

## PUBLICATIONS – 2011

No.	Title	Author (s)	Journal	Vol	Page No	Year
1.	Thermal Stability of Spherical Nanoporous Aggregates and Formation of Hollow Structures by Sintering A Phase-Field Study	R Mukherjee, T Chakrabarti, EA Anumol *, TA Abinandanan, N Ravishankar*  * MRC	ACS Nano	5	2700 - 2706	2011
2.	Interdiffusion and the vacancy wind effect in Ni-Pt and Co-Pt systems	V.D. Divya, U. Ramamurty and A. Paul	Journal of Materials Research	26	2384	2011
3.	Growth mechanism of phases by interdiffusion and atomic mechanism of diffusion in the molybdenum-silicon system	S. Prasad and A. Paul	Intermetallics	19	1191	2011
4.	Diffusion and growth of the $\mu$ phase ( $Ni_6Nb_7$ ) in Ni-Nb system	S.S.K. Balam, H.Q. Dong, T. Laurila, V.Vuorinen, A. Paul	Metallurgical and Materials Transactions	42	1727	2011
5.	Effect of constant and cyclic current stressing on the evolution of intermetallic compound layers	T. Laurila, J. Karppinen, V.Vuorinen, A. Paul and M. Paulasto-Kröckel	Journal of Electronic Materials	40	1517	2011
6.	Reactive diffusion between Vanadium and Silicon	S. Prasad and A. Paul	Journal of Phase Equilibria and Diffusion	32	212	2011
7.	Diffusion in Co-Ni system studied by multifoil technique	V.D. Divya, U. Ramamurty and A. Paul	Defects and Diffusion Forum	312- 315	466	2011
8.	An overview of diffusion studies in the V-Si system	S. Prasad and A. Paul	Defects and Diffusion Forum	312- 315	731	2011
9.	Growth mechanism of phases by interdiffusion and diffusion of species in the Nb-Si system,	S. Prasad and A. Paul	Acta Materialia	59	1577	2011

10.	Interdiffusion study on Co(W) solid solution and topological close-packed $\mu$ phase in Co-W system	R. Ravi and A. Paul	Intermetallics	19	426	2011
11.	Diffusion parameters and growth mechanism of phases in the Cu-Sn system	A. Paul , C. Ghosh and W.J. Boettinger	Metallurgical and Materials Transactions	42A	952	2011
12.	Growth mechanism of phases, Kirkendall voids, marker plane position, and indication of the relative mobilities of the species in the interdiffusion zone	A. Paul	Journal of Materials Science: Materials in Electronics	22	833	2011
13.	Study of interdiffusion and growth of topologically closed packed phases in the Co-Nb system	S.S.K. Balam, and A. Paul	Journal of Materials Science	46	889	2011
14.	Enhanced survival of probiotic L.acidophilus by encapsulation with nanostructured polyelectrolyte layers through Layer-by-Layer approach	J. Angel Priya, S. P. Vijayalakshmi, A. M. Raichur	ACS Journal of Agricultural and Food Chemistry	59	11838-11845	2011
15.	Photocatalytic degradation of dimethoate using LbL fabricated TiO <sub>2</sub> /polymer hybrid films	D. Neela Priya, J. M. Modak, P. Trebše, R. Žabar, A. M. Raichur	Journal of Hazardous Materials	195	214 - 222	2011
16.	Silver nanoparticle synthesis: Novel route for laser triggering of polyelectrolyte capsules	S. Anandhakumar, S. P. Vijayalakshmi, G. Jagadeesh and A. M. Raichur	ACS Applied Materials and Interfaces	3	3419 - 3424	2011
17.	Growth kinetic studies of silver nanoparticles in a bio-based green synthesis process	T. C. Prathna, N. Chandrasekaran, A. M. Raichur and A. Mukherjee	Colloids and Surfaces A: Physico-chemical and Engineering Aspects	377	212 - 216	2011
18.	A facile route to synthesize silver nanoparticles in polyelectrolyte capsules	S. Anandhakumar and A. M. Raichur	Colloids and Surfaces B: Biointerfaces	84	379 – 383	2011

