

Integrated M.E. programme

M.E.(Int.)

1991

1. M.V. Balakrishnan
(S. Ranganathan)
Microstructural characterisation of laser treated Al-Cu eutectic and Al-Co hyper-eutectic alloys
2. M. Matheswaran
(Kishore)
Some studies on the thermoplastic modified epoxy based glass reinforced composites
3. N. Raj Mohan
(K. T. Jacob)
Application of thermodynamics to conceptual design and analysis of processes
4. N. Ramesh
(E. S. Dwarakadasa)
Study of adhesive wear in aluminium-lithium alloy 8090
5. R. K. Sur Chaudhury
(A. K. Lahiri)
Experimental studies on nozzle blockage phenomenon in continuous casting
6. H. Gopal
(Vikram Jayaram and K. Chattopadhyay)
On the estimation of binding energy of $\alpha\text{-Al}_2\text{O}_3$
7. Sitakanta Hotta
(K. S. Raman)
Analysis of the fracture toughness testing procedure using short rod/bar chevron notch specimen
8. P. Sivakumar
(M. K. Surappa)
Fabrication of 2024 aluminium- alumina composites and their toughness evaluation by instrumented impact
9. S. Sanal Kumar
(Vikram Jayaram)
Aerodynamic levitation for undercooling studies on ceramics
10. Prashant Deepak
(R. M. Mallya)
Spray forming : Design of spray deposition laboratory unit for metal-matrix composites
11. V. Nagi Reddy
(D. H. Sastry)
Effect of heat treatment on the creep behaviour of an oxide dispersion strengthened ferritic steel

1992

12. Biswajit Tripathy
(K. Chattopadhyay)
Microstructural evolution in near eutectic Al-Co alloy
13. S. Kannan
(K. T. Jacob)
Thermodynamic analysis of antimony removal from copper
14. R. Giridhar
(M. K. Surappa)
Studies on ageing and its effect of impact fracture behaviour of 2024 Al-alumina composites
15. Ramkumar Viswanathan
(M. V. Bhat)
Effect of microstructure on the corrosion behaviour of SAE 4340 steel in sodium chloride solution
16. Bikash Ranjan Panda
(K. A. Natarajan)
Biocorrosion of stainless steel in the presence of *Thiobacillus ferrooxidans*
17. S. Arun Kumar
(R. M. Mallya)
Mechanical alloying of Al-Fe by impact milling
18. Jaideep Kumar Srivastava
(K. S. Raman)
Microstructural studies on Mn, Cr, Co - β phases in Al-7 Si-0.3 Mg casting alloy
19. S. D. Brainerd Samuel
(Vikram Jayaram)
Processing of MMCs/CMCs by directed melt nitridation
20. N. Sainathan
(Kishore)
Influence of particulate graphite additions on shear related behaviour of glass fibre reinforced epoxy composites
21. A. B. Sunitha
(D. H. Sastry)
Creep of alloys based on Ni₃Al
22. N. N. Viswanathan
(A. K. Lahiri)
A 2-D static model to simulate gas flow and temperature-composition profiles inside blast furnace
23. Fredric D Suresh
(G. N. K. Iyengar)
Influence of microstructure on the wear properties of electroslag refined EN 24 steel

24. S. Venkatakrishnan
(S. Ranganathan)
Fabrication and properties of carbon-carbon composites
25. Sriram Rangarajan
(E. S. Dwarakadasa)
Creep forming of precipitation hardenable aluminium alloys

