Book:

B. Verlinden, J. Driver, I. Samajdar, R. D. Doherty, Thermo-Mechanical Processing of Metallic Materials, ISBN-978-0-08-044497-0, Pergamon Materials Series – series ed. R.W. Cahn, Elsevier, Amsterdam, 2007.

Publication List (Intl. Journal):

- 1) Soudip Basu, Balila Nagamani Jaya, Anirban Patra, Sarbari Ganguly, Monojit Dutta, Anton Hohenwarter and Indradev Samajdar (2021): The Role of Phase Hardness Differential on the Non-Uniform Elongation of a Ferrite-Martensite Dual Phase steel, **MMTA**, In Press.
- 2) Riya Mondal, Parvej Raut, Sunil Kumar Bonagani, Saurabh Kumar, P.V. Sivaprasad, G. Chai, V. Kain and I. Samajdar (2021): Relating Hot deformed Microstructures and Corrosion Performance in a Super Duplex Stainless Steel, **JMEPEG**, In Press.
- 3) Ujjal Tewary, Devesh Mukherjee, Alankar Alankar, Goutam Mohapatra, Satyam S. Sahay, Indradev Samajdar and Shyamprasad Karagadde (2021): An Integrated Multi-Scale Model for Graphite Growth Mechanism in Industrial Cast Iron, **MMTB**, 55B, 633-651.
- 4) H. K. Mehtani, M. I. Khan, B. Nagamani Jaya, S. Parida, M.J.N.V. Prasad and I. Samajdar (2021): The oxidation behavior of iron-chromium alloys: The defining role of substrate chemistry on kinetics, microstructure and mechanical properties of the oxide scale, **JALCOM**, 871, 159583.
- 5) Ashish Dhole, Amrita Bhattacharya, Rohit Kumar Gupta, Amol A. Gokhale and I. Samajdar (2021): The Role of the Metal-Oxide Interface's Terminating Layer on the Selective Cold Cracking of a Commercial Niobium-Hafnium-Titanium (C-103) Alloy, **JALCOM**, 856, 157427.
- 6) S. Dasari, A. Sarkar, A. Sharma, B. Gwalani, D. Choudhuri, V. Soni, S. Manda, I. Samajdar, and R. Banerjee (2021): Recovery of Cold-worked Al0.3CoCrFeNi Complex Concentrated Alloy through Twinning Assisted B2 Precipitation Resulting in Excellent Strength-Ductility Combination, **Acta Mater.**, 202, 448-462.
- 7) Sneha Goel, Hitesh Mehtani, Shu-Wei Yao, Indradev Samajdar, Uta Klement and Shrikant Joshi (2020): As-Built and Post-Treated Microstructures of an Electron Beam Melting (EBM) produced Nickel Based Superalloy, MMTA, 51A, 6546-6559.
- 8) Niraj Nayan, Sivasambu Mahesh, M. J. N. V. Prasad, S. V. S. N. Murthy and Indradev Samajdar (2020): Temperature-dependence of plasticity and fracture in an Al-Cu-Li alloy, **Phil. Mag.**, 100 (23), 2913-2937.
- 9) Sushil K. Giri, A. Durgaprasad, H. Mehtani, S. Kundu and I. Samajdar (2020): Origin of Goss (110)<001> Grains in Hot Worked Grain Oriented Steel, MMTA, 51a, 5268-5284.
- 10) Khushahal Thool, Anirban Patra, David Fullwood, K. V. Mani Krishna, Dinesh Srivastava and Indradev Samajdar (2020): The Role of Crystallographic Orientations on Heterogeneous Deformation in a Zirconium Alloy: A Combined Experimental and Modeling Study, IJP, 133, 102785, 1-24.
- 11) Riya Mondal, Sunil Kumar Bonagani, Parvej Raut, P.V. Sivaprasad, G. Chai, V. Kain and I. Samajdar (2020): Role of Recovery and Recrystallization on the Post Cold Work Corrosion Performance in a Super Duplex Stainless Steel, **J. Electrochem. Soc.**, 167, 101501.
- 12) D. Mukherjee, U. Tewary, S. Kumar, S. Karagadde, R. K. Verma, M. Sambandam and I. Samajdar (2020): Imposed Thermal Gradients and Resultant Residual Stresses: Physical and Numerical Simulations, **MST**, 36(10), 1020-1036.

- 13) Tawqeer Nasir Tak, Aditya Prakash, Arijit Lodh, Shyam M. Keralavarma, SVS Narayana Murty, Indradev Samajdar and P J Guruprasad (2020): Relating Porosity with Ductility in a Commercial AA7075 Alloy: A Combined Experimental and Numerical Study, **J. Engg. Mater. Tech.**, 142, 0411007, 1-8.
- 14) M.I. Khan, H.K. Mehtani, A. Durgaprasad, G.K. Goyal, M.J.N.V. Prasad, S. Parida, T. Dasgupta, N. Birbilis and I. Samajdar (2020): The Defining Role of Interface Crystallography in Corrosion of a Two-Phase Pearlitic Steel, **Phil. Mag.**, 100 (11), 1439-1453.
- 15) Riya Mondal, A. Rajagopal, Sunil Kumar Bonagani, Aditya Prakash, D. Fuloria, P.V. Sivaprasad, G. Chai, V. Kain and I. Samajdar (2020): Solution Annealing of Super Duplex Stainless Steel: Correlating Corrosion Performance with Grain Size and Phase-Specific Chemistry, MMTA, 51, 2480-2494.
- 16) Arijit Lodh1, Prita Pant, Gulshan Kumar, K.V. Mani Krishna. Raghvendra Tewari and Indradev Samajdar (2020): Orientation Dependent Solid Solution Strengthening in Zirconium: A Nanoindentation Study, **JMSc**, 55, 4493-4503.
- 17) H. K. Mehtani, M. I. Khan, A. Durgaprasad, S. K. Deb, S. Parida, M.J.N.V. Prasad, D. Fullwood, R.D. Doherty and I. Samajdar (2020): Oxidation Behavior of Interstitial Free Steel: The Defining Role of Substrate Crystallographic Texture, **Acta Mater.**, 190, 43-57.
- 18) Niraj Nayan, A.K. Mukhopadhyay, S.V.S. Narayana Murty, Manasij Yadava, Rajdeep Sarkar, M.J.N.V. Prasad and I. Samajdar (2020): Effect of Cu and Li Content on the Serrated Flow Behavior of Al-Cu-Li Based Alloys, **MMTA**, 51A, 1457-1462.
- 19) Niraj Nayan, Manasij Yadava, Nilesh P Gurao, S.V.S.Narayana Murty, Sivasambu Mahesh, M.J.N.V. Prasad and I. Samajdar (2020): Subzero temperature dependence of tensile response of 1 friction stir welded Al-Cu-Li (AA2198) alloy, **MMTA**, 51A, 1173-1182.
- 20) Niraj Nayan, Manasij Yadava, Rajdeep Sarkar, Susarla Murty, N.P. Gurao, Sivasambu Mahesh, Prasad M.J.NV and Indradev Samajdar (2020): Al-Cu-Li alloy; friction stir welding; precipitation; digital image correlation; strain hardening, **Mater. Charac.**, 159-110002, 1-12.
- 21) Sanchar Acharya, Binita Tongbram, Indradev Samajdar and Anil Kottantharayil (2020): What causes Poole-Frenkel transport in VLS grown silicon nanowires?, **Materials Science in Semiconductor Processing**, 105, 104749, 1-7.
- 22) R. Mondal, Sunil Kumar Bonagani, A. Lodh, T. Sharma, P. V. Sivaprasad, G. Chai, Vivekanand Kain and I. Samajdar (2019): Relating General and Phase Specific Corrosion in a Super Duplex Stainless Steel with Phase Specific Microstructure Evolution, Corrosion, vol. 75 (11), 1315-1326.
- 23) Arijit Lodh, Tawqeer Nasir Tak, Aditya Prakash, P. J. Guruprasad2, Shyam M. Keralavarma, A. Amine Benzerga, Christopher Hutchinson and Indradev Samajdar (2019): Microstructural Origin of Residual Stress Relief in Aluminum, MMTA, 50A, 5038-5055.
- 24) K.S. Thool, K.V. Mani Krishna, D. Srivastva, A. Patra, R.D. Doherty and I. Samajdar (2019): Confirmation of Dynamically Recrystallized Grains in Hexagonal Zirconium through Local Internal Friction Measurements, MMTA, 50A, 5000-5014.
- 25) Niraj Nayana, S.V.S.Narayana Murty, Rajdeep Sarkar, A.K. Mukhopadhyay, Sarita, S. K. Sarkar, M.J.N.V. Prasad and I. Samajdar (2019): The anisotropy of serrated flow behavior of Al-Cu-Li (AA2198) alloy, **MMTA**, 50A, 5066-5078.
- 26) Tenneti Sharma, Sunil Kumar Bonagani, Naveen Kumar N., Harish Donthula, Mani Krishna K.V., Indradev Samajdar and Vivekanand Kain (2019): Effect of thermal aging on embrittlement of CreMoeV pressure vessel steel, **JNM**, 527-151817, 1-16.

