

1. McCarroll I.E., Lin Y.-C., Rosenthal A., Yen H.-W., Cairney J.M., Hydrogen trapping at dislocations, carbides, copper precipitates and grain boundaries in a dual precipitating low-carbon martensitic steel, *Scripta Materialia*, 221, art. no. 114934; DOI: 10.1016/j.scriptamat.2022.114934
2. Ding L., Ji C., Lu C., Zang R., Weng Y., Liu Q., Jia Z., Study of the precipitate evolution mechanism in an Al-Mg-Si-Cu alloy with Si-rich and low Cu composition, *Materials Characterization*, 191, art. no. 112167; DOI: 10.1016/j.matchar.2022.112167
3. Schäublin R.E., Becker M., Cihova M., Gerstl S.S.A., Deiana D., Hébert C., Pogatscher S., Uggowitzer P.J., Löffler J.F., Precipitation in lean Mg–Zn–Ca alloys, *Acta Materialia*, 239, art. no. 118223; DOI: 10.1016/j.actamat.2022.118223
4. Nie S., Chin R.L., Soufiani A.M., Mehl T., Theska F., Haghdadi N., Primig S., Chan C., Trupke T., Hameiri Z., Temperature sensitivity maps of silicon wafers from photoluminescence imaging: The effect of gettering and hydrogenation, *Progress in Photovoltaics: Research and Applications*, 30 (11), pp. 1298 - 1311; DOI: 10.1002/pip.3579
5. Schneider L.P.C., Barrirero J., Pauly C., Guitar A., Mücklich F., Correlative Site-Specific Sample Preparation for Atom Probe Tomography on Complex Microstructures, *Microscopy and Microanalysis*, 28 (4), pp. 1009 - 1018; DOI: 10.1017/S1431927621000581
6. Li T., Devaraj A., Kruse N., Atomic-scale characterization of (electro-)catalysts and battery materials by atom probe tomography, *Cell Reports Physical Science*, 3 (12), art. no. 101188; DOI: 10.1016/j.xcrp.2022.101188
7. Wang J., Jin S., Yan Q., Liu L., Sha G., Understanding Partitioning and Segregation of Boron in Continuously Cast Slabs of 27MnB5 Steel, *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, 53 (12), pp. 4499 - 4508; DOI: 10.1007/s11661-022-06845-5
8. Van Vreeswijk S.H., Weckhuysen B.M., Emerging analytical methods to characterize zeolite-based materials, *National Science Review*, 9 (9), art. no. nwac047; DOI: 10.1093/nsr/nwac047
9. Akopyan T.K., Belov N.A., Lukyanchuk A.A., Letyagin N.V., Milovich F.O., Fortuna A.S., Characterization of structure and hardness at aging of the A319 type aluminum alloy with Sn trace addition, *Journal of Alloys and Compounds*, 921, art. no. 166109; DOI: 10.1016/j.jallcom.2022.166109
10. Sahu M., Paul A., Ganguly S., Influence of frictional heat spread pattern on the formation of intermetallic layers at the dissimilar FSW joint interface between AA 5083 and HSLA steel, *Journal of Manufacturing Processes*, 83, pp. 555 - 570; DOI: 10.1016/j.jmapro.2022.09.019
11. Chen Y., Rice K.P., Prosa T.J., Reed R.C., Marquis E.A., Al<sub>2</sub>O<sub>3</sub> Grain Boundary Segregation in a Thermal Barrier Coating on a Ni-Based Superalloy, *Microscopy and Microanalysis*, 28 (5), pp. 1453 - 1462; DOI: 10.1017/S1431927622000678
12. Esin V.A., François M., Belkacemi L.T., Irmer D., Briez L., Proudhon H., Effect of microstructure on fatigue crack deviation in AA2050-T84, *Materials Science and Engineering: A*, 858, art. no. 144120; DOI: 10.1016/j.msea.2022.144120
13. Op De Beeck J., Scheerder J.E., Geiser B.P., Bunton J.H., Ulfig R.M., Larson D.J., Van Der Heide P., Vandervorst W., Fleischmann C., The Prospect of Spatially Accurate Reconstructed Atom Probe Data Using Experimental Emitter Shapes,

14. Solís C., Kirchmayer A., da Silva I., Kümmel F., Mühlbauer S., Beran P., Gehrman B., Haghighat M.H., Neumeier S., Gilles R., Monitoring the precipitation of the hardening phase in the new VDM® Alloy 780 by in-situ high-temperature small-angle neutron scattering, neutron diffraction and complementary microscopy techniques, *Journal of Alloys and Compounds*, 928, art. no. 167203; DOI: 10.1016/j.jallcom.2022.167203
15. Yu Z., Jin S., Feng M., Murashkin M.Y., Valiev R.Z., Ringer S.P., Sha G., Temperature-dependent-composition of  $\eta$  phase in an Al-Zn-Mg-Cu alloy under high pressure torsion: Kinetics and thermodynamics, *Acta Materialia*, 237, art. no. 118181; DOI: 10.1016/j.actamat.2022.118181
16. Dumas P., Duguay S., Borrel J., Hilario F., Blavette D., Composition of Carbon Clusters in Implanted Silicon Using Atom Probe Tomography, *Microscopy and Microanalysis*, 28 (4), pp. 994 - 997; DOI: 10.1017/S1431927621012800
17. Zhang S., Gervinskas G., Qiu S., Venugopal H., Marceau R.K.W., De Marco A., Li J., Fu J., Methods of Preparing Nanoscale Vitreous Ice Needles for High-Resolution Cryogenic Characterization, *Nano Letters*, 22 (16), pp. 6501 - 6508; DOI: 10.1021/acs.nanolett.2c01495
18. Tweddle D., Johnson J.A., Kapoor M., Bikmukhametov I., Mileski S., Carsley J.E., Thompson G.B., Atomic-scale clustering in a high-strength Al-Mg-Si-Cu alloy, *Materialia*, 26, art. no. 101567; DOI: 10.1016/j.mtla.2022.101567
19. Qu J., Beznasyuk D.V., Cassidy M., Tanta R., Yang L., Holmes N.P., Griffith M.J., Krogstrup P., Cairney J.M., Atomic-Scale Characterization of Planar Selective-Area-Grown InAs/InGaAs Nanowires, *ACS Applied Materials and Interfaces*; DOI: 10.1021/acsami.2c09594
20. Wang X., Jin K., Wong C.Y., Chen D., Bei H., Wang Y., Ziatdinov M., Weber W.J., Zhang Y., Poplawsky J., More K.L., Understanding effects of chemical complexity on helium bubble formation in Ni-based concentrated solid solution alloys based on elemental segregation measurements, *Journal of Nuclear Materials*, 569, art. no. 153902; DOI: 10.1016/j.jnucmat.2022.153902
21. Jones M.E., London A.J., Breen A.J., Styman P.D., Sikotra S., Moody M.P., Haley D., Improving the Quantification of Deuterium in Zirconium Alloy Atom Probe Tomography Data Using Existing Analysis Methods, *Microscopy and Microanalysis*, 28 (4), pp. 1245 - 1254; DOI: 10.1017/S1431927621012848
22. He H., Halpin J.E., Popuri S.R., Daly L., Bos J.-W.G., Moody M.P., Maclaren D.A., Bagot P.A.J., Atom Probe Tomography of a Cu-Doped TiNiSn Thermoelectric Material: Nanoscale Structure and Optimization of Analysis Conditions, *Microscopy and Microanalysis*, 28 (4), pp. 1340 - 1347; DOI: 10.1017/S1431927621012162
23. Mahajan C., Hasannaemi V., Pole M., Kautz E., Gwalani B., Mukherjee S., Corrosion mechanisms in model binary metallic glass coatings on mild steel and correlation with electron work function, *Corrosion Science*, 207, art. no. 110578; DOI: 10.1016/j.corsci.2022.110578
24. Li J., Zhou X., Breen A., Peng Z., Su J., Kürsteiner P., Correa M.J.D., Chwałek M.L., Wang H., Holec D., Mayer J., Dehm G., Elucidation of formation and transformation mechanisms of Ca-rich Laves phase in Mg-Al-Ca-Mn alloys, *Journal of Alloys and Compounds*, 928, art. no. 167177; DOI: 10.1016/j.jallcom.2022.167177
25. Wang J.-J., Sun S., Lu L., Du H., Jia C.-L., Cojocaru-Mirédin O., Yang J., Liu G., Zhou C., Qiao G., Shi Z., Ma E., Ge B., Yu Y., Wuttig M., Zhang W., Enhancing the

- thermoelectric performance of  $\beta$ -Zn<sub>4</sub>Sb<sub>3</sub> via progressive incorporation of Zn interstitials, *Nano Energy*, 104, art. no. 107967; DOI: 10.1016/j.nanoen.2022.107967
26. Cai J., Han W., Wan F., He J., Investigation of Nano-Scale Segregation in Nanostructured Ferritic Alloy 14YWT after Heavy Ion Irradiation, *Materials*, 15 (20), art. no. 7257; DOI: 10.3390/ma15207257
27. Moyle M.S., Haghdadi N., Davids W.J., Liao X.Z., Ringer S.P., Primig S., Evidence of in-situ Cu clustering as a function of laser power during laser powder bed fusion of 17–4 PH stainless steel, *Scripta Materialia*, 219, art. no. 114896; DOI: 10.1016/j.scriptamat.2022.114896
28. Meng K., Schwarz T.M., Weikum E.M., Stender P., Schmitz G., Frozen n-Tetradecane Investigated by Cryo-Atom Probe Tomography, *Microscopy and Microanalysis*, 28 (4), pp. 1289 - 1299; DOI: 10.1017/S143192762101254X
29. Mukherjee S., Sahu B.P., Sarkar S.K., Ahlawat S., Biswas A., Mandal G.K., Tarafder S., Kar S.K., Temporal evolution of  $\gamma'$  precipitate in HAYNES 282 during ageing: growth and coarsening kinetics, solute partitioning and lattice misfit, *Materialia*, 26, art. no. 101633; DOI: 10.1016/j.mtla.2022.101633
30. Halpin J.E., Jenkins B., Moody M.P., Webster R.W.H., Bos J.-W.G., Bagot P.A.J., Maclaren D.A., A Correlative Study of Interfacial Segregation in a Cu-Doped TiNiSn Thermoelectric half-Heusler Alloy, *ACS Applied Electronic Materials*, 4 (9), pp. 4446 - 4454; DOI: 10.1021/acsaelm.2c00699
31. Zeisl S., Landefeld A., Van Steenberge N., Chang Y., Schnitzer R., The role of alloying elements in NiAl and Ni<sub>3</sub>Ti strengthened Co-free maraging steels, *Materials Science and Engineering: A*, 861, art. no. 144313; DOI: 10.1016/j.msea.2022.144313
32. Fletcher C., Moody M.P., Fleischmann C., Dialameh M., Porret C., Geiser B., Haley D., Automated calibration of model-driven reconstructions in atom probe tomography, *Journal of Physics D: Applied Physics*, 55 (37), art. no. 375301; DOI: 10.1088/1361-6463/ac7986
33. Lindgren K., Schulz F., Gruber H., Markström A., Hryha E., On the role of Zr and B addition on solidification cracking of IN738LC produced by laser powder bed fusion, *Materialia*, 26, art. no. 101609; DOI: 10.1016/j.mtla.2022.101609
34. Zhou X., Wang B., Zeng T., Yan W., Luan J., Wang W., Yang K., Jiao Z., Effect of Pre-deformation on Nanoscale Precipitation and Hardness of a Maraging Stainless Steel, *Acta Metallurgica Sinica (English Letters)*, 35 (12), pp. 2089 - 2100; DOI: 10.1007/s40195-022-01440-4
35. Egan A.J., Xue F., Rao Y., Sparks G., Marquis E., Ghazisaeidi M., Tin S., Mills M.J., Local Phase Transformation Strengthening at Microtwin Boundaries in Nickel-Based Superalloys, *Acta Materialia*, 238, art. no. 118206; DOI: 10.1016/j.actamat.2022.118206
36. Hu B., Shen X., Guo Q., Wen Q., Tu X., Ding C., Ding F., Song W., Luo H., Yielding behavior of triplex medium Mn steel alternated with cooling strategies altering martensite/ferrite interfacial feature, *Journal of Materials Science and Technology*, 126, pp. 60 - 70; DOI: 10.1016/j.jmst.2022.04.003
37. Theska F., Yang Y., Sisco K.D., Plotkowski A., Primig S., On the high-temperature stability of the Al<sub>8</sub>Cu<sub>3</sub>Ce intermetallic in an additively manufactured Al-Cu-Ce-Zr alloy, *Materials Characterization*, 191, art. no. 112109; DOI: 10.1016/j.matchar.2022.112109
38. Yang Q., Chang Z., Messina L., Sandberg N., Castin N., Yousfi A., Toijer E., Thuvander M., Boizot B., Metayer V., Gorse-Pomonti D., Olsson P., Cu precipitation in electron-irradiated iron alloys for spent-fuel canisters, *Journal of Nuclear Materials*, 572, art. no. 154038; DOI: 10.1016/j.jnucmat.2022.154038

39. Tung P.-Y., Zhou X., Morsdorf L., Herbig M., Formation mechanism of brown etching layers in pearlitic rail steel, *Materialia*, 26, art. no. 101625; DOI: 10.1016/j.mtla.2022.101625
40. Sasaki T.T., Lin J.Y., Yi P., Li Z.H., Prameela S.E., Park A., Lipkin E., Lee A., Falk M.L., Weihs T.P., Hono K., Deformation induced solute segregation and G.P. zone formation in Mg-Al and Mg-Zn binary alloys, *Scripta Materialia*, 220, art. no. 114924; DOI: 10.1016/j.scriptamat.2022.114924
41. Lin Y.-R., Bhattacharya A., Chen D., Zhao Y., Kai J.-J., Henry J., Zinkle J.S., The role of Cr concentration and temperature on cavity swelling with co-injected helium in dual-ion irradiated Fe and Fe-Cr alloys, *Materials and Design*, 223, art. no. 111134; DOI: 10.1016/j.matdes.2022.111134
42. Shah S., Gopal A., Thronsen E., Hatzoglou C., Holmedal B., Precipitation, mechanical properties and early slant ductile fracture in cyclic and naturally aged Al-Zn-Mg(-Cu) alloys, *Materials and Design*, 222, art. no. 111026; DOI: 10.1016/j.matdes.2022.111026
43. Saksena A., Kubacka D., Gault B., Spiecker E., Kontis P., The effect of  $\gamma$  matrix channel width on the compositional evolution in a multi-component nickel-based superalloy, *Scripta Materialia*, 219, art. no. 114853; DOI: 10.1016/j.scriptamat.2022.114853
44. Rosenauer A., Brandl D., Ressel G., Lukas S., Monschein S., Stockinger M., Schnitzer R., Influence of delta ferrite on the impact toughness of a PH 13-8 Mo maraging steel, *Materials Science and Engineering: A*, 856, art. no. 144024; DOI: 10.1016/j.msea.2022.144024
45. Ma J., Song Y., Jiang H., Rong L., Effect of Cu on the Microstructure and Mechanical Properties of a Low-Carbon Martensitic Stainless Steel, *Materials*, 15 (24), art. no. 8849; DOI: 10.3390/ma15248849
46. Kim Y.M., Lee S., Kim K.J., Jang T.J., Do H.-S., Jang K., Choi W.S., Jo M.-G., Lee B.-J., Choi P.-P., Sohn S.S., Effects of aging time on the microstructural evolution and strengthening behavior of a VCoNiMo medium-entropy alloy, *Materials Science and Engineering: A*, 857, art. no. 144112; DOI: 10.1016/j.msea.2022.144112
47. Gopon P., Douglas J.O., Meisenkothen F., Singh J., London A.J., Moody M.P., Atom Probe Tomography for Isotopic Analysis: Development of the 34S/32S System in Sulfides, *Microscopy and Microanalysis*, 28 (4), pp. 1127 - 1140; DOI: 10.1017/S1431927621013568
48. Taylor S.D., Gregory D.D., Perea D.E., Kovarik L., Cliff J.B., Lyons T.W., Pushing the limits: Resolving paleoseawater signatures in nanoscale fluid inclusions by atom probe tomography, *Earth and Planetary Science Letters*, 599, art. no. 117859; DOI: 10.1016/j.epsl.2022.117859
49. Zhang L., Yao S., Yu P., Feng D., Dai J., Cao Y., Structural and Optical Property Study of InPBi Thin Films [InPBi薄膜材料的结构性能和光学性能研究], *Bandaoti Guangdian/Semiconductor Optoelectronics*, 43 (5), pp. 898 - 902; DOI: 10.16818/j.issn1001-5868.2022030603
50. Mauze A., Itoh T., Zhang Y., Deagueros E., Wu F., Speck J.S., Coherently strained (001)  $\beta$ -(Al<sub>x</sub>Ga<sub>1-x</sub>)<sub>2</sub>O<sub>3</sub> thin films on  $\beta$ -Ga<sub>2</sub>O<sub>3</sub>: Growth and compositional analysis, *Journal of Applied Physics*, 132 (11), art. no. 115302; DOI: 10.1063/5.0104010
51. Im H.J., Makineni S.K., Oh C.-S., Gault B., Choi P.-P., Elemental Sub-Lattice Occupation and Microstructural Evolution in  $\gamma/\gamma'$  Co-12Ti-4Mo-Cr Alloys, *Microscopy and Microanalysis*, 28 (4), pp. 1335 - 1339; DOI: 10.1017/S1431927621000362

52. Hughes J., Toyama T., Gorley M., Jimenez-Melero E., Full-stage precipitation during aging of Cu-0.55Cr-0.07Zr alloy for high heat flux fusion reactor technology, *Journal of Materials Research and Technology*, 20, pp. 801 - 810; DOI: 10.1016/j.jmrt.2022.07.113
53. Yu Y., Zhou C., Zhang X., Abdellaoui L., Doberstein C., Berkels B., Ge B., Qiao G., Scheu C., Wuttig M., Cojocaru-Mirédin O., Zhang S., Dynamic doping and Cottrell atmosphere optimize the thermoelectric performance of n-type PbTe over a broad temperature interval, *Nano Energy*, 101, art. no. 107576; DOI: 10.1016/j.nanoen.2022.107576
54. Durand M., Cormier J., Paumier F., Katnagallu S., Saksena A., Kontis P., Pettinari-Sturmelt F., Hantcherli M., Franchet J.-M., Dumont C., Bozzolo N., Chemical redistribution and change in crystal lattice parameters during stress relaxation annealing of the AD730TM superalloy, *Acta Materialia*, 237, art. no. 118141; DOI: 10.1016/j.actamat.2022.118141
55. Hua Z.-M., Wang C., Wang T.-S., Du C., Jin S.-B., Sha G., Gao Y., Jia H.-L., Zha M., Wang H.-Y., Large hardening response mediated by room-temperature dynamic solute clustering behavior in a dilute Mg-Zn-Ca-Sn-Mn alloy, *Acta Materialia*, 240, art. no. 118308; DOI: 10.1016/j.actamat.2022.118308
56. Li Z.H., Gao S., Sasaki T.T., Nakata T., Kamado S., Tsuji N., Hono K., Discontinuous yielding phenomena triggered by Zn addition in low-alloyed Mg-Al-Ca-Mn alloys, *Scripta Materialia*, 221, art. no. 114967; DOI: 10.1016/j.scriptamat.2022.114967
57. Kim S.E., Verma N., Özerinç S., Jana S., Das S., Bellon P., Averback R.S., Strengthening of nanocrystalline Al using grain boundary solute additions: Effects of thermal annealing and ion irradiation, *Materialia*, 26, art. no. 101564; DOI: 10.1016/j.mtla.2022.101564
58. Shi Z., He R., Chen Y., Yan H., Song H., Luo C., Nie Q., Hu Z., Microstructural evolution and strengthening mechanisms of a novel Al-11Si-3Cu alloy microalloyed with minor contents of Sr and Sc, *Materials Science and Engineering: A*, 853, art. no. 143738; DOI: 10.1016/j.msea.2022.143738
59. Xiao Y., Xiong X., Sun G., Sun M., Liu W., Atom probe characterization of Cu-rich precipitates in different phases of 15-5 PH stainless steel in over-aged condition, *Materials Characterization*, 191, art. no. 112184; DOI: 10.1016/j.matchar.2022.112184
60. Jung C., Jun H., Jang K., Kim S.-H., Choi P.-P., Tracking the Mn Diffusion in the Carbon-Supported Nanoparticles Through the Collaborative Analysis of Atom Probe and Evaporation Simulation, *Microscopy and Microanalysis*, 28 (6), pp. 1841 - 1850; DOI: 10.1017/S1431927622012211
61. Kim S.-H., Stephenson L.T., da Silva A.K., Gault B., El-Zoka A.A., Phase separation and anomalous shape transformation in frozen microscale eutectic indium-gallium upon remelting, *Materialia*, 26, art. no. 101595; DOI: 10.1016/j.mtla.2022.101595
62. Van Vreeswijk S.H., Monai M., Oord R., Schmidt J.E., Parvulescu A.N., Yarulina I., Karwacki L., Poplawsky J.D., Weckhuysen B.M., Detecting Cage Crossing and Filling Clusters of Magnesium and Carbon Atoms in Zeolite SSZ-13 with Atom Probe Tomography, *JACS Au*, 2 (11), pp. 2501 - 2513; DOI: 10.1021/jacsau.2c00296
63. Feng M., Jin S., Sha G., Understanding Advanced Aluminum Alloys with Atom Probe Tomography [三维原子探针技术助力先进铝合金研究], *Materials China*, 41 (11), pp. 891 - 898; DOI: 10.7502/j.issn.1674-3962.202207023
64. Platl J., Bodner S., Leitner H., Turk C., Nielsen M.-A., Keckes J., Schnitzer R., Local microstructural evolution and the role of residual stresses in the phase stability of a

- laser powder bed fused cold-work tool steel, *Materials Characterization*, 193, art. no. 112318; DOI: 10.1016/j.matchar.2022.112318
65. Jovicevic-Klug M., Tegg L., Jovicevic-Klug P., Dražic G., Almásy L., Lim B., Cairney J.M., Podgornik B., Multiscale modification of aluminum alloys with deep cryogenic treatment for advanced properties, *Journal of Materials Research and Technology*, 21, pp. 3062 - 3073; DOI: 10.1016/j.jmrt.2022.10.089
  66. Sarkar S.K., Biswas A., APT based reliable quantification of Cr-rich phase separation and its relationship with mechanical properties in thermally aged Fe-20 at.% Cr alloy, *Journal of Nuclear Materials*, 572, art. no. 154090; DOI: 10.1016/j.jnucmat.2022.154090
  67. Vojtech V., Charilaou M., Kovács A., Firlus A., Gerstl S.S.A., Dunin-Borkowski R.E., Löffler J.F., Schäublin R.E., Macroscopic magnetic hardening due to nanoscale spinodal decomposition in Fe–Cr, *Acta Materialia*, 240, art. no. 118265; DOI: 10.1016/j.actamat.2022.118265
  68. Kohne T., Dahlström A., Winkelmann A., Hedström P., Borgenstam A., Correlation of Heterogeneous Local Martensite Tetragonality and Carbon Distribution in High Carbon Steel, *Materials*, 15 (19), art. no. 6653; DOI: 10.3390/ma15196653
  69. Nakarmi P., Koenig A., Tweddle D., Cole-Piepkke K., Leary A.M., Noebe R.D., Thompson G.B., Mewes C., Mewes T., Magnetization dynamics of amorphous and nanocomposite CoFeMnNbSiB films with the addition of excess cobalt and boron, *Journal of Magnetism and Magnetic Materials*, 564, art. no. 170029; DOI: 10.1016/j.jmmm.2022.170029
  70. Parikh P., Chung H., Vo E., Banerjee A., Meng Y.S., Devaraj A., Nanoscale Compositional Mapping of Commercial LiNi<sub>0.8</sub>Co<sub>0.15</sub>Al<sub>0.05</sub>O<sub>2</sub> Cathodes Using Atom Probe Tomography, *Journal of Physical Chemistry C*, 126 (34), pp. 14380 - 14388; DOI: 10.1021/acs.jpcc.2c01217
  71. Yamaguchi Y., Kanitani Y., Kudo Y., Uzuhashi J., Ohkubo T., Hono K., Tomiya S., Atomic Diffusion of Indium through Threading Dislocations in InGaN Quantum Wells, *Nano Letters*, 22 (17), pp. 6930 - 6935; DOI: 10.1021/acs.nanolett.2c01479
  72. Shu R., Han Z., Elsukova A., Zhu Y., Qin P., Jiang F., Lu J., Persson P.O.Å., Palisaitis J., le Febvrier A., Zhang W., Cojocaru-Mirédin O., Yu Y., Eklund P., Liu W., Solid-State Janus Nanoprecipitation Enables Amorphous-Like Heat Conduction in Crystalline Mg<sub>3</sub>Sb<sub>2</sub>-Based Thermoelectric Materials, *Advanced Science*, 9 (25), art. no. 2202594; DOI: 10.1002/advs.202202594
  73. Marshall J.M., Tang F., Han Y., Bagot P.A.J., Moody M.P., Multi-Scale microscopy of Reactive sintered boride (RSB) neutron shielding materials, *Nuclear Materials and Energy*, 33, art. no. 101285; DOI: 10.1016/j.nme.2022.101285
  74. Mondal S., Bansal U., Makineni S.K., On the fabrication of atom probe tomography specimens of Al alloys at room temperature using focused ion beam milling with liquid Ga ion source, *Microscopy Research and Technique*, 85 (9), pp. 3040 - 3049; DOI: 10.1002/jemt.24151
  75. Guehairia S., Demoulin R., Merabet H., Pareige P., Cardin J., Labbé C., Carrada M., Goubilleau F., Talbot E., Atomic-scale and optical investigation of nanostructured Er disilicates in silica, *Journal of Alloys and Compounds*, 926, art. no. 166947; DOI: 10.1016/j.jallcom.2022.166947
  76. Poplawsky J.D., Michi R.A., Allard L.F., Bahl S., Plotkowski A.J., Shyam A., Using  $\theta'$  interfaces as templates for planar L12 precipitation in AlCuMnZr alloys, *Additive Manufacturing Letters*, 3, art. no. 100086; DOI: 10.1016/j.addlet.2022.100086

77. Gueye P.M., Gómez-Ferrer B., Kaden C., Pareige C., Role of Ni, Si and P on the formation of solute-rich clusters under irradiation in Fe-Cr alloys, *Journal of Nuclear Materials*, 570, art. no. 153958; DOI: 10.1016/j.jnucmat.2022.153958
78. Hsu C.-Y., Stodolna J., Todeschini P., Delabrouille F., Barnier V., Radiguet B., Christien F., Solute interface segregation measurement: Cross comparison between four different analytical methods, *Applied Surface Science*, 598, art. no. 153784; DOI: 10.1016/j.apsusc.2022.153784
79. Lee Y., Stender P., Eich S.M., Schmitz G., Probing the Miscibility Gap of the Pt-Pd Binary System by Atom Probe Tomography, *Microscopy and Microanalysis*, 28 (4), pp. 1385 - 1395; DOI: 10.1017/S1431927621013842
80. Ren Y., Autefage H., Jones J.R., Stevens M.M., Bagot P.A.J., Moody M.P., Developing Atom Probe Tomography to Characterize Sr-Loaded Bioactive Glass for Bone Scaffolding, *Microscopy and Microanalysis*, 28 (4), pp. 1310 - 1320; DOI: 10.1017/S1431927621012976
81. Morris R.J.H., Cuduvally R., Lin J.-R., Zhao M., Vandervorst W., Thuvander M., Fleischmann C., Field dependent study on the impact of co-evaporated multihits and ion pile-up for the apparent stoichiometric quantification of GaN and AlN, *Ultramicroscopy*, 241, art. no. 113592; DOI: 10.1016/j.ultramic.2022.113592
82. Hsiao H.-W., Feng R., Ni H., An K., Poplawsky J.D., Liaw P.K., Zuo J.-M., Data-driven electron-diffraction approach reveals local short-range ordering in CrCoNi with ordering effects, *Nature Communications*, 13 (1), art. no. 6651; DOI: 10.1038/s41467-022-34335-0
83. Kim T.-Y., Kim T.-H., Cho Y.-H., Lee B.H., Moon J., Lee C.-H., Ha H.-Y., Lee T.-H., Hong H.-U., Influence of Ti addition on MX precipitation and creep-fatigue properties of RAFM steel for nuclear fusion reactor, *Journal of Nuclear Materials*, 571, art. no. 154001; DOI: 10.1016/j.jnucmat.2022.154001
84. Mondol S., Bansal U., Dhanalakshmi P., Makineni S.K., Mandal A., Chattopadhyay K., Enhancement of high temperature strength of Al-Cu alloys by minor alloying and hot working process, *Journal of Alloys and Compounds*, 921, art. no. 166136; DOI: 10.1016/j.jallcom.2022.166136
85. Day A.C., Breen A.J., Reinhard D.A., Kelly T.F., Ringer S.P., Exploration of atom probe tomography at sub-10K, *Ultramicroscopy*, 241, art. no. 113595; DOI: 10.1016/j.ultramic.2022.113595
86. Shi Y., Jones M.E., Meier M.S., Wright M., Polzin J.-I., Kwapil W., Fischer C., Schubert M.C., Grovenor C., Moody M., Bonilla R.S., Towards accurate atom scale characterisation of hydrogen passivation of interfaces in TOPCon architectures, *Solar Energy Materials and Solar Cells*, 246, art. no. 111915; DOI: 10.1016/j.solmat.2022.111915
87. Zhai Q., Xiao Y., Li J., Liu W., Effect of Cu on precipitation strengthening process in Fe-NiAlMn alloy [Cu对Fe-NiAlMn合金析出强化过程的影响], *Cailiao Gongcheng/Journal of Materials Engineering*, 50 (10), pp. 87 - 92; DOI: 10.11868/j.issn.1001-4381.2020.001141
88. Kim S.-H., Dong K., Zhao H., El-Zoka A.A., Zhou X., Woods E.V., Giuliani F., Manke I., Raabe D., Gault B., Understanding the Degradation of a Model Si Anode in a Li-Ion Battery at the Atomic Scale, *Journal of Physical Chemistry Letters*, 13 (36), pp. 8416 - 8421; DOI: 10.1021/acs.jpcclett.2c02236
89. Klupś P., Haley D., London A.J., Gardner H., Famelton J., Jenkins B.M., Hyde J.M., Bagot P.A.J., Moody M.P., PosgenPy: An Automated and Reproducible Approach to Assessing the Validity of Cluster Search Parameters in Atom Probe Tomography

- Datasets, Microscopy and Microanalysis, 28 (4), pp. 1066 - 1075; DOI: 10.1017/S1431927621012368
90. Pareige C., Etienne A., Gueye P.-M., Medvedev A., Kaden C., Konstantinovic M.J., Malerba L., Solute rich cluster formation and Cr precipitation in irradiated Fe-Cr-(Ni,Si,P) alloys: Ion and neutron irradiation, *Journal of Nuclear Materials*, 572, art. no. 154060; DOI: 10.1016/j.jnucmat.2022.154060
  91. Kim K., Jung C., Yim K., Jeong I., Shin D., Hwang I., Song S., Ahn S.K., Eo Y.-J., Cho A., Cho J.-S., Park J.H., Choi P.-P., Yun J.H., Gwak J., Atom-Scale Chemistry in Chalcopyrite-Based Photovoltaic Materials Visualized by Atom Probe Tomography, *ACS Applied Materials and Interfaces*, 14 (47), pp. 52825 - 52837; DOI: 10.1021/acsami.2c14321
  92. Chang A.S., Li B., Wang S., Frisone S., Goldman R.S., Han J., Lauhon L.J., Unveiling the influence of selective-area-regrowth interfaces on local electronic properties of GaN p-n junctions for efficient power devices, *Nano Energy*, 102, art. no. 107689; DOI: 10.1016/j.nanoen.2022.107689
  93. Rogozhkin S.V., Khomich A.A., Klauz A.V., Bogachev A.A., Gorshkova Y.E., Bokuchava G.D., Nikitin A.A., Lukyanchuk A.A., Raznitsyn O.A., Shutov A.S., Zaluzhny A.G., Comprehensive Analysis of Nanostructure of Oxide Dispersion-Strengthened Steels by Ultramicroscopy Methods, *Journal of Surface Investigation*, 16 (6), pp. 1189 - 1200; DOI: 10.1134/S1027451022060490
  94. Spartacus G., Malaplate J., De Geuser F., Sornin D., Mouton I., Guillou R., Deschamps A., The impact of outgassing on the nano-oxides kinetics of ferritic oxide dispersion strengthened steel, *Materials Today Communications*, 33, art. no. 104929; DOI: 10.1016/j.mtcomm.2022.104929
  95. Sepehri-Amin H., Imasato K., Wood M., Kuo J.J., Snyder G.J., Evolution of Nanometer-Scale Microstructure within Grains and in the Intergranular Region in Thermoelectric Mg<sub>3</sub>(Sb, Bi)<sub>2</sub>Alloys, *ACS Applied Materials and Interfaces*, 14 (33), pp. 37958 - 37966; DOI: 10.1021/acsami.2c09905
  96. Liang Z., Neumeier S., Rao Z., Göken M., Pyczak F., CALPHAD informed design of multicomponent CoNiCr-based superalloys exhibiting large lattice misfit and high yield stress, *Materials Science and Engineering: A*, 854, art. no. 143798; DOI: 10.1016/j.msea.2022.143798
  97. Segreto N., Schwarz T.M., Dietrich C.A., Stender P., Schuldt R., Schmitz G., Kästner J., Understanding the Underlying Field Evaporation Mechanism of Pure Water Tips in High Electrical Fields, *Journal of Physical Chemistry A*, 126 (33), pp. 5663 - 5671; DOI: 10.1021/acs.jpca.2c04163
  98. Li J., Zhou X., Su J., Breitbach B., Chwałek M.L., Wang H., Dehm G., Elucidating dynamic precipitation and yield strength of rolled Mg–Al–Ca–Mn alloy, *Materials Science and Engineering: A*, 856, art. no. 143898; DOI: 10.1016/j.msea.2022.143898
  99. Shishido H., Aruga Y., Murata Y., Marioara C.D., Engler O., Evaluation of precipitates and clusters during artificial aging of two model Al–Mg–Si alloys with different Mg/Si ratios, *Journal of Alloys and Compounds*, 927, art. no. 166978; DOI: 10.1016/j.jallcom.2022.166978
  100. Karati A., Ghosh S., Nagini M., Mallik R.C., Shabadi R., Murty B.S., Varadaraju U.V., Thermoelectric properties of nanocrystalline half-Heusler high-entropy Ti<sub>2</sub>NiCoSn<sub>1-x</sub>Sb<sub>1+x</sub> (x = 0.3, 0.5, 0.7, 1) alloys with VEC > 18, *Journal of Alloys and Compounds*, 927, art. no. 166578; DOI: 10.1016/j.jallcom.2022.166578
  101. Zhang M.-X., Wang C., Zhang S.-Y., Liu X., Wang X., Ren M.-W., Wang H.-Y., Enhanced aging precipitation behavior and mechanical properties of 6022 Al–Mg–Si

- alloy with Zr addition, *Materials Science and Engineering: A*, 840, art. no. 142957; DOI: 10.1016/j.msea.2022.142957
102. Levine S.M., Pareige C., Jiao Z., Edmondson P.D., Was G.S., Zinkle S.J., Bhattacharya A., Phase instabilities in austenitic steels during particle bombardment at high and low dose rates, *Materials and Design*, 217, art. no. 110588; DOI: 10.1016/j.matdes.2022.110588
  103. Abolhasani A., Langelier B., Worswick M.J., Wells M.A., Esmaeili S., Experimental analysis and modelling of natural aging in AA7xxx Al alloys, *Journal of Alloys and Compounds*, 906, art. no. 164344; DOI: 10.1016/j.jallcom.2022.164344
  104. Breen A.J., Theska F., Lim B., Primig S., Ringer S.P., Advanced quantification of the site-occupancy in ordered multi-component intermetallics using atom probe tomography, *Intermetallics*, 145, art. no. 107538; DOI: 10.1016/j.intermet.2022.107538
  105. Takahashi J., Kisaka Y., Kawakami K., Terasaki H., Atomic-Scale Analysis of Oxide Inclusion in Weld Metal Using Atom Probe Tomography, *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, 53 (5), pp. 1693 - 1703; DOI: 10.1007/s11661-022-06623-3
  106. Liu J., Kannan R., Zhang D., Liu T., Nandwana P., Devaraj A., Multi-scale characterization of supersolidus liquid phase sintered H13 tool steel manufactured via binder jet additive manufacturing, *Additive Manufacturing*, 56, art. no. 102834; DOI: 10.1016/j.addma.2022.102834
  107. Bae H.J., Ko K.K., Ishtiaq M., Kim J.G., Sung H., Seol J.B., On the stacking fault forming probability and stacking fault energy in carbon-doped 17 at% Mn steels via transmission electron microscopy and atom probe tomography, *Journal of Materials Science and Technology*, 115, pp. 177 - 188; DOI: 10.1016/j.jmst.2021.11.027
  108. Fonseca E.B., Escobar J.D., Gabriel A.H.G., Ribamar G.G., Boll T., Lopes É.S.N., Tempering of an additively manufactured microsegregated hot-work tool steel: A high-temperature synchrotron X-ray diffraction study, *Additive Manufacturing*, 55, art. no. 102812; DOI: 10.1016/j.addma.2022.102812
  109. Kamboj A., Marquis E.A., Effect of dose rate on the phase stability of a CrFeNiMn alloy, *Scripta Materialia*, 215, art. no. 114697; DOI: 10.1016/j.scriptamat.2022.114697
  110. Kainz C., Tkadletz M., Stark A., Schell N., Czettl C., Pohler M., Schalk N., Thermal stability of a cathodic arc evaporated Cr<sub>0.74</sub>Ta<sub>0.26</sub>N coating, *Materialia*, 22, art. no. 101434; DOI: 10.1016/j.mtla.2022.101434
  111. Wurmshuber M., Jakob S., Dopperrmann S., Wurster S., Bodlos R., Romaner L., Maier-Kiener V., Kiener D., Tuning mechanical properties of ultrafine-grained tungsten by manipulating grain boundary chemistry, *Acta Materialia* 232, art. no. 117939; DOI: 10.1016/j.actamat.2022.117939
  112. Tweddle D., Koenig A., Nakarmi P., Leary A.M., Noebe R.D., Mewes T., Mewes C., Thompson G.B., Phase evolution and magnetic properties of a Co-rich multi-component magnetic nanocomposite film, *Journal of Alloys and Compounds*, 903, art. no. 163782; DOI: 10.1016/j.jallcom.2022.163782
  113. Mandal S., Kumar Gupta A., Echeverria E., McIlroy D.N., Poplawsky J.D., Sachan R., Laser-assisted nanofabrication of multielement complex oxide core-shell nanoparticles, *Materials and Design*, 220, art. no. 110882; DOI: 10.1016/j.matdes.2022.110882
  114. Niu J.B., Zhang X.H., Ma X.X., Liu Y., Wang L.Q., Wu T.B., Characterization of vein-like structures formed in nitrided layers during plasma nitriding of 8Cr4Mo4V steel, *Materialia*, 22, art. no. 101378; DOI: 10.1016/j.mtla.2022.101378

115. Chai F., Wang Z., Luo X., Zhang Z., Liu M., Wang Z., Effect of Ni on the Features of Cu-rich Precipitates in High-strength Low Alloy Steel [Ni对高强度低合金钢中富Cu相析出特征的影响], *Cailiao Daobao/Materials Reports*, 36 (11), art. no. 21070210; DOI: 10.11896/cldb.21070210
116. Rodenkirchen C., Appleton M., Ryan M.P., Pedrazzini S., A review on atom probe and correlative microscopy studies of corrosion in nickel-based superalloys, *MRS Bulletin*, 47 (7), pp. 706 - 717; DOI: 10.1557/s43577-022-00366-7
117. Monschein S., Ragger K.S., Zügner D., Fasching J., Schnitzer R., Influence of the Ti Content on the Grain Stability and the Recrystallization Behavior of Nb-Alloyed High-Strength Low-Alloyed Steels, *Steel Research International*, 93 (7), art. no. 2200094; DOI: 10.1002/srin.202200094
118. Sawabe T., Sonoda T., An atom probe study on the Fe distribution in Zr-based alloys with different Fe content under high fluence neutron irradiation, *Journal of Nuclear Materials*, 567, art. no. 153809; DOI: 10.1016/j.jnucmat.2022.153809
119. Weber L., Webel J., Mücklich F., Kraus T., Precipitate number density determination in microalloyed steels by complementary atom probe tomography and matrix dissolution, *Journal of Materials Science*, 57 (26), pp. 12585 - 12599; DOI: 10.1007/s10853-022-07398-z
120. Chadha K., Tian Y., Jiang L., Dorin T., Spray J., Aranas C., Jr., Strengthening mechanisms in a new precipitation hardening stainless steel fabricated by laser powder bed fusion, *MRS Communications*, 12 (3), pp. 365 - 369; DOI: 10.1557/s43579-022-00186-5
121. Baler N., MV A.S., Godha A., Makineni S.K., Microstructural engineering of medium entropy NiCo(CrAl) alloy for enhanced room and high-temperature mechanical properties, *Materialia*, 22, art. no. 101424; DOI: 10.1016/j.mtla.2022.101424
122. Webel J., Mohrbacher H., Detemple E., Britz D., Mücklich F., Quantitative analysis of mixed niobium-titanium carbonitride solubility in HSLA steels based on atom probe tomography and electrical resistivity measurements, *Journal of Materials Research and Technology*, 18, pp. 2048 - 2063; DOI: 10.1016/j.jmrt.2022.03.098
123. Kim S.-H., El-Zoka A.A., Gault B., A Liquid Metal Encapsulation for Analyzing Porous Nanomaterials by Atom Probe Tomography, *Microscopy and Microanalysis*, 28 (4), pp. 1198 - 1206; DOI: 10.1017/S1431927621012964
124. Ling Y.-T., Cools S., Bogdanowicz J., Fleischmann C., Beenhouwer J.D., Sijbers J., Vandervorst W., A Bottom-Up Volume Reconstruction Method for Atom Probe Tomography, *Microscopy and Microanalysis*, 28 (4), pp. 1102 - 1115; DOI: 10.1017/S1431927621012836
125. Guo H., Fan J., Zhang H., Zhang Q., Li W., Dong H., An engineering route to synthesize stable bulk nanocrystalline magnesium with an average grain size of 20 nm, *Materials Science and Engineering: A*, 843, art. no. 143134; DOI: 10.1016/j.msea.2022.143134
126. Baik S.-I., Mao Z., Ren Q., Xue F., Campbell C.E., Zhang C., Zhou B., Noebe R.D., Seidman D.N., The effects of diffusional couplings on compositional trajectories and interfacial free energies during phase separation in a quaternary Ni-Al-Cr-Re model superalloy, *Acta Materialia*, 234, art. no. 118020; DOI: 10.1016/j.actamat.2022.118020
127. Bacchi C., Da Costa G., Cadel E., Cuvilly F., Houard J., Vaudolon C., Normand A., Vurpillot F., Development of an Energy-Sensitive Detector for the Atom Probe Tomography, *Microscopy and Microanalysis*, 28 (4), pp. 1076 - 1091; DOI: 10.1017/S1431927621012708

128. Ohnuma T., First-Principles Calculation of the Evaporation Field and Roll-up Effect of M (M = Fe, Cu, Si, and Mn) on the Fe (001) and Fe Step Structure, *Microscopy and Microanalysis*, 28 (4), pp. 1181 - 1187; DOI: 10.1017/S1431927621000155
129. Mohri M., Chellali M.R., Wang D., Ivanisenko J., Evaluation of Microstructure, Mechanical and Thermal Properties of Ti–Zr–Pd–Cu and Ti–Zr–Pd–Cu–Bi Nanoglass Thin Films, *Metals and Materials International*, 28 (7), pp. 1650 - 1661; DOI: 10.1007/s12540-021-01051-1
130. Eusterholz M.K., Boll T., Gebauer J., Weidner A., Kauffmann A., Franke P., Seifert H.J., Biermann H., Aneziris C.G., Heilmaier M., High-Temperature Ternary Oxide Phases in Tantalum/Niobium–Alumina Composite Materials, *Advanced Engineering Materials*, 24 (8), art. no. 2200161; DOI: 10.1002/adem.202200161
131. Banhart J., Chen Y.-S., Guo Q.N., Marceau R.K.W., Cairney J.M., Direct ageing experiments on nanometre-scale aluminium alloy samples, *Acta Materialia*, 231, art. no. 117848; DOI: 10.1016/j.actamat.2022.117848
132. Hans M., Czigány Z., Neuß D., Sälker J.A., Rueß H., Krause J., Nayak G.K., Holec D., Schneider J.M., Probing the onset of wurtzite phase formation in (V,Al)N thin films by transmission electron microscopy and atom probe tomography, *Surface and Coatings Technology*, 442, art. no. 128235; DOI: 10.1016/j.surfcoat.2022.128235
133. Meier M.S., Jones M.E., Felfer P.J., Moody M.P., Haley D., Extending Estimating Hydrogen Content in Atom Probe Tomography Experiments Where H<sub>2</sub> Molecule Formation Occurs, *Microscopy and Microanalysis*, 28 (4), pp. 1231 - 1244; DOI: 10.1017/S1431927621012332
134. Trummer C., Mendez-Martin F., Kothleitner G., Haberfehlner G., 3D nanoscale elemental mapping of precipitates in steel: Evaluation of analytical electron tomography and comparison to atom probe tomography, *Micron*, 156, art. no. 103233; DOI: 10.1016/j.micron.2022.103233
135. Shen Q., Huang D., Liu W., Li F., Lu Q., Effect of Cu content on the precipitation behavior of Cu-rich and NiAl phases in steel, *Materials Characterization*, 187, art. no. 111849; DOI: 10.1016/j.matchar.2022.111849
136. Bilal H., Nomoto K., Gludovatz B., Kruzic J.J., Ceguerra A.V., Ringer S.P., Atom Probe Analysis of a Zr-based Bulk Metallic Glass, *Microscopy and Microanalysis*, 28 (4), pp. 1348 - 1358; DOI: 10.1017/S1431927621012824
137. Verberne R., Reddy S.M., Saxey D.W., Fougere D., Rickard W.D.A., Quadir Z., Evans N.J., Clark C., Dislocations in minerals: Fast-diffusion pathways or trace-element traps?, *Earth and Planetary Science Letters*, 584, art. no. 117517; DOI: 10.1016/j.epsl.2022.117517
138. Grandfield K., Micheletti C., Deering J., Arcuri G., Tang T., Langelier B., Atom probe tomography for biomaterials and biomineralization, *Acta Biomaterialia*, 148, pp. 44 - 60; DOI: 10.1016/j.actbio.2022.06.010
139. Lindgren K., Boåsen M., Que Z., Stiller K., Efsing P., Thuvander M., Post-irradiation annealing of high flux irradiated and surveillance material reactor pressure vessel weld metal, *Journal of Nuclear Materials*, 562, art. no. 153586; DOI: 10.1016/j.jnucmat.2022.153586
140. Gururaj K., Saha M., Maurya S.K., Nama R., Alankar A., Ponnuchamy M.B., Pradeep K.G., On the correlative microscopy analyses of nano-twinned domains in 2 mol% zirconia alloyed yttrium tantalate thermal barrier material, *Scripta Materialia*, 212, art. no. 114584; DOI: 10.1016/j.scriptamat.2022.114584

141. Liu S., Covian A.C., Wang X., Cline C.T., Akey A., Dong W., Yu S.-Q., Liu J., 3D Nanoscale Mapping of Short-Range Order in GeSn Alloys, *Small Methods*, 6 (5), art. no. 2200029; DOI: 10.1002/smt.202200029
142. Di Russo E., Rigutti L., Correlative atom probe tomography and optical spectroscopy: An original gateway to materials science and nanoscale physics, *MRS Bulletin*, 47 (7), pp. 727 - 735; DOI: 10.1557/s43577-022-00367-6
143. Gault B., Schweinar K., Zhang S., Lahn L., Scheu C., Kim S.-H., Kasian O., Correlating atom probe tomography with x-ray and electron spectroscopies to understand microstructure–activity relationships in electrocatalysts, *MRS Bulletin*, 47 (7), pp. 718 - 726; DOI: 10.1557/s43577-022-00373-8
144. Pérez-Huerta A., Cappelli C., Jabalera Y., Prozorov T., Jimenez-Lopez C., Bazylinski D.A., Biogeochemical fingerprinting of magnetotactic bacterial magnetite, *Proceedings of the National Academy of Sciences of the United States of America*, 119 (31), art. no. e2203758119; DOI: 10.1073/pnas.2203758119
145. Cojocaru-Mirédin O., Schmieg J., Müller M., Weber A., Ivers-Tiffée E., Gerthsen D., Quantifying lithium enrichment at grain boundaries in Li<sub>7</sub>La<sub>3</sub>Zr<sub>2</sub>O<sub>12</sub> solid electrolyte by correlative microscopy, *Journal of Power Sources*, 539, art. no. 231417; DOI: 10.1016/j.jpowsour.2022.231417
146. Sahoo S., Licata O., Mazumder B., Roy S., Novel insights on the near atomic scale spatial distributions of substitutional alloying and interstitial impurity elements in Ti-6Al-4V alloy, *Journal of Alloys and Compounds*, 907, art. no. 164511; DOI: 10.1016/j.jallcom.2022.164511
147. Jin S., Su H., Qian F., Li Y., Sha G., Effects of atom probe analysis parameters on composition measurement of precipitates in an Al-Mg-Si-Cu alloy, *Ultramicroscopy*, 235, art. no. 113495; DOI: 10.1016/j.ultramic.2022.113495
148. Stücker M., Zálešák J., Müller T., Wurster S., Weissitsch L., Meier M., Felfel P., Gammer C., Pippan R., Bachmaier A., Oxide-stabilized microstructure of severe plastically deformed CuCo alloys, *Journal of Alloys and Compounds*, 901, art. no. 163616; DOI: 10.1016/j.jallcom.2022.163616
149. Kano E., Kataoka K., Uzuhashi J., Chokawa K., Sakurai H., Uedono A., Narita T., Sierakowski K., Bockowski M., Otsuki R., Kobayashi K., Itoh Y., Nagao M., Ohkubo T., Hono K., Suda J., Kachi T., Ikarashi N., Atomic resolution analysis of extended defects and Mg agglomeration in Mg-ion-implanted GaN and their impacts on acceptor formation, *Journal of Applied Physics*, 132 (6), art. no. 065703; DOI: 10.1063/5.0097866
150. Schönmaier H., Kremmer T., Brabetz M., Krein R., Pahr H., Peruzzi M., Schnitzer R., High-resolution characterization of precipitates in multi-layer submerged-arc welded 2.25Cr-1Mo-0.25V steel, *Materials Today Communications*, 31, art. no. 103299; DOI: 10.1016/j.mtcomm.2022.103299
151. Klaes B., Renaux J., Lardé R., Delaroche F., Morgado F.F., Stephenson L.T., Gault B., Vurpillot F., Analytical Three-Dimensional Field Ion Microscopy of an Amorphous Glass FeBSi, *Microscopy and Microanalysis*, 28 (4), pp. 1280 - 1288; DOI: 10.1017/S1431927621012629
152. McCarroll I.E., Daly L., White L.F., Cairney J.M., Atom probe tomography and correlative microscopy: Key techniques for future planetary science studies, *MRS Bulletin*, 47 (7), pp. 696 - 705; DOI: 10.1557/s43577-022-00375-6
153. Licata O.G., Zhu M., Hwang J., Mazumder B., Nanoscale chemistry and ion segregation in zirconia-based ceramic at grain boundaries by atom probe tomography, *Scripta Materialia*, 213, art. no. 114603; DOI: 10.1016/j.scriptamat.2022.114603

154. Taji I., Hajilou T., Ebner A.S., Scheiber D., Karimi S., Plesiutchnig E., Ecker W., Barnoush A., Maier-Kiener V., Johnsen R., Razumovskiy V.I., Hydrogen assisted intergranular cracking of alloy 725: The effect of boron and copper alloying, *Corrosion Science*, 203, art. no. 110331; DOI: 10.1016/j.corsci.2022.110331
155. Kautz E.J., Lambeets S.V., Royer J., Perea D.E., Harilal S.S., Devaraj A., Compositional partitioning during early stages of oxidation of a uranium-molybdenum alloy, *Scripta Materialia*, 212, art. no. 114528; DOI: 10.1016/j.scriptamat.2022.114528
156. He J., Li N., Makineni S.K., Zhao Y., Liu W., Wang L., Wang Z., Song M., Effects of minor Nb alloying on the thermal stability and mechanical responses of a  $\gamma/\gamma'$  type high-entropy alloy with high Fe content, *Materials Science and Engineering: A*, 851, art. no. 143610; DOI: 10.1016/j.msea.2022.143610
157. Wang C., Wu Y., Li H., Zhou L., Influencing mechanism of phosphorous on intragranular M23C6 of a Ni-base superalloy studied by atom probe tomography, *Materials Letters*, 313, art. no. 131727; DOI: 10.1016/j.matlet.2022.131727
158. Lu F., Antonov S., Lu S., Zhang J., Li L., Wang D., Zhang J., Feng Q., Unveiling the Re effect on long-term coarsening behaviors of  $\gamma'$  precipitates in Ni-based single crystal superalloys, *Acta Materialia*, 233, art. no. 117979; DOI: 10.1016/j.actamat.2022.117979
159. Cojocaru-Mirédin O., Devaraj A., Correlative microscopy and techniques with atom probe tomography: Opportunities in materials science, *MRS Bulletin*, 47 (7), pp. 680 - 687; DOI: 10.1557/s43577-022-00369-4
160. WANG Y.-C., WU X.-D., YUE L., GUO M.-X., CAO L.-F., Aging precipitation behavior and properties of Al–Zn–Mg–Cu–Zr–Er alloy at different quenching rates, *Transactions of Nonferrous Metals Society of China (English Edition)*, 32 (4), pp. 1070 - 1082; DOI: 10.1016/S1003-6326(22)65856-4
161. Felfer P., Ott B., Monajem M., Dalbauer V., Heller M., Josten J., MacAulay C., An Atom Probe with Ultra-Low Hydrogen Background, *Microscopy and Microanalysis*, 28 (4), pp. 1255 - 1263; DOI: 10.1017/S1431927621013702
162. Zhang J., Zong H., Lu F., Huang T., Wang D., Zhang J., Zhang J., Su H., Liu L., Synergistic effects of Re and Ta on the distribution of W in Ni-based superalloys, *Intermetallics*, 147, art. no. 107609; DOI: 10.1016/j.intermet.2022.107609
163. Devaraj A., Barton D.J., Li C.-H., