

PUBLICATIONS LIST

Mark Aindow

Papers in Refereed Journals

1. Hexagonal Crystallography and Interphase Boundary Dislocations, RC Pond, M Aindow, WAT Clark, *Scripta Metall* **21**: 971-974 (1987). [doi: 10.1016/0036-9748(87)90136-0]
2. Interfacial Structure in Heteroepitaxial Silicon-on-Sapphire, M Aindow, *J Am Ceram Soc* **73**: 1136-1143 (1990). [doi: 10.1111/j.1151-2916.1990.tb05169.x]
3. Influence of Stoichiometry and Purity on the Deformation Mechanisms in the Intermetallic Compound TiAl, M Aindow, K Chaudhuri, S Das, HL Fraser, *Scripta Metall* **24**: 1105-1108 (1990). [doi: 10.1016/0956-716X(90)90307-3]
4. On the Extension of Substrate Dislocations into Heteroepitaxial Deposits, M Aindow, *Phil Mag Lett* **62**: 139-141 (1990). [doi: 10.1080/09500839008215050]
5. Threading Dislocations in CVD β -SiC on (001) Si, TT Cheng, M Aindow, *Phil Mag Lett* **62**: 239-246 (1990). [doi: 10.1080/09500839008215129]
6. On the Shape of Edge Dislocation Loops In β -NiAl, M Aindow, A Parthasarathi, HL Fraser, *Phil Mag Lett* **62**: 317-322 (1990). [doi: 10.1080/09500839008215151]
7. On Epitaxial Misorientations, M Aindow, RC Pond, *Phil Mag A* **63**: 667-694 (1991). [doi: 10.1080/01418619108213907]
8. Concerning Dissociation of Grown-in Dislocations in Melt Spun Ribbons of the Intermetallic Compound Nb₃Al, M Aindow, J Shyue, TA Gaspar, HL Fraser, *Phil Mag Lett* **64**: 59-65 (1991). [doi: 10.1080/09500839108214667]
9. Use of Ferrofluids to obtain Magnetic Domain Images in AFM, M Aindow, AJ Williams, IR Harris, *J Micros Res Tech* **23**: 98-99 (1992). [doi: 10.1002/jemt.1070230109]
10. The Use of Electrochemical Scanning Tunneling Microscopy to Study the Initial Stages of Electrodeposition *in Situ*; Overpotential Deposition of Pb and Pt on HOPG, M Aindow, JPG Farr, *Trans Inst Met Fin* **70**: 171-176 (1992).
11. Microscopic Studies of YBCO Single Crystals, A Drake, M Aindow, Y Feng, JS Abell, *J Cryst Growth* **128**: 762-766 (1993). [doi: 10.1016/S0022-0248(07)80040-6]
12. Deformation Mechanisms in Intermetallic Compounds Based on Nb₃Al, J Shyue, D-H Hou, M Aindow, HL Fraser, *Mat Sci Eng A* **170**: 1-10 (1993). [doi:10.1016/0921-5093(93)90363-J]
13. Geometry and Interface Structure of Island Nuclei for GaSb Buffer Layers Grown on (001) GaAs by MOVPE, M Aindow, TT Cheng, NJ Mason, TY Seong, PJ Walker, *J Cryst Growth* **133**: 168-174 (1993). [doi: 10.1016/0022-0248(93)90117-F]
14. HREM Study of the Ionic Conductor Strontium Lithium β -Alumina, TT Cheng, M Aindow, J Mayer, M Rühle, *Phil Mag B* **69**: 643-654 (1994). [doi: 10.1080/01418639408240134]
15. Analysis of the Dislocation Network at a Low-Angle Near-Twist Boundary in Zinc, I MacLaren, M Aindow, *Scripta Metall* **29**: 811-816 (1993). [doi: 10.1016/0956-716X(93)90232-H]

16. Observation of a Metastable B2 Phase in Rapidly Solidified Ribbons of Nb-Al Alloys, H Kohmoto, J Shyue, M Aindow, HL Fraser, *Scripta Metall* **29**: 1271-1274 (1993). [doi: 10.1016/0956-716X(93)90122-9]
17. Influence of Substrate Surface Preparation on the Microstructure of CdTe Grown on (001) GaAs by MOCVD, TT Cheng, M Aindow, IP Jones, JE Hails, DJ Williams, MG Astles, *J Cryst Growth* **135**: 409-422 (1994). [doi: 10.1016/0022-0248(94)90129-5]
18. On the Origins of “Forbidden” 100-Type Spots in Electron Diffraction Patterns from the A15 compounds Nb₃Al, Cr₃Si and V₃Si, M Aindow, LS Smith, J Shyue, MH Loretto, HL Fraser, *Phil Mag Lett* **69**: 23-30 (1994). [doi: 10.1080/09500839408242433]
19. The Origins of Growth Spirals on Laser-Ablated YBa₂Cu₃O_{7-δ} Thin Films, M Aindow, M Yeadon, *Phil Mag Lett* **70**: 47-53 (1994). [doi: 10.1080/09500839408243870]
20. Development of Anisotropic Microtwin Distributions in GaAs Grown on 4°-off (001) Si by MBE, XL Wei, M Aindow, *Appl Phys Lett* **65**: 1903-1905 (1994). [doi: 10.1063/1.112834]
21. Microstructures and Properties of Laser-Ablated Epitaxial YBa₂Cu₃O_{7-δ} Thin Films for Device Applications, M Yeadon, M Aindow, F Wellhöfer, JS Abell, B Avenhaus, MJ Lancaster, P Woodall, *IEEE Trans Appl Supercon* **5**: 1214-1217 (1995). [doi: 10.1109/77.402780]
22. Formation and Microstructural Development of TiSi₂ in (111)Si by Ti Ion Implantation and Annealing at 950°C, S Jin, M Aindow, Z Zhang, LJ Chen, *J Mater Res* **10**: 891-899 (1995). [doi: 10.1557/JMR.1995.0891]
23. A Study of the Surface Cross-Hatch and Misfit Dislocation Structure in In_{0.15}Ga_{0.85}As/GaAs Grown by Chemical Beam Epitaxy, R Beanland, M Aindow, TB Joyce, P Kidd, M Lourenço, PJ Goodhew, *J Cryst Growth* **149**:1-11 (1995). [doi: 10.1016/0022-0248(94)00669-5]
24. The Effects of Low Power Plasma Treatment on Polyethylene Surfaces, S O’Kell, T Henshaw, G Farrow, M Aindow, C Jones, *Surf Inter Anal* **23**: 319-327 (1995). [doi: 10.1002/sia.740230508]
25. Annealing Twins in Dilute Al-Mn-Si Alloys, RL Higginson, M Aindow, PS Bate, *Phil Mag Lett* **72**: 193-198 (1995). [doi: 10.1080/09500839508242451]
26. The Role of the Initial Nucleation Stage in Microstructural Development for CdTe Grown on Heat-Cleaned 2°-off (001)GaAs by Metalorganic Chemical Vapour Deposition, TT Cheng, M Aindow, IP Jones, JE Hails, DJ Williams, *J Cryst Growth* **154**: 251-261 (1995). [doi: 10.1016/0022-0248(95)00117-4]
27. A Study of the Pd/HOPG Electrodeposition System by *In Situ* Electrochemical STM, XQ Tong, M Aindow, JPG Farr, *J Electroan Chem* **395**: 117-126 (1995). [doi: 10.1016/0022-0728(95)04081-X]
28. The Application of Pettifor Structure Maps to Ternary Additions in Nb₃Al-Based Alloys, LS Smith, DK Tappin, M Aindow, *Scripta Metall Mater* **34**: 227-234 (1996). [doi: 10.1016/1359-6462(95)00512-9]
29. Instrumental Effects on *in situ* Electrochemical STM Studies: an Investigation of a Current Surge-Induced Pd Deposit on HOPG, XQ Tong, M Aindow, JPG Farr, *Micros Res Tech* **34**: 87-95 (1996). [doi: 10.1002/(SICI)1097-0029(19960501)34:1<87::AID-JEMT12>3.0.CO;2-L]
30. Structure of a 12.29° Near-Tilt Grain Boundary in Titanium, I MacLaren, M Aindow, *Phil Mag Lett* **73**: 217-224 (1996). [doi: 10.1080/095008396180687]

31. The Precipitation and Migration of Point Defects in MOCVD $\text{Cd}_x\text{Hg}_{1-x}\text{Te}$, IP Jones, TT Cheng, M Aindow, J Gough, A Graham, J Geiss, *J Cryst Growth* **159**: 1096-1099 (1996). [doi: 10.1016/0022-0248(95)00682-6]
32. Hydrogen-Assisted Stable Crack Growth in Iron-3wt% Silicon Steel, TJ Marrow, M Aindow, P Prangnell, M Strangwood, JF Knott, *Acta Mater* **44**: 3125-3140 (1996). [doi: 10.1016/1359-6454(95)00429-7]
33. *In Situ* ECSPM Corrosion Studies on Duplex Stainless Steel in Aqueous NaCl Solutions, E Schmidt-Rieder, XQ Tong, JPG Farr, M Aindow, *Brit Corros J* **31**: 139-145 (1996).
34. Stacking Fault Energy in the C15 Laves Phase Cr_2Nb , AV Kazantzis, M Aindow, IP Jones, *Phil Mag Lett* **74**: 129-135 (1996). [doi: 10.1080/095008396180272]
35. Misfit Dislocations in Heteroepitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ on (001) MgO , M Aindow, DJ Norris, TT Cheng, *Phil Mag Lett* **74**: 267-272 (1996). [doi: 10.1080/095008396180218]
36. Structural Imaging of Mechanically Alloyed Remanence-Enhanced $\text{Sm}_2\text{Fe}_{17}\text{N}_3/\alpha\text{-Fe}$, K O'Donnell, M Aindow, IR Harris, R Skomski, JMD Coey, *J Magn Magn Mater* **158**: 79-80 (1996). [doi: 10.1016/0304-8853(95)01157-9]
37. The Effects of Al Substitution on the Microstructure and Properties of Laser-Ablated Epitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Films on (001) MgO , M Yeadon, PJ Hirst, KR Locherer, J Chrosch, JS Abell, M Aindow, F Wellhöfer, E Salje, *Physica C* **274**: 117-124 (1997). [doi: 10.1016/S0921-4534(96)00656-9]
38. Topographical Development and Misfit Relief in Laser-Ablated Heteroepitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Thin Films, M Yeadon, M Aindow, F Wellhöfer, JS Abell, *J Cryst Growth* **172**: 145-155 (1997). [doi: 10.1016/S0022-0248(96)00723-3]
39. Re-Assessment of the Constrained CSL Model for Reference Structures in Vicinal High-Angle Grain Boundaries, I MacLaren, M Aindow, *Phil Mag Lett* **76**: 25-32 (1997). [doi: 10.1080/095008397179345]
40. Magnetic Noise in YBCO Thin Films and its Relationship to Growth Morphology, J Smithyman, CM Muirhead, M Aindow, F Wellhöfer, P Woodall, *IEEE Trans Appl Supercon* **7**: 1624-1627 (1997). [doi: 10.1109/77.620888]
41. The Effect of Finely-Dispersed Particles on Primary Recrystallisation Textures in Al-Mn-Si Alloys, RL Higginson, M Aindow, PS Bate, *Mat Sci Eng A* **225**: 9-21 (1997). [doi: 10.1016/S0925-8388(96)02782-X]
42. The Effect of Selected Process Parameters on Laser-Ablated YBCO Thin Films on SrTiO_3 Substrates, F Wellhöfer, P Woodall, DJ Norris, M Aindow, M Slaski, LG Earwaker, *J Alloy Compd* **251**: 123-128 (1997). [doi: 10.1016/S0925-8388(96)02782-X]
43. Mapping the Variations in Properties of Co-Deposited PLD Films of YBCO on MgO , P Woodall, F Wellhöfer, DJ Norris, M Aindow, LG Earwaker, *J Alloy Compd* **251**: 172-175 (1997). [doi: 10.1016/S0925-8388(96)02821-6]
44. Analysis of the Reference Structure Adopted by a Mixed Tilt/Twist Vicinal HAGB in Titanium, I MacLaren, M Aindow, *Phil Mag A* **76**: 871-888 (1997). [doi: 10.1080/01418619708214215]
45. Deformation Behaviour of the C15 Laves phase Cr_2Nb , AV Kazantzis, M Aindow, IP Jones, *Mat Sci Eng A* **233**: 44-49 (1997). [doi: 10.1016/S0921-5093(97)00047-6]

46. Microstructures and Deformation Behaviour in Nb/10-25at%Al/20-40at%V Alloys, DK Tappin, LS Smith, DN Horspool, M Aindow, *Acta Mater* **45**: 4923-4938 (1997). [doi: 10.1016/S1359-6454(97)00195-X]
47. The Effect of Substrate Off-Cut on the Properties of Epitaxial Thin Films of YBa₂Cu-O_{7-x} Grown by Pulsed Laser Deposition, F Wellhöfer, P Woodall, DJ Norris, S Johnson, D Vassiloyannis, M Aindow, M Slaski, CM Muirhead, *Appl Surf Sci* **127-129**: 525-530 (1998). [doi: 10.1016/S0169-4332(97)00698-3]
48. On the Orientation Relationships Between A15 Precipitates and the Nb-rich Matrix in Nb-Al(-X) Alloys, TS Rong, M Aindow, *Phil Mag Lett* **79**: 93-98 (1999). [doi: 10.1080/095008399177453]
49. Dislocation Processes During the Plastic Deformation of γ -TiAl, D Häussler, M Bartsch, M Aindow, IP Jones, U Messerschmidt, *Phil Mag A* **79**: 1045-1071 (1999). [doi: 10.1080/014186199252192]
50. On the Effect of Antiphase Domain Boundaries on ALCHEMI, N Jiang, TS Rong, IP Jones, M Aindow, *Phys Stat Sol* **214**: 237-243 (1999). [doi: 10.1002/(SICI)1521-3951(199908)214:2<237::AID-PSSB237>3.0.CO;2-L]
51. Self-Assembly of Size-Selected Colloidal Metal Clusters: Crystalline Descriptions of Non-Close-Packed Arrangements, M Aindow, SN Williams, RE Palmer, J Fink, CJ Kiely, *Phil Mag Lett* **79**: 569-574 (1999). [doi: 10.1080/095008399176940]
52. A High-Resolution Electron Microscopy Study of Steps on Lamellar γ/α_2 Interfaces in a Low Misfit TiAl-Based Alloy, P Shang, TT Cheng, M Aindow, *Phil Mag A* **79**: 2553-2575 (1999). [doi: 10.1080/014186199251517]
53. High-Resolution Electron Microscopy of Steps on Lamellar γ/α_2 Interfaces in a Ti – 44 at% Al – 8 at% Nb Alloy, P Shang, TT Cheng, M Aindow, *Phil Mag Lett* **80**: 1-10 (2000). [doi: 10.1080/095008300176399]
54. Orientational and Translational Ordering of Sub-Monolayer Films of Passivated Multiply Twinned Gold Clusters, A Wellner, PD Nellist, RE Palmer, M Aindow, JP Wilcoxon, *J Phys D: Appl Phys* **33** L23-L26 (2000). [doi: 10.1088/0022-3727/33/2/104]
55. Interfacial Dislocation Mechanism for Diffusional Phase Transformations Exhibiting Martensitic Crystallography: Formation of TiAl + Ti₃Al Lamellae, RC Pond, P Shang, TT Cheng, M Aindow, *Acta Mater* **48**: 1047-1053 (2000). [doi: 10.1016/S1359-6454(99)00416-4]
56. Analysis of a 69.3° Vicinal HAGB in Pure Titanium, S Wang, M Aindow, *Interface Sci* **8**: 17-25 (2000). [doi: 10.1023/A:1008770918151]
57. Identifying the Character of Intrinsic Stacking Faults in the A15 Compound Nb₃Al, TS Rong, LS Smith, M Aindow, IP Jones, MH Loretto, *Phil Mag Lett* **80**: 519-524 (2000). [doi: 10.1080/09500830050110440]
58. On the Role of the Pore Filling Medium in Photoluminescence from Photochemically Etched Porous Silicon, KW Kolasinski, JC Barnard, S Ganguly, L Koker, A Wellner, M Aindow, RE Palmer, CN Field, PA Hamley, M Poliakoff, *J Appl Phys* **88**: 2472-2479 (2000). [doi: 10.1063/1.1287770]
59. The Effect of Etchant Composition on Film Structure During Laser-Assisted Porous Si Growth, A Wellner, L Koker, KW Kolasinski, M Aindow, RE Palmer, *Phys Stat Sol* **182**: 87-91 (2000). [doi: 10.1002/1521-396X(200011)182:1<87::AID-PSSA87>3.3.CO;2-E]
60. Defect Formation in Nd₂Fe₁₄B Grains Caused by Zn Diffusion, Y Hu, IR Harris, M Aindow, IP Jones, *Phil Mag Lett* **81**: 233-241 (2001). [doi: 10.1080/09500830010029427]

61. Microstructural Characteristics of the Eutectoid Mixture Zr_2Cu/Zr_7Cu_{10} , ZY Liu, M Aindow, JA Hriljac, IP Jones, IR Harris, *J Mater Sci Lett* **20**: 543-545 (2001). [doi: 10.1023/A:1010932601393]
62. The Interaction Between Extended Dislocations and Antiphase Domain Boundaries: I. Superpartial Separation and the Yield Stress, TS Rong, M Aindow, IP Jones, *Intermetallics* **9**: 499-506 (2001). [doi: 10.1016/S0966-9795(01)00031-0]
63. The Interaction Between Extended Dislocations and Antiphase Domain Boundaries: II. Uncoupled Superpartial Dislocations and Planar Slip, TS Rong, M Aindow, IP Jones, *Intermetallics* **9**: 507-514 (2001). [doi: 10.1016/S0966-9795(01)00032-2]
64. The Influence of Oxide Layers on the Initiation of Carbon Deposition on Stainless Steel, GR Millward, HE Evans, M Aindow, CW Mowforth, *Oxid Met* **56**: 231-250 (2001). [doi: 10.1023/A:1010320727492]
65. Phase Transformations in an Equiatomic ZrCu Alloy, ZY Liu, M Aindow, JA Hriljac, IP Jones, IR Harris, *J Metastab Nanocryst* **10** 223-228 (2001). [doi: 10.4028/www.scientific.net/JMN.10.223]
66. The Microstructure of Laser-Ablated Superconducting $La_2CuO_4F_x$ Thin Films on $SrTiO_3$, G Kong, MO Jones, JS Abell, PP Edwards, ST Lees, KE Gibbons, I Gameson, M Aindow, *J Mater Res* **16**: 3309-3316 (2001). [doi: 10.1557/JMR.2001.0455]
67. Microstructure and Mechanical Behaviour of Nb-Al-V Alloys with 10-25%Al and 20-40%V: I Microstructural Observations, TS Rong, DN Horspool, M Aindow, *Intermetallics* **10**: 1-12 (2002). [doi: 10.1016/S0966-9795(01)00076-0]
68. Microstructure and Mechanical Behaviour of Nb-Al-V Alloys with 10-25%Al and 20-40%V: II Mechanical Behaviour and Deformation Mechanisms, TS Rong, DN Horspool, M Aindow, *Intermetallics* **10**: 13-21 (2002). [doi: 10.1016/S0966-9795(01)00077-2]
69. Near-Coincident Site Lattice Structures Formed Between Two Contacting Monolayer Rafts of Metallic Nanoparticles with Different Superlattice Periodicities, J Fink, A Burrows, M Brust, M Aindow, CJ Kiely, *Phil Mag Lett* **82**: 21-26 (2002). [doi: 10.1080/09500830110100660]
70. Oxygen-Stabilized Partial Amorphization in a $Zr_{50}Cu_{50}$ Alloy, ZY Liu, M Aindow, JA Hriljac, IP Jones, IR Harris, *J Mater Sci* **37**: 745-751 (2002). [doi: 10.1023/A:1013887730514]
71. A Transmission Electron Microscope Study of Microstructural Development in Magnetron-Sputtered $MoSi_2$ Thin Films, XY Wang, ITH Chang, M Aindow, *Intermetallics* **10**: 829-839 (2002). [doi: 10.1016/S0966-9795(02)00035-3]
72. Magnesium Manganese Oxide Nanoribbons: Synthesis, Characterization and Catalytic Applications, J Liu, J Cai, Y-C Son, Q Gao, SL Suib, M Aindow, *J Phys Chem B* **106**: 9761-9768 (2002). [doi: 10.1021/jp0208586]
73. Nucleation of the C40 To C11_b Transformation in in Magnetron-Sputtered $MoSi_2$ Thin Films, XY Wang, ITH Chang, M Aindow, *Phil Mag Lett* **82**: 687-694 (2002). [doi: 10.1080/0950083021000038083]
74. Measurement of Epitaxial Misorientations and Related Effects in Thin Films of $YBa_2Cu_3O_{7-d}$ Grown on Nominally (001)MgO Substrates by Pulsed Laser Deposition, DJ Norris, M Aindow, *Thin Solid Films* **423**: 33-40 (2003). [doi: 10.1016/S0040-6090(02)00999-9]
75. Formation of a Cu/Alumina Self-Assembled Nanocomposite, T Bhatia, M Aindow, NP Padture, *Phil Mag Lett* **83**: 135-142 (2003). [doi: 10.1080/0950083021000056614]

76. Effects of Zn Coating on the Microstructure and Magnetic Properties of Nd–Fe–B Magnets, Y Hu, M Aindow, IP Jones, IR Harris, *Journal of Alloys and Compounds* **351**: 299-303 (2003). [doi: 10.1016/S0925-8388(02)01070-8]
77. Zn Diffusion Induced Precipitation along Grain Boundaries in Zn-coated NdFeB Magnets, Y Hu, IP Jones, M Aindow, IR Harris, *J Magn Magn Mater* **261**: 13-20 (2003). [doi: 10.1016/S0304-8853(02)01407-5]
78. Effect of Self-Accommodation on α/α Boundary Populations in Pure Titanium, S Wang, M Aindow, M Starink, *Acta Mater* **51**: 2485-2503 (2003). [doi: 10.1016/S1359-6454(03)00035-1]
79. γ' Precipitation Kinetics in P/M IN100, AM Wusatowska-Sarnek, MJ Blackburn, M Aindow, *Mater Sci Forum* **426**: 767-772 (2003). [doi: 10.4028/www.scientific.net/MSF.426-432.767]
80. Precipitate Orientation Relationships and Interfacial Structures in the Duplex Stainless Steel Zeron 100, H Jiao, M Aindow, RC Pond, *Phil Mag* **83**: 1867-1887 (2003). [doi: 10.1080/1478643031000107249]
81. Assembly of CdSe Nanocrystals into Well-Ordered Monolayers with Strong Crystallographic Texture, D Kang, J Lee, F Papadimitrakopoulos, M Aindow *Phil Mag Lett* **83**: 569-574 (2003). [doi: 10.1081/0950083031000151365]
82. Effects of Alkali Metal and Ammonium Cation Templates on Nanofibrous Cryptomelane-type Manganese Oxide Octahedral Molecular Sieves (OMS-2), J Liu, V Makwana, J Cai, SL Suib, M Aindow, *J Phys Chem B* **107**: 9185-9194 (2003). [doi: 10.1021/jp0300593]
83. Techniques for Microstructural Characterization of Powder-Processed Nickel-Based Superalloys, AM Wusatowska-Sarnek, MJ Blackburn, M Aindow, *Mat Sci Eng A* **360**: 390-395 (2003). [doi: 10.1016/S0921-5093(03)00498-2]
84. Characterization of the Microstructure and Phase Equilibria Calculations in the Powder Metallurgy Superalloy IN100, AM Wusatowska-Sarnek, G Ghosh, GB Olson, MJ Blackburn, M Aindow, *J Mater Res* **18**: 2653-2663 (2003). [doi: 10.1557/JMR.2003.0371]
85. Nucleation of the Lamellar Decomposition in a Ti-44Al-4Nb-4Zr Alloy, LC Zhang, TT Cheng, M Aindow, *Acta Mater* **52**: 191-197 (2004). [doi: 10.1016/j.actamat.2003.09.005]
86. Pseudoelastic Deformation Behavior in a Ti/Mo-Based Alloy, T Zhou, M Aindow, SP Alpay, MJ Blackburn, MH Wu, *Scripta Mater* **50**: 343-348 (2004). [doi: 10.1016/j.scriptamat.2003.10.012]
87. Size Control, Metal Substitution and Catalytic Application of Cryptomelane Nanomaterials Prepared using Cross-Linking Reagents, J Liu, Y-C Son, J Cai, XF Shen, SL Suib, M Aindow, *Chem Mater* **16**: 276-285 (2004). [doi: 10.1021/cm0303989]
88. Threading Dislocation Generation in Epitaxial (Ba,Sr)TiO₃ Films Grown on (001) LaAlO₃ by Pulsed Laser Deposition, IB Misirlioglu, AL Vasiliev, M Aindow, SP Alpay, R Ramesh, *Appl Phys Lett* **84**: 1742-1744 (2004). [doi: 10.1063/1.1664035]
89. Phase Stability and Microstructure in Devitrified Al-Rich Al-Y-Ni Alloys, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, *Intermetallics* **12**: 349-362 (2004). [doi: 10.1016/j.intermet.2003.11.007]
90. Interfacial Defects and Lamellar Decomposition in Titanium Aluminides, M Aindow, TT Cheng, C Lin, HW Yang, P Shang, RC Pond, *Interface Science* **12**: 293-302 (2004). [doi: 10.1023/B:INTS.0000028658.15867.87]

91. Preparation of Carbon-Aerogel-Supported Platinum Electrocatalysts by Supercritical Deposition Methods, CD Saquing, TT Cheng, M Aindow, C Erkey, *J Phys Chem B* **108**: 7716-7722 (2004). [doi: 10.1021/jp049535v]
92. Effect of Heat-Treatment on the Microstructure and Hardness of a Devitrified Al-3.0Y-3.0Gd-5.0Ni-1.0Fe-1.0Co Alloy, NJ Magdefrau, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, *Scripta Mater* **51**: 485-489 (2004). [doi: 10.1016/j.scriptamat.2004.05.050]
93. High-Resolution Transmission Electron Microscopy Studies of Planar Defects in the Magnetic Superconductor $\text{RuSr}_2\text{EuCu}_2\text{O}_8$, AL Vasiliev, M Aindow, Z Han, JI Budnick, WA Hines, PW Klamut, M Maxwell, B Dabrowski, *Appl Phys Lett* **85**: 3217-3219 (2004). [doi: 10.1063/1.1805176]
94. Microstructures and Mechanical Properties of Nb-(10,15)Al-20V Alloys, H Jiao, F Barradas, TS Rong, IP Jones, M Aindow, *Acta Metal Sinica* **17**: 575-583 (2004).
95. Observation of Tension/Compression Asymmetry in an NbAlV Alloy, H Jiao, F Barradas, TS Rong, IP Jones, M Aindow, *Mat Sci Eng A* **387-389**: 476-480 (2004). [doi: 10.1016/j.msea.2004.01.139]
96. Synthesis, Characterization and Catalytic Applications of Manganese Oxide Octahedral Molecular Sieve (OMS) Nanowires with a 2x3 Tunnel Structure, X Shen, Y Ding, J Liu, K Laubernds, M Polverejan, Y-C Son, M Aindow, SL Suib, *Chem Mater* **16**: 5327-5335 (2004). [doi: 10.1021/cm049291r]
97. Hydrodesulfurization of Model Diesel using Pt/ Al_2O_3 Catalysts Prepared by Supercritical Deposition, S Haji, Y Zhang, D Kang, M Aindow, C Erkey, *Catal Today* **99**: 365-373 (2005). [doi: 10.1016/j.cattod.2004.10.011]
98. Preparation and Characterization of Ruthenium/Carbon-Aerogel Nanocomposites, Y Zhang, D Kang, M Aindow, C Erkey, *J Phys Chem B* **109**: 2617-2624 (2005). [doi: 10.1021/jp0467595]
99. Amine-Assisted Bottleneck Etching of CdSe Nanocrystals, R Li, J Lee, B Yang, DN Horspool, M Aindow, F Papadimitrakopoulos, *J Am Chem Soc* **127**: 2524-2532 (2005). [doi: 10.1021/ja0465404]
100. Phase Formation During the Devitrification of Al-Rich Melt-Spun Al-8.5Ni-5.0Y-3.0(Co,Fe) Alloys, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, *Scripta Mater*: **52**: 699-704 (2005). [doi: 10.1016/j.scriptamat.2004.12.024]
101. Control of Nano-Scale Tunnel Sizes in Porous Manganese Oxide Octahedral Molecular Sieves (OMS) Nanomaterials, X Shen, Y Ding, J Liu, J Cai, K Laubernds, RP Zerger, M Polverejan, M Aindow, SL Suib, *Adv Mater* **17**: 805-809 (2005). [doi: 10.1002/adma.200401225]
102. Investigation of Supercritical Deposition of Platinum Nanoparticles into Carbon Aerogels, CD Saquing, D Kang, M Aindow, C Erkey, *Micropor Mesopor Mater* **80**: 11-23 (2005). [doi: 10.1016/j.micromeso.2004.11.019]
103. Incorporation of Fluorine Ions into Hydroxyapatite by a pH Cycling Method, H Qu, AL Vasiliev, M Aindow, M Wei, *J Mater Sci - Mater M* **16**: 447-453 (2005). [doi: 10.1007/s10856-005-6985-4]
104. Supported Platinum Nanoparticles by Supercritical Deposition, Y Zhang, D Kang, CD Saquing, M Aindow, C Erkey, *Ind Eng Chem Res* **44**: 4161-4164 (2005). [doi: 10.1021/ie050345w]
105. The Structure of Ternary Compounds in Al-Gd-Ni Alloys, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, *Intermetallics* **13**: 741-748 (2005). [doi: 10.1016/j.intermet.2004.11.004]
106. Nucleation of Stress-Induced Martensites in a Ti/Mo-based alloy, LC Zhang, T Zhou, M Aindow, SP Alpay, MJ Blackburn, MH Wu, *J Mater Sci* **40**: 2833-2836 (2005). [doi: 10.1007/s10853-005-2426-5]

107. A Hybrid Extraction/Surface Replication Technique for Microstructural Analysis in Ni-Based Superalloys, K Song, M Aindow, *J Mater Sci* **40**: 3403-3407 (2005). [doi: 10.1007/s10853-005-2848-0]
108. The Microstructural Evolution of Nb-Al-V Ternary Alloys, H Jiao, F Barradas, TS Rong, IP Jones, M Aindow, *Intermetallics* **13**: 1157–1165 (2005). [doi: 10.1016/j.intermet.2005.02.011]
109. Cd₂P₂Se₆ Nanolenses Formed at a Water-Air Interface, D Kang, J Lee, F Papadimitrakopoulos, M Aindow, *J Mater Sci* **40**: 4097-4100 (2005). [doi: 10.1007/s10853-005-0624-9]
110. Strong Degradation of Physical Properties and Formation of a Dead Layer in Ferroelectric Films due to Interfacial Dislocations, IB Misirlioglu, AL Vasiliev, M Aindow, SP Alpay, *Integr Ferroelectr* **71**: 67-80 (2005). [doi: 10.1080/10584580590964709]
111. Synthesis and Catalytic Activity of Cryptomelane-Type Manganese Dioxide Nano-Materials Produced by a Novel Solvent-Free Method, Y Ding, X Shen, S Sithambaram, S Gomez, R Kumar, VMB Cristomo, SL Suib, M Aindow, *Chem Mater* **17**: 5382-5389 (2005). [doi: 10.1021/cm051294w]
112. Origin of Pseudoelastic Behavior in Ti-Mo-Based Alloys, LC Zhang, T Zhou, SP Alpay, M Aindow, M Wu, *Appl Phys Lett* **87**: 241909(1-3) (2005). [doi: 10.1063/1.2142089]
113. Synthesis of Highly Photoluminescent Zinc Blende CdSe Nanocrystals, R Li, J Lee, D Kang, Z Luo, M Aindow, F Papadimitrakopoulos, *Adv Funct Mater* **16**: 345-350 (2006). [doi:10.1002/adfm.200500319]
114. Morphology and Interface Structures for γ Precipitates Formed in the β Phase of a Ti-44Al-4Nb-4Zr Alloy, LC Zhang, M Aindow, *J Mater Sci* **41**: 611-620 (2006). [doi: 10.1007/s10853-006-6477-z]
115. Defect Microstructures in Epitaxial PbZr_{0.2}Ti_{0.8}O₃ Films Grown on (001) SrTiO₃ by Pulsed Laser Deposition, IB Misirlioglu, AL Vasiliev, SP Alpay, M Aindow, R Ramesh, *J Mater Sci* **41**: 697-708 (2006). [doi:10.1007/s10853-006-6488-9]
116. Hydrothermal Growth of Manganese Dioxide into Novel 3D Hierarchical Nano-architectures, Y Ding, X Shen, S Gomez, H Luo, M Aindow, SL Suib, *Adv Funct Mater* **16**: 549-555 (2006). [doi:10.1002/adfm.200500436]
117. Accommodation of Angular Incompatibilities Between Interfacial Facets During Precipitate Growth, RC Pond, H Jiao, LC Zhang, M Aindow, *Metall Mater Trans A* **37**: 901-909 (2006). [doi:10.1007/s11661-006-0064-4]
118. Thermodynamic and Electrostatic Analysis of Threading Dislocations in Epitaxial Ferroelectric Films, IB Misirlioglu, SP Alpay, M Aindow, V Nagarajan, *Appl Phys Lett* **88**: 102906(1-3) (2006). [doi:10.1063/1.2178194]
119. Structure of Ribbon Borides in a Ti-44Al-4Nb-4Zr-1B Alloy, U Kitkamthorn, LC Zhang, M Aindow, *Intermetallics* **14**: 759-769 (2006). [doi:10.1016/j.intermet.2005.11.013]
120. In-situ Synthesis of Mixed-Valent Manganese Oxide Nanocrystals: An In-Situ Synchrotron X-ray Diffraction Study, X Shen, Y Ding, JC Hanson, M Aindow, SL Suib, *J Am Chem Soc* **128**: 4570-4571 (2006). [doi: 10.1021/ja058456+]
121. Hydrothermal Synthesis of Structure and Shape Controlled Manganese Oxide Octahedral Molecular Sieve (OMS) Nano-materials, WN Li, JK Yuan, XF Shen, S Gomez-Mower, LP Xu, S Sithambaram, M Aindow, SL Suib, *Adv Funct Mater* **16**: 1247-1253 (2006). [doi:10.1002/adfm.200500504]

122. Grain Boundary Curvature in a Model Ni-Based Superalloy, K Song, M Aindow, *Metall Mater Trans* **38A**: 1-6 (2007). [doi:10.1007/s11661-006-9032-2]
123. Decoration of Multi-Wall Carbon Nanotubes with Platinum Nanoparticles using a Supercritical Fluid Route: Thermodynamic Control of Metal Loading, A Bayrakceken, U Kitkamthorn, M Aindow, C Erkey, *Scripta Mater* **56**: 101-103 (2007). [doi:10.1016/j.scriptamat.2006.09.019]
124. The Mechanical Properties and the Deformation Microstructures of the C15 Laves Phase Cr₂Nb at High Temperatures, AV Kazantzis, M Aindow, IP Jones, GK Triantafyllidis, JTM De Hosson, *Acta Mater* **55** 1873–1884 (2007). [doi:10.1016/j.actamat.2006.10.048]
125. Shape Evolution of Single-crystalline Mn₂O₃ Using a Solvothermal Approach, WN Li, LC Zhang, JK Yuan, XF Shen, S Sithambaram, M Aindow, SL Suib, *J Phys Chem C* **111**: 14694-14697 (2007). [doi:10.1021/jp0745539]
126. Behavior of H₂ Chemisorption on Ru/TiO₂ Surface and its Application in Evaluation of Ru Particle Sizes Compared with TEM and XRD Analyses, XF Shen, LJ Garces YS Ding, K Laubernds, RP Zenger, M Aindow, EJ Neth, SL Suib, *Appl Catal A* **335**: 187–195 (2008). [doi:10.1016/j.apcata.2007.11.017]
127. Pt-Based Electrocatalysts for Polymer Electrolyte Fuel Cells Prepared by a Supercritical Deposition Technique, A Bayrakceken, A Smirnova, U Kitkamthorn, M Aindow, L. Türker, İ Eroğlu, C Erkey, *J Power Sources* **179**: 532–540 (2008). [doi:10.1016/j.jpowsour.2007.12.086]
128. Grain Growth and Particle Pinning in a Model Ni-based Superalloy, K Song, M Aindow, *Mat Sci Eng A* **479**: 365–372 (2008). [doi:10.1016/j.msea.2007.09.055]
129. Microstructures and Mechanical Properties of Nb-Ti-C Alloys, H Jiao, IP Jones, M Aindow, *Mat Sci Eng A* **485**: 359–366 (2008). [doi:10.1016/j.msea.2007.08.035]
130. On the Self-Pinning Character of Synchro-Shockley Dislocations in a Laves Phase During Strain Rate Cyclical Compressions, AV Kazantzis, M Aindow, GK Triantafyllidis, JTM De Hosson, *Scripta Mater* **59** 788-791 (2008). [doi:10.1016/j.scriptamat.2008.06.024]
131. Thickness Dependence of Electronic Phase Transitions in V₂O₃ Thin Films on (0001) LiTaO₃, BS Allimi, M Aindow, SP Alpay, *Appl Phys Lett* **93**: 112109 (1-3) (2008). [doi:10.1063/1.2978352]
132. Dielectric Response and Tunability of a Dielectric-Paraelectric Composite, K Zhou, SA Boggs, R Ramprasad, M Aindow, C Erkey, SP Alpay, *Appl Phys Lett* **93**: 102908 (1-3) (2008). [doi:10.1063/1.2982086]
133. Microstructure and Phase Stability in a Nb-Mo-Cr-Al-Si Alloy, YL Hu, AL Vasiliev, LC Zhang, K Song, M Aindow, *J Mater Sci* **43**: 7013-7025 (2008). [doi:10.1007/s10853-008-3042-y]
134. Cation Ordering in Epitaxial Lead Zirconate Titanate Films, LC Zhang, AL Vasiliev, IB Misirlioglu, R Ramesh, SP Alpay, M Aindow, *Appl Phys Lett* **93**: 262903 (1-3) (2008). [doi:10.1063/1.3058755]
135. Vulcan Supported Pt Electrocatalysts for PEMFCs Prepared Using Supercritical Carbon Dioxide Deposition, A Bayrakceken, A Smirnova, U Kitkamthorn, M Aindow, L Türker, İ Eroğlu, C Erkey, *Chem Eng Comm* **196**: 194-203 (2009). [doi: 10.1080/00986440802290110]
136. Polymorphism in the Laves Phase Precipitates of a Quinary Nb-Mo-Cr-Al-Si Alloy, YL Hu, AL Vasiliev, LC Zhang, K Song, M Aindow, *Scripta Mater* **60**: 72-75 (2009). [doi:10.1016/j.scriptamat.2008.08.034]

137. Atomic Site Occupancies and Mechanical Response of the Eutectic C14 and A15 Phases in a Quinternary Nb-Mo-Cr-Al-Si Alloy, YL Hu, LC Zhang, D Shuman, BD Huey, M Aindow, *Scripta Mater* **60**: 309-312 (2009). [doi:10.1016/j.scriptamat.2008.10.026]
138. Characterization of Microstructural Effects in a Percussion Laser-Drilled Powder Metallurgy Ni-Based Superalloy, JKM Garofano, HL Marcus, M Aindow, *J Mater Sci* **44**: 680–684 (2009). [doi:10.1007/s10853-008-3177-x]
139. Preparation of Carbon Black Supported Pd, Pt and Pd-Pt Nanoparticles Using Supercritical CO₂ Deposition, B Cangül, LC Zhang, M Aindow, C Erkey, *J Supercrit Fluids* **50**: 82–90 (2009). [doi:10.1016/j.supflu.2009.04.001]
140. ZnO with Different Morphologies Synthesized by Solvothermal Methods for Enhanced Photocatalytic Activity, LP Xu, YL Hu, C Pelligra, CH Chen, L Jin, H Huang, S Sithambaram, M Aindow, R Joesten, SL Suib, *Chem Mater* **21**: 2875-2885 (2009). [doi:10.1021/cm900608d]
141. Nanoscale Carbide Precipitation in the Recast Layer of a Percussion Laser-Drilled Superalloy, JKM Garofano, HL Marcus, M Aindow, *Scripta Mater* **61**: 943–946 (2009). [doi:10.1016/j.scriptamat.2009.07.034]
142. Modification of Carbon Aerogel Supports for PEMFC Catalysts, A Smirnova, T Wender, D Goberman, YL Hu, M Aindow, W Rhine, NM Sammes, *Int J Hydrogen Energ* **34**: 8892-8897 (2009). [doi:10.1016/j.ijhydene.2009.08.055]
143. Stability and Work Function of TiC_xN_{1-x} Alloy Surfaces: Density Functional Theory Calculations, H Zhu, M Aindow, R Ramprasad, *Phys Rev B* **80**: 201406-R (2009). [doi:10.1103/physrevb.80.201406]
144. Nanostructured Arrays of Semiconducting Octahedral Molecular Sieves by Pulsed Laser Deposition, AE Espinal, LC Zhang, C-H Chen, A Morey, YF Nie, L Espinal, BO Wells, R Joesten, M Aindow, SL Suib, *Nat Mater* **9**: 54-59 (2010). [doi:10.1038/nmat2567]
145. Heteroepitaxial Growth of Nanoscale Oxide Shell-Fiber Superstructures by Mild Hydrothermal Processes, C-H Chen, L Jin, AE Espinal, BT Firliet, LP Xu, M Aindow, R Joesten, SL Suib, *Small* **6**: 988-992 (2010). [doi:10.1002/smll.200902381] also featured on the inside cover [doi:10.1002/smll.201090027]
146. Extraction Replication Studies of Near-Surface Microstructures in Laser-Drilled Samples of the Powder Metallurgy Ni-Based Superalloy IN100, JKM Garofano, HL Marcus, M Aindow, *Mater Charact* **61**: 929-936 (2010). [doi:10.1016/j.matchar.2010.06.003]
147. Phase Homogeneity in MgO-ZrO₂ Nano-Composites Synthesized by a Combined Sol-Gel / Thermal Decomposition Route, CK Muoto, EH Jordan, M Gell, M Aindow, *J Am Ceram Soc* **93**: 3102-3109 (2010). [doi:10.1111/j.1551-2916.2010.03821.x]
148. PtPd/BP2000 Electrocatalysts Prepared by Sequential Supercritical Carbon Dioxide Deposition, A Bayrakçeken, B Cangül, LC Zhang, M Aindow, C Erkey, *Int J Hydrogen Energ* **35**: 11669-11680 (2010). [doi:10.1016/j.ijhydene.2010.08.059]
149. Base Metal Alloys with Self-Healing Native Conductive Oxides for Electrical Contact Materials, M Aindow, SP Alpay, Y Liu, JV Mantese, BS Senturk, *Appl Phys Lett* **97**: 152103(1-3) (2010). [doi:10.1063/1.3499369]
150. Adsorption of Pt(cod)me₂ onto Organic Aerogels from Supercritical Solutions for the Synthesis of Supported Platinum Nanoparticles, SE Bozbag, NS Yasar, LC Zhang, M Aindow, C Erkey, *J Supercrit Fluid* **56**: 105-113 (2011). [doi:10.1016/j.supflu.2010.10.045]

151. A Foaming Esterification Sol-Gel Route for the Synthesis of Magnesia-Yttria Nanocomposites, CH Chen, JKM Garofano, CK Muoto, AL Mercado, SL Suib, M Aindow, M Gell, EH Jordan, *J Am Ceram Soc* **94**: 367–371 (2011). [doi:10.1111/j.1551-2916.2010.04343.x]
152. Effects of Precursor Chemistry on the Structural Characteristics of Y₂O₃-MgO Nanocomposites Synthesized by a Combined Sol-Gel/Thermal Decomposition Route, CK Muoto, EH Jordan, M Gell, M Aindow, *J Am Ceram Soc* **94**: 372-381 (2011). [doi:10.1111/j.1551-2916.2010.04078.x]
153. Identification of Desirable Precursor Properties for Solution Precursor Plasma Spray, CK Muoto, EH Jordan, M Gell, M Aindow, *J Therm Spray Technol* **20**: 802-816 (2011). [doi:10.1007/s11666-011-9636-y]
154. Electrical and Tribological Behavior of a Ni-18%Ru Alloy for Contact Applications, Y Liu, BS Senturk, JV Mantese, M Aindow, SP Alpay, *J Mater Sci* **46**: 6563-6570 (2011). [doi:10.1007/s10853-011-5603-8]
155. Characterization of the Fe-Doped Mixed-Valent Tunnel Structure Manganese Oxide K-OMS-2, XF Shen, A Morey, J Liu, YS Ding, J Cai, J Durand, Q Wang, W Wen, WA Hines, JC Hanson, JM Bai, AI Frenkel, W Reiff, M Aindow, SL Suib, *J Phys Chem C* **115**: 21610–21619 (2011). [doi: 10.1021/jp206046k]
156. Phase Homogeneity in Y₂O₃-MgO Nano-Composites Synthesized by Thermal Decomposition of Nitrate Precursors with Ammonium Acetate Additions, CK Muoto, EH Jordan, M Gell, M Aindow, *J Am Ceram Soc* **94**: 4207–4217 (2011). [doi: 10.1111/j.1551-2916.2011.04787.x]
157. Effects of Microstructure on Native Oxide Scale Development and Electrical Characteristics in Eutectic Cu-Cu₆La Alloys, BS Senturk, Y Liu, JV Mantese, SP Alpay, M Aindow, *Acta Mater* **60**: 851–859 (2012). [doi 10.1016/j.actamat.2011.11.013]
158. Carbon Aerogel Supported Nickel Nanoparticles and Nanorods Using Supercritical Deposition, SE Bozbag, LC Zhang, M Aindow, C Erkey, *J Supercrit Fluid* **66**: 265–273 (2012). [doi 10.1016/j.supflu.2012.02.027]
159. Discontinuous Precipitation of β-Ru Phase in Ni-18Ru Alloys, Y Liu, LC Zhang, BS Senturk, JV Mantese, SP Alpay, M Aindow, *J Mater Sci* **47**: 5701-5705 (2012). [doi: 10.1007/s10853-012-6457-4]
160. Aerogel-Copper Nanocomposites Prepared Using the Adsorption of a Polyfluorinated Complex from Supercritical CO₂, SE Bozbag, SO Kostenko, MA Kurykin, VN Khrustalev, AR Khokhlov, LC Zhang, M Aindow, C Erkey, *J Nanopart Res* **14**: 973(1-13) (2012). [doi: 10.1007/s11051-012-0973-7]
161. Microstructural Characteristics of Y₂O₃-MgO Composite Coatings Deposited by Suspension Plasma Spray, CK Muoto, EH Jordan, M Gell, M Aindow, *J Therm Spray Techn* **21**: 1309-1321 (2012). [doi: 10.1007/s11666-012-9816-4]
162. Selective Hydrogenation of CO₂ and CO to Useful Light Olefins over Octahedral Molecular Sieve Manganese Oxide Supported Iron Catalysts, B Hu, S Frueh, HF Garces, LC Zhang, M Aindow, C Brooks, E Kreidler, SL Suib, *Appl Catal B* **132-133**: 54-61 (2013). [doi: g/10.1016/j.apcatb.2012.11.003]
163. Formation of Spinel Reaction Layers in Manganese Cobaltite - Coated Crofer 22 APU for Solid Oxide Fuel Cell Interconnects, NJ Magdefrau, L Chen, EY Sun, J Yamanis, M Aindow, *J Power Sources* **227**: 318-326 (2013). [doi: 10.1016/j.jpowsour.2012.07.091]

164. A Sucrose Mediated Sol-Gel Technique for the Synthesis of MgO-Y₂O₃ Nanocomposites, A Iyer, JKM Garofano, J Reutenaur, SL Suib, M Aindow, M Gell, EH Jordan, *J Am Ceram Soc* **96**: 346-350 (2013). [doi: 10.1111/jace.12123]
165. Effect of Upset Forging on Microstructure and Tensile Properties in a Devitrified Al-Y-Ni-Co Alloy, MA Gordillo, LC Zhang, TJ Watson, M Aindow, *J Mater Sci* **48**: 3841-3851 (2013). [doi: 10.1007/s10853-013-7185-0]
166. Thermodynamic Control of Metal Loading and Composition of Carbon Aerogel Supported Pt-Cu Alloy Nanoparticles by Supercritical Deposition, SE Bozbag, U Unal, MA Kurykin, CJ Ayala, M Aindow, C Erkey, *J Phys Chem C* **117**: 6777-6787 (2013). [doi: 10.1021/jp311641g]
167. Effects of Alloy Heat Treatment on Oxidation Kinetics and Scale Morphology for Crofer 22 APU, NJ Magdefrau, L Chen, EY Sun, M Aindow, *J Power Sources* **241**: 756-767 (2013). [doi: 10.1016/j.jpowsour.2013.03.181]
168. Substrate Control of Anisotropic Resistivity in Heteroepitaxial Nanostructured Arrays of Cryptomelane Manganese Oxide on Strontium Titanate, AE Espinal, YG Yan, LC Zhang, L Espinal, A Morey, BO Wells, M Aindow, SL Suib, *Small* **10**: 66-72 (2014). [doi: 10.1002/sml.201300713]
169. The Effect of Mn_{1.5}Co_{1.5}O₄ Coatings on the Development of Near Surface Microstructure for Haynes 230 Oxidized at 800°C in Air, NJ Magdefrau, L Chen, EY Sun, M Aindow, *Surf Coat Tech* **242**: 109-117 (2014). [doi: 10.1016/j.surfcoat.2014.01.025]
170. Phase Stability in a Powder-Processed Al-Mn-Ce Alloy, MA Gordillo, I Cernatescu, TT Aindow, TJ Watson, M Aindow, *J Mater Sci* **49**: 3742-3754 (2014). [doi: 10.1007/s10853-014-8086-6]
171. Effect of Heat-Treatment on Phase Stability and Grain Coarsening in a Powder-Processed Al-Ni-Co-Zr-Y Alloy, MA Gordillo, B Bedard, TJ Watson, M Aindow, *J Mater Sci* **49**: 5866-5877 (2014). [doi: 10.1007/s10853-014-8297-x]
172. Microstructure Effects in Braze Joints Formed Between Ag/W Electrical Contacts and Sn-Coated Cu using Cu-Ag-P Filler Metal, HB Yu, Y Sun, SP Alpay, M Aindow, *J Mater Sci* **50**: 324-333 (2015). [10.1007/s10853-014-8591-7]
173. Electrochemical Performance of Fuel Cell Catalysts Prepared by Supercritical Deposition: Effect of Different Precursor Conversion Routes, SE Bozbağ, T Gümüšoğlu, S Yilmaztürk, CJ Ayala, M Aindow, H Deligöz, C Erkey, *J Supercrit Fluid* **97**: 154-164 (2015). [doi: 10.1016/j.supflu.2014.08.014]
174. Microstructural Effects of the Reduction Step in the Reactive Consolidation of Manganese Cobaltite Coatings on Crofer[®] 22 APU, LV Gambino, NJ Magdefrau, M Aindow, *Mater High Temp* **32**: 142-147 (2015). [doi: 10.1179/0960340914Z.00000000090]
175. The stoichiometry of metal assisted etching (MAE) of Si in V₂O₅+HF and HOOH+HF solutions, KW Kolasinski, WB Barclay, Y Sun, M Aindow, *Electrochim Acta* **158**: 219-228 (2015). [doi: 10.1016/j.electacta.2015.01.162]
176. Facet-Dependent Catalytic Activity of MnO Electrocatalysts for Oxygen Reduction and Oxygen Evolution Reactions, C-H Kuo, IM Mosa, S Thanneeru, V Sharma, LC Zhang, S Biswas, M Aindow, SP Alpay, JF Rusling, SL Suib, J He, *Chem Comm* **51**: 5951-5954 (2015). [doi: 10.1039/C5CC01152C]
177. Influence of Electric Current on Microstructure Evolution in Ti/Al and Ti/TiAl₃ During Spark Plasma Sintering, Y Sun, J Haley, K Kulkarni, M Aindow, AK Sachdev, EJ Lavernia, *J Alloy Compd* **648**: 1097-1103 (2015). [doi: 10.1016/j.jallcom.2015.07.079]

178. Surface Degradation of Ag/W Circuit Breaker Contacts During Standardized UL Testing, H Yu, Y Sun, MT Kesim, J Harmon, J Potter, SP Alpay, M Aindow, J Mater Eng Perform **24**, 251-3262 (2015). [doi: 10.1007/s11665-015-1647-2]
179. Preface to the 50th Anniversary Issue of the Journal of Materials Science, M Aindow, J Mater Sci **51**: 1-6 (2016). [doi: 10.1007/s10853-015-9500-4]
180. ALCHEMI Studies of Site Occupancies in Cr-, Ni- and Fe-substituted Manganese Cobaltite Spinel, LV Gambino, AB Freeman, NJ Magdefrau, M Aindow, J Mater Sci **51**: 158-170 (2016). [doi: 10.1007/s10853-015-9307-3]
181. Extended Aging of Ag/W Circuit Breaker Contacts: Influence on Surface Structure, Electrical Properties and UL Testing Performance, H Yu, MT Kesim, Y Sun, J Harmon, J Potter, SP Alpay, M Aindow, J Mater Eng Perform **25**: 91-101 (2016). [doi: 10.1007/s11665-015-1837-y]
182. Microstructural Evolution in Manganese Cobaltite Films Grown on Crofer 22 APU Substrates by Pulsed Laser Deposition, LV Gambino, NJ Magdefrau, M Aindow, Surf Coat Tech **286**: 206-214 (2016). [doi: 10.1016/j.surfcoat.2015.12.034]
183. Electrostatically Driven Dielectric Anomaly in Mesoscopic Ferroelectric-Paraelectric Bilayers, H Khassaf, N Khakpash, S Vijayan, M Aindow, SP Alpay, Acta Mater **105**: 68-74 (2016). [doi: 10.1016/j.actamat.2015.12.023]
184. Modified Mesoporous Silica for Efficient Siloxane Capture, T Jafari, T Jiang, W Zhong, N Khakpash, B Deljoo, M Aindow, P Singh, S Suib, Langmuir **32**: 2369-2377 (2016). [doi: 10.1021/acs.langmuir.5b04357]
185. Solidification Microstructures in Ag₃Sn-Cu₃Sn Pseudo-Binary Alloys, H Yu, Y Sun, SP Alpay, M Aindow, J Mater Sci **51**: 6474-6487 (2016). [doi: 10.1007/s10853-016-9947-y]
186. Synthesis of Ru/PDMS Nano-Composites via Supercritical Deposition, M-L Ge, SE Bozbag, CJ Ayala, M Aindow, C Erkey, Materials Chemistry and Physics **180**: 1-4 (2016). [doi: 10.1016/j.matchemphys.2016.05.058]
187. Structure and Mechanical Properties in a Powder-Processed Icosahedral-Phase-Strengthened Aluminum Alloy, TJ Watson, MA Gordillo, I Cernatescu, M Aindow, Scripta Mater **123**: 51-54 (2016). [doi: 10.1016/j.scriptamat.2016.05.037]
188. Switchable and Tunable Film Bulk Acoustic Resonator Fabricated using Barium Strontium Titanate Active Layer and Ta₂O₅/SiO₂ Acoustic Reflector, NM Sbrockey, TS Kalkur, A Mansour, H Khassaf, H Yu, M Aindow, SP Alpay, GS Tompa, Appl Phys Lett **109**: 052902 (2016). [doi: 10.1063/1.4960361]
189. Metallo-Organic Solution Deposition of Ferroelectric Films onto Additively Manufactured Aerospace Alloys, T Patel, H Khassaf, S Vijayan, N Bassiri-Gharb, M Aindow, SP Alpay, RJ Hebert, Acta Mater **122**: 352-358 (2017). [doi: 10.1016/j.actamat.2016.10.009]
190. Microstructural Stability, Defect Structures and Deformation Mechanisms in a Ag₃Sn / Cu₃Sn Alloy, Y Sun, H Yu, MT Kesim, SP Alpay, M Aindow, J Mater Sci **52**: 2944-2956 (2017). [doi: 10.1007/s10853-016-0590-4]
191. Regenerative Electroless Etching of Silicon, KW Kolasinski, NJ Gimbar, H Yu, M Aindow, E Mäkilä, J Salonen, Angew Chem Int Ed **56**: 624-627 (2017). [doi: 10.1002/anie.201610162]; *ibid*, Angew Chem **129**: 639-642 (2017). [doi: 10.1002/ange.201610162]

192. Strong, Ductile and Thermally Stable Cu-Based Metal-Intermetallic Nanostructured Composites, KJ Dusoe, S Vijayan, TR Bissell, J Chen, AM Dongare, M Aindow, SW Lee, *Sci Rep* **7**, 40409 (2017). [doi: 10.1038/srep40409]
193. Focused Ion Beam Sectioning Studies of Biomimetic Hydroxapatite Coatings on Ti-6Al-4V Substrates, C Hu, M Aindow, M Wei, *Surf Coat Tech* **313**: 255-262 (2017). [doi: 10.1016/j.surfcoat.2017.01.103]
194. Control of Average Particle Size of Carbon Aerogel Supported Platinum Nanoparticles by Supercritical Deposition, SB Barim, A Bayrakçeken, SE Bozbag, LC Zhang, M Aindow, C Erkey, *Micropor Mesopor Mater.* **245**: 94-103 (2017). [doi: 10.1016/j.micromeso.2017.01.037]
195. Ion-Damage-Free Planarization or Shallow Angle Sectioning of Solar Cells for Mapping Grain Orientation and Nanoscale Photovoltaic Properties, Y Kutes, J Luria, Y Sun, A Moore, BA Aguirre, J Cruz-Campa, M Aindow, D Zubia, BD Huey, *Nanotechnology* **28**: 185705 (2017). [doi: 10.1088/1361-6528/aa67c2].
196. Transformation of $\text{La}_{0.65}\text{Sr}_{0.35}\text{MnO}_3$ in Electrochemical Water Oxidation, MM Najafpour, A Shirazi Amin, SE Balaghi, Y Mousazadeh, T Jafari, B Deljoo, M Aindow, SL Suib, *Int J Hydrogen Energ.* **42**: 8560-8568 (2017). [doi: 10.1016/j.ijhydene.2016.11.016]
197. Salt Fog Corrosion Behavior in a Powder-Processed Icosahedral-Phase-Strengthened Aluminum Alloy, TJ Watson, MA Gordillo, AT Ernst, BA Bedard, M Aindow. *Corros Sci.* **121**: 133-138 (2017). [doi: 10.1016/j.corsci.2017.03.010]
198. FIB Preparation of Samples for MEMS-based TEM Heating Experiments, S Vijayan, JR Jinschek, S Kujawa, J Greiser, M Aindow. *Microsc Microanal.* **23**: 708-716 (2017). [doi: 10.1017/S1431927617000605]
199. Microstructural stability and phase transformations in electro-deposited cobalt-phosphorus coatings, S Vijayan, N Luo and M Aindow. *J Alloy Compd.* **719**: 142–150 (2017). [doi: 10.1016/j.jallcom.2017.05.152]
200. Cold Spray Deposition of an Icosahedral-Phase-Strengthened Aluminum Alloy Coating, TJ Watson, A Nardi, AT Ernst, I Cernatescu, BA Bedard and M Aindow. *Surf. Coat. Tech.* **324**: 57-63 (2017). [doi: 10.1016/j.surfcoat.2017.05.049]
201. High-Pressure Torsion Induced Phase Transformations and Grain Refinement in Al/Ti Composites, Y Sun, M Aindow, RJ Hebert, TG Langdon and EJ Lavernia. *J Mater Sci* **52**: 12170-12184 (2017). [doi: 10.1007/s10853-017-1331-z]
202. Characterization of Sputter Deposited IrO_2/Pt Bottom Electrodes for PiezoMEMS Applications, DM Potrepka, M Rivas, H Yu, RG Polcawich, M Aindow and GR Fox, *Thin Solid Films* **638**: 127-137 (2017). [doi: 10.1016/j.tsf.2017.07.024]
203. Superelastic and Micaceous Deformation in the Intermetallic Compound CaFe_2As_2 , JT Sypek, CR Weinberger, S Vijayan, M Aindow, SL Bud'ko, PC Canfield, S-W Lee. *Scripta Mater* **141**: 10-14 (2017). [doi: 10.1016/j.scriptamat.2017.07.008]
204. Graphene Aerogel Supported Pt Electrocatalysts for Oxygen Reduction Reaction by Supercritical Deposition, FE Sarac Oztuna, SB Barim, SE Bozbag, H Yu, M Aindow, U Unal and C Erkey, *Electrochim Acta* **250**: 174-184 (2017). [doi: 10.1016/j.electacta.2017.08.067]
205. Non-Metallic Inclusions in 17-4PH Stainless Steel Parts Prepared by Selective Laser Melting, Y Sun, RJ Hebert, M Aindow. *Mater Des* **140**: 153-162 (2018). [doi: 10.1016/j.matdes.2017.11.063]
206. Microstructure and preparation of an ultra-fine-grained W- Al_2O_3 composite by hydrothermal synthesis and spark plasma sintering, C Wang, L Zhang, S Wei, K Pan, M Aindow, Y Yang, *Int. J. Refract. Met. Hard Mater.* **72**: 149-156 (2018). [doi: 10.1016/j.ijrmhm.2017.12.022]

207. Defect Structures in Solution-Grown Single Crystals of the Intermetallic Compound Ag_3Sn , H Yu, Y Sun, WR Meier, PC Canfield, CR Weinberger, S-W Lee and M Aindow, *J Mater Sci* **53**: 5317-5328 (2018). [doi: 10.1007/s10853-017-1901-0]
208. The Effects of Powder Recycling on Ti-6Al-4V Feedstocks for Additive Manufacturing, Y Sun, M Aindow, RJ Hebert. *Mater High Temp* **35**: 217-224 (2018). [doi: 10.1080/09603409.2017.1389133]
209. Corrosion, Oxidation, Erosion and Performance of Ag/W-Based Circuit Breaker Contacts: A Review, MT Kesim, H Yu, Y Sun, M Aindow and SP Alpay. *Corros Sci* **135**: 12-34 (2018). [doi: 10.1016/j.corsci.2018.02.010]
210. Constitutive modeling of high temperature flow behavior in a Ti-45Al-8Nb-2Cr-2Mn-0.2Y alloy, G Ge, LQ Zhang, J Xin, J Lin, M Aindow, LC Zhang, *Sci Rep.* **8**: 5453 (2018). [doi: 10.1038/s41598-018-23617-7]
211. Comparison of Virgin Ti-6Al-4V Powders for Additive Manufacturing, Y Sun, M Aindow and RJ Hebert. *Additive Manufacturing* **21**: 544-555 (2018). [doi: 10.1016/j.addma.2018.02.011]
212. Mesoporous Carbon Aerogel Supported Pt-Cu Bimetallic Nanoparticles via Supercritical Deposition and Their Dealloying and Electrocatalytic Behaviour, SB Barim, SE Bozbag, H Yu, R Kizilel, M Aindow, C Erkey, *Catalysis Today* **310**: 166-175 (2018). [doi: 10.1016/j.cattod.2017.09.023]
213. Hydrogen annealing effects on local structures and oxidation states of atomic layer deposited SnO_x , S Chang, S Vijayan, M Aindow, G Jursich, CG Takoudis. *J. Vac. Sci. Technol. A* **36**: 031519(1-9) (2018). [doi: 10.1116/1.5026696]
214. Effect of IrO_2/Pt , IrO_2 , and Pt bottom electrodes on the structure and electrical properties of PZT-based piezoelectric microelectromechanical system devices, DM Potrepka, M Rivas, H Yu, M Aindow, GR Fox, RG Polcawich. *J Mater Sci Mater Electr.* **29**: 11367–11377 (2018). [doi: 10.1007/s10854-018-9224-8]
215. A Nanoindentation Study of the Plastic Deformation and Fracture Mechanisms in Single-Crystalline CaFe_2As_2 , KG Frawley, I Bakst, JT Sypek, S Vijayan, CR Weinberger, PC Canfield, M Aindow and S-W Lee, *JOM.* **70**: 1074-1080 (2018). [doi: 10.1007/s11837-018-2851-y]
216. Insights into the Plasticity of Ag_3Sn from Density Functional Theory, IN Bakst, H Yu, M Bahadori, H Yu, S-W Lee, M Aindow, CR Weinberger. *Int J Plast* **110**: 57-73 (2018). [doi: 10.1016/j.ijplas.2018.06.008]
217. Unraveling the Mesoscale Evolution of Microstructure during Supersonic Impact of Aluminum Powder Particles, S Suresh, S-W Lee, M Aindow, HD Brody, VR Champagne and AM Dongare, *Sci Rep.* **8**: 10075 (2018). [doi: 10.1038/s41598-018-28437-3]
218. Effect of Heat Treatments on Microstructural Evolution of Additively Manufactured and Wrought 17-4PH Stainless Steel, Y Sun, RJ Hebert, M Aindow, *Mater Des* **156**: 429-440 (2018). [doi: 10.1016/j.matdes.2018.07.015]
219. Effect of transition metal alloying elements on the deformation of Ti-44Al-8Nb-0.2B-0.2Y alloys, LQ Zhang, G Ge, J Lin, M Aindow, LC Zhang, *Sci Rep* **8**: 14242 (2018). [doi: 10.1038/s41598-018-32570-4]
220. Microstructure and Micromechanical Response in Gas-Atomized Al 6061 Alloy Powder and Cold-Sprayed Splats, BA Bedard, T Flanagan, AT Ernst, A Nardi, AM Dongare, HD Brody, VK Champagne Jr., S-W Lee, M Aindow, *J Therm Spray Technol* **27**: 1563-1578 (2018). [doi: 10.1007/s11666-018-0785-0]
221. Temperature Calibration of In Situ TEM Specimen Heating Holders by Isothermal Sublimation of Silver Nanocubes, S Vijayan, M Aindow, *Ultramicroscopy* **196**: 142-153 (2019). [doi: 10.1016/j.ultramicro.2018.10.011]

222. Crystallographically Determined Etching and Its Relevance to the Metal Assisted Catalytic Etching (MACE) of Silicon Powders, KW Kolasinski, BA Unger, A Ernst, M Aindow, *Front Chem.* **6**: 651 (2019). [doi: 10.3389/fchem.2018.00651]
223. Magnetic and Tunable Dielectric Properties of DyCrO₃ Thin Films, A McDannald, S Vijayan, J Shi, A Chen, Q Jia, M Aindow, M. Jain, *J Mater Sci* **54**: 8984-8994 (2019). [doi: 10.1007/s10853-019-03524-6]
224. Studies of thermally activated processes in gas-atomized Al alloy powders: *in situ* STEM heating experiments on FIB-cut cross-sections, S Vijayan, BA Bedard, MA Gleason, HR Leonard, DL Cote, M Aindow, *J Mater Sci* **54**: 9921-9932 (2019). [doi: 10.1007/s10853-019-03562-0]
225. Surfactant selection as a strategy for tailoring the structure and properties of UCT manganese oxides, B Deljoo, T Jafari, R Miao, M-P Nieh, SL Suib and M Aindow. *Mater Des* **180**: 107902 (2019). [doi: 10.1016/j.matdes.2019.107902]
226. Eutectic Microstructures in Dilute Al-Ce and Al-Co Alloys, Y Sun, C Hung, RJ Hebert, C Fennessy, S Tulyani, M Aindow, *Mater Char* **154**: 269-276 (2019). [doi: 10.1016/j.matchar.2019.06.010]
227. Mechanical properties of supersonic-impacted Al6061 microparticles, TJ Flanagan, BA Bedard, AM Dongare, HD Brody, A Nardi, VK Champagne Jr, M Aindow, S-W Lee, *Scripta Materialia* **171**: 52-56 (2019). [doi: 10.1016/j.scriptamat.2019.06.024]
228. Fabrication of a Multi-Phase Porous High-Temperature Mo-Si-B Alloy by *in-situ* Reaction Synthesis, Y Huang, LQ Zhang, M Wang, H Zhang, M Aindow, *Powder Metall* **62**: 258-266 (2019). [doi: 10.1080/00325899.2019.1626584]
229. Development of Quasicrystal Morphology in Gas-Atomized Icosahedral-Phase-Strengthened Aluminum Alloy Powders, H Leonard, S. Rommel, TJ Watson, T Policandriotes, M. Aindow, *Mater Des* **182**: 108094 (2019). Accepted 8/1/19. [doi: 10.1016/j.matdes.2019.108094]
230. Aerobic self-esterification of alcohols assisted by mesoporous manganese and cobalt oxide, E Moharreri, S Biswas, B Deljoo, D Kriz, S Lim, S Elliott, S Dissanayake, M Dabaghian, M Aindow, SL Suib, *ChemCatChem* **11**: 3413-3422 (2019). [doi: 10.1002/cctc.201900704R1]

Refereed Conference Proceedings Edited

Influences of Interface and Dislocation Behavior on Microstructure Evolution

Proceedings of a symposium held at the Fall MRS meeting in Boston, MA December 2000.
 Editors: M Aindow, M Asta, MV Glazov, DL Medlin, AD Rollet, and M Zaiser,
Mater Res Soc Symp Proc **652** (2001).

Electron Microscopy and Analysis 2001

Proceedings of a conference held in Dundee, Scotland on 5-7 September 2001.
 Editors: M Aindow and CJ Kiely,
Inst Phys Conf Ser **168** (2001).

Papers in Refereed Conference Proceedings

1. Epitaxial Growth of (001)Si on Vicinal (01 $\bar{1}2$) Sapphire, RC Pond, M Aindow, C Dineen, TB Peters, in "Microscopy of Semiconducting Materials 1987" (6-8 April 1987, Oxford, UK) eds AG Cullis, PD Augustus, *Inst Phys Conf Ser* **87**: 181-186 (1987).

2. Reciprocal Space Crystallography of Hexagonal Crystals; Application to RHEED of (01 $\bar{1}2$) Sapphire, M Aindow, DJ Eaglesham, RC Pond, in "Electron Microscopy and Analysis 1987" (8-9 September 1987, Manchester, UK) ed LM Brown, Inst Phys Conf Ser 90: 123 (1987).
3. Defects in Large Misfit Heteroepitaxy, DJ Eaglesham, M Aindow, RC Pond, in "Heteroepitaxy on Silicon: Fundamentals, Structure and Devices" (Spring MRS Meeting, 5-8 April 1988, Reno, NV) eds HK Choi, R Hull, H Ishiwara, RJ Nemanich, Mater Res Soc Symp Proc 116: 267-272 (1988). [doi: 10.1557/PROC-116-267]
4. Misorientation Effects in MOCVD CdTe on Sapphire, M Aindow, DJ Eaglesham, RC Pond, in "Eurem 88" (4-9 September 1988, York, UK) eds PJ Goodhew, HG Dickinson, Inst Phys Conf Ser 93(2): 405-406 (1988).
5. The Effect of Rapid Thermal Annealing on the Dislocation Structure of Silicon on Sapphire, M Aindow, JL Batstone, L Pfeiffer, JM Phillips, RC Pond, in "Characterization of the Structure and Chemistry of Defects in Materials" (Fall MRS Meeting, 28 November - 3 December 1988, Boston, MA) eds BC Larson, M Rühle, DN Seidman, Mater Res Soc Symp Proc 138: 373-378 (1989). [doi: 10.1557/PROC-138-373]
6. An Electron Microscopy Study Of MOCVD Cadmium Telluride On Sapphire, M Aindow, DJ Eaglesham, RC Pond, LM Smith, J Thompson, KT Woodhouse, in "Microscopy of Semiconducting Materials 1989" (10-13 April 1989, Oxford, UK) eds AG Cullis, JL Hutchison, Inst Phys Conf Ser 100: 223-228 (1989).
7. Beryllide Precipitation in a Cu - 0.35 wt% Be - 1.60 wt% Ni Alloy, M Aindow, A Guha, P Pirouz, AH Heuer, in "Interfaces in Metal-Ceramics Composites" (TMS Annual Meeting, 18-22 February 1990, Anaheim, CA) eds RY Lin, RJ Arsenault, GPMartins, SG Fishman, (TMS, Warrendale PA) 411-421 (1990).
8. An Electron Microscopy Study on the Microstructure and Microarchitecture of the *Strombus gigas* Shell, VJ Laraia, M Aindow, AH Heuer, in " Materials Synthesis Utilizing Biological Processes" (Fall MRS Meeting, 27 November - 1 December 1989, Boston, MA) eds PC Reike, M Alper, PD Calvert, Mater Res Soc Symp Proc **174**: 117-124 (1990). [doi: 10.1557/PROC-174-117]
9. The Formation of Helical Dislocations in Si Substrates During Epitaxial Deposition of β -SiC, M Aindow, TT Cheng, P Pirouz, in " Diamond, Boron Nitride, Silicon Carbide and Related Wide Bandgap Semiconductors" (Fall MRS Meeting, 27 November - 1 December 1989, Boston, MA) eds JT Glass, R Meisser, N Fujimori, Mater Res Soc Symp Proc **162**: 445-450 (1990). [doi: 10.1557/PROC-162-445]
10. Compatability of Potential Fiber Reinforcing Ceramics with Fe and Ni Aluminides, JA Moser, M Aindow, WAT Clark, S Draper, HL Fraser, in "Intermetallic Matrix Composites" (Spring MRS Meeting, 16-17 April 1990, San Francisco, CA) eds DL Anton, R McMeeking, D Miracle, P Martin, Mater Res Soc Symp Proc **194**: 379-384 (1990). [doi: 10.1557/PROC-194-379]
11. A Comparative Study of Nanocrystalline Material Produced by Sliding Wear and Inert-Gas Condensation, SK Ganapathi, M Aindow, H L Fraser, DA Rigney, in "Clusters and Cluster-Assembled Materials" (Fall MRS Meeting, 26-29 November 1990, Boston, MA) eds RS Averbach, J Bernholc, DL Nelson, Mater Res Soc Symp Proc **206**: 593-598 (1991). [doi: 10.1557/PROC-206-593]

12. Metastable Phases and Defect Microstructures in Melt-Spun Ribbons of Nb₃Al, M Aindow, J Shyue, TA Gaspar, H L Fraser, in "Defects in Materials" (Fall MRS Meeting, 26-29 November 1990, Boston, MA) eds PD Bristowe, JE Epperson, JE Griffith, Z Lillental-Weber, Mater Res Soc Symp Proc **209**: 89-94 (1991). [doi: 10.1557/PROC-209-89]
13. Extended Stacking Faults in Nb₃Al, M Aindow, TT Cheng, R Beanland, J Shyue, HL Fraser, in "Electron Microscopy and Analysis 1991" (10-13 September 1991, Bristol, UK) ed LM Brown, Inst Phys Conf Ser **90**: 249-252 (1991).
14. contributions to the Faraday Discussion "The Liquid - Solid Interface at High Resolution" (7-9 September 1992, Newcastle-upon-Tyne, UK), JPG Farr, M Aindow, Faraday Discuss **94**: 229 and 263 (1992).
15. Atomic Force Microscopy of Growth Features on Epitaxial CdHgTe Films, M Aindow, TT Cheng, IP Jones, MG Astles, DJ Williams, in "Evolution of Surface and Thin Film Microstructure" (Fall MRS Meeting, 30 November - 3 December 1992, Boston, MA) eds HA Atwater, E Chason, M Grabow, M Lagally, Mat Res Soc Symp Proc **280**: 153-156 (1993). [doi: 10.1557/PROC-280-153]
16. Defect Anisotropy in MOVPE CdTe / GaAs, TT Cheng, M Aindow, IP Jones, JE Hails, DJ Williams, MG Astles, in "Evolution of Surface and Thin Film Microstructure" (Fall MRS Meeting, 30 November - 3 December 1992, Boston, MA) eds HA Atwater, E Chason, M Grabow, M Lagally, Mater Res Soc Symp Proc **280**: 425-428 (1993). [doi: 10.1557/PROC-280-425]
17. The Stability of B2 Compounds in Ti-Modified Nb-Al Alloys, J Shyue, D-H Hou, SC Johnson, M Aindow, HL Fraser, in "High Temperature Ordered Intermetallic Alloys V" (Fall MRS Meeting, 30 November - 3 December 1992, Boston, MA) eds I Baker, R Dariola, JD Whittenberger, MH Yoo, Mater Res Soc Symp Proc **288**: 243-250 (1993). [doi: 10.1557/PROC-288-243]
18. Planar Growth Faults in Nb₃Al Alloys, LS Smith, TT Cheng, M Aindow, in "High Temperature Ordered Intermetallic Alloys V" (Fall MRS Meeting, 30 November - 3 December 1992, Boston, MA) eds I Baker, R Dariola, JD Whittenberger, MH Yoo, Mater Res Soc Symp Proc **288**: 263-268 (1993). [doi: 10.1557/PROC-288-263]
19. Dislocations and Slip Systems in V₃Si, LS Smith, M Aindow, MH Loretto, in "High Temperature Ordered Intermetallic Alloys V" (Fall MRS Meeting, 30 November - 3 December 1992, Boston, MA) eds I Baker, R Dariola, JD Whittenberger, MH Yoo, Mater Res Soc Symp Proc **288**: 477-482 (1993). [doi: 10.1557/PROC-288-477]
20. Deformation Mechanisms and Mechanical Properties of B2 Compounds in Ti-Modified Nb-Al Alloys, J Shyue, D-H Hou, SC Johnson, M Aindow, HL Fraser, in "High Temperature Ordered Intermetallic Alloys V" (Fall MRS Meeting, 30 November - 3 December 1992, Boston, MA) eds I Baker, R Dariola, JD Whittenberger, MH Yoo, Mater Res Soc Symp Proc **288**: 573-576 (1993). [doi 10.1557/PROC-288-573]
21. Modification of Crystallization on Implanted of Bioceramics by Proteins, J Mei, RM Shelton, M Aindow, PM Marquis, Proceedings of the 3rd European Ceramics Conference (12-17 September 1993, Madrid, Spain) **3**, 167 (1993).
22. Determination of Beam Directions and Axis / Angle Pairs for Grain Boundaries in Hexagonal Materials, I MacLaren, M Aindow, in "Electron Microscopy and Analysis 1993" (14-17 September 1993, Liverpool, UK) ed AJ Craven, Inst Phys Conf Ser **138**: 157-160 (1993).
23. An ECSTM Study of the Electrodeposition of Nickel onto HOPG Substrates, K Riddell, XQ Tong, M Aindow, JPG Farr, in "Electron Microscopy and Analysis 1993" (14-17 September 1993, Liverpool, UK) ed AJ Craven, Inst Phys Conf Ser **138**: 279-282 (1993).