- 27) Niraj Nayan, Sumeet Mishra, Aditya Prakash, S.V.S.N. Murty, M.J.N.V. Prasad, I. Samajdar (2019): Origin of through-thickness serrated tensile flow behavior in Al-Cu-Li (AA2195) alloy: Effect of microstructure and texture, **Materialia**, 5, 100180.
- 28) Gagan K. Goyal, Shriparna Mukherjee, Ramesh C. Mallik, Satish Vitta, Indradev Samajdar and Titas Dasgupta (2019): High Thermoelectric Performance In Mg₂(Si_{0.3}Sn_{0.7}) By Enhanced Phonon Scattering, **ACS Appl. Energy Mater.**, 2, 2129-2137.
- 29) Tenneti Sharma, N Naveen Kumar, Riya Mondal, K V Mani Krishna, I Samajdar and V Kain (2019): Ductile to Brittle Transition in Low Alloy Steel: A Combined Experimental and Numerical Investigation, **JMEPEG**, 28(7), 4275-4288.
- 30) K. Sai Rajeshwari, Aditya Prakash, Rohit Jagtap, S. Sankarana, I. Samajdar, Vijay K. Vasudevan and Gerhard Wilde (2019): On the comparison of graded microstructures developed through High Reduction (per pass) Cold Rolling (HRCR) and Ultrasonic Nanocrystal Surface Modification (UNSM) in Nickel-base Alloy 602CA, **Mater. Charac.**, 153, 328-338.
- 31) Tenneti Sharma, PV Durgaprasad, N Naveen Kumar, Sunil Kumar Bonagani, J Chattopadhyaya, I Samajdar and Vivekanand Kain (2019): Detection of embrittlement in low alloy steels due to thermal aging by Small Punch Test, **MSEA**, A759,181-194.
- 32) Sushil K. Giri, A. Durgaprasad, K. Thool, S. Kundu and I. Samajdar (2019): High Temperature Flow Behavior of Grain Oriented and Non-Grain Oriented Electrical Steel, **MST**, 1-12.
- 33) Niraj Nayan, Sivasambu Mahesh, M. J. N. V. Prasad, S. V. S. N. Murthy, Indradev Samajdar (2019): A phenomenological hardening model for an aluminium-lithium alloy, **IJP**, 118, 215-232.
- 34) Sushil K. Giri, A. Durgaprasad, K.V. Manikrishna, Anoop C.R., S. Kundu, I. Samajdar (2019): Exploring the Origin of Variant Selection through Martensite-Austenite Reconstruction, **Phil. Mag.**, 99(6), 699-717.
- 35) Biswanath Bhoia, N. Venkataramani, Shiva Prasad, R.P.R.C. Aiyar, Gulshan Kumar, I. Samajdar and M. Kostylev (2019): Observation of enhanced magnetic anisotropy in PLD YIG thin film on GGG (1 1 1) substrate, **JMMM**, 483, 191-195.
- 36) Aditya Prakash, Tawqeer Nasir Tak, , Arijit Lodh, Niraj Nayan,4, S.V.S. Narayana Murty, P. J. Guruprasad and Indradev Samajdar (2019): Composition Gradient and Particle Deformed Zone An Emerging Correlation, MMTA, 50A, 1250-1260.
- 37) L. Venkatesha, B. Venkataraman, Manish Tak, G. Sivakumar, Ravi C. Gundakaram, S.V. Joshi and I. Samajdar (2019): Room temperature and 600°C erosion behaviour of various chromium carbide composite coatings, **Wear**, 422-423, 44-53.
- 38) Niraj Nayan, Sumeet Mishra, Aditya Prakash, S.V.S.N. Murty, M.J.N.V. Prasad, I. Samajdar (2019): Effect of cross-rolling on microstructure and texture evolution and tensile behavior of aluminium-copper-lithium (AA2195) alloy, **MSEA**, 740-741, 252-261.
- 39) Santanu Paul, Ramesh Singh, Wenyi Yan, Indradev Samajdar, Anna Paradowska, Khushahal Thool, Mark Reid (2018): Critical deposition height for sustainable restoration via laser additive manufacturing, **Scientific Reports: Nature Publishing Group**, 8: 14726, 1-8.
- 40) Arijit Lodh, Ujjal Tewary, Ram Pratap Singh, Tawqeer Nasir Tak, Aditya Prakash, Alankar Alankar, PJ Guruprasad and Indradev Samajdar (2018): Orientation Dependent Developments in Misorientation and Residual Stress in Rolled Aluminum: The Defining Role of Dislocation Interactions, **MMTA**, 49A, 5946-5952.
- 41) Ramya Hariharana, S.K. Sahoo, I. Samajdar and Prakash Gopalan (2018): Correlation between microstructure and electrical properties of Asite substituted YAlO₃ ceramics, **MSEB**, 231, 66-73.

- 42) C.R. Anoop, Aditya Prakash, S.V.S. Narayana Murty, Indradev Samajdar (2018): Effect of Solution Treatment Temperature on Impact Toughness (Room Temperature and 77K) of a 12Cr-10Ni Martensitic Precipitation Hardenable Stainless Steel, **Met. Micr. Anal.**, 7, 379-386.
- 43) C.R. Anoop, Aditya Prakash, S.V.S. Narayana Murty, Indradev Samajdar (2018): Effect of Zener–Holloman Parameter on the PriorAustenite Grain size in a 12Cr-10Ni Precipitation-Hardenable Stainless Steel, **JMEPEG**, 27(7), 3559-3565.
- 44) Kamlesh Joshi, Upendra Bhandarkar, Indradev Samajdar, Suhas S. Joshi (2018): Micro-structural characterization of thermal damage on silicon wafers sliced using wire-EDM, **J. Manu. Sci. Engg.**, 140, 091001-1-14.
- 45) N. Srinivasan, B. Sunil Kumar, V. Kain, N. Birbilis, S.S. Joshi, P.V. Sivaprasad, G. Chai, A. Durgaprasad, S. Bhattacharya and I. Samajdar (2018): Defining the Post-Machined Sub-Surface in Austenitic Stainless Steels, MMTA, 49A, 2281-2292.
- 46) A. Durgaprasad, S. Giri, S. Lenka, Sudip Kumar Sarkar, Aniruddha Biswas, S. Kundu, S.Mishra, S. Chandra, R. D. Doherty and I. Samajdar (2018): Delamination of Pearlitic Steel Wires: The Defining Role of Prior Drawing Microstructure, **MMTA**, 49A, 2037-2047.
- 47) C.R. Anoop, Aditya Prakash, Sushil Kumar Giri, S.V.S. Narayana Murty, Indradev Samajdar (2018): Optimization of hot workability and microstructure control in a 12Cr-10Ni precipitation hardenable stainless steel: An approach using processing maps, **Mater. Charc.**, 141, 97-107.
- 48) Tenneti Sharma, Sunil Kumar Bonagani, Naveen Kumar, I. Samajdar and V. Kain (2018): Detection of intergranular embrittlement of reactor pressure vessel steel by electrochemical method, **MSEA**, A725, 88-97.
- 49) H. K. Mehtani, M. I. Khan, A. Durgaprasad, S. K. Deb, S. Parida, M. J. N. V. Prasad and I. Samajdar (2018): Oxidation Kinetics in Pearlite: The Defining Role of Interface Crystallography, **Scripta Mater.**, 152, 44-48.
- 50) A. Durgaprasad, S. Giri, S. Lenka, S. Kundu, S.Mishra, S. Chandra, R. D. Doherty and I. Samajdar (2018): Microstructural Engineering in Eutectoid Steel: A Technological Possibility?, **MMTA**, 49A, 1520-1535.
- 51) R. Halder Banerjee, P. Sengupta, A. Chatterjee, S.C. Mishra, A. Bhukta, P.V. Satyam, I. Samajdar and G.K. Dey (2018): Understanding self ion damage in FCC Ni-Cr-Fe based alloy using X-ray diffraction techniques, **JNM**, 501, 82-93.
- 52) C.R. Anoop, Aditya Prakash, S.V.S. Narayana Murty and Indradev Samajdar (2018): Origin of low temperature toughness in a 12Cr-10Ni martensitic precipitation hardenable stainless steel, **MSEA**, A709, 1-8.
- 53) Arijit Lodh, Tawqeer Nasir Tak, Aditya Prakash, P. J. Guruprasad, Christopher Hutchinson and Indradev Samajdar (2017): Relating Residual Stress and Substructural Evolution During Tensile Deformation of an Aluminum-Manganese Alloy, **MMTA**, 48A, 5317-5331.
- 54) Santanu Paula, Khushahal Thool, Ramesh Singh, Indradev Samajdar, Wenyi Yan (2017), **Proc.Manu.**, 10, 804-818.
- 55) Gulshan Kumar, Arijit Lodh, Jaiveer Singh, Ramesh Singh, D. Srivastava, G.K. Dey and I. Samajdar (2017): Experimental Characterization and Finite Element Modeling of Through Thickness Deformation Gradient in a Cold Rolled Zirconium Sheet, **J. Manu. Sci. Tech.**, 19, 176-190.
- 56) A. Durgaprasad, S. Giri, S. Lenka, S. Kundu, S.Mishra, S. Chandra, R. D. Doherty and I. Samajdar (2017): Microstructures and Mechanical Properties of As Drawn and Laboratory Annealed Pearlitic Steel Wires, **MMTA**, 48A, 4583-4597.

- 57) L. Jain, K.V. Mani Krishna, Aditya Prasad, H. K. Mehtani, D. S. Misra, Abha Misra and I. Samajdar (2017): Defining the Role of Silicon Substrate Orientation on the Poly-crystalline Diamond Film: A Novel Approach for Characterizing Faceted Microstructures, **Cry. Grow. Des.**, 17, 5366-5376.
- 58) L. Jain, D. R. Mohapatra, R. Basu, D. S. Misra, AbhaMisra and I. Samajdar (2017): Effect of Interplay between Isotropic Gases on Microstructural Evolution of Single Crystal Diamond, Cry. Res. Tech., 1700016, 1-8.
- 59) Gulshan Kumar, Sandip Balo, Ashish Dhoble, Jaiveer Singh, Ramesh Singh, D. Srivastava, G.K. Dey, and I. Samajdar (2017): Through-Thickness Deformation Gradient in a Part-Pilgered Zirconium Tube: Experimental Measurements and Numerical Validation, **MMTA**, 48A, 2844-2857.
- 60) Niraj Nayan, S.V.S.N. Murty, Sumit Chhangani, Aditya Prakash, P V Venkitakrishnan, M.J.N.V. Prasad and I Samajdar (2017): Effect of temperature and strain rate on hot deformation behavior and microstructure of Al-Cu-Li alloy, **JALCOM**, 723, 548-558.
- 61) L. Jain, R. Bajpai, R.Basu, D. S. Misra, I. Samajdar (2017): Delamination/Rupture of Polycrystalline Diamond Film: Defining Role of Shear Anisotropy, **Cry. Grow. Des.**, 17, 1514-1523.
- 62) L. Venkatesh, Suresh Babu Pitchuka, G. Sivakumar, Ravi C. Gundakaram, S.V. Joshi and I. Samajdar (2017): Microstructural response of various chromium carbide based coatings to erosion and nano impact testing, **Wear**, 386-387, 72-79.
- 63) A. Durgaprasad, S. Giri, S. Lenka, S. Kundu, S. Mishra, S. Chandra, R. D. Doherty and I. Samajdar (2017): Defining A Relationship Between Pearlite Morphology and Ferrite Crystallographic Orientation, **Acta Mater.**, 129, 278-289.
- 64) L. Venkatesh, P. Suresh Babu, Ravi C. Gundakaram, Roger D. Doherty, S.V. Joshi and I. Samajdar (2017): Morphology Dependent Hardness of Cr₇C₃-Ni rich alloy Composite versus Orientation Independent Hardness of Cr₇C₃ Primary Phase in a Laser Clad Microstructure, **MMTA**, 48A, 1534-1539.
- 65) B.P. Badgujar, Santosh Kumar, M.N Jha, I. Samajdar, M Mascarenhas, R. Tewari, G.K. Dey (2017): An investigation of electron beam welding of Nb-1Zr-0.1C alloy: Process parameters and microstructural analysis, **J. Manf. Process.**, 28, 326-335.
- 66) Jaiveer Singh, S. Mahesh, Shomic Roy, Gulshan Kumar, D. Srivastava, G. K. Dey, N. Saibaba and I. Samajdar (2017): Temperature dependence of work hardening in sparsely twinning zirconium, **Acta Mater.**, 123, 337-349.
- 67) Gulshan Kumar, A. K. Kanjarla, Arijit Lodh, Jaiveer Singh, Ramesh Singh, D. Srivastava, G. K. Dey, N. Saibaba, R. D. Doherty and I. Samajdar (2016): Burst Ductility of Zirconium Clads: The Defining Role of Residual Stress, **MMTA**, 47A, 3882-3896.
- 68) V. Basavaraj, S.K. Shekhawat, K. Narasimhan and I. Samajdar (2016): Forming Limit Curves In Low Carbon Steels: Improved Prediction by Incorporating Microstructural Evolution, **J. Adv. Manuf. Tech.**, 86, 1027-1036.
- 69) N. Srinivasan, V. Kain, N.Birbilis, B. Sunil Kumar, M. N. Gandhi, P.V. Sivaprasad, G. Chai, A. Lodh, P.M. Ahmedabadi and I. Samajdar (2016): Plastic Deformation and Corrosion in Austenitic Stainless Steel: A Novel Approach Through Microtexture and Infrared Spectroscopy, Corr. Sci., 111, 404-413.
- 70) Jaiveer Singh, S. Mahesh, Shomic Roy, Gulshan Kumar, D. Srivastava, G.K. Dey, N. Saibaba, I. Samajdar (2016): A Miniature Physical Simulator of Pilgering, **JMPT**, 237, 126-138.

- 71) A. Tripathi, A. Tewari, A.K.Kanjarla, N. Srinivasan, G.M. Reddy, S.M. Zhu, J.F. Nie, R.D. Doherty and I. Samajdar (2016): Microstructural Evolution During Multi-Pass Friction Stir Processing of a Magnesium Alloy, **MMTA**, 47A, 2001-2216.
- 72) A. Tripathi, I. Samajdar, J.F. Nie, A. Tewari (2016): Study of grain structure evolution during annealing of a twin-roll-cast Mg alloy, **Mater. Charc.**, 114, 157-165.
- 73) V. Basavaraj, S.K. Shekhawat, K. Narasimhan and I. Samajdar (2015): Improved prediction of strain distribution during mechanical and hydromechanical deep drawing processes using microstructure-based dynamic strain hardening and anisotropy, **JSA**, 50(1), 51-60.
- 74) A.K. Revelly, A.S. Panwar, H.W. Becker, B.Vishwanadth, K.V. Mani Krishna, R. Tewari, D. Srivastava, G.K. Dey and I. Samajdar (2015): High Purity Zirconium Under Niobium Ion Implantation: Possibility of a Dynamic Precipitation?, **Phil. Mag.**, 95 (33), 3727-3744.
- 75) N. Srinivasan, V. Kain, N. Birbilis, K.V. Mani Krishna, S. Shekhawat and I. Samajdar (2015): Near Boundary Gradient Zone and Sensitization Control in Austenitic Stainless Steel, **Corr. Sci.**, 100, 544-555.
- 76) Gulshan Kumar, Ramesh Singh, Jaiveer Singh, D. Srivastava, G. K. Dey and I. Samajdar (2015): Defining the Stages of Annealing in a Moderately Deformed Commercial Zirconium Alloy, **JNM**, 466, 243-252.
- 77) A.K. Revelly, G. Monpara, I. Samajdar, K.V. Mani Krishna, R. Tewari, D. Srivastava, G.K. Dey and A.S. Panwar (2015): Effect of Gallium Ion Damage on Poly-Crystalline Zirconium: Direct Experimental Observations and Molecular Dynamics Simulations, **JNM**, 467, 155-164.
- 78) L. Venkatesh, I. Samajdar, Manish Tak, Roger D. Doherty, Ravi C. Gundakaram, K. Satya Prasad and S.V. Joshi (2015): Microstructure and phase evolution in laser clad Chromium carbide-NiCrMoNb, **Appl. Surf. Sci.**, 357, 2391-2401.
- 79) Nabaneeta Mukhopadhyay, Ajay S. Panwar, Gulshan Kumar, I. Samajdar and Arup R. Bhattacharyya (2015): Influence of non-covalent modification of multiwalled carbon nanotubes on the crystallization behaviour of binary blend of polypropylene and polyamide6, **Phys. Chem. Phys.**, 17, 4293-4310.
- 80) Jaiveer Singh, S. Mahesh, Gulshan Kumar, Prita Pant, D. Srivastava, G. K. Dey, N. Saibaba and I. Samajdar (2015): Deformation Twinning in Zirconium: Direct Experimental Observations and Polycrystal Plasticity Predictions, **MMTA**, 46A, 5058-5071.
- 81) A. Tripathi, A. Tewari, N. Srinivasan, G.M. Reddy, S.M. Zhu, J.F. Nie, R.D. Doherty, and I. Samajdar (2015): Microstructural Origin of Friction Stir Processed Zone in a Magnesium Alloy, MMTA, 46A, 3333-3336.
- 82) Jaiveer Singh, S. Mahesh, Gulshan Kumar, Prita Pant, D. Srivastava, G. K. Dey, N. Saibaba and I. Samajdar (2015): Texture Development and Plastic Deformation in a Pilgered Zircaloy-4 Tube, **MMTA**, 46A, 1927-1947.
- 83) S. K. Shekhawat, R. Chakrabarty, V. Basavaraj, V.D. Hiwarkar, K. V. Mani, P. J. Guruprasad, A. A. Benzerga, K. G. Suresh and I. Samajdar (2015): Orientation Dependent Plastic Deformation in Transformer Steel: Experiments and Dislocation Dynamics Simulations, **Acta Mater.**, 84, 256-264.
- 84) Bikas C. Maji, Madangopal Krishnan, Amit Verma, R. Basu, I. Samajdar and R.K. Ray (2015): Effects of Pre-straining on the Shape Recovery of Fe-Mn-Si-Cr-Ni Shape Memory Alloys, **MMTA**, 46A, 639-655.
- 85) V. Vasabaraj, S. K. Shekhawat, K. Narasimhan and I. Samajdar (2015): Mechanical and Hydro-Mechanical Deep Drawing of Low Carbon Steels: Predicting Macroscopic Strains Through Microstructural Inputs, Intl. J. Metal. Form., 8, 327-339.

- 86) S. K. Shekhawat, V. Basavaraj, V.D. Hiwarkar, A. Ingle, K. G. Suresh and I. Samajdar (2014): Degradation of Magnetic Properties in Transformer Steel: Role of Prior Elastic Deformation, **IEEE Trans. Mag.**, 50(12), 6001112.
- 87) A.K. Revelly, G. Monpara, R.P. Singh, A.S. Panwar, K.V. Mani Krishna, R.Tewari, D.Srivastava, G.K.Dey and I. Samajdar (2014): Grain Boundary Energy and Relative Ion Damage: Experimental Observation and Molecular Dynamics Simulation, **Phil. Mag. Lett.**, 94 (9), 601-608.
- 88) A.K. Revelly, N. Srinivasan, A.S. Panwar, K.V. Mani Krishna, R. Tewari, D. Srivastava, G.K. Dey and I. Samajdar (2014): Orientation Sensitivity of Focused Ion Beam Damage in Pure Zirconium: Direct Experimental Observations and Molecular Dynamics Simulations, **Phil. Mag.**, 94 (14), 1601-1621.
- 89) R. Halder, Pranesh Sengupta, V. Sudarsan, A. Ghosh, A. Ghosh, A. Bhukta, G. Sharma, I. Samajdar and G.K. Dey (2015): Photoluminescence study on irradiated yttria stabilized zirconia, **JNM**, 456, 359-368.
- 90) R. Kapoor, A. Sarkar, R. Yogi, S. Kumar, I. Samajdar, J.K. Chakravartty (2014): low localization in an Al-2.5Mg alloy after severe plastic deformation, MSEA, A611, 114-122.
- 91) A.P.S. Baghel, S. K. Sekhawat, S. V. Kulkarni and I. Samajdar (2014): Modeling of Dynamic Hysteresis for Grain-Oriented Laminations using a Viscosity-Based Modified Dynamic Jiles-Atherton Model, **Physica B**, 448, 349-353.
- 92) R. Halder, R.S. Dutta, P. Sengupta, I. Samajdar and G.K. Dey (2014): Microstructural Studies on Alloy 693, JNM, 453, 91-97.
- 93) S. K. Shekhawat, V. Basavaraj, V. D. Hiwarkar, R. Chakrabarty, J. Nemade, P. J. Guruprasad, K. G. Suresh, R. D. Doherty and I. Samajdar (2014): Direct Experimental Observations on Concurrent Microstructure and Magnetic Property Developments in a Non-Grain Oriented Electrical Steel, MMTA, 45A, 3695-3698.
- 94) N. Keskar, S. Mukherjee, K. V. Mani Krishna, D. Srivastava, G.K. Dey, P. Pant, R.D. Doherty and I. Samajdar (2014): Quantifying The Redundant Mesoscopic Shear Strains in Plane Strain Compressed Poly-Crystalline Zirconium, **Acta Mater.**, 69, 265-274.
- 95) D. Kohli, R. Rakesh, V.P. Sinha, G.J. Prasad and I. Samajdar (2014): Fabrication of Simulated Plate Fuel Elements: Defining Role of Stress Relief Annealing, **JNM**, 447, 150-159.
- 96) Rajeev Kapoor, Apu Sarkar, Jaiveer Singh, Indradev Samajdar and Dierk Raabe (2014): Effect of strain rate on twinning in a Zr alloy, **Scripta Mater.**, 74, 72-75.
- 97) S. Samanta, S. Das, D. Chakravarti, I. Samajdar, S.B. Singh and A. Haldar (2013): Development of Multiphase microstructure with bainite, martensite and retained austenite in a Co-containing steel through Quenching & Partitioning (Q&P) treatment, MMTA, 44, 5653-5664.
- 98) Santidan Biswas, Martin Grant, Indradev Samajdar, Arunansu Haldar and Anirban Sain (2013): Micromechanics of emergent patterns in plastic flows, **Scientific Reports: Nature Publishing Group**, *Scientific Reports* **3**, Article number: 2728 doi:10.1038/srep02728, 1-9.
- 99) R.Rakesh, D.Kohli1, V.P.Sinha, G.J.Prasad and I.Samajdar (2014): Fabrication of Simulated Plate Fuel Elements: Defining Role of out-of-plane Residual Shear Stress, **JNM**, 445, 200-208.
- 100) Ritwik Basu, Lokendra Jain, Bikas Maji, Madangopal Krishnan and Indradev Samajdar (2013): Microstructural Developments through Marforming in a Ni-Ti-Fe Shape memory Alloy, **MMTA**, 44A, 4310-4322.

- 101) R. Kapoor, A. Sarkar, R. Yogi, S. Kumar, I. Samajdar, J.K. Chakravartty (2013): Softening of Al during multi-axial forging in a channel die, **MSEA**, A560, 404-412.
- 102) Parag M Ahmedabadi, Vivekanand Kain, Bhupinder Kumar Dangi and I. Samajdar (2013): Role of grain boundary nature and residual strain in controlling sensitisation of type 304 stainless steel, **Corr. Sci.**, 66, 242-255.
- 103) Parag M Ahmedabadi, Vivekanand Kain, K. Venkata Muralidhar and I. Samajdar (2013): On the role of residual strain in controlling sensitisation of twin-boundary engineered type 304 stainless steel, **JNM**, 432, 243-251.
- 104) B. Vishwanadh, K. Vaibhav, S.K. Jha, K.V. Mirji, I. Samajdar, D. Srivastava, R. Tewari, N. Saibaba, G.K. Dey (2012): Development of Nb–1%Zr–0.1%C alloy as structural components for high temperature reactors, **JNM**, 427, 350-358.
- 105) S. K. Shekhawat, V. Basavaraj, V.D. Hiwarkar, J. Dumbre, A. Ingle, K. G. Suresh and I. Samajdar (2012): Magnetic Properties in Deformed Grain Orientated Electrical Steel: On the Role of Strain Hardening Exponent and Microstructural Developments, **ISIJ Intl.**, 52(11), 2100-2108.
- 106) S.G. Acharyya, A. Khandelwal, V. Kain, A. Kumar and I. Samajdar (2012): Surface working of 304L stainless steel: Impact on microstructure, electrochemical behavior and SCC resistance, **Mater. Charc.**, 72, pp. 68-76.
- 107) Parag M. Ahmedabadi, V. Kain, I. Samajdar, M. Gupta, S.C. Sharma, P. Bhagwat and Ajaykumar (2012): Effect of prior cold-work on radiation-induced segregation in proton-irradiated austenitic stainless steel, **Corr. Sci.**, 60, pp. 153-164.
- 108) Ritwik Basu, Lokendra Jain, Bikas Maji, M, adangopal Krishnan, K.V. ManiKrishna, Indradev Samajdar and Prita Pant (2012): Origin of Microstructural Irreversibility in Ni-Ti Based Shape Memory Alloys during Thermal Cycling, **MMTA**, 43A, pp. 1277-1287.
- 109) Priya Maheshwari, P.K. Pujari, S.K. Sharma, K. Sudarshan, D. Dutta, S. Samanta, A. Singh, D.K. Aswal, R. Ajay Kumar and I. Samajdar (2012): Defect profiling in organic semiconductor multilayers, **Org. Elec.**, 13, pp. 1409-1419.
- 110) R. Khatirkar, V. Basavaraj, S.K. Shekhawat, A. Haldar and I. Samajdar (2012): Orientation Dependent Recovery in Interstitial Free Steel, **ISIJ Intl.**, 52 (5), pp. 884-893.
- 111) Rajesh Khatirkar, Vadavadagi Basavaraj, Arunansu Haldar and Indradev Samajdar (2012): ND//<111> Recrystallization in Interstitial Free Steel: The Defining Role of Growth Inhibition, **ISIJ Intl.**, 52 (5), pp. 894-901.
- 112) Parag M. Ahmedabadi, V. Kain, M. Gupta, I. Samajdar, S. Sharma, P. Bhagwat, and Y. Watanabe (2012): Electrochemical Evaluation of Radiation-Induced Segregation in Austenitic Stainless Steels with Oversize Solute Addition, **JMEPEG**, 16 (1), DOI: 10.1007/s11665-012-0201-8.
- 113) A.R. Anilchandra, R. Basu, I. Samajdar and M.K. Surappa (2012): Microstructure and Compression Behaviour of Chip Consolidated Magnesium, **JMR**, 27 (4), pp. 709-719.
- 114) Parag Ahmedabadi, V. Kain, K. Arora, I. Samajdar, S.C. Sharma, S. Ravindra, P. Bhagwat (2011): Radiation-induced Segregation in Austenitic Stainless Steel Type 304: Effect of High Fraction of Twin Boundaries, **MSEA**, A528, pp. 7541-7551.
- Parag Ahmedabadi, V. Kain, K. Arora, I. Samajdar, S. Sharma and P. Bhagwat (2011): Radiation-Induced Segregation in Desensitized Type 304 Austenitic Stainless Steel, **JNM**, 414, pp. 335-344.

- Parag Ahmedabadi, Vivekanand Kain, Manu Gupta, I. Samajdar, S.C. Sharma, P. Bhagwat, R. Chowdhury (2011): The Role of Niobium Carbide in Radiation Induced Segregation Behaviour of type 347 Austenitic Stainless Steel, **JNM**, 415, pp. 123-131.
- 117) K. V. Mani Krishna, D. Srivastava, G. K. Dey, V. Hiwarkar, I. Samajdar and N. Saibaba (2011): Comparative study of methods of the determination of Kearns Parameter in Zirconium, **JNM**, 414, pp. 492-497.
- 118) K.V. Mani Krishna, D. Srivastavaa, G.K. Dey, V. Hiwarkar, I. Samjadar and S. Banerjee (2011): Role of Grain/Phase Boundary Nature on the Formation of Hydrides in Zirconium Alloys, **JNM**, 414, pp. 270-275.
- 119) Dipti Ranjan Mohapatra, L. Jain, Padmnabh Rai, K. S. Hazra, I. Samajdar and D. S. Misra (2011): Development of Crystallographic Texture and in-grain Misorientation in Chemical Vapor Deposited Singles and Polycrystalline Diamond, **CVD**, 17, pp. 107-113.
- 120) S. Raveendra, A. K. Kanjarla, H. Paranjape, S.K. Mishra, S. Mishra, L. Delannay, I. Samajdar and P. Van Houtte (2011): Strain Mode Dependence of Deformation Texture Developments: Microstructural Origin, **MMTA**, 42A, pp. 2113-2124.
- 121) R. Khatirkar, K. V. Mani Krishna, L.A.I. Kestens, R. Petrov, P. Pant and I. Samajdar (2011): Strain Localizations in Ultra Low Carbon Steel: Exploring the Role of Dislocations, **ISIJ Intl.**, Vol.51(2011), No.5, pp. 849-856.
- 122) V.D. Hiwarkar, S.K. Sahoo, I. Samajdar, A. Satpathy, K. V. Mani krishna, G.K. Dey, D. Srivastava, R. Tewari, S. Banarjee (2011): Defining Recrystallization in Pilgered Zircaloy-4: From Preferred Nucleation to Growth Inhibition, **JNM**, 412, pp. 287-293.
- 123) P. Ahmedabadi, V. Kain, K. Arora and I. Samajdar (2011): Effect of Residual Strain on Radiation Induced Segregation in SS 304, **Corr. Sci.**, 53, pp. 1465-1475.
- 124) Santidan Biswas, Indradev Samajdar, Arunansu Haldar and Anirban Sain (2011): Phase field model with orientation field for coarsening in polycrystalline material, **J. Phys.: Condens. Matter**, 23, 072202 (5pp).
- 125) N.T. Kumbhar, S.K. Sahoo, I. Samajdar, G.K. Dey, K. Bhanumurthy (2011): Microstructure and Microtextural Studies of Friction Stir Welded Aluminium Alloy 505, **Mater. & Design**, 32, pp. 1657-1666.
- 126) A.K. Mukhopadhyay, A. Kumar, S. Raveendra, I. Samajdar (2011): Development of Grain Structure During Superplastic Deformation of an Al-Zn-Mg-Cu-Zr Alloy Containing Sc, **Scripta Mater.**, 64, pp. 386-389.
- 127) S. Majumdar, I. G. Sharma, I. Samajdar and P. Bhargava (2010): Preparation of Mo-Ti-Zr-C alloy tube by P/M route, **J. Nucl. Design**, 240, pp. 975-979.
- 128) A. Sarkar, J.K. Chakravartty, I. Samajdar (2010): The Avrami kinetics of dynamic recrystallization in Cadmium, **MMTA**, 41A, pp. 2466-2470.
- 129) T. Karthikeyan, Arup Dasgupta, R. Khatirkar, S. Saroja, I. Samajdar and M. Vijayalakshmi (2010): Effect of cooling rate on transformation texture and variant selection during $\beta \rightarrow \alpha$ transformation in Ti–5Ta–1.8Nb alloy, **MSEA**, A528, pp. 540-558.
- 130) S. K. Sahoo, V.D. Hiwarkar, L. Jain, I. Samajdar, P. Pant, G. K. Dey, D. Srivastav, R. Tewari and S. Banerjee (2010): Deformed Microstructures of Two-Phase Zr-2.5Nb Alloy: Effects of the Second Phase Hardness, **JNM**, 404, pp. 222-230.
- 131) A. Albou, S. Raveendra, P. Karajagikar, I. Samajdar, C. Maurice and J.H. Driver (2010): Direct correlation of deformation microstructures and cube recrystallization nucleation in aluminium, **Scripta Mater.**, 62, pp. 469-472.

