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3.	A Constitutive Equation for Grain Boundary Sliding: An Experimental Approach	Korla, Rajesh; Chokshi, Atul H.	METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE	45A	698 708
4.	In Vivo Genotoxicity Assessment of Titanium Dioxide Nanoparticles by Allium cepa Root Tip Assay at High Exposure Concentrations	Pakrashi, Sunandan; Jain, Nitin; Dalai, Swayamprava; Jayakumar, Jerobin; Chandrasekaran, Prathna Thanjavur; Raichur, Ashok M.; Chandrasekaran, Natarajan; Mukherjee, Amitava	PLOS ONE	9	Article No.e87789
5.	Tailor-Made Hollow Silver Nanoparticle Cages Assembled with Silver Nanoparticles: An Efficient Catalyst for Epoxidation	Anandhakumar, S.; Sasidharan, M.; Tsao, Cheng-Wen; Raichur, Ashok M.	ACS APPLIED MATERIALS & INTERFACES	6	3275 3281
6.	Qualitative toxicity assessment of silver nanoparticles on the fresh water bacterial isolates and consortium at low level of exposure concentration	Kumar, Deepak; Kumari, Jyoti; Pakrashi, Sunandan; Dalai, Swayamprava; Raichur, Ashok M.; Sastry, T. P.; Mandal, A. B.; Chandrasekaran, N.; Mukherjee, Amitava	ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY	108	152 160

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9.	Lipid coated mesoporous silica nanoparticles as an oral delivery system for targeting and treatment of intravacuolar <i>Salmonella</i> infections	Mudakavi, Rajeev J.; Raichur, Ashok M.; Chakravorty, Dipshikha# # <i>Dept. of MCB</i>	RSC ADVANCES	4	61160 61166
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14.	Recent developments on biosynthesis of noble metal nanoparticles: synthesis, characterization and potential applications	T. C. Prathna, A. M. Raichur, N. Chandrasekaran and A. Mukherjee	REVIEWS IN ADVANCED SCIENCES AND ENGINEERING	3	239 249
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102.	Co-existence of tetragonal and monoclinic phases and multiferroic properties for $x \leq 0.30$ in the $(1-x)\text{Pb}(\text{Zr}_{0.52}\text{Ti}_{0.48})\text{O}_{3-x}\text{BiFeO}_3$ system	Sharma, Subhash; Singh, Vikash; Kotnala, R. K.; Ranjan, Rajeev; Dwivedi, R. K.	JOURNAL OF ALLOYS AND COMPOUNDS	614	165 172
103.	Ferroelectric phase coexistence by crystallite size reduction in $\text{BiFeO}_3\text{-PbTiO}_3$	Kothai, V.; Narayan, Bastola; Brajesh, Kumar; Kaushik, S. D.; Siruguri, V.; Ranjan, Rajeev	PHYSICAL REVIEW B	90	Article No 155115
104.	Magneto-structural study of the multiferroic $\text{BiFeO}_3\text{-SrTiO}_3$	Vura, Sandeep; Kumar, P. S. Anil; Senyshyn, Anatoliy; Ranjan, Rajeev	JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS	365	76 82
105.	Structural refinement, optical and electrical properties of $[\text{Ba}_{1-x}\text{Sm}_{2x/3}](\text{Zr}_{0.05}\text{Ti}_{0.95})\text{O}_{3-x}$ ceramics	Badapanda, T.; Sarangi, S.; Behera, B.; Anwar, S.; Sinha, T. P.; Ranjan, R.; Luz, G. E., Jr.; Longo, E.; Cavalcante, L. S.	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	25	3427 3439
106.	Orthorhombic-tetragonal phase coexistence and enhanced piezo-response at room temperature in Zr, Sn, and Hf modified BaTiO_3	Kalyani, Ajay Kumar; Brajesh, Kumar; Senyshyn, Anatoliy; Ranjan, Rajeev	APPLIED PHYSICS LETTERS	104	Article No 252906
107.	Phase transformation, improved ferroelectric and magnetic properties of $(1-x)\text{BiFeO}_3\text{-xPb}(\text{Zr}_{0.52}\text{Ti}_{0.48})\text{O}_3$ solid solutions	Sharma, Subhash; Singh, Vikash; Dwivedi, R. K.; Ranjan, Rajeev; Anshul, Avneesh; Amritphale, S. S.; Chandra, Navin	JOURNAL OF APPLIED PHYSICS	115	Article No 224106
108.	Dielectric relaxation and anti-ferromagnetic coupling of BiEuO_3 and BiGdO_3	Saha, Sujoy; Chanda, Sadhan; Dutta, Alo; Kumar, Uday; Ranjan, Rajeev; Sinha, T. P.	JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS	360	80 86