24. TEM and STM Studies of Growth Spirals on Laser-Ablated Epitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Thin Films, M Yeadon, M Aindow, F Wellhöfer, JS Abell, in "Electron Microscopy and Analysis 1993" (14-17 September 1993, Liverpool, UK) ed AJ Craven, Inst Phys Conf Ser **138**: 283-286 (1993).
25. Growth and Microstructure of Aluminium Substituted $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Single Crystals, A Drake, P Hirst, M Aindow, JS Abell, in "Electron Microscopy and Analysis 1993" (14-17 September 1993, Liverpool, UK) ed AJ Craven, Inst Phys Conf Ser **138**: 333-336 (1993).
26. Ordering in Nb-Al Alloys Containing 10-25 at % Al, LS Smith, J Shyue, M Aindow, MH Loretto, HL Fraser, in "Electron Microscopy and Analysis 1993" (14-17 September 1993, Liverpool, UK) ed AJ Craven, Inst Phys Conf Ser **138**: 433-436 (1993).
27. A Modified Approach to the Modelling of Grain Boundary Structure in Materials with an Hexagonal Crystal Structure, I MacLaren, M Aindow, in "Defect-Interface Interactions" (Fall MRS Meeting, 29 November - 2 December 1993, Boston, MA) eds EP Kvam, AH King, MJ Mills, TD Sands, V Vitek, Mater Res Soc Symp Proc **319**: 251-256 (1994). [doi: 10.1557/PROC-319-251]
28. Microstructures, Defects and Deformation Mechanisms in Vanadium Modified Nb_3Al , LS Smith, M Aindow, MH Loretto, in "High Temperature Silicides and Refractory Alloys" (Fall MRS Meeting, 29 November - 2 December 1993, Boston, MA) eds CL Briant, JJ Petrovic, BP Bewley, AK Vasudevan, Mater Res Soc Symp Proc **322**: 453-458 (1994). [doi: 10.1557/PROC-322-453]
29. Influence of Substrate Surface Preparation on the two-stage MOCVD of CdTe on (001) GaAs, T-T Cheng, M Aindow, IP Jones, JE Hails, A Graham, J Geiss, DJ Williams, MG Astles, in "Compound Semiconductor Epitaxy" (Spring MRS Meeting, 4-8 April 1994, San Francisco, CA) eds CW Tu, LA Kolodziejki, VR McCrary, Mater Res Soc Symp Proc **340** 581-586 (1994). [doi: 10.1557/PROC-340-581]
30. Langmuir Blodgett Films of Calcium Stearate, N Costa, M Aindow, PM Marquis, in "Molecularly Designed Ultrafine/Nanostructured Materials" (Spring MRS Meeting, 4-8 April 1994, San Francisco, CA) eds KE Gonsalves, GM Chow, TD Xiao, RC Cammarata, Mater Res Soc Symp Proc **351** 97-102 (1994). [doi: 10.1557/PROC-351-97]
31. Constrictions on Extended Dislocations in Nb_3Al , LS Smith, M Aindow, MH Loretto, in "Proceedings of ICEM13" (17-22 July 1994, Paris, France) (Ed de Physique, Paris) **2** 71-72.
32. Epitaxial Regrowth in Initial Layers of CdTe on (001)GaAs, TT Cheng, M Aindow, IP Jones, JE Hails, J Giess, DJ Williams, MG Astles, in "Proceedings of ICEM13" (17-22 July 1994, Paris, France) (Ed de Physique, Paris) **2** 147-148.
33. The Effects of Low Power Plasma Treatment on Polyethylene Surfaces, S O'Kell, M Aindow, C Jones, Vide-Couches Minces, 1994, No272 SS, 420-423.
34. Dislocation Motion in γ -TiAl Studied by *In-Situ* Straining Experiments in the HVEM, U Messerschmidt, M Bartsch, M Aindow, R Hattenhauer, D Häussler, IP Jones, in "High Temperature Ordered Intermetallic Alloys VI" (Fall MRS Meeting, 28 November - 1 December 1994, Boston, MA) eds JA Horton, I Baker, S Hanada, RD Noebe, DS Schwartz, Mater Res Soc Symp Proc **364**: 47-52 (1995). [doi: 10.1557/PROC-364-47]
35. Surface Modification of Langmuir Blodgett Films in a Simulated Body Fluid Environment, NG Costa, M Aindow, PM Marquis, in "Proceedings of the 11th Brazilian Conference on Materials Science 11-14 December 1994" 615 (1995).

36. Deformation Microtwinning In Heteroepitaxial Films On Offcut Substrates, TT Cheng, XL Wei, M Aindow, IP Jones, in "Microscopy of Semiconducting Materials 1995" (20-23 March 1995, Oxford, UK) eds AG Cullis, A Staton-Bevan, Inst Phys Conf Ser **146**: 305-308 (1995).
37. Effect Of Substrate Temperature On The Microstructure Of CdTe Thin Films Grown By Plasma-Enhanced MOCVD On (001)GaAs, R Chester, TT Cheng, M Aindow, IP Jones, DJ Williams, in "Microscopy of Semiconducting Materials 1995" (20-23 March 1995, Oxford, UK) eds AG Cullis, A Staton-Bevan, Inst Phys Conf Ser **146**: 313-316 (1995).
38. *In Situ* SPM Observation of Corrosion Processes on a Duplex Stainless Steel in Saline Solutions, ES Reider, XQ Tong, JPG Farr, M Aindow, in "Electron Microscopy and Analysis 1995" (12-15 September 1995, Birmingham, UK) ed D Cherns, Inst Phys Conf Ser **147**: 247-250 (1995).
39. Tip Effects in ECSTM Studies of Pd on HOPG, XQ Tong, M Aindow, JPG Farr, in "Electron Microscopy and Analysis 1995" (12-15 September 1995, Birmingham, UK) ed D Cherns, Inst Phys Conf Ser **147**: 259-262 (1995).
40. Development of Surface Morphology for Laser-Ablated Epitaxial Thin Films of $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ on MgO, M Yeadon, M Aindow, F Wellhöfer, P Woodall, JS Abell, in "Electron Microscopy and Analysis 1995" (12-15 September 1995, Birmingham, UK) ed D Cherns, Inst Phys Conf Ser **147**: 263-266 (1995).
41. Investigation of the Influence of Al-Doping on the Microstructures of Laser-Ablated Epitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Thin Films on (001) MgO, M Yeadon, PJ Hirst, KR Locherer, J Chrosch, JS Abell, M Aindow, F Wellhöfer, P Woodall, EKH Salje, in "Electron Microscopy and Analysis 1995" (12-15 September 1995, Birmingham, UK) ed D Cherns, Inst Phys Conf Ser **147**: 421-424 (1995).
42. Dislocation Motion in γ -TiAl *in situ* Recorded in an HVEM, D Häussler, M Bartsch, U Messerschmidt, M Aindow, IP Jones, in "Electron Microscopy and Analysis 1995" (12-15 September 1995, Birmingham, UK) ed D Cherns, Inst Phys Conf Ser **147**: 463-466 (1995).
43. Deformation Behaviour of V-Modified Nb_3Al -Based Alloys, LS Smith, DN Horspool, DK Tappin, M Aindow, in "Electron Microscopy and Analysis 1995" (12-15 September 1995, Birmingham, UK) ed D Cherns, Inst Phys Conf Ser **147**: 495-498 (1995).
44. Polytropic Structures in the Laves Phase Cr_2Nb , AV Kazantsis, TT Cheng, M Aindow, IP Jones, in "Electron Microscopy and Analysis 1995" (12-15 September 1995, Birmingham, UK) ed D Cherns, Inst Phys Conf Ser **147**: 511-514 (1995).
45. Effect of Variations in Laser Fluence and Pulse Repetition Rate on YBCO Thin Films, DJ Norris, M Aindow, LG Earwaker, P Woodall, F Wellhöfer, in "Applied Superconductivity 1995" (3-6 July 1995, Edinburgh, Scotland) ed D Dew-Hughes, Inst Phys Conf Ser **148**: 879-882 (1995).
46. Properties of Laser-Ablated Epitaxial Thin and Ultrathin $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Films, M Yeadon, M Aindow, JS Abell, M Slaski, C Gough, P Woodall, F Wellhöfer, in "Applied Superconductivity 1995" (3-6 July 1995, Edinburgh, Scotland) ed D Dew-Hughes, Inst Phys Conf Ser **148**: 991-994 (1995).
47. Identification of the Reference Structure for a High Angle Grain Boundary in Titanium, I MacLaren, M Aindow, in "Intergranular and Interphase Boundaries in Materials" - proceedings of IIB'95 (26-29 June 1995, Lisbon, Portugal) eds AC Ferro, JP Conde, MA Fortes, Materials Science Forum **207-209**: 289-292 (1996).
48. High Resolution Fractography of Hydrogen-Assisted Fracture in Fe-3wt% Si, TJ Marrow, M Aindow, JF Knott, in "Hydrogen Effects in Materials" (11-14 September 1994, Moran, WY) eds AW Thompson, NR Moody (TMS, Warrendale PA) 623 (1996).

49. The Mechanical Behaviour and Deformation Mechanisms of Nb-V-Al Alloys, DK Tappin, D Horspool, LS Smith, M Aindow, IP Jones, in "High Temperature Ordered Intermetallic Alloys VII" (Fall MRS Meeting, 2-5 December 1996, Boston, MA) eds CC Koch, CT Liu, NS Stoloff, A Wanner, Mater Res Soc Symp Proc **460**: 671-676 (1997). [doi: 10.1557/PROC-460-671]
50. Transmission Electron Microscopy Study of $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Thin Film Multilayer Devices, MA Barnett, JS Abell, M Aindow, NG Chew, PJ Hirst, RG Humphreys, in "Epitaxial Oxide Thin Films III" (Spring MRS Meeting, 31 March - 4 April 1997, San Francisco, CA) eds DG Schlom, CB Eom, ME Hawley, CM Foster, JS Speck, Mater Res Soc Symp Proc **474**: 107-112 (1997). [doi: 10.1557/PROC-474-107]
51. A Study of The Microstructure and Mechanical Behaviour of Ductile Nb-Al-V Alloys, DN Horspool, DK Tappin, M Aindow, in "Structural Intermetallics 1997" (21-25 September 1997, Seven Springs, PA) eds MV Nathal, R Darolia, CT Liu, PL Martin, DB Miracle, R Wagner, M Yamaguchi (TMS, Warrendale PA) 841-849 (1997).
52. TEM Study of Facet Junctions in $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ / $\text{PrBa}_2\text{Cu}_3\text{O}_{7-x}$ Thin Film Patterned Multilayer Structures, MA Barnett, M Aindow, JS Abell, PJ Hirst, NG Chew, RG Humphreys, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 417-420 (1997).
53. STM Surface Modification of $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Thin Films, SE Johnson, M Yeadon, M Aindow, P Woodall, F Wellhöfer, JS Abell, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 437-440 (1997).
54. A TEM Study of Secondary Epitaxial Orientations in Laser-Ablated $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Thin Films, DJ Norris, M Aindow, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 441-444 (1997).
55. The Effect of Substrate Vicinal Offset on The Morphology and Defect Microstructure of $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ Thin Films on (001) SrTiO_3 , D Vassilyannis, DJ Norris, SE Johnson, M Aindow, P Woodall, F Wellhöfer, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 449-452 (1997).
56. Phase Stability Defects and Deformation Mechanisms in the "Exotic" Intermetallic Compounds Nb_3Al and Cr_2Nb , M Aindow, AV Kazantzis, LS Smith, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 535-540 (1997).
57. Al_3Zr Precipitation Behaviour in a Melt-Spun Al-02Cu-12Mg-05Zr Alloy, CG Jiao, M Aindow, GF Yu, MG Yan, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 553-556 (1997).
58. Orientation Relationships in Duplex Nb-Al-V Alloys, DN Horspool, DK Tappin, M Aindow, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 561-564 (1997).
59. Carbon Deposition on AGR Fuel Pins, GR Millward, D Cox, M Aindow, PJ Darley, HE Evans, CW Mowforth, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 597-600 (1997).
60. High Angle Grain Boundary Structure in Widmanstätten Alpha Ti Microstructures, S Wang, M Aindow, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 661-664 (1997).

61. Phase Transformations and Oxidation of Sputtered MoSi₂ Thin Films, XY Wang, ITH Chang, M Aindow, in "Electron Microscopy and Analysis 1997" (2-5 September 1997, Cambridge, UK) editor JM Rodenburg, Inst Phys Conf Ser **153**: 669-672 (1997).
62. The Growth of YBa₂Cu₃O_{7-d} and PrBa₂Cu₃O_{7-d} Over Argon Ion Milled Steps, PJ Hirst, M Barnett, NG Chew, JS Abell, M Aindow, RG Humphreys, in "Applied Superconductivity 1997" (30 June-3 July 1997, Veldhoven, Netherlands) eds H Rogalla, DHA Blank, Inst Phys Conf Ser **158**: 185-188 (1997).
63. High Temperature Deformation of the Cr₂Nb Laves Phase, AV Kazantzis, M Aindow, IP Jones, in "Proceedings of EUREM-11" (26-30 August 1996, Dublin, Ireland) (CESM, Brussels) **2** 309 (1998).
64. The Internal Oxidation of Nb-20at%Zr-15at%Al, DK Tappin, M Aindow, IP Jones, in "Proceedings of EUREM-11" (26-30 August 1996, Dublin, Ireland) (CESM, Brussels) **2** 359 (1998).
65. Grain Boundary Structure in Hexagonal Materials, F Sarrazit, I MacLaren, M Aindow, RC Pond, in "Boundaries and Interfaces in Materials: The David A Smith Symposium" (Materials Week '97, 14-18 September 1997, Indianapolis, IN) eds RC Pond, WAT Clark, AH King, DB Williams (TMS, Warrendale PA) 29-38 (1998).
66. Selective Oxidation of Austenitic Stainless Steel, DC Cox, GR Millward, M Aindow, HE Evans, in "Electron Microscopy 1998" (31 August – 4 September 1998, Cancun, Mexico) **2**: 605-606 (1998).
67. The Character of Steps on Gamma/Alpha-2 Interfaces in Lamellar TiAl-Based Alloys, P Shang, TT Cheng, M Aindow, in "Intergranular and Interphase Boundaries in Materials" - proceedings of IIB'98 (6-9 July 1998, Prague, Czech Republic) eds P Lejcek, V Paidar, Materials Science Forum **294-296**: 239-242 (1999).
68. Analysis of a 69.3° Near-Twist Boundary in Titanium; a Comparison of 2- and 3-D Models for the Reference Structure, S Wang, M Aindow, in "Intergranular and Interphase Boundaries in Materials" - proceedings of IIB'98 (6-9 July 1998, Prague, Czech Republic) eds P Lejcek, V Paidar, Materials Science Forum **294-296**: 309-312 (1999).
69. The Character of Steps on Gamma/Alpha-2 Interfaces in a Low-Misfit Lamellar TiAl-Based Alloys, P Shang, TT Cheng, M Aindow, in "High Temperature Ordered Intermetallic Alloys VIII" (Fall MRS Meeting, 30 November - 3 December 1998, Boston, MA) eds EP George, M Yamaguchi, MJ Mills, Mater Res Soc Symp Proc **552** KK3.7 (1999). [doi: 10.1557/PROC-552-KK3.7.1]
70. High Temperature Creep of Nb-Al-V Alloys, TS Rong, M Aindow, in "High Temperature Ordered Intermetallic Alloys VIII" (Fall MRS Meeting, 30 November - 3 December 1998, Boston, MA) eds EP George, M Yamaguchi, MJ Mills, Mater Res Soc Symp Proc **552** KK8.28 (1999). [doi: 10.1557/PROC-552-KK8.28.1]
71. The Character of Steps on Gamma/Alpha-2 Interfaces in Lamellar Ti-44Al-4X-4Y Alloys, P Shang, TT Cheng, M Aindow, in "Gamma Titanium Aluminides 1999" (TMS Annual Meeting, 28 February – 4 March 1999, San Diego, CA) eds YW Kim, MH Loretto, D Dimiduk, (TMS, Warrendale PA) 59-66 (1999).
72. Nucleation of Recrystallisation Near Prior Grain Boundaries, SJ Lillywhite, M Aindow, PS Bate in "Proceedings of ReX'99 (JIMIS-10) - The 4th International Conference on Recrystallisation and Related Phenomena" (13-16 July 1999, Tsukuba City, Japan) eds T Sakai, HG Suzuki (The Japan Institute of Metals, Tokyo) 143-148 (1999).

