Telangana Academy of Sciences	Telangana Academy of Sciences – 2015
S. No.	Name of the Membership	Awarding Agency / Year
1	International Programme Committee Member for MMM conferences at Pittsburgh, USA and at Las Vegas, (USA)	Pittsburgh, USA at Las Vegas, (USA) - 2022
2	Executive Member	Rare Earth Association of India – 2015 to Till date
3	Joint Secretary	Magnetics Society of India - 2005-Till date
4	Editorial Board Member	J. Materials Science and Engineering A&B -2016-Till date
5	Member, Steering Committee on Energy Storage	TIFAC, New Delhi - 2018-Till date
6	Member Invitee – “The Consultative Group on Future Transportation System”	PSA Office, Govt. of India - 2018-Till date
7	Advisory Committee Member	TIDCO Nanoscience & Technology, Tamilnadu Government - 2017- Till date
8	Member	Board of Studies, PSG College of Technology, Coimbatore - 2018- Till date
9	Member	Board of Research, Hindustan Institute of Science and Technology, Chennai - 2018- Till date
10	International Advisory Committee Member for Rare Earth Magnets	REPM (USA, Europe, Asia) - Till date
11	Member	Programme Advisory Committee (PAC), SERB - 2021-2024
12	Board of Members, ASSPIRE	ICAT – 2020
13	Distinguished INAE-AICTE visiting Professorship	Indian National Academy of Engineering – 2020
14	Member Research Advisory Board (Under Ministry of Heavy Industry)	International Centre for Automotive Technology (ICAT) – 2020
15	Member Invitee – “The Consultative Group on Future Transportation System”	PSA Office, Govt. of India - 2020
16	Executive Member	Indian Society for Analytical Scientists (ISAS) - 2020
17	Member Publication Committee	Indian National Academy of Engineering (INAE) - 2020
18	Member of Sectional Committee- VIII	Mining, Metallurgical and Materials Engineering, Indian National Academy of Engineering (INAE) - 2020
19	Member, Steering Committee on Energy Storage	TIFAC, New Delhi - 2019
20	International Programme Committee Member for MMM conferences at Pittsburgh, USA and at Las Vegas, USA	USA - 2019
21	Member Invitee – Rare Earth Magnets	NITI AAYOG Govt. of India - 2018
22	International Programme Committee Member for MMM conferences at Pittsburgh, USA and at Las Vegas, USA	USA - 2017

Publications (List of papers published in SCI Journals, in year wise descending order) (Google Scholar Citation index: h-index 30, i10-index 102)	
1.	Sonia Sharma, Venkatesh Manchala, R Gopalan, TN Rao, Bijoy Das, "Quasi-diffusion controlled high rate sodium-ion storage performance of flame pyrolysis derived spherical hard carbon", Carbon, Volume 226, pp 119158, 2024
2.	Prerit Tandon, Akhila Priya Kotti, Amaresh Chandra Mishra, R Venkatesh, Kumud Singh, Kavita Srikanti, R Gopalan "Soft Magnetic Characteristics and Magnetoimpedance Phenomenon in Copper Wire Coated with Permalloy Film Electroplated from a Sodium Gluconate-Based Bath" Journal of Electronic Materials, 1-16, 2024
3.	K Konda, MS Jacob, JR Seth, VA Juvekar, R Gopalan , SB Moodakare, Capacity degradation of lithium-ion cell: The role of free carbon black content in the slurry and drying induced cracks in LiFePO ₄ electrode, Journal of Energy Storage 74, 109477 2023