- 132) K. V. Mani Krishna, P. Tripathi, V.D. Hiwarkar, P. Pant, I. Samajdar, D. Srivastava and G.K.Dey (2010): Automated Reconstruction of Pre-Transformation Microstructures in Zirconium, **Scripta Mater.**, 62, pp.391-394.
- 133) S. K. Sahoo, V.D. Hiwarkar, K.V. Mani Krishna,I. Samajdar, P. Pant, P.K. Pujari, G.K. Dey, D. Srivastav, R. Tiwari and S. Banerjee (2010): Grain Fragmentation and Twinning in Deformed Zircaloy 2: Response to Positron Lifetime Measurements, **MSEA**, A527, pp. 1427-1435.
- 134) S. K. Sahoo, V.D. Hiwarkar, I. Samajdar, P. Pant, G. K. Dey, D. Srivastav, R. Tewari and S. Banerjee (2010): Deformation Twinning in Zircaloy 2, **MST**, 26, pp. 104-114.
- T. Karthikeyan, V. Thomas Paul, S. Mishra, S. Saroja, M. Vijayalakshmi and I. Samajdar (2009): Effect of Thermomechanical Treatment on the Grain Boundary Character Distribution in a 9Cr-1Mo Ferritic steel, **MMTA**, 40A, pp. 2030-2032.
- R. Kaul, N. Parvathavarthini, P. Ganesh, Sweta V. Mulki, I. Samajdar, R. K. Dayal and L. M. Kukreja (2009): A New Surface Treatment for Enhanced Inter-granular Corrosion Resistance of Austenitic Stainless Steel Weldment, **Welding J**, 88, pp. 233s-242s.
- N. Parvathavarthini, R.K.Dayal, Baldev Raj, S.Mulki, I.Samajdar and K.V.Mani (2009): Sensitization Control in AISI 316L(N) Austenitic Stainless Steel: Defining the Role of Grain Boundary Nature, **Corr. Sci.**, 51, pp. 2144-2150.
- 138) S. K. Sahoo, V.D. Hiwarkar, A. Majumdar, I. Samajdar, P. Pant, G. K. Dey, D. Srivastav, R. Tiwari and S. Banerjee (2009): Presence and Absence of Significant Twinning: Effects on Cold Deformed Microstructures of Single Phase Zircaloy 2, **MSEA**, A518, 47-55.
- 139) V.D. Hiwarkar, S.K. Sahoo, K. V. Mani krishna, I. Samajdar, G.K.Dey, D. Srivastav, R. Tewari, S. Banarjee and R.D. Doherty (2009): Coarsening of Second Phase in a Two-Phase Zr-2.5 Nb: On the Role of Phase Boundaries, **Acta Mater**, 57, pp. 5812-5821.
- 140) S. Mulki, P. K. Pujari, D. Srivastava, I. Samajdar, G. K. Dey and S. Sharma (2009): Study on secondary phase precipitate behavior in Zircaloy-2 by positron annihilation spectroscopy, **Phys. Status Solidi**, C6(11), pp. 2370–2372.
- 141) S. Mulki, P. K. Pujari, D. Srivastava, I. Samajdar, G. K. Dey, V.D. Hiwarkar and S. Sharma (2009): Positron annihilation study of recrystallization behaviour in Zr2.5%Nb alloy, **Phys. Status Solidi**, C6(11), pp. 2352–2354.
- S.Raveendra, H. Paranjape, S. Mishra, H. Weiland, R.D. Doherty and I. Samajdar (2009): Relative Stability of Deformed Cube in Warm and Hot Deformed AA6022: Possible Role of Strain Induced Boundary Migration, **MMTA**, 40A, pp. 2220-2230.
- 143) Bikas C. Maji, Madangopal Krishnan, Vijay Hiwarkar, Indradev Samajdar, and R.K. Ray (2009): Development of Texture and Microstructure During Cold Rolling and Annealing of a Fe-Based Shape Memory Alloy, **ASME J. Mater. Engg. & Performance**, 18, pp. 588-593.
- 144) Lakshmikanta Aditya, J. Nanda, I. Samajdar, N. Venkataramani and Shiva Prasad (2009): Correlation of grain boundary nature with magnetization in RF sputtered lithium-zinc ferrite thin films, **JMMM**, 321, pp. 3373-3379.
- 145) S. Majumdar, I.G. Sharma, S. Ravindra, I. Samajdar and P. Bhargava (2009): Densification and Grain Growth during Isothermal Sintering of Mo and Mechanically Alloyed Mo-TZM, **Acta Mater.**, 57, pp. 4158-4168.
- 146) S. K. Mishra, Sharvari G. Desai, Prita Pant, K. Narasimhan and I. Samajdar (2009): Improved predictability of forming limit curves through microstructural inputs, **Intl. J. Metal. Form.**, 2, pp. 59-67.

- 147) S.K. Mishra, P. Pant, K. Narasimhan, A.D. Rollett and I. Samajdar (2009): On the Widths of Orientation Gradient Zones Adjacent to Grain Boundaries, **Scripta Mater.**, 61, pp. 273-276.
- 148) R. Kapoor, B. Paul, S. Raveendra, I. Samajdar and J. K. Chakravartty (2009): Aspects of dynamic recrystallization in cobalt at high temperatures, **MMTA**, 40A, pp 818-827.
- S. Majumdar, I.G. Sharma, S. Ravindra, I. Samajdar, P. Bhargava and R. Tewari (2009): A study on preparation of Mo–0.6Ti–0.2Zr–0.02C alloy by mechanical alloying and hot isostatic pressing, and its characterization, **Mater. Chem. Phy.**, 113, pp 562-566.
- 150) S. Majumdar, I.G. Sharma, I. Samajdar, and P. Bhargava (2008): Kinetic Studies on Hydrogen Reduction of MoO₃ and Morphological Analysis of Reduced Mo Powder, **MMTB**, 39B, pp 431-438.
- 151) S. Majumdar, R. Kapoor, S. Raveendra, H. Sinha, I. Samajdar, P. Bhargava, J.K. Chakravartty, I.G. Sharma and A.K. Suri (2009): A study of hot deformation behavior and microstructural characterization of Mo-TZM alloy, **JNM**, 385, pp 545-551.
- 152) R. Khatirkar, L.A.I. Kestens, R. Petrov and I. Samajdar (2009): Controlled Warm Working: Possible Tool for Optimizing Stored Energy Advantage in Deformed □-fiber (ND//<111>), **ISIJ Intl.**, 49, pp. 78-85.
- 153) V.D. Hiwarkar, S.K. Sahoo, I. Samajdar, K. Narasimhan, K. V. Mani krishna, G.K. Dey, D. Srivastav R. Tewari and S. Banerjee (2009): Annealing of Cold Worked Two-Phase Zr-2.5 Nb Associated Microstructural Developments, **JNM**, 384, pp 30-37.
- 154) Sanjib Majumdar, Indrakumar Sharma, Indradev Samajdar and Parag Bhargava (2008): Relationship Between Pack Chemistry and Growth of Silicide Coatings on Mo–TZM Alloy, **J. ElectroChem. Soc.**, 155(12), pp. D734-D741.
- 155) K.V. Mani Krishna, S. K. Sahoo, I. Samajdar, S. Neogy, R. Tewari, D. Srivastava, G.K. Dey, Gaur Hari Das and N. Saibaba (2008): Microstructural and Textural Developments During Zircaloy-4 Fuel Tube Fabrication, **JNM**, 383, pp 78-85.
- 156) S.Raveendra, S. Mishra, K.V. Mani, H. Weiland, and I Samajdar (2008): Patterns of Recrystallization in Warm/Hot Deformed AA6022, MMTA, 39A, pp 2760-2771.
- 157) S. Majumdar, I. G. Sharma, S. Raveendra, I. Samajdar and P. Bhargava (2008): In-situ chemical vapour co-deposition of Al and Si to form diffusion coatings on TZM, MSEA, A493, pp 411-417.
- 158) N. Parvathavarthini, R.K. Dayal, Rakesh Kaul, P.Ganesh, Jai Khare, A.K. Nath, S.K. Mishra, I. Samajdar (2008): A Novel Laser Surface Treatment Approach to Suppress Sensitization in Modified Type 316(N) Stainless Steel Weld Metal, **Sci. Tech. Welding Joining**, 13, pp. 335-343.
- 159) Sumantra Mandal, S. K. Mishra, Anish Kumar, I. Samajdar, P.V. Sivaprasad, T. Jayakumar and Baldev Raj (2008): Evolution and Characterization of Dynamically Recrystallized Microstructure in a Titanium Modified Austenitic Stainless Steel using Ultrasonic and EBSD Techniques, **Phil. Mag.**, 88, pp 883-897.
- 160) V. Pancholi, Madangopal Krishnan, I. Samajdar, V. Yadav, N.B. Ballal (2008): Self Accommodation in the Bainitic Microstructure of Ultra High Strength Steel, **Acta Mater.**, 55, pp. 2037-2050.
- 161) T. Karthikeyan, Arup Dasgupta, S. Saroja, R. Khatirkar, M. Vijayalakshmi and I. Samajdar (2008): Study of texture and microtexture during β to α + β transformation in a Ti–5Ta–1.8Nb alloy, **MSEA**, A485, pp 581-588.