1993

26. C. S. Ravi
(G. N. K. Iyengar)
Simultaneous removal of sulphur and phosphorous in En - steel
27. B. Srinivasan
(S. Ranganathan)
Reactive sintering of Ni₃Al and Ni₃Al based composites to near full densities
28. T. Jayaprakash
(R. M. Mallya)
Mechanical alloying of Al-Fe-V-Si system and its composite for aerospace applications
29. R. Rajaram
(Y. V. R. K. Prasad)
Processing maps for hot Working of cadmium and cadmium - 1% zinc alloy: correlations with microstructure
30. S. Sankararaman
(A. K. Lahiri)
Modelling and simulation of continuous casting tundish
31. E. Joe Michael
(Vikram Jayaram)
Role of solute elements and alumina coated SiC particulates on
32. C. Rama
(K. T. Jacob)
Microscopic thermodynamics of multi-component oxide ceramics
33. P.V. Jagannadham Chetty
(K. S. Raman)
Effect of solidification parameters (DAS and CPUA) and heat treatment variables on mechanical properties of Al-7 Si-0.3 Mg (LM 25) cast alloy
34. V. V. Harsha Kumar Srivatsa
(A. K. Lahiri)
Simulation of turbulent fluid flow in continuous casting mould
35. S. Ramanathan
(Kishore)
Drop weight instrumented impact tests and post-impact studies on glass/epoxy laminates

36. T. Sanjeev
(K. Chattopadhyay)
Investigation on possible phase formations during metatectic and peritectic reactions in Cu-Sn Alloys
37. P. Nagarajan
E. S. Dwarakadasa
Design of spray forming unit for MMC production
38. S. Ravindra Reddy
(J. P. Hajra)
Thermodynamic models of ternary systems and applications
39. Manish Narayan
(M. K. Surappa)
Dry sliding wear of 2024 Al-Al₂O₃ metal matrix composites
40. P. V. Gayathri
(D. H. Sastry)
Creep behaviour of particulate reinforced 6061 Al composites

1994

41. Jose Martin Korath
(A. K. Lahiri)
Computer simulation of submerged arc furnace process for production of ferro manganese
42. R. Sankarasubramanian
(S. Ranganathan)
Synthesis of niobium aluminides through novel processing routes
43. S. Muthukkaruppan
(K. S. Raman)
Semi-solid casting and forging of Al-7Si-0.3Mg alloy
44. B. Arun Kumar
(M. K. Surappa)
Processing and characterization of magnesium based (AZ91)-SiCp composites
45. L. Sridharan
(K. Chattopadhyay)
Evolution of microstructure in unidirectionally solidified zinc-lead monotectic alloy
46. Murali Menon
(Kishore)
Aramid fiber reinforced epoxy composite - A tribological study
47. A. Sujeeth
(R. M. Mallya)
Nanophase materials: ultrasonic gas atomization and mechanical alloying
48. M. Divakar
(J. P. Hajra)

Thermodynamics of surfaces and adsorption in ternary systems

49. Subhankar Choudhury
(S. Subramanian)
Flotation studies on magnesite and serpentine
 50. Sandeep Kumar
(Vikram Jayaram)
Role of SiC pre-oxidation and alumina coating in processing of SiC/Al₂O₃/Al ceramic matrix composites
 51. Monsur Ali Mondal
(E. S. Dwarakadasa)
Fatigue behaviour of HE 15A aluminium alloy (Fatigue, fracture toughness, corrosion and stress corrosion studies)
 52. N. R. Siva Kumar
(S. Subramanian)
Selective flotation of sphalerite from galena using dextrin
- 1995**
53. Arun Srinivasan
(Kishore)
Effect of moisture on the physical and mechanical properties of glass-epoxy composites
 54. B. Balaji
(Kishore)
Effect of PTFE additions on the shear related behavior of Glass-epoxy composites
 55. D. Srinivasa Murthy
(Y. V. R. K. Prasad)
Hot deformation behaviour of Al₂O₃/AlN/Al composite
 56. A.N. Sudhakar
(S. Subramanian)
Thermogravimetric and vibration milling studies on leached manganese nodules
 57. A. Saravanan
(Vikram Jayaram)
Wet processing and consolidation of SiCp - Al₂O₃ composites
 58. Sibandu Mukherjee
(A. K. Lahiri)
Mathematical model of Argon-Oxygen-Decarburisation process
 59. Bidyut Kumar Pattanayak
(E. S. Dwarakadasa)
Effect of silver addition on the deformation and corrosion behaviour of aluminium lithium alloy (1441)
 60. V. S. Chandrashekar
(E. S. Dwarakadasa)
Spray forming of Al-Zn-Mg (7075) alloy and characterization of the

