

### Transactions of the Indian Institute of Metals

Sl.No.	Title of the Papers	Author	Branch	Transaction Details	Location
1	Changes in solidification morphology of Mg–Si alloys by ca additions	K. K. Ajith Kumar & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 695-699	Library Server
2	Simultaneous primary Si refinement and eutectic modification in hypereutectic Al–Si alloys	K. Al-Helal & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 663-667	Library Server
3	Solidification of silicon for solar cells	Lars Arnsberg & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 509-513	Library Server
4	Some investigations on friction stir processed zone of AZ91 alloy	H. S. Arora & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 735-739	Library Server
5	Influence of reaction temperature and reaction time for the manufacturing of Al–Ti–B (Ti:B 5 5:1, 1:3) master alloys and their grain refining efficiency on Al–7Si alloys	V. Auradi & S. A. Kori	Mech	Transactions of the Indian institute of metals (2012), 65(6), 637-645	Library Server
6	Comparative studies of different methods for determining crystallization kinetics of metallic glass	A. Barman & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 565-570	Library Server
7	Multi-Phase-Field modeling of solidification in technical steel grades	B. Bottger & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 613-615	Library Server
8	Evolution of specific surface area with solid volume fraction during coalescence with parabolic shape assumption for dendrite	Prodyut R. & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 783-790	Library Server

9	Studies on double diffusive convection and macro-segregation during solidification of an Al-alloy based on macro-micro model	A. Das & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 815-820	Library Server
10	Microstructures of directionally solidified Al-Ag-Cu ternary eutectics	Anne Dennstedt & Lorenz Ratke	Mech	Transactions of the Indian institute of metals (2012), 65(6), 777-782	Library Server
11	Influence of varying SiO <sub>2</sub> % on the mechanical properties of Al based MMC	Pallavi Deshmukh & Shailkumar Pathak	Mech	Transactions of the Indian institute of metals (2012), 65(6), 741-745	Library Server
12	Simulation of cooling of liquid metal in an inclined slope to predict the condition for semi solid forming and its experimental validation	B. K. Dhindaw & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 581-585	Library Server
13	Modeling temperature profiles and flow velocities during melt filtration in permanent mould casting of AZ91E magnesium alloy	A. Elsayed & C. Ravindran	Mech	Transactions of the Indian institute of metals (2012), 65(6), 689-694	Library Server
14	Differential thermal analysis assessment of beta phase precipitation in Al-6.5Si-1Fe alloy	D. Ferdian & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 821-825	Library Server
15	Cavitations erosion studies on friction stir processed hydro turbine steel	H. S. Grewal & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 731-734	Library Server
16	A few aspects on the processing and deformation behavior of advanced eutectic alloys	J. Das & T. Maity	Mech	Transactions of the Indian institute of metals (2012), 65(6), 571-576	Library Server
17	Non-dendritic structural changes in Al-7Si alloy cast through rapid slurry formation (RSF) process	A. Jain & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 545-551	Library Server
18	Effect of Mg on solidification microstructures of homogenous and functionally graded A390	E. Jayakumar & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 677-681	Library Server

	aluminum alloys				
19	Influence of Al <sub>4</sub> C <sub>3</sub> particles on grain refinement of Mg–3Al alloys	K. R. Ravi & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 607-612	Library Server
20	Effect of Ce and Sb on primary graphite growth in cast irons	K. Theuwissen & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 707-712	Library Server
21	Porous surfaces via impinging and solidifying molten hollow melt droplets on substrates	Arvind Kumar & Sai Gu	Mech	Transactions of the Indian institute of metals (2012), 65(6), 771-775	Library Server
22	Scaling analysis of solidification of liquid aluminum alloy flowing on cooling slope	N. K. Kund & P. Dutta	Mech	Transactions of the Indian institute of metals (2012), 65(6), 587-594	Library Server
23	Solidification of Si Mo nodular cast iron for high temperature applications	Lena Magnusson Aberg & Cathrine Hartung	Mech	Transactions of the Indian institute of metals (2012), 65(6), 633-636	Library Server
24	Issues on puddle formation during rapid solidification of Fe–Si–B–Nb–Cu alloy using planar flow melt spinning process	B. Majumdar & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 841-847	Library Server
25	Solidification behavior of Ti–Cu–Fe–Co–Ni high entropy alloys	Ajit Kumar Mishra & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 725-730	Library Server
26	Studies on transport phenomena during solidification of a binary solution (NH <sub>4</sub> Cl + H <sub>2</sub> O) on an inclined cooling plate	D. Mohanty & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 801-807	Library Server
27	A front tracking model for transient solidification of Al–7wt% Si in a bridgman furnace	R. P. Mooney & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 527-530	Library Server
28	Towards a three-dimensional phase-	A. M. Mullis &	Mech	Transactions of the Indian	

	field model of dendritic solidification with physically realistic interface width	Others		institute of metals (2012), 65(6), 617-621	Library Server
29	Evolution of microstructure during solidification of an aluminium alloy under stirring	N. Barman & P. Dutta	Mech	Transactions of the Indian institute of metals (2012), 65(6), 683-687	Library Server
30	Micro structural and mechanical characterization of two aluminium based in situ composite foams	Sree Harsha Nandam & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 595-600	Library Server
31	Wetting behavior and evolution of microstructure of Sn-3.5Ag solder alloy on electroplated 304 stainless steel substrates	Vignesh U & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 713-717	Library Server
32	Micro structural evolution of A356 Al alloy during flow along a cooling slope	Prosenjit Das & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 669-672	Library Server
33	Modification of AZ91 Mg alloys for high temperature applications	B. C. Pai & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 601-606	Library Server
34	Assessment of heat transfer during solidification of Al-22% Si alloy by inverse analysis and surface roughness based predictive model	Jayananda & K. Narayan Prabhu	Mech	Transactions of the Indian institute of metals (2012), 65(6), 539-543	Library Server
35	A Zr-Co-Al bulk metallic glass derived from the atomic-cluster-plus-glue-atom model and its mechanical properties	Jianbing Qiang & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 577-580	Library Server
36	Developments in solidification processing of functionally graded aluminium alloys and composites by centrifugal casting technique	T. P. D. Rajan & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 531-537	Library Server
37	Investigation on the wear properties of primary Si modified Al-20Si alloy	K. Raju & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 673-676	Library Server
38	Prediction of glass forming ability	B. Ramakrishna	Mech	Transactions of the Indian	

	using hemodynamic parameters	Rao & Others		institute of metals (2012), 65(6), 559-563	Library Server
39	Thermal analysis and microstructure of ZA8 alloy solidifying against chills	G. Ramesh & K. Narayan Prabhu	Mech	Transactions of the Indian institute of metals (2012), 65(6), 719-723	Library Server
40	Preface	Lorenz Ratke & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 1-1	Library Server
41	Casting solidification feed-path computation and industrial application	B. Ravi	Mech	Transactions of the Indian institute of metals (2012), 65(6), 521-525	Library Server
42	Processing and stability of LM25/SiCP composite foams	N. V. Ravi Kumar & A. A. Gokhale	Mech	Transactions of the Indian institute of metals (2012), 65(6), 753-757	Library Server
43	Fe bearing intermetallic phase formation in a wrought Al–Mg–Si alloy	S. Kumar & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 553-557	Library Server
44	Nan composites of aluminum alloys by rapid solidification processing	S. S. Nayak & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 647-651	Library Server
45	On the relationship between inclusions and pores, Part I: precipitation	Arash Safavi Nick & Hasse Fredriksson	Mech	Transactions of the Indian institute of metals (2012), 65(6), 791-794	Library Server
46	Numerical prediction of effect of oxide characteristics on heterogeneous nucleation of bubbles in aluminium foaming	S. N. Sahu & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 795-800	Library Server
47	3D In situ imaging of aluminium alloys during solidification	L. Salvo & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 623-626	Library Server
48	Numerical simulation of laser surface remelting on unstructured grids	Ojas Satbhai & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 833-840	Library Server

49	Effect of process parameters on porosity in laser deposited IN625 alloy	U. Savitha & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 765-770	Library Server
50	Study on rheological behavior of semisolid A356 alloy during solidification	S. Simlandi & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 809-814	Library Server
51	Squeeze infiltration processing of functionally graded aluminum-Si C metal ceramic composites	K. M. Sree Manu & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 747-751	Library Server
52	Development of in situ as cast Al-Mg 2Si particulate composite: microstructure refinement and modification studies	V. Srinivas & Vijaya Singh	Mech	Transactions of the Indian institute of metals (2012), 65(6), 759-764	Library Server
53	Hot tearing susceptibility of magnesium-gadolinium binary alloys	Amirthalingam Srinivasan & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 701-706	Library Server
54	Micro structural characterization of graphite spheroids in ductile iron	Koenraad Theuwissen & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 627-631	Library Server
55	Prediction of bulk metallic glass formation in Cu-Zr-Ag-Hf system by thermodynamic and topological modeling	S. Vincent & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 827-831	Library Server
56	Introducing non-locality into solidification models	Vaughan R. Voller	Mech	Transactions of the Indian institute of metals (2012), 65(6), 515-519	Library Server
57	Oxidation of aluminium alloy melts and inoculation by oxide particles	Yun Wang & Others	Mech	Transactions of the Indian institute of metals (2012), 65(6), 653-661	Library Server