73. Grain Boundary Influence on Texture Evolution during Deformation and Recrystallisation, SJ Lillywhite, M Aindow, PS Bate in "Proceedings of ICOTOM-12 - The 12th International Conference on Textures of Materials" (9-13 August 1999, Montreal, Canada) ed JA Szpunar (NRC Research Press, Ottawa) 1619-1624 (1999).
74. ALCHEMI Studies of B2 Nb-Al-V Alloys, TS Rong, N Jiang, M Aindow, IP Jones, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) editor CJ Kiely, Inst Phys Conf Ser **161**:439-442 (1999).
75. Dislocation Networks in Single Crystal MoSi₂ Deformed at High Temperatures, CG Jiao, M Aindow, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) editor CJ Kiely, Inst Phys Conf Ser **161**:475-478 (1999).
76. Electron Microscopy Studies of the Oxidation of Nd-Fe-B Magnets, Y Li, M Aindow, HE Evans, IR Harris, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) editor CJ Kiely, Inst Phys Conf Ser **161**:483-486 (1999).
77. The Metastable C40 Structure in Sputtered MoSi₂ Thin Films, XY Wang, ITH Chang, M Aindow, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) editor CJ Kiely, Inst Phys Conf Ser **161**:491-494 (1999).
78. Microstructural Study of Nd-Fe-Co-Ga-B Magnet Alloys During The Hydrogenation Disproportionation Process, Y Hu, O Gutfleisch, M Aindow, IR Harris, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) editor CJ Kiely, Inst Phys Conf Ser **161**:503-506 (1999).
79. Catalysed Carbon Deposition on Austenitic Stainless Steel, GR Millward, HE Evans, M Aindow, CW Mowforth, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) editor CJ Kiely, Inst Phys Conf Ser **161**:557-560 (1999).
80. Observations of Non-Close-Packed Arrangements in Multilayers of Passivated Gold Clusters, A Wellner, P Brown, M Aindow, CJ Kiely, JP Wilcoxon, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) ed CJ Kiely, Inst Phys Conf Ser **161**:561-564 (1999).
81. Microstructure of Laser-Ablated La₂CuO₄F_x Thin Films on SrTiO₃, G Kong, M Aindow, MO Jones, I Gameson, ST Lees, KE Gibbons, JS Abell, PP Edwards, in "Electron Microscopy and Analysis 1999" (24-27 August 1999, Sheffield, UK) editor CJ Kiely, Inst Phys Conf Ser **161**:609-612 (1999).
82. Transmission Electron Microscopy Studies of Photochemically Etched Porous Silicon, A Wellner, RE Palmer, L Koker, KW Kolasinski, M Aindow, In "Microscopy of Semiconducting Materials 1999" (22-25 March 1989, Oxford, UK) eds AG Cullis, R Beanland, Inst Phys Conf Ser **164** 513-516 (1999).
83. The Mechanism of Mixed-Mode Phase Transformations, RC Pond, P Shang, TT Cheng, M Aindow, In "Interfacial Engineering for Optimized Properties" (Fall MRS Meeting, 29 November - 3 December 1999, Boston, MA) eds C.B. Carter, E.L. Hall, C.L. Briant, S. Nutt, Mater Res Soc Symp Proc **586** 21-26 (2000). [doi: 10.1557/PROC-586-21]
84. The Mechanism of Diffusionless Transformations in Metallic and Protein Crystals, RC Pond, T Nixon, TT Cheng, M Aindow, In "Grain Boundaries: Their Character, Characterisation and Influence on Properties" (16-17 September 1999, Birmingham, UK) eds I R Harris, I P Jones (Institute of Materials, London) 227-236 (2001).

85. Phase Transformations in an Equiatomic ZrCu Alloy, ZY Liu, M Aindow, JA Hriljac, IP Jones, IR Harris, in "Metastable, Mechanically Alloyed and Nanocrystalline Materials (ISMANAM 2000)" (9-14 July 2000, Oxford, UK) *Mater Sci Forum* **360-362** 223-228 (2001).
86. Crystallographic Description for Nanoparticle Assemblies-Application to Cadmium Selenide Clusters, AL Vasiliev, M Aindow, J Lee, F Papadimitrakopoulos, FC Jain, In "Anisotropic Nanoparticles--Synthesis, Characterization and Applications" eds SJ Stranick, P Searson, LA Lyon, CD Keating, *Mater Res Soc Symp Proc* **635** C4.37.1-6 (2001). [doi: 10.1557/PROC-635-C4.37]
87. The Effect Of Extended Superdislocation / Domain Boundary Interactions In Ordered Intermetallic Compounds, TS Rong, M Aindow, IP Jones, In "Influences of Interface and Dislocation Behavior on Microstructure Evolution" (Fall MRS Meeting, 27 November - 1 December 2000, Boston, MA) eds M Aindow, M Asta, MV Glazov, DL Medlin, AD Rollet, M Zaiser, *Mater Res Soc Symp Proc* **652** Y11.4.1-6 (2001). [doi: 10.1557/PROC-652-Y11.4]
88. The Structure of the α' / β Martensite interface in Ti-10%Mo, DO Klenov, RC Pond, M Aindow, JL Hutchison, in "Electron Microscopy and Analysis 2001" (5-7 September 2001, Dundee, Scotland) eds. M Aindow, CJ Kiely, *Inst Phys Conf Ser* **168**: 353-356 (2001).
89. Observations of Widmanstätten γ Precipitates in a Duplex Stainless Steel, H Jiao, M Aindow, RC Pond, MG Hall, in "Electron Microscopy and Analysis 2001" (5-7 September 2001, Dundee, Scotland) eds. M Aindow, CJ Kiely, *Inst Phys Conf Ser* **168**: 361-364 (2001).
90. Phase formation in Ti (Ta)-Ni and Co-Ti films deposited on (001)Si in N₂ atmospheres, AL Vasiliev, M Aindow, AG Vasiliev, AA Orlikovsky, (Fall MRS Meeting, 2-5 December 2002, Boston, MA) *Mater Res Soc Symp Proc* **745**: N4.10 1-6 (2003). [doi: 10.1557/PROC-745-N4.10]
91. Crystallization of Aluminum in Powder-Processed Al-Rare Earth- Transition Metal Alloys, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, in "Ferroelectric Thin Films XII" (Fall MRS Meeting, 2-5 December 2002, Boston, MA) *Mater Res Soc Symp Proc* **754**: CC11.7 1-6 (2003). [doi: 10.1557/PROC-754-CC11.7]
92. Synthesis of Metal-Doped Cryptomelane Nanomaterials Using Cross-Linking Reagents, J Liu, J Cai, X Shen, SL Suib, M Aindow, (Fall MRS Meeting, 2-5 December 2002, Boston, MA) *Mater Res Soc Symp Proc* **755**: DD6.24 1-6 (2003). [doi: 10.1557/PROC-755-DD6.24]
93. Phase Transformations and Mechanical Response in a Ti/Mo-Based Pseudo-Elastic Alloy, T Zhou, M Aindow, SP Alpay, MJ Blackburn, MH Wu, in "Ti-2003" (Proceedings of the 10th World Conference on Titanium, 13-18 July 2003, Hamburg, Germany) eds. G Lüterjng, J. Albrecht (Wiley-VCH) 1527-1534 (2004).
94. A Transmission Electron Microscopy Study of Dislocation Substructures in PLD-grown Epitaxial Films of (Ba,Sr)TiO₃ on (001) LaAlO₃, IB Misirlioglu, AL Vasiliev, M Aindow, R Ramesh, SP Alpay, in "Ferroelectric Thin Films XII" (Fall MRS Meeting, 1-5 December 2003, Boston, MA) *Mater Res Soc Symp Proc* **784**: C2.7 1-6 (2004). [doi: 10.1557/PROC-784-C2.7]
95. High-Resolution TEM Characterization of Carbon Aerogels as Catalyst Support, D Kang, Y Zhang, C Saquing, C Erkey, M Aindow, in "Synthesis, Characterization, and Properties of Energetic/ Reactive Nanomaterials" (Fall MRS Meeting, 1-5 December 2003, Boston, MA) *Mater Res Soc Symp Proc* **800**: AA9.5 1-6 (2004). [doi: 10.1557/PROC-800-AA9.5]
96. Devitrification Mechanisms in Al-Y-Ni Glasses, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, in "Amorphous and Nanocrystalline Metals" (Fall MRS Meeting, 1-5 December 2003, Boston, MA) *Mater Res Soc Symp Proc* **806**: MM2.11 1-6 (2004). [doi: 10.1557/PROC-806-MM2.11]

97. TEM Studies Of Devitrification Products in Al-Gd-Ni-(Fe) Alloys, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, in “Amorphous and Nanocrystalline Metals” (Fall MRS Meeting, 1-5 December 2003, Boston, MA) Mater Res Soc Symp Proc **806**: MM5.9 1-6 (2004). [doi: 10.1557/PROC-806-MM5.9]
98. Microstructure and Ternary Phases In Al-rich Al-Y-Ni Alloys, AL Vasiliev, M Aindow, MJ Blackburn, TJ Watson, in “Amorphous and Nanocrystalline Metals” (Fall MRS Meeting, 1-5 December 2003, Boston, MA) Mater Res Soc Symp Proc **806**: MM5.10 1-6 (2004). [doi: 10.1557/PROC-806-MM5.10]
99. Phase Formation in Ti (Ta)-Ni and Co-Ti Films Deposited on (001)Si in a N₂ Ambient, AL Vasiliev, M Aindow, AG Vasiliev, IA Horin, AA Orlikovsky, (Design and Nature II, 28-30 June 2004, Rhodes, Greece) *Design and Nature* **6**: 471-474 (2004).
100. HREM Studies on the Morphology of CdSe Nanocrystals Exposed to Amines, DN Horspool, R Li, J Lee, B Yang, F Papadimitrakopoulos, M Aindow, in “Proceedings of Microscopy and Microanalysis 2004” (1-5 August 2004, Savannah GA) *Microsc Microanal* **10 (suppl 2)**, 24-25 (2004). [doi: 10.1017/S1431927604882758]
101. HREM Study of β/γ Interfaces in a Water-Quenched Ti-44Al-4Nb-4Zr Alloy, LC Zhang, TT Aindow, M Aindow, in “Proceedings of Microscopy and Microanalysis 2004” (1-5 August 2004, Savannah GA) *Microsc Microanal* **10 (suppl 2)**, 288-289 (2004). [doi: 10.1017/S1431927604883429]
102. Extraction Replication of Carbides and Borides in the Ni-base Superalloy IN100, K Song, MJ Blackburn, M Aindow, in “Proceedings of Microscopy and Microanalysis 2004” (1-5 August 2004, Savannah GA) *Microsc Microanal* **10 (suppl 2)**, 692-693 (2004). [doi: 10.1017/S1431927604881522]
103. Structural Transformation Induced by Ion-Milling in TiAl-Based Alloys, LC Zhang, M Aindow, in “Proceedings of Microscopy and Microanalysis 2004” (1-5 August 2004, Savannah GA) *Microsc Microanal* **10 (suppl 2)**, 692-693 (2004). [doi: 10.1017/S1431927604883028]
104. HREM of Carbide and Silicide Precipitation in a TiAl-Based Alloy During Aging, LC Zhang, M Aindow, Y-W Kim, in “Proceedings of Microscopy and Microanalysis 2004” (1-5 August 2004, Savannah GA) *Microsc Microanal* **10 (suppl 2)**, 692-693 (2004). [doi: 10.1017/S1431927604882060]
105. The Structure of Ribbon Borides in a Ti-44Al-4Nb-4Zr-1B Alloy, U Kitkamthorn, LC Zhang, TT Aindow, M Aindow, in “Proceedings of Microscopy and Microanalysis 2004” (31 July - 4 August 2005, Honolulu HI) *Microsc Microanal* **11 (suppl 2)**, 1702-1703 (2005). [doi: 10.1017/S1431927605505385]
106. Microstructural Studies of a Directionally Solidified Nb-27Mo-27Cr-9Al-9Si Alloy, YL Hu, AL Vasiliev, LC Zhang, M Aindow, DM Shah, in “Proceedings of Microscopy and Microanalysis 2005” (31 July - 4 August 2005, Honolulu HI) *Microsc Microanal* **11 (suppl 2)**, 1782-1783 (2005). [doi: 10.1017/S1431927605507189]
107. Irradiation-Induced Structural Re-Organization of Carbon Aerogel and Its Derivatives in TEM, D Kang, Y Zhang, C Erkey, M Aindow, in “Proceedings of Microscopy and Microanalysis 2005” (31 July - 4 August 2005, Honolulu HI) *Microsc Microanal* **11 (suppl 2)**, 2048-2049 (2005). [doi: 10.1017/S1431927605500175]