resultant ingot

61. I. Balasubramanian
(T. A. Abinandanan)
Computational study of phase diagrams and phase transformations in binary alloys
62. S. Jayaram
(M. K. Surappa)
Studies on co-extrusion of SiCp reinforced aluminium matrix composites
63. G. Finney David
(S. Ranganathan and K. Chattopadhyay)
Directional Solidification of a ternary monotectic system: Indium-Lead-Zinc
64. P. Sundharajan
(M. K. Surappa)
Dry sliding wear of AZ91 Mg-SiCp metal matrix composites

1996

65. Amaresh
(A. H. Chokshi)
A study of the mechanisms and the microstructural aspects of superplasticity in Al-33wt%Cu eutectic alloy
66. Sunil Khatri
(K. S. Raman and S. Seshan, ME)
Production and characterisation of squeeze cast 70 : 30 brass
67. P. Padma Priya
(T. A. Abinandanan and V. Jayaram)
Coarsening characteristics of Al-Al₂O₃ composite produced by directed metal oxidation process
68. V. Ganesh
(E. S. Dwarakadasa)
Effect of zirconium on microstructure, thermal aging and wear behaviour of the Al-Si IC engine piston alloys
69. Suvro Upadhyay
(S. Ranganathan)
Microstructural evolution during mechanical alloying of Ti-Ni-Al system
70. Balaji Venkateswaran
(J. P. Hajra)
Thermodynamic modeling of quaternary systems
71. R. Sessa Sayee
(S. Subramanian)
Mechano-chemical extraction of metal values from leached manganese nodules residue
72. S. Venkatraman
(Kishore)

- Characterization of static and dynamic behaviour of foam containing glass epoxy laminates
73. U. Mukund
(A. K. Lahiri)
Physical modelling of the reduction shaft of the Corex process
74. S. Mythreyi
(T. A. Abinandanan)
A comparison of the micro-structural evolution predicted by the nucleation theory, with a Monte Carlo experiment
75. V. Srinivas
(E. S. Dwarakadasa)
Fracture toughness and wear behaviour of high strength aluminium alloys
76. Surya K Bhattacharji
(Kishore)
Influence of PTFE fillers on the strength and fracture features of glass epoxy composites
77. Rajive Prakash Upadhyay
(Y. V. R. K. Prasad)
A study of the hot working characteristics of the 6201 alloy using processing map

1997

78. Nilanjana Bhattacharyya
(K. Chattopadhyay)
Investigation of synthesis of metallic foams by powder metallurgy route
79. Rakesh Misra
(Kishore)
Deformation behavior of Al_2O_3/Al composite at elevated temperatures
80. V. Venugopalan
(A. K. Lahiri)
Corex Process: One-dimensional steady state model of melter gasifier
81. S. Arvind Kumar
(T. A. Abinandanan)
Spinodal Microstructures: A Monte Carlo Study
82. Pankaj
(E. S. Dwarakadasa)
Deformation of large size aluminium-7010 billets modeling of the deformation behaviour
83. P. V. Sankaran
(E. S. Dwarakadasa)
Modeling and simulation of the deposit formation stage in spray deposition process
84. Keshav Kumar
(Kishore)