4.	R Vijay, DS Rao, R Johnson, R Gopalan , TN Rao, Evolution of "International Advanced Research Center for Powder Metallurgy and New Materials (ARCI)", a Unique Centre for Translating Materials Research to Technology, Indian Metallurgy: The Platinum Years, 297-317, 2023
5.	S Pariyath, R Vedarajan, V Ramadesigan, K Ramya, R Gopalan , Crystallinity in polymer electrolyte membranes used in H ₂ generators: Degradation mechanism from the perspective of recycling, Polymer Degradation and Stability 215, 110460, 2023
6.	MB Siva Kumar, D Prabhu, M Sadhasivam, KG Pradeep, G Sundararajan, R Gopalan , Restricted grain growth and role of Nb precipitates in Nd-Fe-Nb-B melt spun ribbon, IEEE International Magnetic Conference-Short Papers (INTERMAG Short ...) 2023
7.	M Tiadi, V Trivedi, S Kumar, PK Jain, SK Yadav, R Gopalan , Enhanced Thermoelectric Efficiency in P-Type Mg ₃ Sb ₂ : Role of Monovalent Atoms Codoping at Mg sites, ACS Applied Materials & Interfaces 15 (16), 20175-20190, 2023
8.	VR Rikka, SR Sahu, M Gurumurthy, A Chatterjee, S Chandran, G Sundararajan, R Gopalan , Raju Prakash Temperature-Derived Fe Dissolution of a LiFePO ₄ /Graphite Cell at Fast Charging and High State-of-Charge Condition Energy Technology, 2201388, 2023
9.	G Vijayaragavan, D Prabhu, MB Ponnuchamy, KRSP Meher, R Gautam, Mainak Saha, R Gopalan, KG Pradeep, Microstructure evolution and phase analysis of Sm ₆₀ Ni ₄₀ alloy, Journal of Magnetism and Magnetic Materials 566, 170323, 2023
10.	Mahender Peddi, Sahana B. Moodakare, Akshay Kumar Budumuru, Kamaraj Muthusamy, Govindan Sundararajan, R Gopalan , "Multilayer Graphene as a Cathode Conductive Additive in Lithium-Ion Pouch Cells: A Correlation of Changes in Electrolyte Uptake and Composition of the Electrode Electrolyte Interface with Enhanced Cycling Stability", ACS Appl. Energy Mater. 2023. https://doi.org/10.1021/acsaem.2c03828
11.	P Laxman Mani Kanta, M Venkatesh, Satyesh Kumar Yadav, Bijoy Das, R Gopalan , "High Energy-Power Characteristics of Hierarchical Nitrogen-Doped Mesoporous Carbon Decorated Sodium Vanadium Phosphate in Full cell level, Applied Energy 334, 120665, 2023.
12.	Prerit Tandon, Rahul Sahu, Amaresh Chandra Mishra, Kumud Singh, Kavita Srikanti, R Gopalan , "Magnetoimpedance effect in electrodeposited NiFe/Cu wire using trisodium citrate additive in plating bath", Journal of Magnetism and Magnetic Materials, Vol. No. pp.170490, 2023.
13.	G Vijayaragavan, D Prabhu, MB Ponnuchamy, KRS Preethi Meher, Ravi Gautam, Mainak Saha, R Gopalan , KG Pradeep "Microstructure evolution and phase analysis of Sm ₆₀ Ni ₄₀ alloy" Journal of Magnetism and Magnetic Materials, Vol. No.566, pp.170323, 2023
14.	Duraisamy Sivaprahasam, Ashutosh Kumar, Babu Jayachandran, R Gopalan , "Thermoelectric properties of Sb doped AlFe ₂ B ₂ ", 2023, https://doi.org/10.48550/arXiv.2212.01193
15.	Manchala Venkatesh, G Sudha Priyanga, Sonia Sharma, P Laxman Mani Kanta, Tiju Thomas, R Gopalan , Bijoy Das, "Effect of dopants and microstructure on the electrochemical cyclic stability of layered P2-type Na _{0.67} MnO ₂ prepared by different chemical routes: An experimental and theoretical study" Ceramics International, Vol. No.49(4), pp.6654-6665, 2023.
16.	Vikrant Trivedi, Minati Tiadi, Budaraju Srinivasa Murty, Dillip Satapathy, Manjusha B, R Gopalan , "Giant Thermoelectric Efficiency of Single-filled Skutterudite Nanocomposites: Role of Interface Carrier Filtering", ACS Applied Energy & Materials, Vol. No.14(45), pp. 51084-51095, 2022
17.	Vallabha Rao Rikka, Sumit Ranjan Sahu, Abhijit Chatterjee, Raju Prakash, G. Sundararajan and R. Gopalan , "Enhancing cycle life and usable energy density of fast charging LiFePO ₄ -graphite cell by regulating electrodes' lithium level" iScience, Vol. No.25 (9), pp. 104831, 2022

18.	Megha Sara Jacob , Doddi Nikhil , Vasu Shanmugam, Ebenezer Prasanna G, Mahender Peddi, Raman Vedarajan, Sahana B Moodakare, R Gopalan , “Standardization of Ionic Conductivity Measurements in Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ -Polymer Composite Electrolytes” <i>Materials Science and Engineering B</i> , Vol. No. 286 , pp. 116049, 2022.
19.	MB Sivakumar, D. Prabhu, Manjusha. B, Sadasivam, N. Chandrasekaran, K.G. Pradeep, G. Sundararajan, R. Gopalan , “Enhancing the coercivity of Nd-Cu diffused Nd-Fe-B permanent magnets by Nb assisted grain boundary pinning” <i>Materials Research Letters</i> , Vol.10(12) , pp.780-787, 2022, (https://doi.org/10.1080/21663831.2022.2104139) -
20.	L. Saravanan, Vireshwar Mishra, Lalit Pandey, Nanhe Kumar Gupta, Nakul Kumar, R. Gopalan, D. Prabhu, H.A. Therese, Sujeet Chaudhary, “Investigation of perpendicular magnetic anisotropy in CoFeMnSi based heterostructures”, Vol.561 , pp-169693, <i>Journal of Magnetism and Magnetic Materials</i> , 2022.
21.	Bijoy Das, MB Siva Kumar, Debendra Nath Kar, M Palit, R Gopalan, “Investigation of magnetocaloric properties and critical behavior in layered type (Ce _{0.65} La _{0.35})Mn ₂ Ge ₂ room temperature ferromagnet”, <i>IEEE Transactions on Magnetics</i> , Vol.58(8) , PP. 1-7, 2022 (DOI: 10.1109/TMAG.2022.3184481)
22.	Vikrant Trivedi Manjush Battabyal B.S.Murty R.Gopalan, Interfacial thermoelectric and mechanical properties of indigenously prepared Ni–Cr–Cu/ Co ₄ Sb ₁₂ skutterudite thermoelectric joints, <i>Ceramics International</i> , Vol. No.48(9) , pp. 29175-29182, 2022 https://doi.org/10.1016/j.ceramint.2022.05.131
23.	R. Archana, V.V. Ramakrishna, V. Suresh Pramod Bhatt Deepika R M Ramya S.M. Yusuf R. Gopalan, "Magnetocaloric effect, magnetic interactions and phase transition in La _{1.3} Fe _{11.6-x} Si _{1.4} Ga _x alloys, Vol. No.35 (9) , pp. 2505-2518, 2022
24.	Mahender Peddi, Sahana B Moodakare, M Kamaraj, G Sundararajan, R Gopalan, Effects of Nano-Micro Hierarchical Architecture Intraparticle Connectivity and Carbon Black-LiNi _{1/3} Mn _{1/3} Co _{1/3} O ₂ Interaction: an Energy-Power Tradeoff In Lithium-Ion Batteries. Vol.169 (2) , pp. 020576, <i>Journal of The Electrochemical Society</i> , 2022
25.	Priyadarshini Balasubramanian , Manjusha Battabyal , Raghavan Gopalan, Improving the oxidation resistance of thermoelectric Mg ₂ Si leg with silica coating, <i>Materials Letters</i> 312 (2022) 131599