109.	Stabilization of metastable tetragonal phase in a rhombohedral magnetoelectric multiferroic BiFeO ₃ -PbTiO ₃	Siddaramanna, Ashoka; Kothai, V.; Srivastava, Chandan; Ranjan, Rajeev	JOURNAL OF PHYSICS D-APPLIED PHYSICS	47	Article No 045004
110.	Analogous stress and electric field driven structural transformation and decrease in polarization coherence on poling around the morphotropic phase boundary in BiScO-PbTiO ₃	Lalitha K V, Ajay Kumar Kalyani and Rajeev Ranjan	PHYSICAL REVIEW B	90	2014
111.	Cooperativity and Structural Relaxations in PVDF/PMMA Blends in the Presence of MWNTs: An Assessment through SAXS and Dielectric Spectroscopy	Sharma, Maya; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	MACROMOLECULES	47	1392 1402
112.	Nanoparticle-Driven Intermolecular Cooperativity and Miscibility in Polystyrene/Poly(vinyl methyl ether) Blends	Bharati, Avanish; Xavier, Priti; Kar, Goutam Prasanna; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	JOURNAL OF PHYSICAL CHEMISTRY B	118	2214 2225
113.	Assessing the critical concentration of NH ₂ terminal groups on the surface of MWNTs towards chain scission of PC in PC/SAN blends: effect on dispersion, electrical conductivity and EMI shielding	Pawar, Shital Patangrao; Pattabhi, K.; Bose, Suryasarathi	RSC ADVANCES	4	18842 18852
114.	Process induced electroactive beta-polymorph in PVDF: effect on dielectric and ferroelectric properties	Sharma, Maya; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	14792 14799

115.	Non-equilibrium segmental dynamics driven by multiwall carbon nanotubes in PS/PVME blends	Xavier, Priti; Bose, Suryasarathi	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	9309 9316
116.	PE/PEO blends compatibilized by PE brush immobilized on MWNTs: improved interfacial and structural properties	Mural, Prasanna Kumar S.; Rana, Manish Singh; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	RSC ADVANCES	4	16250 16259
117.	Reduced graphene oxide induced phase miscibility in polystyrene-poly(vinyl methyl ether) blends	Xavier, Priti; Sharma, Keshav; Elayaraja, K.; Vasu, K. S.; Sood, A. K.; Bose, Suryasarathi	RSC ADVANCES	4	12376 12387
118.	Size dependent structural relaxations and dielectric properties induced by surface functionalized MWNTs in poly blends	Sharma, Maya; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	2693 2704
119.	Polymer-grafted multiwall carbon nanotubes functionalized by nitrene chemistry: effect on cooperativity and phase miscibility	Kar, Goutam Prasanna; Xavier, Priti; Bose, Suryasarathi	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	17811 17821
120.	Electromagnetic Interference Shielding Materials Derived from Gelation of Multiwall Carbon Nanotubes in Polystyrene/Poly(methyl methacrylate) Blends	Rohini, Rani; Bose, Suryasarathi	ACS APPLIED MATERIALS & INTERFACES	6	11302 11310
121.	Anomalous structural relaxations in PVDF rich blends with PMMA in the presence of surface functionalized CNTs	Sharma, Maya; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	23421 23430