Effect of filler addition on the mechanical properties of epoxy resin

85. K. Chitra
(Y. V. R. K. Prasad)
A study of hot deformation mechanism in copper-nickel system using processing maps
86. K.S. Sriram
(K. T. Jacob)
Antiferroelectric lead zirconate thin films fabricated using ion beam sputter deposited multilayer structures
87. R. Nanda Nandan
(S. Ranganathan)
Characterization of interfaces in discontinuously reinforced Al-Mg-Zn/SiCp and Al/Si₃N₄ composites
88. John Immanuel Paul
(S. Subramanian)
Effect of HF Pretreatment on the Mechano-chemical Extraction of copper, cobalt and nickel from leached manganese nodules residue and adsorption of copper using red mud
89. Rohit Shukla
(Vikram Jayaram)
Surface modification of SiC/Al₂O₃/Al Dimox composites and hot pressing of SiCw/Al₂O₃ composites

1998

90. K.H. Prakash
(M.K. Surappa)
High temperature deformation behaviour of A356 alloy and A356+25 volume % SiC_p composite
91. Pavan Kumar Suri
(E.S. Dwarakadasa)
Simulation and modelling to predict the effect of pitting corrosion (Aircraft alloy DTD 2024)
92. M. Kumar
(Vikram Jayaram)
Surface modification of Al₂O₃/SiC_p/Al composite and hot pressing of Al₂O₃/SiC whiskers
93. Ravi Aggarwal
(Atul H Chokshi)
Compressive creep of hot-pressed Yttria
94. Ramashankar Singh
(A.K. Lahiri)
Corex process : One-dimensional steady state model of melter gasifier
95. S. Balaji
(J.P. Hajra)
Optimization of the synthesis, and dielectric spectroscopy of the relaxor

- ferroelectric PMN-PT
96. R. Balachandran
(K. Chattopadhyay)
Laser surface alloying of nickel on aluminium substrate
97. R. Anand
(T.A. Abinandanan)
Spinodal microstructures in ternary systems - A Monte Carlo study
98. B. Pranava
(Kishore)
Post-impact mechanical properties of glass-epoxy laminates
99. B. Anand
(E.S. Dwarakadasa)
Development of a novel thermomechanical treatment for DTD 7010 aircraft alloy
100. Shalin Garg
(K.S. Raman)
Studies on squeeze cast copper-chromium alloys
101. L.N. Venkataraman
(J.P. Hajra)
Thermodynamic modelling of quaternary Al-Ga-In-As system
- 1999**
102. Arnab Chaudhuri
(G.S. Gupta)
Modeling and simulation of the carburizing process under industrial conditions
103. T.S. Vishnukumar
(K. Chattopadhyay)
Deposition and characterization of multilayers of Bismuth and amorphous Al-Fe-Si-system by electron beam evaporation technique
104. Bharat Bhushan
(A.K. Lahiri)
Simulation of reduction kinetics of iron ore in reduction shaft of corex process
105. K.R. Balasubramanian
(V. Jayaram)
Low temperature synthesis of Yttrium aluminate powders and films via spray pyrolysis route
106. M. Rajesh
(T.A. Abinandanan)
Precipitation transformation in ternary systems: A Monte Carlo study
107. U. Arun
(Kishore)
Drop weight instrumented impact test and post impact studies on syntactic foam core sandwich materials

108. Santosh Shanmukh
(A.H. Chokshi)
Cavitation during high temperature tensile deformation of fine-grained 3mol% Yttria stabilized tetragonal zirconia
109. L. Ram Shankar
(S.B. Krupanidhi & M.K. Surappa)
Fabrication of bismuth layered ferroelectric thin films for NVRAM applications
- 2000**
110. Santanu Goswami
(A.K. Lahiri)
Study of flow of granular solids in a reduction shaft
111. S. Rajneesh
(G.S. Gupta)
Mathematical modelling of stresses in the raceway region of the blast furnace
112. K. Easwar
(T.A. Abinandanan)
Comparative study of precipitation transformation for two different models : A Monto Carlo study
113. Sushil Kapoor
(Subodh Kumar)
Analysis of phases in model 1200 Al series alloys
114. Shashank Priya
(K.T. Jacob)
Thermodynamics of alloys : Bulk and surface)
115. Mainak Biswas
(K. Chattopadhyay)
Studies on reaction ball milling of aluminium and copper sulphate pentahydrate system