26.	S Kavita, M Alagusoundarya, VV Ramakrishna, V Suresh, Pramod Bhatt, P Srimathi, R Archana, Debendranath Kar, Tiju Thomas, R Gopalan , “On the table-like magnetocaloric effect, microstructure and mechanical properties of LaxFe _{11.6} Si _{1.4} system” <i>Journal of Alloys and Compounds</i> , Vol.895 , pp. 162597, 2022
27.	Pavana SV Mocherla, V Ramya, Debendranath Kar, D Prabhu, R Gopalan , Correlation between milling-induced strain, microstructure, and magnetic properties in anisotropic SrFe ₁₂ O ₁₉ powders”, <i>Ceramics International</i> , Vol. 48 (18) , pp 26669-26677, 2022
28.	Pavana S.V. Mocherla, Priya Ganesan, D. Prabhu, Neha.Y.Hebalkar, R.Gopalan , U.V. Varadaraju, “Influence of Post-synthesis NaCl Flux Treatment on the Magnetic Properties of Jet-Milled SrFe ₁₂ O ₁₉ Powders”, <i>Journal of American Ceramic Society</i> , 2021, Vol.105(2) , pp-1116-1126, 2022
29.	Vasu Shanmugam, Sasikala Natarajan, Laurel Simon Lobo, Ankita Mathur, Moodakare B Sahana, G Sundararajan, R Gopalan . “Surface oxygen vacancy engineering and physical protection by in-situ carbon coating process of lithium rich layered oxide”, <i>Journal of Power Sources</i> , Vol.515 , pp.230623, 2021
30.	P Laxman Mani Kanta, N Lakshmi Priya, Prajeet Oza, M Venkatesh, Satyesh Kumar Yadav, Bijoy Das, G Sundararajan, R Gopalan . “Unusual Case of Higher Cyclic Stability at a Wider Voltage Window in Sodium Vanadium Phosphate”. <i>ACS Applied Energy Materials</i> , 2021.
31.	Deepak Kumar Dinkar, Bijoy Kumar Das, R Gopalan , Brijnandan Singh Dehiya, “Magnetic and optical properties of green synthesized nickel ferrite nanoparticles and its application into photocatalysis”, <i>Nanotechnology</i> , Vol.32(50) , pp.505725, 2021
32.	Vallabha Rao Rikka, Sumit Ranjan Sahu, Abhijit Chatterjee, R Gopalan , G Sundararajan, Raju Prakash. “ Composition-Dependent Long-Term Stability of Mosaic Solid-Electrolyte Interface for Long-Life Lithium-Ion Battery”, <i>Batteries & Supercaps</i> , Vol.4(11) , pp-1722-1730, 2021
33.	Priyadarshini Balasubramanian , Manjusha Battabyal , Arumugam Chandra Bose , R.Gopalan “Effect of Ball-Milling on The Phase Formation And Enhanced Thermoelectric Properties In Zinc Antimonides”, <i>Materials Science & Engineering B</i> Vol.271 , pp-115-274, 2021.
34.	Manjusha Battabyal, Karthiselva Ns, P Rajesh, R Gopalan “Pressure induced enhancement in the thermoelectric and mechanical properties of Ni-doped skutterudites during spark plasma sintering” <i>Materials Research Innovations</i> , Vol.25 (4) , PP No. 227-232, 2021

35.	D Sivaprahasam, T Sujitha, U Gowtham, B Jayachandran, R Gopalan , "Microstructure and heat transfer characteristics of active brazed Ceramic–Metal joints" Ceramics International , Vol.47(11) , pp.16133-16140, 2021,
36.	B Jayachandran, B Prasanth, R Gopalan , T Dasgupta, D Sivaprahasam, "Thermally stable, low resistance Mg ₂ Si _{0.4} Sn _{0.6} /Cu thermoelectric contacts using SS 304 interlayer by one step sintering", Materials Research Bulletin , Vol.136 , pp. 111147, 2021
37.	S. Harish, D. Sivaprahasam, B. Jayachandran, R. Gopalan , G. Sundararajan, "Performance of Bismuth telluride modules under thermal cycling in an automotive thermoelectric generator", Energy Conversion and Management , Vol.232 , pp.113900, 2021.