19.	Biomimetic synthesis of silver nanoparticles by citrus limon (lemon) aqueous extract and theoretical prediction of particle size	T. C. Prathna, N. Chandrasekaran, A. M. Raichur, A. Mukherjee	Colloids and Surfaces B: Biointerfaces	82	152 - 159	2011
20.	Polyelectrolyte microcapsules for sustained delivery of water soluble drugs	S. Anandakumar, D. Mitra, V. Nagaraja and A. M. Raichur	Materials Science and Engineering	C 31	342 - 349	2011
21.	Dissolution properties of BaTiO <sub>3</sub> nano-particles in aqueous suspensions,	S. S. Tripathy and A. M. Raichur	Journal of Experimental Nanoscience	6	127 - 137	2011
22.	Formulation and characterization of dexibuprofen microbeads by microemulsification-ionotropic gelation technique	K. M. Manjanna, B. Shivakumar, A. M. Raichur and T. M. Pramod Kumar	International Journal of Drug Formulation and Research	2	120 - 138	2011
23.	Influence of grain boundary sliding on diffusion in yttria doped zirconia	Santonu Ghosh, Sathya Swaroop, Peter Fielitz, Guenter Borchardt, A. H. Chokshi	Journal of the European Ceramic Society	31	1027- 1032	2011
24.	On the exothermic peak during annealing of electrodeposited nanocrystalline nickel	M.J.N.V. Prasad, A. H. Chokshi	Scripta Materialia	64	544- 547	2011
25.	Microstructural stability and superplasticity in an electrodeposited nanocrystalline Ni-P alloy	M.J.N.V. Prasad, A. H. Chokshi	Acta Materialia	59	4055- 4067	2011
26.	Influence of grain size on high temperature fracture in a MgAZ31 alloy	M. R. R. Panicker, A. H. Chokshi	Materials Science and Engineering:A	528	3031- 3036	2011
27.	Microstructural Stability and Nanoindentation of an Electrodeposited Nanocrystalline Ni-1.5 wt% P Alloy	M.J.N.V. Prasad and A.H. Chokshi,	Kovove Materialy-Metallic Materials	49	93-99	2011
28.	Size dependent microstructure for Ag-Ni nanoparticles	C. Srivastava, S. Chithra, K. D. Malviya, S. K. Sinha and K. Chattopadhyay	Acta Materialia	59	6501	2011

29.	Onset of sphalerite to wurtzite transformation in ZnS Nanoparticles	C. Tiwary, C. Srivastava and P. Kumbhakar	Journal of Applied Physics	110	03490 8	2011
30.	Ultra fine scale phase separated microstructure for Ag-Fe Nanoparticle	C. Srivastava and S. K. Sinha	Chemical Physics Letters	514	301	2011
31.	Observation of Side Bands Modulated Structure in FeTiO <sub>3</sub> -Mn <sub>2</sub> O <sub>3</sub> Alloys	M Shamsuzzoha, C Srivastava, P Kale, P Periaswamy, S Kotru and R Pandey	Microscopy and Microanalysis	17	1834	2011
32.	Oxidation kinetics of the boron powder	Ashish Jain, K. Joseph, S. Anthonysamy and G.S. Gupta	Thermochimica Acta	514	67-73	2011
33.	Microwave Assisted Synthesis and UV-Vis Spectroscopic Studies of Silver Nanoparticles Synthesized Using Vanillin as a Reducing Agent	B. Aswathy, G.S. Avadhani, I.S. Sumithra, S. Suji, G. Sony	Journal of Molecular Liquids	159	165- 169	2011
34.	Investigations on Zinc Doped Nanocrystalline Hydroxyapatite	G. Devanand Venkatasubbu, S. Ramasamy, V. Ramakrishnan, G.S. Avadhani, R. Thangavel and J. Kumar,	International Journal of NanoScience and Nanotechnology	2	1-23	2011
35.	Microwave Assisted one pot Synthesis of biocompatible gold nanoparticles in Triton X-100 aqueous micellar medium using tryptophan as a reducing agent	B. Aswathy, S Suji G.S. Avadhani, R Awasthy, S Suganthi, G. Sony,	Journal of Molecular Liquids	162	155- 158	2011
36.	Thermodynamic properties of strontium titanates Sr(2)TiO(4), Sr(3)Ti(2)O(7), Sr(4)Ti(3)O(10), and SrTiO(3)	Jacob, K. T.; Rajitha, G.	Journal of chemical thermodynamics	43	51-57	2011

37.	Diffusion path during internal displacement reactions in multi-component oxides: Reaction between Fe and (Co,Mg)TiO(3) solid solution at 1273 K	Reddy, S. N. S.; Sundlof, Brian R.; Jacob, K. T.	Solid state ionics	182	1-7	2011
38.	Thermodynamic properties of LaFeO(3-delta) and LaFe(12)O(19)	Jacob, K. T.; Ranjani, R.	Materials science and engineering B- advanced functional solid-state materials	176	559-566	2011
39.	A critique of the green house gas converter proposed by Azad et al.	Jacob, K. T.; Adharsh, R.	American ceramic society bulletin	90	40-44	2011
40.	Thermodynamic data for Mn <sub>3</sub> O <sub>4</sub> , Mn <sub>2</sub> O <sub>3</sub> and MnO <sub>2</sub>	Jacob,K.T.; A. Kumar G.Rajitha Y.Waseda	High Temp Mater. Process	30	459-472	2011
41.	Microbially induced flotation of alumina, silica/calcite from haematite	H. Sarvamangala and K.A. Natarajan	International Journal of Mineral Processing,	99	70	2011
42.	Microbially induced separation of quartz from calcite using <i>Saccharomyces cerevisiae</i>	S. Usha Padukone and K.A. Natarajan	Colloids and Surfaces B: Biointerfaces	88	45	2011
43.	Preparation of ultrafine CsCl crystallites by combined cryogenic and room temperature ball milling	Tiwary C. S.; Verma Akash; Biswas Krishanu; Mondal A.K; Chattopadhyay K	Ceramics International	37	3677-3686	2011
44.	Effect of Gallium on microstructure and mechanical properties of Nb-Si eutectic alloy	Kashyap S.; Tiwary C. S.; Chattopadhyay K	Intermetallics	19	1943-1952	2011
45.	Microstructure and texture evolution during accumulative roll bonding of aluminium alloy AA5086	Roy Shibayan; Singh Satyaveer D.; Suwas Satyam; Kumar S; Chattopadhyay K	Materials Science And Engineering A	528	8469-8478	2011

46.	Joining of dissimilar metals: issues and modelling techniques	Phanikumar G.; Chattopadhyay K.; Dutta P.	Science And Technology of Welding And Joinin	16	313-317	2011
47.	Combined Cryo and Room-Temperature Ball Milling to Produce Ultrafine Halide Crystallites	Verma Akash; Biswas Krishanu; Tiwary Chandra Sekhar; Mondal A.K.; Chattopadhyay K	Metallurgical And Materials Transactions A-Physical Metallurgy And Materials Science	42A	1127-1137	2011
48.	Structure evolution and phase change in Ag-5.1 at.% Bi alloy during mechanical alloying	Chithra S.; Lele S.; Chattopadhyay K.	Acta Materialia	59	2009-2019	2011
49.	Crystallography of solid-liquid interface and evolution of texture during directional solidification of Tb(0.3)Dy(0.7)Fe(1.95) alloy	Palit Mithun; Banumathy S.; Singh A. K.; Pandian S; Chattopadhyay K	: Intermetallics	19	357-368	2011
50.	Formation of a single, rotated-Brass {1 1 0}<5 5 6 > texture by hot cross-rolling of an Al-Zn-Mg-Cu-Zr alloy	Mondal Chandan; Singh A. K.; Mukhopadhyay A. K Chattopadhyay K	Scripta Materialia	64	446-449	2011
51.	Formation of amorphous xenon nanoclusters and microstructure evolution in pulsed laser deposited Ti(62.5)Si(37.5) thin films during Xe ion irradiation	Bysakh Sandip; Mitsuishi Kazutaka; Song Minghui; Furuya, K ; Chattopadhyay K	Journal of Materials Research	26	62-69	2011
52.	Grain size effect on the phase transformation temperature of nanostructured CuFe(2)O(4)	Prabhu D.; Narayanasamy A.; Shinoda K.; Jeyadeven, B ; Grenache, JM ; Chattopadhyay K	Journal of Applied Physics	109	13532	2011