122.	Thermally Induced Demixing in an LCST Mixture in the Presence of Densely Grafted Nanoparticles: Tuning the Graft Chain Length to induce Thermodynamic Miscibility	Kar, Goutam Prasanna; Begam, Nafisa; Basu, J. K.; Bose, Suryasarathi	MACROMOLECULES	47	7525 7532
123.	Polyolefin based antibacterial membranes derived from PE/PEO blends compatibilized with amine terminated graphene oxide and maleated PE	Mural, Prasanna Kumar S.; Banerjee, Aditi; Rana, Manish Singh; Shukla, Abhinaya; Padmanabhan, Babu; Bhadra, Sambhu; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	JOURNAL OF MATERIALS CHEMISTRY A	2	17635 17648
124.	An unusual demixing behavior in PS-PVME blends in the presence of nanoparticles	Xavier, Priti; Bharati, Avani; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	21300 21309
125.	Shear induced crystallization in different polymorphic forms of PVDF induced by surface functionalized MWNTs in PVDF/PMMA blends	Sharma, Maya; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	16492 16501
126.	Electromagnetic shielding materials and coatings derived from gelation of multiwall carbon nanotubes in an LCST mixture	Xavier, Priti; Bose, Suryasarathi	RSC ADVANCES	4	55341 55348
127.	PVDF based flexible and lightweight materials for attenuating microwave radiations	Sharma, Maya; Singh, Mahender; Srivastava, Chandan; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	ACS APPLIED MATERIALS & INTERFACES	6	21151 21160
128.	Zirconia doped barium titanate induced electroactive β polymorph in PVDF-HFP: high energy density and dielectric properties	Sharma, Maya; Ranganatha, S; Kalyani, Ajay; Ranjan, Rajeev; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	MATERIALS RESEARCH EXPRESS	1	Article No 45301

129.	Flexible EMI shielding materials derived by melt blending PVDF and ionic liquid modified MWNTs	Sharma, Maya, Sharma, Sukanya; J Abraham, Jiji; Thomas, Sabu; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	MATERIALS RESEARCH EXPRESS	1	Article No 35003
130.	Positive temperature coefficient and structural relaxations in selectively localized MWNTs in PE/PEO blends	Mural, PKS; Madras, Giridhar*; Bose, Suryasarathi <i>*Dept. of Chem Engg</i>	RSC ADVANCES	4	4943 4954
131.	Amine-functionalized multiwall carbon nanotubes impart osteoinductive and bactericidal properties in poly(epsilon-caprolactone) composites	Kumar, Sachin; Bose, Suryasarathi; Chatterjee, Kaushik	RSC ADVANCES	4	19086 19098
132.	Combinatorial effect of rolling and carbonaceous nanoparticles on the evolution of crystallographic texture and structural properties of ultra high molecular weight polyethylene	Kolanthai, Elayaraja; Kalsar, Rajib; Bose, Suryasarathi; Suwas, Satyam; Chatterjee, Kaushik	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	16	23108 23117
133.	Failure of pyrolysis coils coated with anit-coking film in an ethylene cracking plant	Goswami, A.; Kumar, S.	ENGINEERING FAILURE ANALYSIS	39	181 187
134.	Antimicrobial and conducting polymer substrate derived from hybrid structures of silver nanoparticles and multiwall carbon nanotubes	Kumar, S.; Pawar, S. P.; Chatterjee, K.; Bose, S.	MATERIALS TECHNOLOGY	29	B59 63
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136.	Comparative Studies on the Bioremediation of Hexavalent and Trivalent Chromium using <i>Citrobacter freundii</i> : Part I-Effect of parameters controlling Biosorption	Divyasree, P.; Braun, J. J.; Subramanian, S.	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH	8	1127 1134
137.	Basic studies on the role of components of <i>Bacillus megaterium</i> as flotation biocollectors in sulphide mineral separation	Vasanthakumar, Balasubramanian; Ravishankar, Honnavar; Subramanian, Sankaran	APPLIED MICROBIOLOGY AND BIOTECHNOLOGY	98	2719 2728
138.	Autocatalytic duplex Ni-P/Ni-W-P coatings on AZ31B magnesium alloy	Selvi, V. Ezhil; Chatterji, Purba; Subramanian, S.; Balaraju, J. N.	SURFACE & COATINGS TECHNOLOGY	240	103 109
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141.	Effect of nanoscale boron carbide particle addition on the microstructural evolution and mechanical response of pure magnesium	Sankaranarayanan, S.; Sabat, R. K.; Jayalakshmi, S.; Suwas, S.; Gupta, M.	MATERIALS & DESIGN	56	428 436
142.	Enhanced superplasticity for (alpha plus beta)-hot rolled Ti-6Al-4V-0.1B alloy by means of dynamic globularization	Roy, Shibayan; Suwas, Satyam	MATERIALS & DESIGN	58	52 64

143.	Biodegradable Mg and Mg based alloys for biomedical implants	Manivasagam, G.; Suwas, S.	MATERIALS SCIENCE AND TECHNOLOGY	30	515 520
144.	Nano-ZnO particle addition to monolithic magnesium for enhanced tensile and compressive response	Sankaranarayanan, S.; Nayak, U. Pranav; Sabat, R. K.; Suwas, S.; Almajid, A.; Gupta, M.	JOURNAL OF ALLOYS AND COMPOUNDS	615	211 219
145.	Microstructural evolution and mechanical properties of Mg composites containing nano-B4C hybridized micro-Ti particulates	Sankaranarayanan, S.; Sabat, R. K.; Jayalakshmi, S.; Suwas, S.; Gupta, M.	MATERIALS CHEMISTRY AND PHYSICS	143	1178 1190
146.	Texture transition in cold-rolled nickel-40 wt.% cobalt alloy	Madhavan, R.; Ray, R. K.; Suwas, S.	ACTA MATERIALIA	74	151 164
147.	Influence of crystallographic texture and microstructure on elastic modulus of steels	Pramanik, S.; Suwas, S.; Ray, R. K.	CANADIAN METALLURGICAL QUARTERLY	53	274 281
148.	Crystallographic texture and microstructure evolution during hot compression of Ti-6Al-4V-0.1B alloy in the (alpha plus beta)-regime	Roy, Shibayan; Madhavan, R.; Suwas, Satyam	PHILOSOPHICAL MAGAZINE	94	358 380
149.	The importance of crystallographic texture in the use of titanium as an orthopedic biomaterial	Bahl, Sumit; Suwas, Satyam; Chatterjee, Kaushik	RSC ADVANCES	4	38078 38087
150.	New insights into the development of micro-structure and deformation texture in nickel-60 wt.% cobalt alloy	Madhavan, R.; Ray, R. K.; Suwas, S.	ACTA MATERIALIA	78	222 235

151.	Effect of High-Pressure Torsion on Texture, Microstructure, and Raman Spectroscopy: Case Study of Fe- and Te-Substituted CoSb ₃	Anbalagan, R.; Rogl, Gerda; Zehetbauer, Michael; Sharma, Amit; Rogl, Peter; Suwas, Satyam; Mallik, Ramesh Chandra	JOURNAL OF ELECTRONIC MATERIALS	43	3817 3823
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153.	Microstructural Features of Hot Deformed Nb-1Zr-0.1C Alloy	Chaudhuri, Atanu; Sarkar, Apu; Kapoor, Rajeev; Singh, Ram N.; Chakravarty, Jayanta K.; Suwas, Satyam	JOM	66	1923 1929
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156.	Texture evolution during annealing of large-strain deformed nanocrystalline nickel	Madhavan, R.; Gurao, N. P.; Suwas, Satyam	PHILOSOPHICAL MAGAZINE LETTERS	94	141 149
157.	On the absence of shear cracking and grain boundary cavitation in secondary tensile regions of Ti-6Al-4V-0.1B alloy during hot (alpha plus beta)-compression	Roy, Shibayan; Suwas, Satyam	PHILOSOPHICAL MAGAZINE	94	447 463
158.	Deformation of nanograined Ni-60Co alloy with low stacking fault energy	Madhavan, R.; Suwas, Satyam	PHILOSOPHICAL MAGAZINE LETTERS	94	548 555

159.	Evolution and stability of phases in a high temperature shape memory alloy Ni _{49.4} Ti _{38.6} Hf ₁₂	Suresh, K. S.; Kim, Dong-Ik; Bhaumik, S. K.; Suwas, Satyam	INTERMETALLICS	44	18 25
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164.	Pressure-Induced Bond Rearrangement and Reversible Phase Transformation in a Metal-Organic Framework	Spencer, Elinor C.; Kiran, Mangalampalli S. R. N.; Li, Wei; Ramamurty, Upadrasta; Ross, Nancy L.; Cheetham, Anthony K.	ANGEWANDTE CHEMIE-INTERNATIONAL EDITION	53	5583 5586
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166.	Hot deformation behavior of Ni-Fe-Ga-based ferromagnetic shape memory alloy - A study using processing map	Biswas, Aniruddha; Singh, Gaurav; Sarkar, Sudip Kumar; Krishnan, Madangopal; Ramamurty, Upadrasta	INTERMETALLICS	54	69 78

167.	Effect of hydrogen on the yielding behavior and shear transformation zone volume in metallic glass ribbons	Zhao, Yakai; Choi, In-Chul; Seok, Moo-Young; Kim, Min-Hyun; Kim, Do-Hyang; Ramamurty, Upadrasta; Suh, Jin-Yoo; Jang, Jae-il	ACTA MATERIALIA	78	213 221
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170.	Micropillar and macropillar compression responses of magnesium single crystals oriented for single slip or extension twinning	Prasad, K. Eswar; Rajesh, K.; Ramamurty, U.	ACTA MATERIALIA	65	316 325
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172.	Hot deformation behaviour and microstructure control in AlCrCuNiFeCo high entropy alloy	Nayan, Niraj; Singh, Gaurav; Murty, S. V. S. N.; Jha, Abhay K.; Pant, Bhanu; George, Koshy M.; Ramamurty, Upadrasta	INTERMETALLICS	55	145 153
173.	Studying Microstructure in Molecular Crystals With Nanoindentation: Intergrowth Polymorphism in Felodipine	Mishra, Manish Kumar; Desiraju, Gautam R.; Ramamurty, Upadrasta; Bond, Andrew D.	ANGEWANDTE CHEMIE-INTERNATIONAL EDITION	53	13102 13105

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175.	Temperature-dependent stability of stacking faults in Al, Cu and Ni: first-principles analysis	Bhogra, Meha; Ramamurty, U.; Waghmare, Umesh V.	JOURNAL OF PHYSICS-CONDENSED MATTER	26	Article No 385402
176.	Estimation of the Hall-Petch strengthening coefficient of steels through nanoindentation	Seok, Moo-Young; Choi, In-Chul; Moon, Joonoh; Kim, Sungju; Ramamurty, Upadrasta; Jang, Jae-il	SCRIPTA MATERIALIA	87	49 52
177.	Deformation and strength of Ti-6Al-4V alloyed with B at cryogenic temperatures	Singh, Gaurav; Bajargan, Govind; Datta, Ranjan; Ramamurty, Upadrasta	MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	611	45 57
178.	First-Principles Study of Structure, Vibrational, and Elastic Properties of Stoichiometric and Calcium-Deficient Hydroxyapatite	Bhat, Soumya S.; Waghmare, Umesh V.; Ramamurty, Upadrasta	CRYSTAL GROWTH & DESIGN	14	3131 3141
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180.	Universal binding energy relation for cleaved and structurally relaxed surfaces	Srirangarajan, Aarti; Datta, Aditi; Gandhi, Appala Naidu; Ramamurty, U.; Waghmare, U. V.	JOURNAL OF PHYSICS-CONDENSED MATTER	26	Article No 055006
181.	Effect of Zirconium on the Densification of Reactively Hot-Pressed Zirconium Carbide	Chakrabarti, Tamoghna; Rangaraj, Lingappa; Jayaram, Vikram	JOURNAL OF THE AMERICAN CERAMIC SOCIETY	97	3092 3102

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183.	Total internal reflection Raman spectroscopy of poly(alpha-olefin) oils in a lubricated contact	Praveena, Manimunda; Guha, Kaustav; Ravishankar, Abhilash; Biswas, Sanjay K.*; Bain, Colin D.; Jayaram, Vikram *Mech Engg	RSC ADVANCES	4	22205 22213
184.	Micro-Mechanisms of Strengthening and Fracture in Free-Standing Pt-Aluminide Bond Coats under Tensile Loading	Md. Zafir Alam, S. V.Kamat , V. Jayaram and D. K. Das	ACTA MATERIALIA	67	278 296
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186.	Role of interface curvature on stress distribution under indentation for ZrN/Zr multilayer coating	Nisha Verma, , Vikram Jayaram	THIN SOLID FILMS	571	283 289
187.	Effect of thermal annealing on dual photoluminescence emission characteristics of chemically synthesized uncapped Mn ²⁺ doped ZnS quantum dots	Kole, Arup Kanti; Tiwary, Chandra Sekhar; Kumbhakar, Pathik	JOURNAL OF LUMINESCENCE	155	359 367
188.	Cost-effective wear and oxidation resistant electrodeposited Ni-pumice coating	Aruna, S. T.; Roy, Shibayan; Sharma, Amit; Savitha, G.; Grips, V. K. William	SURFACE & COATINGS TECHNOLOGY	251	201 209

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190.	Polymer-Derived In-Situ Metal Matrix Composites Created by Direct Injection of a Liquid Polymer into Molten Magnesium	Sudarshan; Terauds, Kalvis; Anilchandra, A. R.; Raj, Rishi	METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE	45A	551 554
191.	Biogenic nanosilver incorporated reverse osmosis membrane for antibacterial and antifungal activities against selected pathogenic strains: An enhanced eco-friendly water disinfection approach	Manjumeena, R.; Duraibabu, D.; Sudha, J.; Kalaichelvan, P. T.	JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING	49	1125 1133
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195.	Role of different factors affecting interdiffusion in Cu(Ga) and Cu(Si) solid solutions.	S. Santra, H. Dong, T. Laurila, A. Paul	PROCEEDINGS OF THE ROYAL SOCIETY A	470	20130464
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CONFERENCE PROCEEDINGS

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1	Modelling ternary effects on antiphase boundary energy of Ni ₃ Al	K.V. Vamsi, S. Karthikeyan	MATEC Web Conf. 14, Eurosuperalloys 2014	11005	2014 doi:10.1051/mateconf/20141411005.
2	Computational design of model Re/Ru bearing Ni-base superalloys	K.V. Vamsi, K.N. Goswami, K.S. Vinay, S.K. Verma, R. Balamuralikrishnan [#] , N. Das, D. Banerjee, S. Karthikeyan	MATEC Web Conf. 14, Eurosuperalloys 2014	17007	2014 doi:10.1051/mateconf/201414
3	First principles study of structural stability and site preference in Co ₃ (W,X)	Sri Raghunath. Joshi, K.V. Vamsi, S. Karthikeyan	MATEC Web Conf. 14, Eurosuperalloys 2014	18001	2014 doi:10.1051/mateconf/201414
4	Multi-scale modelling of Suzuki segregation in and Ni ₃ (Al,Ti) and Co ₃ (W,Al) precipitates in Ni and Co-base superalloys	P. Srimannarayana, K.V. Vamsi, S. Karthikeyan	MATEC Web Conf. 14, Eurosuperalloys 2014	15003	2014 doi:10.1051/mateconf/20141415003.
5	Self assembly based 3D heatsink antenna for high density 3D integration	N. Oraon, Punith Kumar MK, C. Srivastava and M. Rao	Proceedings of International conference on Circuits, Controls and Communications (CCUBE)	1-5	2014
6	Understanding the effect of electromigration on the growth of interfacial reaction layers in Cu-Sn and Cu-Ni-Sn systems	T. Laurila and A. Paul	Electronic System-Integration Technology Conference (ESTC)	1-8	978-1-4799-4026-4/14 2014
7	Utility of DNA isolated from Bacillus circulans for the selective flotation of sphalerite from galena	B. Vasanthakumar, H. Ravishankar, J. J. Braun and S. Subramanian	Proceedings of the XXVI International Mineral Processing Congress, (Ed.)	3; 1-11	2014

			Juan Yianatos,		
8	Equilibrium phases in the multiferroic BiFeO ₃ -PbTiO ₃ system - a revisit	Kothai, V ; Senyshyn, A; Ranjan, R	7th Joint European Magnetic Symposia (JEMS), Greece, 24-30 Aug, 2013	75; 09003	2014
9	An overview of the interdiffusion studies in Mo-Si and W-Si systems,	S. Roy, S. Prasad and A. Paul	Defects and Diffusion Forum	354; 79-84	2014
10	Microstructural analysis of a wootz steel blade form southern India	Bharat Dixit, Satyam Suwas, Sharada Srinivasan, S. Jaikishan and S. Ranganathan,	Proc of the 8 th Conference of the Beginning of the Use of Metals and Alloys (BUMA VIII) eds Kazuhiro Nagata, Eiji Izawa and Eiji, Yamasue	264-271	2014
11	Thermographical Analysis of Continuing Tradition of Mirror Casting in Kerala	Takekazu.Nagae, Sharada Srinivasan, Srinivasa Ranganathan, R.M.Pillai, Yasuji Shimizu and Haruhisa Mifune,	Proc of the 8 th Conference of the Beginning of the Use of Metals and Alloys (BUMA VIII) eds Kazuhiro Nagata, Eiji Izawa and Eiji, Yamasue,	363 367	2014

Books

Title of the Book	Authors	Publisher
Thermodynamics, Diffusion and the Kirkendall effect in Solids, Springer, Heidelberg, Germany	Aloke Paul, Tomi Laurila, Vesa Vuorinen, Sergiy Divinski	Springer, UK, ISBN-13: 000-3319074601 ISBN-10: 3319074601,
High-Entropy Alloys	B.S. Murty, Jien-Wei Yeh S. Ranganathan	Butterworth-Heinemann; ISBN-13: 978-0128002513 ISBN-10: 0128002514
India's legendary Wootz steel: an advanced material of the ancient world	S.Srinivasan and S. Ranganathan	Chennai, Universities Press
Crystallographic Textures of Materials by, Edition: 2014	Prof. Satyam Suwas and Prof. R.K. Ray.	Springer, ISBN-1447163141, 9781447163145

Book chapters

Title of the Book	Authors	Publisher
Chapter XII – Industrial Production	Eds. G.S. Gupta, OlleWijk and Bo Rogberg	Treatise on Process Metallurgy (Book) Chief Eds. S. Seetharaman et al. Publisher: Elsevier Ltd
Process Concept for Scaling-Up and Plant Studies	G.S. Gupta, S. Sarkar, A. Chychko, L.D. Teng, M. Nzotta and S. Seetharaman	Treatise on Process Metallurgy (Book) Chief Eds. S. Seetharaman et al. Publisher: Elsevier Ltd

Other Reports

International Workshop in Iron and Steel Making	Eds: G.S. Gupta, S. Subramanian, T.R.R. Rao and S. Seetharaman	Workshop Proceeding on CD Dept. of Materials Eng., IISc, Bangalore, India
Use of Modelling in Iron and Steel Industries	G. S. Gupta	Int. Workshop on Iron and Steel Making Proceeding on CD, Dept. of Materials Eng., IISc, Bangalore, India