38.	Sonia Sharma, Meghna Narayanan, Ravi Gautam, R Gopalan , P Swaminathan "Effect of processing route on the structural and functional properties of manganese doped zinc oxide", Materials Chemistry and Physics , Vol. 261 , pp. 124206, 2021.
39.	VV Ramakrishna, S Kavita, T Ramesh, Ravi Gautam, R Gopalan , "On the Structural and Magnetic Properties of Mn-Bi Alloy Jet Milled at Different Feed Rates", Journal of Superconductivity and Novel Magnetism , Vol. 34(3) , pp.733-737, 2021
40.	Vikrant Trivedi, Manjusha Battabyal, Suresh Perumal, Avnee Chauhan, Dillip K Satapathy, Budaraju Srinivasa Murty, R Gopalan , "Effect of Refractory Tantalum Metal Filling on the Microstructure and Thermoelectric Properties of Co ₄ Sb ₁₂ Skutterudites", ACS Omega , Vol.6(5) , pp.3900-3909, 2021
41.	DA Kolodkin, AG Popov, AV Protasov, VS Gaviko, D Yu Vasilenko, S Kavita, D Prabhu, R Gopalan , Magnetic properties of Sm ²⁺ αFe ₁₇ Nx powders prepared from bulk and strip-cast alloys, Journal of Magnetism and Magnetic Materials , Vol. 518 , pp. 167416, 2021.
42.	Minati Tiadi, Manjusha Battabyal, PK Jain, Avnee Chauhan, Dillip Kumar Satapathy, R Gopalan , "Enhancing the thermoelectric efficiency in p-type Mg ₃ Sb ₂ via Mg site co-doping", Sustainable Energy & Fuels , Vol.5 (16) pp.4104-4114, 2021
43.	N. Rajalakshmi, R. Gopalan , "Recent trends in Science and Technology of Hydrogen and Polymer electrolyte membrane fuel cells", Vol.6 , pp-189-218, Transactions of the Indian National Academy of Engineering , 2021.
44.	Kumari Konda, Sahana B Moodakare, P Logesh Kumar, Manjusha Battabyal, Jyoti R Seth, Vinay A Juvekar, R Gopalan , "Comprehensive effort on electrode slurry preparation for better electrochemical performance of LiFePO ₄ battery" Journal of Power Sources , Vol.480 , pp-228837, 2020
45.	S Kavita, VV Ramakrishna, Shruti Behra, S Suganthi, Debendra Nath Kar, Tiju Thomas, T Ramesh, K Sethupathi, R Gopalan , "Investigation of magnetocaloric and mechanical properties of Ni _{49-x} Mn ₃₉ Sb ₁₂ Cox alloys", Journal of Alloys and Compounds , Vol.847 , pp.156558, December 2020
46.	B Prasanth, B Jayachandren, Neha Hebalkar, R Gopalan , SB Chandrasekhar, D Sivaprahasam "Improved thermal stability of thermoelectric Mg ₂ Si _{0.4} Sn _{0.6} " Materials Letters , Vol.276 . pp-128-204, 2020
47.	Sumit Ranjan Sahu, Vallabha Rao Rikka, Prathap Haridoss, Abhijit Chatterjee, R Gopalan , Raju Prakash, "Lithium-Ion Batteries: A Novel α-MoO ₃ /Single-Walled Carbon Nanohorns Composite as High-Performance Anode Material for Fast-Charging Lithium-Ion Battery", Advanced Energy Materials , Vol.10 (36) pp.2070151, 2020
48.	Ravi Gautam, Roja Rani, D Prabhu, V Chandrasekaran, Taisuke Sasaki, K Hono, G Sundararajan, R Gopalan , "Effect of recovery and recrystallization on microstructure and magnetic properties of Fe-0.4P rolled sheets", Materialia , Vol.13 , pp.100863, 2020
49.	P. Laxman Mani Kanta, M. Venkatesh, Satyesh Kumar Yadav, Bijoy Kumar Das, R. Gopalan , "Scalable Synthesis and Kinetic Studies of Carbon Coated Sodium Titanate: A Promising Ultra-low Voltage Anode for Sodium Ion Battery", Transactions of the Indian National Academy of Engineering , Vol. No.5 PP.475-483 , 2020.