- 162) Lakshmikanta Aditya, A. Srivastava1, S. K. Sahoo, P. Das, C. Mukherjee, Abha Misra, V. R. Reddy, R. S. Shinde, Ajay Gupta, Shiva Prasad, I. Samajdar, R. V. Nandedkar, and N. Venkataramani (2008): Growth of Textured Nanocrystalline Cobalt Ferrite Thin Films by Pulsed Laser Deposition, J. NanoSci. & NanoTech., 8, pp. 1-6.
- 163) S. Mishra, K. Narasimhan and I. Samajdar (2007): Deformation Twinning in AISI 316L Austenitic Stainless Steel Role of Strain and Strain Path, **MST**, 23, pp. 1118-1126.
- 164) A. Chaudhury, R. Khatirkar, N.N. Viswanathan, V. Single, A. Ingle, S. Joshi and I. Samajdar (2007): Low-Silicon Non-Grain-Oriented Electrical Steel: Linking Magnetic Properties with Metallurgical Factors, **JMMM**, 313, 21-28.
- 165) S. K. Sahoo, V.D. Hiwarkar, I. Samajdar, G. K. Dey, D. Srivastav, R. Tiwari & S. Banerjee (2007): Heterogeneous Deformation in Single Phase Zircaloy 2, **Scripta Mater.**, 56, pp. 963-966.
- V. Pancholi, D. Mallick, Ch. AppaRao, I. Samajdar, O. P. Chakrabarti, H.S.Maiti and R. Majamdar (2007): Microstructural characterization using orientation imaging microscopy of cellular Si/SiC ceramics synthesized by replication of Indian dicotyledonous plants, **J. Eur. Cer. Soc.**, <u>27</u>, pp. 367-376.
- 167) P.K. Patro, R. Khatirkar, I. Samajdar, A.R. Kulkarni and C.S. Harendranath (2007): Strontium Barium Niobate Relating Structural Developments and Dielectric Constant, **J. Eur. Cer. Soc.**, <u>27</u>, pp. 2255-2263.
- 168) A. Mishra, P.K. Tyagi, B.S. Yadav, P. Rai, D.S. Mishra, V. Pancholi, I. Samajdar (2006): Hexagonal diamond synthesis on h-GaN strained films, **Appl. Phys. Lett.**, 89 (7-071911), pp. 1-3.
- 169) K.V. Mani Krishna, A. Sain, I. Samajdar, G.K. Dey, D. Srivastava, S. Neogi, R. Tiwari and S. Banerjee (2006): Resistance to Hydride Formation in Zirconium: An Emerging Possiblity, **Acta Mater.**, <u>54</u>, pp.2665-2675.
- 170) M. Kiran Kumar, C. Vanitha, I. Samajdar, G.K. Dey, R. Tewari, D. Srivastava, S. Banerjee (2006): Deformation Texture and Microtexture Developments in a Cold Rolled Single Phase Hexagonal Zircaloy 2, **MST**, <u>22</u> (3), pp. 331-342.
- 171) R. Bauri, V. Pancholi, I. Samajdar, M.K. Surappa (2005): Relating Microtexture and Dynamic Microhardness in an extruded AA8090 Ally and AA8090-8 vol% SiC_P Composite, **Sci. Tech. Adv. Mater.**, <u>6</u>, pp. 933-938.
- 172) M. Kiran Kumar, C. Vanitha, I. Samajdar, G.K. Dey, R. Tewari, D. Srivastava, S. Banerjee (2004): Textural and microstructural developments during fabrication of Zr–2.5Nb pressure tubes, **JNM**, <u>335</u>, pp. 35-58.
- 173) M. R. Suresh, M. Kiran Kumar, P. Ravindran, I. Samajdar, P. P. Sinha, N. B. Ballal and P. Krishna Rao (2004): Relative anisotropy of structures and ultrasound attenuation response between laboratory casting in permanent mould (vacuum induction melted) and casting processed through electroslag refining, **Ironmaking & Steelmaking**, 31 (4), pp. 1-8.
- 174) S. K. Yerra, H. V. Vankudre, P. P. Date and I. Samajdar (2004): Effect of Strain Path on the Formability of a Low Carbon Steel on the Textural and Microtextural developments, **ASME Trans. Journal of Engineering Materials & Technology**, <u>126</u>, pp. 53-61.
- 175) M.R. Suresh, I. Samajdar, A. Ingle, N.B. Ballal, P.K. Rao and P.P. Sinha (2003): Role of Hardening/Tempering on the Microstructure/Property Development in a New Ultra High Strength Medium Carbon Low alloy Steel, **Ironmaking & Steelmaking**, 30 (5), pp. 379-384.

- 176) D. N. Wasnik, I. K. Gopalkrishnan, J. V. Yakhami, V. Kain, and I. Samajdar (2003): Cold Rolled Texture and Microstructure in Types 304 and 316L Austenitic Stainless Steels, **ISIJ Intl.**, 43 (10), pp. 1581-1589.
- 177) R. PremKumar, I. Samajdar, N. N. Viswanathan, V. Singal and V. Seshadri (2003): Relative Effect(s) of Texture and Grain Size on Magnetic Properties in a Low Silicon Non Grain Oriented Electrical Steel, **JMMM**, 264, pp. 75-85.
- 178) D. N. Wasnik, V. Kain, I. Samajdar, B. Verlinden and P. K. De (2003): Large Random Boundary Concentration An Effective way of Improving Inter-granular Stress Corrosion Cracking, **JMEPEG**, <u>12</u> (4), pp. 402-407.
- 179) D. N. Wasnik, G.K. Dey, V. Kain, and I. Samajdar (2003): Precipitation Stages in a 316L Austenitic Stainless Steel, **Scripta Mater.**, <u>49</u> (2), pp. 135-141.
- 180) M. Kiran Kumar, I. Samajdar, N. Venkatramani, G.K. Dey, R. Tewari, D. Srivastava and S. Banerjee (2003): Explaining Absence of Texture Developments in Two-Phase Zr-2.5 wt% Nb alloy, **Acta Mater.**, <u>51</u> (3), pp. 625-640.
- 181) D.N. Wasnik, V. Kain, I. Samajdar, B. Verlinden and P.K. De (2002): Resistance to Sensitization and Intergranular Corrosion Through Extreme Randomization of Grain Boundaries, **Acta Mater.**, <u>50</u> (18), pp. 4587-4601.
- Mrugesh Desai, Shiva Prasad, N. Venkataramani, Indradev Samajdar, A. K. Nigam, and R. Krishnan (2002): Cubic Phase Stabilization in Sputter-Deposited Nanocrystalline Copper Ferrite Thin Films With Large Magnetization, **IEEE Trans. Magnetics**, <u>38</u> (5), pp. 3012-3014.
- 183) M. Desai, S. Prasad, N. Venkataramani, Indradev Samajdar, A.K. Nigam, N. Keller, R. Krishnan, E.M. Baggio-Saitovitch, B.R. Pujada and A. Rosi (2002): Anomalous variation of coercivity with annealing in nanocrystalline NiZn ferrite films, **J. Appl. Phys.**, <u>91</u> (10), pp 7592-7594.
- 184) H.V. Vankudre, P.P. Date, I. Samajdar and S.K. Yerra (2002): Effect of in-plane biaxial strain paths on the variation of normal anisotropy and texture of steel sheet, **J. Mater. Process. Tech.**, <u>125-126</u>, pp. 756-763.
- 185) S.Cicalè, I. Samajdar, B. Verlinden, G. Abbruzzese and P. Van Houtte (2002): Development of Cold Rolled Texture and Microstructure In a Hot Band Fe-3% Si Steel, **ISIJ Int.**, 42 (7), pp 770-778.
- 186) Mrugesh Desai, Shiva Prasad, N. Venkataramani, Indradev Samajdar, A. K. Nigam and R. Krishnan (2002): Enhanced magnetization in sputter-deposited copper ferrite thin films, **JMMM**, <u>246</u> (1-2), pp. 266-269.
- 187) Mrugesh Desai, Shiva Prasad, N. Venkataramani, Indradev Samajdar, A. K. Nigam, R. Krishnan (2002): Annealing induced structural change in sputter deposited copper ferrite thin films and its impact on magnetic properties, **J. Appl. Phys.**, 91 (4), pp 2220-2227.
- 188) I. Samajdar, A. Ingle, A.K. Shah and V.P. Deshmukh (2001): The Different Shapes of Second-Phase Particles in Fe-TiC Metal Matrix Composites Formed by Combustion Casting, **Int. J. SHS**, <u>4</u> (10), pp. 463-476.
- 189) V.M. Nandedkar, I. Samajdar and K. Narashiman (2001): Development of grain interior strain localizations during plane strain deformation of a deep drawing quality steel, **ISIJ Int.**, <u>41</u> (12), pp 1517-1523.
- 190) R. Rajeev, I. Samajdar, R. Raman, C.S. Harendranath and G.V. Kale (2001): Microstructural Origin of Hard and Soft Zone Formation during cladding of austenitic stainless steel on plain carbon steel, **MST**, 17 (8), pp 1005-1011.