108. Commensurate Intergrowths in Titanium Monoboride Precipitates, U Kitkamthorn, M Aindow in “Proceedings of Microscopy and Microanalysis 2005” (30 July - 3 August 2005, Chicago, IL) *Microsc Microanal* **12 (suppl 2)**, 1068-1069 (2006). [doi: 10.1017/S1431927606063689]
109. The Influence Of Pulse Parameters On The Laser Drilling Of Hastelloy X, R Bright, P Jacobs, M Aindow, HL Marcus, in “Proceedings of ICALEO 2007” (29 October – 1 November 2007, Orlando, FL), Paper #1201, 613-620 (2007).
110. Devitrification of Al-Y-Ni Glasses, A.L.Vasiliev, M. Aindow, in “Proceedings of EMMM-2007” (3-7 September 2007, Moscow, Russia), *AIP Conf Proc* **999**: 257-267 (2008). [doi: 10.1063/1.2918112]
111. Stress Relaxation by Cation Ordering in Epitaxial Lead Zirconate Titanate Films, LC Zhang, AL Vasiliev, IB Misirlioglu, SP Alpay, M Aindow, R Ramesh in “Proceedings of Microscopy and Microanalysis 2008” (3 - 7 August 2008, Albuquerque, NM) *Microsc Microanal* **14 (suppl 2)**, 450-451 (2008). [doi: 10.1017/S143192760808690X]
112. Characterization of Metallurgical Effects in Laser-Drilling of Superalloys, JKM Garofano, HL Marcus, M Aindow in “Proceedings of Microscopy and Microanalysis 2008” (3 - 7 August 2008, Albuquerque, NM) *Microsc Microanal* **14 (suppl 2)**, 558-559 (2008). [doi: 10.1017/S1431927608087539]
113. Investigation of the Laser Drilling Process by Emission Spectroscopy, R Bright, HL Marcus, M Aindow, in “Proceedings of ICALEO 2008” (20-23 October 2008, Temecula, FL), Paper #302.
114. Synthesis of Carbon Aerogel Supported Co-Based PEMFC Catalysts Using Supercritical Ammonia, A Smirnova, Y-L Hu, M Aindow, D Goberman, P Menard, W Rhine, in “Proceedings of the AIChE 2008 Annual Meeting” (16-21 November, 2008, Philadelphia, PA) Paper #508b (2008).
115. Synthesis of Novel Electrode Materials using Supercritical Fluids, AL Smirnova, Y-L Hu, LC Zhang, M Aindow, P Menard, P Singh, D Goberman, in “Novel Electrode Materials” (215th ECS Meeting, 24-29 May 2009, San Francisco, CA) eds S Minter, B Lakshmanan, S Narayanan, *ECS Transactions*, **19[21]** 9-21 (2009). [doi: 10.1149/1.3242512]
116. Electron Microscopy Resources and Education at the Institute of Materials Science, University of Connecticut, VC Solomon, RA Ristau, M Aindow in “Proceedings of Microscopy and Microanalysis 2009” (26 – 30 July 2009, Richmond, VA) *Microsc Microanal* **15 (suppl 2)**, 1150-1151 (2009). [doi: 10.1017/S1431927609098043]
117. Ceramic Joining by Gas Phase Pulsed Laser Processing, CM Weiss, M Aindow, HL Marcus, in “Proceedings of the 2009 SFF Symposium” (3-5 August 2009, Austin, TX), 22-28 (2009).
118. Plasma Spray of Nano Composite Ceramics Using Solution Precursors and Combustion Synthesized Nano Powders, CK Muoto, EH Jordan, M Gell, M Aindow, in “Reliability and Materials Issues of Semiconductor Optical and Electrical Devices and Materials” (Fall MRS Meeting, 30 November – 4 December 2009, Boston, MA) *Mater Res Soc Symp Proc* **1195**: B12.3 1-6 (2010). [doi: 10.1557/PROC-1195-B12-03]
119. Effects of Precursor Chemistry on the Microstructural Characteristics of Sol-Gel/Combustion Synthesized Y₂O₃-MgO Nano-Composites, C Muoto, M Aindow, E Jordan, M Gell in “Proceedings of Microscopy and Microanalysis 2010” (1 - 5 August 2010, Portland, OR) *Microsc Microanal* **16 (suppl 2)**, 1692-1693 (2010). [doi: 10.1017/S1431927610059891]

120. Tomographic Reconstruction of Microstructures in Al-Ni-Y-Based Alloys, M Gordillo, L Zhang, T Watson, M Aindow in “Proceedings of Microscopy and Microanalysis 2011” (7 - 11 August 2011, Nashville, TN) *Microsc Microanal* **17 (suppl 2)**, 1856-1857 (2011). [doi: 10.1017/S1431927611010154]
121. Binary Adsorption of Platinum and Copper Complexes from Supercritical Carbon Dioxide on Carbon Aerogels for the Synthesis of Supported Bimetallic Nanoparticles, SE Bozbag, SO Kostenko, MA Kurykin, LC Zhang, M Aindow, C Erkey, in “Proceedings of the 10th International Symposium on Supercritical Fluids” (13-16 May 2012, San Francisco, CA).
122. AFM-FIB-TEM Analysis of Surface Relief Caused by Various Types of Deformation Bands in Ti-Mo-Based Pseudoelastic Alloys, L Zhang, R Ristau, M Aindow in “Proceedings of Microscopy and Microanalysis 2012” (29 July - 2 August 2012, Phoenix, AZ) *Microsc Microanal* **18 (suppl 2)**, 1772-1773 (2012). [doi: 10.1017/S1431927612010719]
123. Microstructural Development in Manganese Cobaltite Coatings on Metallic Interconnects for Solid Oxide Fuel Cells, NJ Magdefrau, L Gambino, L Chen, EY Sun, J Yamanis, M Aindow in “Proceedings of the 15th European Microscopy Congress” (16th - 21st September 2012, Manchester, UK).
124. EPMA Studies on Reactions Between Ti and Al during Spark Plasma Sintering, Y Sun, K Kulkani, M Aindow, A Sachdev, E Lavernia, in “Proceedings of Microscopy and Microanalysis 2014” (3 - 7 August 2015, Hartford, CT) *Microsc Microanal* **20 (suppl 3)**, 756-757 (2014). [doi: 10.1017/S1431927614005509]
125. Characterization of the Surface Layer of Ag/W Electrical Contacts, H Yu, Y Sun, SP Alpay, M Aindow, in “Proceedings of Microscopy and Microanalysis 2014” (3 - 7 August 2015, Hartford, CT) *Microsc Microanal* **20 (suppl 3)**, 860-861 (2014). [doi: 10.1017/S1431927614006023]
126. Analysis of Titanium Microalloying in As-Received and Oxidized Crofer 22 APU, L Gambino, NJ Magdefrau, M Aindow in “Proceedings of Microscopy and Microanalysis 2014” (3 - 7 August 2015, Hartford, CT) *Microsc Microanal* **20 (suppl 3)**, 892-893 (2014). [doi: 10.1017/S1431927614006187]
127. Fractographic Analysis of Co-P-SiC Electrocomposite Coatings by Stereoscopic Reconstruction, S Vijayan, A Datta, JD Carpenter, Mark Aindow in “Proceedings of Microscopy and Microanalysis 2014” (3 - 7 August 2015, Hartford, CT) *Microsc Microanal* **20 (suppl 3)**, 1884-1885 (2014). [doi: 10.1017/S1431927614011155]
128. Phase Transformations in Electrodeposited Cobalt-Phosphorous Coatings, S Vijayan, N Luo, M Aindow in “Proceedings of the 2015 International Conference on Solid-Solid Phase Transformations in Inorganic Materials (PTM 2015)” (28 June – 3 July 2016, Whistler, British Columbia, Canada) – accepted (in press).
129. ALCHEMI Studies of Spinel Oxides for SOFC Interconnect Alloy Coatings, L Gambino, NJ Magdefrau, M Aindow in “Proceedings of Microscopy and Microanalysis 2015” (2 - 6 August 2015, Portland, OR) *Microsc Microanal* **21 (suppl 3)**, 2277-2278 (2015). [doi: 10.1017/S1431927615012167]
130. *In Situ* TEM Heating Experiments on PVP-Capped Silver Nano-Cubes, S Vijayan, S Thota, J Zhao, M Aindow in “Proceedings of Microscopy and Microanalysis 2016” (24 - 28 July 2016, Columbus, OH) *Microsc Microanal* **22 (suppl 3)**, 822-823 (2016). [doi: 10.1017/S1431927616004967]
131. Microstructural Transformations of $\text{La}_{0.6}\text{Sr}_{0.4}\text{MnO}_3$ to Nano-layered Mn Oxide during Electrochemical Water Oxidation, B Deljoo, AS Amin, SE Balaghi, Y Mousazadeh, T Jafari, MM Najafpour, SL Suib, M Aindow in “Proceedings of Microscopy and Microanalysis 2016” (24 - 28

- July 2016, Columbus, OH) *Microsc Microanal* **22 (suppl 3)**, 1276-1277 (2016). [doi:10.1017/S1431927616007224]
132. Characterization of Gadolinium Doped Cerium (IV) Oxides Deposited by Reactive Spray Deposition Technology for Intermediate Temperature Fuel Cell Applications, A Poozhikunnath, M Aindow, R Maric in “Proceedings of Microscopy and Microanalysis 2016” (24 - 28 July 2016, Columbus, OH) *Microsc Microanal* **22 (suppl 3)**, 1344-1345 (2016). [doi: 10.1017/S143192761600756X]
133. Electron Microscopy Analysis of 17-4 PH Powder for Additive Manufacturing, Y Sun, M Aindow, RJ Hebert in “Proceedings of Microscopy and Microanalysis 2016” (24 - 28 July 2016, Columbus, OH) *Microsc Microanal* **22 (suppl 3)**, 1768-1769 (2016). [doi: 10.1017/S1431927616009685]
134. TEM Sample Preparation of Ceramic Matrix Composites Using FIB, S Poges, JE Cloud, M Aindow, SL Suib, in “Proceedings of Microscopy and Microanalysis 2016” (24 - 28 July 2016, Columbus, OH) *Microsc Microanal* **22 (suppl 3)**, 1836-1837 (2016). [doi: 10.1017/S1431927616010023]
135. Effects of Thermal Processing on Microstructure in P/M Superalloys, B Bedard, MA Kaplan, MP Bochiechio, M Aindow in “Proceedings of Microscopy and Microanalysis 2016” (24 - 28 July 2016, Columbus, OH) *Microsc Microanal* **22 (suppl 3)**, 1958-1959 (2016). [doi: 10.1017/S1431927616010631]
136. Fluidized Bed Production of Surface Functionalized Powders for Solid Oxide Fuel Cell Cathodes, N Sbrockey, M Aindow, B Deljoo, H Ghezal-Ayagh, A Torabi, G Tompa, in “Solid Oxide Fuel Cells 15 (SOFC-XV)” (15th International Symposium on Solid Oxide Fuel Cells, 23-28 July 2017, Hollywood, FL) eds SC Singhal, T Kawada, ECS Transactions, **78[1]** 817-825 (2017). [doi: 10.1149/07801.0817ecst]
137. A Comparison of Ga FIB and Xe-Plasma FIB of Complex Al Alloys, A Ernst, M Wei, M Aindow in “Proceedings of Microscopy and Microanalysis 2017” (6 - 10 August 2017, St. Louis, MO) *Microsc Microanal* **23 (suppl 1)**, 288-289 (2017). [doi: 10.1017/S1431927617002124]
138. Cross Sectional Analysis of Cation Doped Transition Metal Oxide Mesoporous Catalyst Materials, S Poges, B Dutta, H Khanna, E Moharrerri, M Aindow, S L Suib in “Proceedings of Microscopy and Microanalysis 2017” (6 - 10 August 2017, St. Louis, MO) *Microsc Microanal* **23 (suppl 1)**, 292-293 (2017). [doi: 10.1017/S1431927617002148]
139. TEM Specimen Preparation for In Situ Heating Experiments Using FIB, S Vijayan, JR Jinschek, S Kujawa, J Greiser, M Aindow in “Proceedings of Microscopy and Microanalysis 2017” (6 - 10 August 2017, St. Louis, MO) *Microsc Microanal* **23 (suppl 1)**, 294-295 (2017). [doi: 10.1017/S143192761700215X]
140. Characterization of Dislocations in Single-Crystalline Ag₃Sn Intermetallic Alloys, H Yu, Y Sun, S-W Lee, PC Canfield, M Aindow in “Proceedings of Microscopy and Microanalysis 2017” (6 - 10 August 2017, St. Louis, MO) *Microsc Microanal* **23 (suppl 1)**, 760-761 (2017). [doi: 10.1017/S1431927617004469]
141. Studies of the Hierarchical Structure in UCT Manganese Oxides, B Deljoo, T Jafari, SL Suib, M Aindow in “Proceedings of Microscopy and Microanalysis 2017” (6 - 10 August 2017, St. Louis, MO) *Microsc Microanal* **23 (suppl 1)**, 1864-1865 (2017). [doi: 10.1017/S1431927617009989]
142. Microstructural Study of the Heat-treated 17-4PH Stainless Steel Parts Prepared by Selective Laser Melting, Y Sun, M Aindow, RJ Hebert in “Proceedings of Microscopy and Microanalysis 2017” (6 - 10 August 2017, St. Louis, MO) *Microsc Microanal* **23 (suppl 1)**, 2252-2253 (2017). [doi: 10.1017/S1431927617011928]

143. Eutectic Solidification in Zn-Sn Binary Alloys: An Experiment for High Schools, J Aindow, H Yu, MA Bellinger, M Aindow in “Proceedings of Microscopy and Microanalysis 2017” (6 - 10 August 2017, St. Louis, MO) *Microsc Microanal* **23 (suppl 1)**, 2304-2305 (2017). [doi: 10.1017/S1431927617012181]
144. ORR Activity of N-Doped Carbon Aerogel Supported Cobalt Catalyst Prepared by Supercritical Deposition, S Ünsal, SE Bozbağ, B Deljoo, M Aindow, C Erkey in “Proceedings of EFC2017” (12-15 December 2017, Naples, Italy).
145. SEM Technique Based Automatic Analysis for Metal Powders and Defects in Additively Manufactured Components, Y Sun, M Aindow, RJ Hebert in “Proceedings of Microscopy and Microanalysis 2018” (5 - 9 August 2018, Baltimore, MD) *Microsc Microanal* **24 (suppl 1)**, 652-653 (2018). [doi: 10.1017/S1431927618003756]
146. FIB Milling Strategies for TEM Sample Preparation of Spheroidal Powder Particles, AT Ernst, M Wei, M Aindow in “Proceedings of Microscopy and Microanalysis 2018” (5 - 9 August 2018, Baltimore, MD) *Microsc Microanal* **24 (suppl 1)**, 826-827 (2018). [doi: 10.1017/S1431927618003756]
147. Hierarchical Porous Silicon and Porous Silicon Nanowires Produced with Regenerative Electroless Etching (ReEtching) and Metal Assisted Catalytic Etching (MACE), KW Kolasinski, BA Unger, H Yu, AT Ernst, M Aindow, E Mäkilä, J Salonen, in “Pits & Pores 8: Nanomaterials – Fabrication, Properties, and Applications” (AiMES 2018 Meeting, 30 September-4 October 2018, Cancun, Mexico) eds P. Granitzer, R. Boukherroub, D. J. Lockwood, H. Masuda, S. Virtanen, *ECS Transactions*, **86[1]** 65-70 (2018). [doi: 10.1149/08601.0065ecst]
148. Localized Corrosion Phenomena in Powder-Processed Icosahedral-Phase-Strengthened Aluminum Alloys, S. Rommel, H.R. Leonard, T.J. Watson, T. Policandriotes, M. Aindow, in “Proceedings of Microscopy and Microanalysis 2019” (4 - 8 August 2019, Portland, OR) *Microsc Microanal* **25 (suppl 2)**, 752-753 (2019). [doi: 10.1017/S1431927619004495]
149. *In Situ* Heating to Investigate Phase Transformations in Individual Powder Particles of a Gas-Atomized Icosahedral-Phase-Strengthened Al Alloy, H.R. Leonard, S. Rommel, S. Vijayan, T.J. Watson, T. Policandriotes, M. Aindow, in “Proceedings of Microscopy and Microanalysis 2019” (4 - 8 August 2019, Portland, OR) *Microsc Microanal* **25 (suppl 2)**, 1432-1433 (2019). [doi: 10.1017/S143192761900789X]
150. *In Situ* Phase Transformation of Monodisperse Manganese Oxide Nanoparticles, B. Deljoo, SL Suib, M Aindow, in “Proceedings of Microscopy and Microanalysis 2019” (4 - 8 August 2019, Portland, OR) *Microsc Microanal* **25 (suppl 2)**, 1896-1897 (2019). [doi: 10.1017/S1431927619010213]
151. Effect of Metal-Assisted Catalytic Etching (MACE) on Single-Crystal Si Wafers With Faceted Macropores, AT Ernst, KW Kolasinski, BA Unger, M Aindow, in “Proceedings of Microscopy and Microanalysis 2019” (4 - 8 August 2019, Portland, OR) *Microsc Microanal* **25 (suppl 2)**, 2124-2125 (2019). [doi: 10.1017/S1431927619011358]
152. Effect of Part Placement Strategy on the Microstructure of Additively Manufactured 17-4PH Stainless Steel Thin-Wall Parts, Y Sun, M Aindow, R.J. Hebert, in “Proceedings of Microscopy and Microanalysis 2019” (4 - 8 August 2019, Portland, OR) *Microsc Microanal* **25 (suppl 2)**, 2572-2573 (2019). [doi: 10.1017/S143192761901359X]