50.	Sasikala Natarajan, Sahana B Moodakare, Prathap Haridoss, R Gopalan "Concentration Gradient Driven Aluminium Diffusion in a Single Step Co-precipitation of Compositionally Graded Precursor for LiNi _{0.8} Co _{0.135} Al _{0.065} O ₂ with Mitigated Irreversibility of H ₂ ↔H ₃ Phase Transition". ACS Applied Materials & Interfaces , Vol.12(31) , pp-34959-34970, 2020
51.	AG Popov, OA Golovnia, VS Gaviko, D Yu Vasilenko, D Yu Bratushev, VI Nithin Balaji, A Kovács, KG Pradeep, R Gopalan , "Development of high-coercivity state in high-energy and high-temperature Sm-Co-Fe-Cu-Zr magnets upon step cooling", Journal of Alloys and Compounds , Vol.820 , pp-153103, 2020

52.	S Kavita, G Anusha, Pramod Bhatt, V Suresh, R Vijay, K Sethupathi, R Gopalan "On the giant magnetocaloric and mechanical properties of Mn-Fe-P-Si-Ge alloy", Journal of Alloys and Compounds, Vol. 817 pp-153232, 2020
53.	Vaddi Venkata Narasimha Phanikumar, Boyapati Venkata Appa Rao, Kauveri Vengatajalabathy Gobi, R Gopalan , Raju Prakash, "A Sustainable Tamarind Kernel Powder Based Aqueous Binder for Graphite Anode in Lithium-Ion Batteries", Chemistry Select, Vol.5(3), pp-1199-1208, 2020
54.	Vallabha Rao Rikka, Sumit Ranjan Sahu, Ashok Roy, Sambhu Nath Jana, Duraisamy Sivaprahasam, Raju Prakash, R. Gopalan , Govindan Sundararajan "Tailoring micro resistance spot welding parameters for joining nickel tab to inner aluminium casing in a cylindrical lithium ion cell and its influence on the electrochemical performance", Journal of Manufacturing Processes, Vol.49, pp-463-471, 2020.
55.	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, Vol.493, pp- 165743, 2020.
56.	Subramani Bhuvaneshwari, U.V. Varadaraju, R. Gopalan , Raju Prakash, "Sc-doping induced cation-disorder in LiNi _{0.5} Mn _{1.5} O ₄ spinel leading to improved electrochemical performance as cathode in lithium ion batteries", Electro Chimica Acta, Vol.327, 135008, 2019
57.	B Priyadarshini, M Battabyal, D Das, AC Bose, R Gopalan , "Tuning of Mg content to enhance the thermoelectric properties in binary Mg _{2+δ} Si (δ=0, 0.1,0.15,0.2)", Materials Research Express, 2019, Vol.6 (12), pp-125-519, 2019
58.	D Kolodkin, A Popov, A Protasov, V Gaviko, S Kavita, DB Prabhu, R Gopalan , "Effect of solid solution treatment and nitrogenation on magnetic properties of Sm ²⁺ αFe ₁₇ N _x powders", Journal of Physics: Conference Series, Vol.1389 (1), pp-012-125, 2019
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11. Books / Reports/ Chapters/ General articles etc.				
S. No.	Title	Author's Name	Publisher	Year of Publication
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2.	Chapter Title - Automotive waste heat recovery by thermoelectric generator technology Book Title - Bringing thermoelectricity into reality	Duraisamy Sivaprahasam, Subramaniam Harish, R Gopalan and G Sundararajan	INTECH open. UK	2018
3.	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
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6	<p><u>Chapter Title</u></p> <p><u>Book Title</u></p>	Vijay, R., Rao, D.S., Johnson, R., Gopalan, R., Rao, T.N		2024