- 191) Mrugesh Desai, J. Dash, Indradev Samajdar, N. Venkataramani, Shiva Prasad, Pran Kishan, Nitendar Kumar (2001): A TEM study on lithium zinc ferrite thin flms and the microstructure correlation with the magnetic properties, **JMMM**, 231, pp 108-112.
- 192) I. Samajdar, P. Ratchev, B. Verlinden and E. Aernoudt (2001): Hot Working of AA1050 Relating the Microstructural and Textural Developments, **Acta Mater.**, 49, pp 1759-1769.
- 193) Nisha Preschilla, A.S. Major, Nigvendra Kumar, I. Samajdar and R.S. Srinivasa (2000): Nanocrystalline Gallium Nitride thin films, **Appl. Phys. Lett.**, <u>77</u>, pp 1861-1863.
- 194) I. Samajdar, B. Verlinden, P. Watte and F. Mertens (1999): Secondary Recrystallization in Non-Sag W filament wires On the Possible Role of Relative Grain Boundary Character Distribution, **Scripta Mater.**, 40 (11), pp 1263-1268.
- 195) I. Samajdar, B. Verlinden, L. Rabet and P. Van Houtte (1999): Recrystallization Textures in a Cold Rolled Commercial Purity Aluminum:-An Effort to Define the Probable Macro and Micro Mechanisms Involved, **MSEA**, <u>A266</u>, pp 146-154.
- 196) L. Delannay, P. Van Houtte and I. Samajdar (1999): Modelling of the Microscopic Strain Heterogenity during Cold Rolling of Steel Sheet. Prediction of the Deformation Texture, **J. Phys. IV France**, <u>Pr9</u>, pp 43-52.
- 197) P. Van Houtte, L. Delannay and I. Samajdar (1999): Quantitative Prediction of Cold Rolling Textures in Low-Carbon Steels by Means of Lamel-Model, **Tex. & Micro.**, <u>31</u>, pp 109-149.
- 198) I. Samajdar, E. Girault, B. Verlinden, E. Aernoudt and J. Van Humbeeck (1999): Transformations during Intercritical Annealing of a Tripassisted Steel, **ISIJ Int.**, 38 (9), pp 998-1006.
- 199) I. Samajdar, B. Verlinden, L. Kestens and P. Van Houtte (1999): Physical Parameters Related to the Developments of Recrystallization Texture of a Ultra Low Carbon steel, **Acta Mater.**, <u>47</u> (1), pp 55-65.
- 200) Roger D. Doherty, Li Chun Chen and Indradev Samajdar (1998): Cube Recrystallization Texture Experimental Results and Modeling, **MSEA**, <u>A257</u>, pp 18-36.
- 201) J. Proost, I. Samajdar, B. Verlinden, P. Van Houtte, K. Maex and L. Delaey (1998): The role of grain boundary structure on electromigration induced drift in pure Al and Al (0.5 wt% Cu), **Scripta Mater.**, <u>39</u> (8), pp 1039-1045.
- 202) I. Samajdar, S. Cicale, B. Verlinden, P. Van Houtte and G. Abbruzzesse (1998): Primary Recrystallization in a Grain Oriented Si-Steel: on the Origin of Goss {110}<001> Grains, **Scripta Mater.**, <u>39</u>(8), pp 1083-1088.
- 203) I. Samajdar, P. Ratchev, B. Verlinden, P. Van Houtte and P. De Smet (1998): Dislocation Cell Formation and Hot Ductility in Al-Mg alloys, **MSEA**, <u>A247</u>, pp 58-66.
- 204) N.R.M.R. Bhargava, I. Samajdar, S. Ranganathan and M.K. Surappa (1998): Role of SiCp reinforcements and trace elements on the β'/β precipitation in Al-10Mg alloy, **Met. Trans.**, 29A, pp 2835-2842.
- 205) I. Samajdar, L. Rabet, B. Verlinden and P. Van Houtte (1998): An Investigation on Grain Growth in a commercial Al-Mg alloy, **Tex. & Micro.**, <u>30</u>, pp 191-206.
- 206) Indradev Samajdar and R.D. Doherty (1998): Cube recrystallization texture in warm deformed aluminum, **Acta Mater.**, <u>46</u> (9), pp 3145-3158.

- 207) I. Samajdar, P. Ratchev, B. Verlinden and D. Schryvers (1998): Recrystallization and Grain Growth in a B2 Iron Aluminide Alloy, **Intermetallics**, 6, pp 419-425.
- 208) I. Samajdar, B. Verlinden and P. Van Houtte (1998): Channel die compression of IF steel: Developments in Macro and Micro Texture, **ISIJ Int.**, 38 (7), pp 759-763.
- 209) I. Samajdar, B. Verlinden, and P. Van Houtte (1998): Development of Recrystallization texture in IF-steel: An Effort to Explain Developments In Global Texture From Microtextural Studies, **Acta Mater.**, 46 (8), pp 2751-2763.
- 210) S. Saravaanan, I. Samajdar and M.K. Surappa (1998): Microstructural characterization of the subsurface plastic zone formed during erosion of A356 Al alloy and Composites, **Wear**, 215, pp 223-231.
- 211) I. Samajdar, L. Rabet, B. Verlinden and P. Van Houtte (1998), The Relative Contribution of Different Nucleation Sources to Recrystallization Textures of a Cold Rolled Aluminum-Magnesium alloy, **ISIJ Int.**, <u>38</u> (6), pp 539-546.
- 212) B. Dutta, I. Samajdar and M.K. Surappa (1998): Particle redistribution and matrix microstructure evolution during hot extrusion of cast SiCp reinforced Aluminum matrix composites, **MST**, <u>14</u> (1), pp 36-46.
- 213) I. Samajdar, B. Verlinden, P. Van Houtte and D. Vanderschueren (1997): □-fiber recrystallization texture in IF-steel: An investigation on the recrystallization Mechanisms, **MSEA**, <u>A238</u>, pp 343-350.
- 214) I. Samajdar, B. Verlinden and P. Van Houtte (1997): Textural Changes through Grain Growth in Ti-bearing IF-Steel, Investigated by Orientation Imaging Microscopy and X-ray Diffraction, **ISIJ Int.**, 37 (10), pp 1010-1015.
- 215) I. Samajdar, B. Verlinden, P. Van Houtte and D. Vanderschueren (1997): Recrystallization Kinetics in IF steel: A study on the sluggish recrystallization behavior, **Scripta Mater.**, <u>37</u> (6), pp 869-874.
- 216) Indradev Samajdar and R.D. Doherty (1995): Role of S orientations in preferred nucleation of cube, **Scripta Metall. & Mater.**, <u>32</u> (6), pp 845-850.
- 217) Indradev Samajdar and R.D. Doherty (1994): Grain boundary misorientation in dc-cast aluminum alloy, **Scripta Metall. & Mater.**, <u>31</u> (5), pp 527-530.
- 218) R.D. Doherty, I. Samajdar and K. Kunze (1992): Orientation Imaging Microscopy, Scripta Metall. & Mater., 27 (11), pp 1459-1464.
- 219) Indradev Samajdar and S.K. Varma (1991): The effect of Wire drawing speed on the dislocation cell size and yield strength in pure aluminum, MSEA, A141, pp L1-L3.