

Publications in peer reviewed journals

Sl. No.	Authors	Title	Name of Journal	Vol.	Page	Year
AFTER JOINING INSTITUTE OF PHYSICS						
1.	B. C. Behera, G. Sabat, Shwetha G. Bhat, S. N. Sarangi, B. R. Sekhar, D. Samal	Tailoring magnetism in spinel vanadate CoV ₂ O ₄ epitaxial thin-films	J. Phys.: Condens. Matter (Accepted)			
2.	Subhadip Jana, T. Senapati, and D. Samal	Evidence for Spin-Orbit and e-e Coulomb Interaction from a Magnetotransport Study on CaCu ₃ Ru ₄ O ₁₂ thin films	Phys. Rev. B	103	245109	2021
3.	Subham Naik, Somesh K, R. Nath, S. N. Sarangi, Akshay K. Sahu, D. Samal , Himansu S. Biswal, and Saroj L. Samal	Nominal Effect of Mg Intercalation on the Superconductivity Properties of 2H-NbSe ₂	Inorganic Chemistry	60	4588	2021
4.	Ravinder Kumar, S. N. Sarangi, D. Samal , and Z. Hossain	Positive exchange bias and inverted hysteresis loop in Y ₃ Fe ₅ O ₁₂ /Gd ₃ Ga ₅ O ₁₂	Phys. Rev. B	103	064421	2021
5.	Subhadip Jana, Shwetha G. Bhat, B. C. Behera, L. Patra, P. S. Anil Kumar, B. R. K. Nanda, D. Samal	Localization crossover near metal insulator transition in two dimension limit of CaCu ₃ Ru ₄ O ₁₂	Europhysics Letter https://arxiv.org/abs/1908.11128v2	133	17005	2021
6.	M K Hooda, C S Yadav, and D Samal	Electronic and topological properties of group-10 transition metal dichalcogenides	J. Phys.: Condens. Matter (Topical Review)	33	103001	2021
7.	B. C. Behera, S. N. Sarangi, D. Samal and S. K. Tripathy	A comparative study on the magnetic properties of undoped and Li doped Cu(OH) ₂ -CuO	Journal of magnetism and magnetic materials	513	167263	2020
8.	T. S. Dash, S. D. Kaushik, S. N. Sarangi, D Samal , S. Moun, C. S. Yadav, and S L Samal	Mixed Valent Antimony Induced Disorder in Substituted Antiferromagnetic Mn ₂ SnS ₄	Dalton Transactions	49	6425	2020
9.	H. Nakamura, D. Huang, J. Merz, E. Khalaf, P. Ostrovsky, A. Yaresko, D. Samal , and H. Takagi	Robust weak anti-localization due to spin-orbital entanglement in Dirac material Sr ₃ SnO	Nature Communications	11	1161	2020

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10.	D. Huang, H. Nakamura, K. Küster, A. Yaresko, D. Samal , N. B. M. Schröter, V. N. Strocov, U. Starke, and H. Takagi	Unusual valence state in the antiperovskites Sr ₃ SnO and Sr ₃ PbO revealed by X-ray photoelectron spectroscopy	Physical Review Materials	3	124203	2019
11.	Tuhin Subhra Dash, Subham Naik, S. D. Kaushik, D. Samal , and S. L. Samal	Complex Magnetic Structure and Related Thermodynamic Properties of Mn ₂ SnS ₄	Journal of magnetism and magnetic materials	497	165991	2020
12.	Bibekananda Sahoo, Krutika L Routray, Ganesh Ch Mirdha, S. Karmakar, A K Singh, D Samal , and Dhruvananda Behera	Investigation of microhardness and superconducting parameters of CNTs blended YBCO superconductor	Ceramics International	45	22055	2019
13.	Harikrishnan S. Nair , K. Ramesh Kumar , Baidyanath Sahu , Sindisiwe P. Khakaza , Pramita Mishra , D Samal , Sarit K. Ghosh , Biju R. Sekhar and André M. Strydom	Field-independent features in the magnetization and specific heat of Sm ₃ Co ₄ Ge ₁₃	Crystals	9	322	2019
14.	Subham Naik, Gopal K Pradhan, Shwetha G Bhat, Bhaskar Chandra Behera, PS Anil Kumar, Saroj L Samal, and D Samal	The effect of Sn intercalation on the superconducting properties of 2H-NbSe ₂ Physica C: Superconductivity and its Applications, 561, 18 (2019)	Physica C: Superconductivity and its Applications	561	18	2019
15.	B C Behera, Subhadip Jana, Shwetha G Bhat, N Gauquelin, G Tripathy, PS Anil Kumar, and D Samal	Evidence for exchange bias coupling at the perovskite/brownmillerite interface in spontaneously stabilized bilayers	Phys. Rev. B	99	024425	2019
16.	Bibekananda Sahoo, Krutika L Routray, Bandana Panda, D Samal , and Dhruvananda Behera	Excess conductivity and magnetization of CoFe ₂ O ₄ combined with Y ₁ Ba ₂ Cu ₃ O _{7-δ} as a superconductor	Journal of Physics and Chemistry of Solids	132	187	2019
17.	Bibekananda Sahoo, SR Mohapatra, AK Singh, D Samal , and Dhruvananda Behera,	Effects of CNTs blending on the superconducting parameters of YBCO superconductor	Ceramics International	45	7709	2019

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18.	Bibekananda Sahoo, Krutika L Routray, D Samal , and Dhruvananda Behera	Effect of artificial pinning centers on YBCO high temperature superconductor through substitution of graphene nano-platelets	Materials Chemistry and Physics	223	784	2019
19.	C Behera, D.Samal , S G Bhat, PS Anil Kumar, and Saroj L Samal,	Facile Synthesis and Visible Light Photocatalytic Activity of Sn _{1-x} MnxS (0 ≤ x ≤ 0.20) Nanocrystals	Chemistry Select	3	12645	2018
20.	S G Bhat, N Gauquelin, Nirmal K Sebastian, A Sil, A Béché, J Verbeeck, D Samal , and PS Anil Kumar	Orthorhombic vs. hexagonal epitaxial SrIrO ₃ thin films: Structural stability and related electrical transport properties	Europhysics Letter (Editor's choice and highlights of 2018 in EPL)	122	28003	2018
21.	S N Sarangi, Gopal K Pradhan, D Samal	Band gap engineering in SnO ₂ by Pb doping	Journal of Alloys and Compounds	762	16	2018
22.	A Gaurav, BR Sekhar, PS Anil Kumar, and D Samal	Suppressed B _{c2} in a superconducting/ferromagnetic bilayer	J. Phys. Commun.	1	035008	2017
23.	M. Dantz, J. Pellicciari, D. Samal , V. Bisogni, Y. Huang, P. Olalde-Velasco, V. N. Strocov, G. Koster and T. Schmitt	Quenched magnon excitations by oxygen sublattice reconstruction in (SrCuO ₂) _n (SrTiO ₃) ₂ superlattices	Scientific reports (Nature Publishers)	6	32896	2016
24.	D.Samal , H. Nakamura and H. Takagi	Molecular beam epitaxy of three-dimensional Dirac material Sr ₃ PbO	APL. Mater (Featured article)	4	076101	2016
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25.	S. Moser, N. E. Shaik, D. Samal , S. Fatale, B. Dalla Piazza, M. Dantz, J. Pellicciari, P. Olalde-Velasco, T. Schmitt, G. Koster, F. Mila, H. M. Rønnow, and M. Grioni	Magnons in tetragonal CuO	Phys. Rev. B (Rapid Comm.)	92	140404	2015
26.	D Samal and G Koster	Manipulating Oxygen Sub-Lattice in Ultrathin Cuprates: A new direction to engineer Oxides	J. Mater. Res (Invited feature Paper)	30	463	2015

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27.	M. K. Dalai, B. R. Sekhar, D. Biswas, S. Thakur, T. C. Chiang, D. Samal , C. Martin and K. Maiti	Valence band study of $\text{Sm}_{0.1}\text{Ca}_{0.9-x}\text{Sr}_x\text{MnO}_3$ using high resolution ultra-violet photoelectron spectroscopy	Phys. Rev. B	89	245131	2014
28.	D. Samal , Haiyan Tan, Y. Takamura, W. Siemons, Jo Verbeeck, G. Van Tendeloo, E. Arenholz, C. A. Jenkins, G. Rijnders and Gertjan Koster	Direct structural and spectroscopic investigation of ultrathin films of tetragonal CuO: Six-fold co-ordinated copper	Euro physics Letter	105	17003	2014
29.	Kaustuv Manna, D Samal , A K Bera, Suja Elizabeth, S M Yusuf, and P.S. Anil Kumar	Correspondence between neutron depolarization and higher order magnetic susceptibility to investigate ferromagnetic clusters in phase-separated systems	J.Phys.:Condns. Matter.	26	016002	2014
30.	D Samal , Haiyan Tan, H. Molegraaf, B. Kuiper, W. Siemons, Sara Bals, Jo Verbeeck, Gustaaf Van Tendeloo, Y. Takamura, Elke Arenholz, Catherine A. Jenkins, G. Rijnders, and Gertjan Koster	Experimental evidence for oxygen sublattice control in polar infinite-layer SrCuO_2	Phys. Rev. Lett.	111	096102	2013
31.	B. Kuiper, D. Samal , D. H. A. Blank, J. E. ten Elshof, G. Rijnders, and G Koster	Control of oxygen sublattice structure in ultra-thin SrCuO_2 films studied by X-ray photoelectron diffraction	APL Mater. (Editor's pick)	1	042113	2013
32.	Kaustuv Manna, D. Samal , Suja Elizabeth and P.S. Anil Kumar	Tuning the ferromagnetic transition temperature in $\text{La}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$ thin films	J. Appl. Phy	114	083904	2013
33.	Chanchal Sow, D. Samal , A K Bera, S M Yusuf, and P.S. Anil Kumar	Freezing of the octahedral tilt near ferromagnetic transition and appearance of a glassy phase at low temperature driven by the tilt instabilities in SrRuO_3	J. Appl. Phy	113	17E122	2013

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34.	A.Wouter Maijenburg, Antony George, D. Samal <i>et al.</i>	Electrodeposition of micropatterned Ni Pt multilayers and segmented Ni Pt Ni nanowires	Electrochimica Acta	81	123	2012
35.	D. Samal , R. Kundu, M. K. Dalai, B. R. Sekhar and P. S. Anil Kumar	Time evolution of resistance in response to magnetic field: the evidence of glassy transport in $\text{La}_{0.85}\text{Sr}_{0.15}\text{CoO}_3$	Phys. Status Solidi B	249	2190	2012
36.	C. Sow, D. Samal , A. K. Bera, S M Yusuf, and P.S. Anil Kumar	Structural-modulation driven low-temperature glassy behavior in SrRuO_3	Phys. Rev. B	85	224426	2012
37.	C.Sow, D. Samal and P.S. Anil Kumar	Anomalous low temperature magnetic and magnetotransport properties in Ru deficient SrRuO_3	J. Phys. Chem.C	111	07E121	2012
38.	D. Samal , and P.S. Anil Kumar	Evidence for low temperature glassy behavior in $\text{La}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$	J. Appl .Phy	111	043902	2012
39.	D. Samal , and P. S. Anil Kumar	Influence of the ferromagnetic layer on the pair breaking and lower critical field in superconductor/ferromagnet bilayer	J. Appl .Phy	109	07E129	2011
40.	D. Samal , and P. S. Anil Kumar	Observation of higher suppression of superconducting transition temperature in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{La}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$ as compared to $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ bilayers	J. Supercond. Nov. Magn.	24	915	2011
41.	Kaustuv Manna, D. Samal , Suja Elizabeth, H. L. Bhat, and P. S. Anil Kumar	Observation of Spin glass behaviour in $\text{La}_{0.85}\text{Sr}_{0.15}\text{CoO}_3$ single crystals	J. Supercond. Nov. Magn.	24	833	2011

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42.	D. Samal , and P.S. Anil Kumar	Evidence for 2D vortex behavior in La _{0.7} Sr _{0.3} MnO ₃ /YBa ₂ Cu ₃ O ₇ /La _{0.7} Sr _{0.3} MnO ₃ trilayer	J. Appl .Phy	108	123909	2010
43.	D. Samal , and P.S. Anil Kumar	A critical re-examination and a revised phase diagram of La _{1-x} Sr _x CoO ₃	J. Phys.: Condens.Matter. (Highlights 2011 collection for Journal of Physics: Condensed Matter)	23	016001	2010
44.	D. Samal , C. Shivakumara, and P.S. Anil Kumar	Field induced Spin Reorientation Transition in epitaxial La _{0.5} Sr _{0.5} CoO ₃ films.	J. Magn. Magn. Mater.	322	3672	2010
45.	D. Samal , Chanchal Sow and P.S. Anil Kumar	Observation of reduced activation energy and the possible existence of decoupled pancake vortices in Superconductor/Ferro magnet bilayers	J. Phys.: Condens. Matter.	22	295701	2010
46.	D. Samal , D. Venkateswarlu, and P.S. Anil Kumar	Influence of finite size effect on magnetic and magnetotransport properties of La _{0.5} Sr _{0.5} CoO ₃ thin films.	Solid State Commun.	150	576	2010
47.	D. Samal , and P.S. Anil Kumar	Observation of intense de-pairing effect in YBa ₂ Cu ₃ O ₇ due to the spin injection from La _{0.5} Sr _{0.5} CoO ₃	J.Phys.:Condens. Matter. (Fast track communication) (IOP select)	21	492203	2009
48.	D. Samal , C. Shivakumara, and P.S. Anil Kumar	The incongruous observation of magnetic phase separation in La _{0.85} Sr _{0.15} CoO ₃ spin glass system	J. Appl .Phy	106	123920	2009
49.	D. Samal , K.Balamurugan C. Shivakumara and P.S. Anil Kumar	Spin glass versus phase separation in La _{0.85} Sr _{0.15} CoO ₃ .	J. Appl .Phy	105	07E320	2009

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50.	D. Samal , C. Shiva kumara and P.S. Anil Kumar	Magneto transport study on La _{0.5} Sr _{0.5} CoO ₃ /YBa ₂ Cu ₃ O ₇ /La _{0.7} Ca _{0.3} MnO ₃ trilayer system.	Phys. Rev. B	77	094510	2008

General article

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1.	Giant Magneto resistance, Nobel Prize in Physics 2007	D Samal and P S Anil Kumar	Resonance , April 2008, page- 342 (Indian Academy of Science) Also at <i>Wiley Interscience, ChemInform</i> Vol. 40, Issue 12, 2009	2008-2009