53.	The determination of stem cell fate by 3D scaffold structures through the control of cell shape	G. Kumar, C.K. Tison, K. Chatterjee, P.S. Pine, J.H. McDaniel, M.L. Salit, M.F. Young, C.G. Simon, Jr.	Biomaterials	32	9188-9196	2011
54.	Fluorine Doping effect in the new superconducting $Y_3Ba_5Cu_8O_{Y-0.2}F_{0.2}$	K. Srinivasan, C. George Thomas, P. Padaikathan	Journal of Minerals & Materials Characterization & Engineering	10	1277-1283	2011
55.	Pulsed laser deposition film of a donor-acceptor-donor polymer as possible active layer in devices	Ranjith K, Swathi S. K, Prajwal Kumar, Praveen C. Ramamurthy	Journal of Material Science	46	2259–2266	2011
56.	Synthesis and characterization of flexible epoxy nanocomposites reinforced with amine functionalized alumina nanoparticles: A potential encapsulant for organic devices	Satyajit Gupta, Praveen C Ramamurthy, Giridhar Madras*  *Dept of Chemical Engineering	Polymer Chemistry	2	221-228	2011
57.	Imidazole functionalized polyaniline: synthesis, characterization and Cu (II) coordination studies	Alex Joseph, Praveen C. Ramamurthy, S. Subramanian	Journal of Applied Polymer Science	123	526-534	2011
58.	Covalent grafting of polydimethylsiloxane over surface modified alumina nanoparticles for encapsulation of organic devices	Satyajit Gupta, Praveen C Ramamurthy, Giridhar Madras*  *Dept of Chemical Engineering	Industrial and Engineering Chemistry Research	50	6585-6593	2011
59.	Rheological study for the real time curing behavior of hydride terminated polydimethylsiloxane with allyl functionalized alumina	Satyajit Gupta, Praveen C Ramamurthy, Giridhar Madras *  *Dept of Chemical Engg	Thermochimica Acta	524	74 – 79	2011

60.	Electrochemical copolymerization of thiophene derivatives; a precursor to photovoltaic devices	Prajwal Kumar, Ranjith K, Satyajit Gupta, Praveen C. Ramamurthy	j.electacta Electrochimica Acta	10 06	1016 114	2011 2011
61.	Synthesis and characterization of silicone polymer/functionalized mesostructured silica composites	Satyajit Gupta, Praveen C. Ramamurthy, Giridhar Madras * *Department of Chemical Engg	Polymer Chemistry	2	2643 - 2650	2011
62.	Magnetic structure and magneto-elastic-structural coupling in Cr-modified SrRuO <sub>3</sub> : A neutron powder diffraction study	Rajeev Ranjan, Anatoliy Senyshyn, Rohini Garg, and Hans Boysen,	Journal of Applied Physics	109	07390 8	2011
63.	Thickness-dependent fcc-hcp phase transformation in polycrystalline titanium thin films	J. Chakraborty, Kishor Kumar, Rajeev Ranjan, S. Ghosh Chowdhury, S.R. Singh,	Acta Materialia	59	2615	2011
64.	Neutron diffraction study of the coupling between spin, lattice, and structural degrees of freedom in 0.8BiFeO <sub>3</sub> -0.2PbTiO <sub>3</sub>	Rajeev Ranjan, V. Kothai, Anatoliy Senyshyn, and Hans Boysen	Journal of Applied Physics	109	06352 2	2011
65.	Occurrence and activity of cardamom pests and honeybees as affected by pest management and climate change	M.Murugan, P.K.Shetty, M.B.Hiremath, R.Ravi, A.Subbiah	International Multidisciplinary Research Journal	1/6	3-12	2011
66.	Climate change and crop yields in the Indian cardamom hills, 1978-2007 CE, Climatic Change,	Muthusamy Murugan, Paddu Krishnappa Shetty, Raju Ravi, Aavudai Anandhi and Arulappan Joseph Rajkumar	Springer	110	737- 753	2011

67.	Environmental impacts of intensive cardamom (small) cultivation in Indian Cardamom Hills: the need for sustainable and efficient practices, Recent Research in Science and Technology	Muthusamy Murugan, Paddu Krishnappa Shetty, Raju Ravi, Alappan Subbiah, Murigendra B. Hiremath	Recent Research in Science and Technology	3(2)	9-15	2011
68.	Evolution of texture and grain boundary microstructure in two-phase ( $\alpha+\beta$ ) brass during recrystallization	Rohini Garg, N.P. Gurao, S. Ranganathan, Satyam Suwas	Philosophical Magazine	91	4089-4108	2011
69.	Effect of rolling temperature and reduction in thickness on microstructure and mechanical properties of ZM21 magnesium alloy and its subsequent annealing treatment	M. Thirumurugan, S. Kumaran, Satyam Suwas, T. Srinivasa Rao	Materials Science and Engineering: A	528	8460-8468	2011
70.	Effect of strain path change on the evolution of texture and microstructure during rolling of copper and nickel	N.P. Gurao, S. Sethuraman, Satyam Suwas	Materials Science and Engineering: A	528	7739-7750	2011
71.	Development of solidification microstructure in boron modified alloy Ti-6Al-4V	S. Roy, Satyam Suwas, S. Tamirisakandala, D.B. Miracle, R. Srinivasan	Acta Materialia	59	5494-5510	2011
72.	Effect of Hypoeutectic Boron Addition on the $\beta$ Transus of Ti-6Al-4V Alloy	S. Roy, Vedavyas T., Satyam Suwas	Metallurgical and Materials Transactions A	42	2535-2541	2011
73.	Texture Evolution in an Al-Cu alloy during Equal Channel Angular Pressing: The effect of Starting Microstructure	P. Venkatachalam, S. Roy, B. Ravisankar, V. Thomas Paul, M. Vijayalakshmi, Satyam Suwas	Journal of Materials Science	46	6518-6527	2011
74.	Effect of Strain Rate on Tensile and Compression Behaviour of Al-Si /Graphite Composite	G. Rajaram, S. Kumaran, Satyam Suwas	Materials Science and Engineering: A	528,	6271-6278	2011

75.	Deformation behaviour of CP Titanium at extreme strain rates	N.P. Gurao, R. Kapoor, Satyam Suwas	Acta Materialia	59	3431-3446	2011
76.	Evolution of crystallographic texture during deformation of submicron grain size titanium	N.P. Gurao, Satyam Suwas	Journal of Materials Research	26	523-532	2011
77.	Analysis of texture evolution in pure magnesium and the magnesium alloy AM30 during rod and tube extrusion	S. Biswas, Satyam Suwas, R. Sikand, A.K. Gupta	Materials Science and Engineering A	528	3722-3729	2011
78.	Texture evolution and operative mechanisms during large-strain deformation of nanocrystalline nickel	N.P. Gurao, Satyam Suwas	Philosophical Magazine	91	798-817	2011
79.	Progressive Changes in the Microstructure and Texture in Pearlitic Steel during Wire Drawing	P. Kumar, N.P. Gurao, A. Haldar, Satyam Suwas	ISIJ International.	51	679-684	2011
80.	Texture evolution in commercially pure titanium after warm equal channel angular extrusion	Satyam Suwas, B. Beausir, L.S. Tóth, J.-J. Fundenberger, G. Gottstein	Acta Materialia	59	1121-1133	2011
81.	X-ray diffraction Line Profile Analysis of Deformation Microstructure in Boron modified Ti-6Al-4V Alloy	A. Sarkar, S. Roy, Satyam Suwas	Materials Characterization	62	35-42	2011
82.	Local texture and microstructure in cube oriented Nickel single crystal deformed by equal channel angular extrusion	D. Goran, J.-J. Fundenberger, E. Bouzy, W. Skrotzki, Satyam Suwas, T. Grosdidier, L.S. Tóth	Philosophical Magazine	91	281-289	2011
83.	Wear behavior of plasma electrolytic oxidation (PEO) and hybrid coatings of PEO and laser on MRI 230D magnesium alloy	G. Rapheal, S. Kumar, C. Blawert and N. B. Dahotre	Wear	271	1987-1997	2011

84.	Microstructure and mechanical properties of SIMA processed A356 alloy	R. Gupta, A. Sharma and S. Kumar	Proc. World Cong. on Engg. and Technol. CET2011	3	443-445	2011
85.	Improving corrosion resistance of MRI 230D Mg alloy by hybrid coating of laser surface alloying and plasma electrolytic oxidation	G. Rapheal, S. Kumar, C. Blawert and N. B. Dahotre	Materials Science Forum	706-709	1209-1214	2012
86.	Studies on development, bioactivity and corrosion behaviour of nanostructured titania/hydroxyapatite composite layer on Cp Ti	K. Venkateswarlu, N. Rameshbabu, A. Chandra Bose, V. Muthupandi and S. Subramanian	Key Engineering Materials	471-472	325-330	2011
87.	Deep groundwater flow as the main pathway for chemical outputs in a small headwater watershed (Mule Hole, South India)	J.C. Maréchal, J. Riotte, C. Lagane, S. Subramanian, C. Kumar, L. Ruiz, S. Audry, M.R.R. Varma and J.J. Braun	Applied Geochemistry	26	S94-S96.	2011
88.	Thermally induced phase separation in PaMSAN/PMMA blends in presence of functionalized multiwall carbon nanotubes: Rheology, morphology and electrical conductivity	Ceren Özdilek, Suryasarathi Bose, Jan Leys, Jin Won Seo, Michael Wübbenhorst, Paula Moldenaers	Polymer	52	4480	2011
89.	Orientation dependence of the indentation impression morphology in a Mg alloy	S. Gollapudi, M. A. Azeem, A. Tewari and U. Ramamurty	Scripta materialia	64	189-192	2011
90.	On numerical implementation of an isotropic elastic-viscoplastic constitutive model for bulk metallic glasses	P. Tandaiya, U. Ramamurty, and R. Narasimhan*  *ME Dept	Modeling and Simulation in Materials Science and Engineering	19	art. no. 01500 2	2011

91.	Improved mechanical properties of polymer nanocomposites incorporating graphene-like BN: Dependence on the number of BN layers	M. S. R. N. Kiran, K. Raidongia, U. Ramamurty, C. N. R. Rao	Scripta materialia	64	592-595	2011
92.	Microstructure and mechanical properties of annealed SUS 304H austenitic stainless steel with copper	Indrani Sen, E. Amankwah, N. S. Kumar, E. Fleury, K. Oh-ishi, K. Hono, and U. Ramamurty	Materials Science and Engineering A	528	4491-4499	2011
93.	Role of indenter angle on the plastic deformation underneath the sharp indenter and on representative strains: an experimental and numerical study	K. Eswar Prasad, N. Chollocoop, and U. Ramamurty	Acta Materialia	59	4343-4355	2011
94.	Surface effects on stacking fault and twin formation in fcc nanofilms: a first-principles study	Aditi Datta, A. Srirangarajan, U. W.aghmare, U. Ramamurty, and A. C. To	Computational Materials Science	50	3342-3345	2011
95.	Effect of irradiation on the microstructure and mechanical behavior of nanocrystalline nickel	G. Sharma, A. Sarkar, J. Varshney, U. Ramamurty, A. Kumar, S.K. Gupta, J.K. Chakravarty	Scripta materialia	65	727-730	2011
96.	High temperature deformation processing maps for a NiTiCu shape memory alloy	V. V. Shastry, B. Maji, K. Madangopal, U. Ramamurty	Journal of Materials Research	26	2484-2492	2011
97.	Interaction anisotropy and shear instability of aspirin polymorphs established by nanoindentation	S. Varughese, M. S. R. N. Kiran, K. A. Solanko, A. D. Bond, U. Ramamurty, and G. R. Desiraju	Chemical Science	02	2236-2242	2011
98.	Magnetic and Mechanical Anisotropy in A Manganese 2-Methylsuccinate Framework Structure	W. Li, P. T. Barton, M. S. R. N. Kiran, R. P. Burwood, U. Ramamurty, and A. K. Cheetham	Chemistry: A European Journal	17	12429 – 12436	2011

99.	Microtensile testing of a free-standing Pt-aluminide bond coat	Md. Zafir Alam, B. Srivaths, S.V. Kamat, V. Jayaram, D.K. Das	Materials & Design	32	1242-1252	2011
100	Effect of Strain Rate on Ductile-to-Brittle Transition Temperature of a Free-Standing Pt-Aluminide Bond Coat	Alam MZ, Chatterjee D, Muraleedharan K, Nandy TK, Kamat SV, Jayaram V, Das DK	Metall. Mater. Trans A	42	1431-1434	2011
101	Study of brittle – ductile transition in Pt aluminide bond coat using micro-tensile testing method	Md. Zafir Alam. B. Srivaths, S.V.Kamat, V.Jayaram D.K.Das	Trans. IIM	64	57-61	2011
102	Deformation and structural densification in Al(2)O(3)-Y(2)O(3) glass	Paul, Arindam; Jayaram, Vikram	Acta materialia	59	82-92	2011
103	Severe wear of a near eutectic aluminium-silicon alloy	Mahato, Anirban; Verma, Nisha; Jayaram, Vikram; Biswas, S. K.*  * ME Dept	Acta materialia	59	6069-6082	2011
104	Reactive pulsed laser deposition and characterization of niobium nitride thin films	Krishnan, R.; David, C.; Ajikumar, P. K.; Dash, S.; Tyagi, A. K Jayaram, V.; Raj, Baldev	Surface & coatings technology	206	1196-1202	2011
105	Characterization of phase transformation behaviour and microstructural development of electroless Ni-B coating	Pal, Soupitak; Verma, Nisha; Jayaram, Vikram; Riddle, Yancy; Biswas S.K.*  *ME Dept	Materials science and engineering A-structural materials properties microstructure and processing	528	8269-8276	2011

106	Evolution of texture and grain boundary microstructure in two-phase (alpha plus beta) brass during recrystallization	Garg, Rohini; Gurao, N. P.; Ranganathan, S.; Suwas, Satyam	Philosophical magazine	91	4089-4108	2011
107	Influence of Inclination Angle and Machining Direction on Friction and Transfer Layer Formation	Menezes, Pradeep L. Kishore Kailas, Satish V.* Lovell, Michael R.  *ME Dept	Journal of tribology-transactions of the asme	133	01450 1	2011
108	Role of Surface Texture, Roughness, and Hardness on Friction During Unidirectional Sliding	Menezes, Pradeep L. Kishore Kailas, Satish V.* Lovell, Michael R.  *ME Dept	Tribology letters	41	1-15	2011
109	Chromium-manganese iron alloy system design cast in metal and sand moulds for erosion resistance: a positron lifetime study	Sampathkumaran, P.; Ranganathaiah, C.; Seetharamu, S.; Kishore	International journal of advanced manufacturing technology	52	45-52	2011
110	Behavior of Sandwich Beams With Functionally Graded Rubber Core in Three Point Bending	Doddamani, M. R.; Kulkarni, S. M.; Kishore	Polymer composites	32-10	1541-1551	2011
111	Response of Materials During Sliding on Various Surface Textures	Menezes, Pradeep L. Kishore; Kailas, Satish V.* Lovell, Michael R.  *ME Dept	Journal of materials engineering and performance	20-8	1438-1446	2011
112	Tribological characteristics of A356 Al alloy-SiC(P) composite discs	Shivamurthy R. C.; Surappa M. K.	Wear	271	1946-1950	2011

113	On substructure in titanium alloy martensites: comment on 'Antiphase boundary-like stacking fault in alpha "-martensite of disordered crystal structure in beta-titanium shape memory alloy'	Banerjee Dipankar	Philosophical magazine A	91	2078	2011
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CONFERENCE PROCEEDINGS:

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S. Vimalnath, S. Subramanian, S. Sampath, R. Vasant Kumar and Carsten Schwandt : <i>Bioremediation of lead from aqueous solution</i> Proceedings of the International Seminar on Mineral Processing Technology, Udaipur (2011) EI 73-80
Shakthi Pravesh, R. J. Deshpande and S. Subramanian : <i>Removal of iron from clay using ascorbic acid</i> Proceedings of the International Seminar on Mineral Processing Technology, Udaipur (2011) IM 60-65
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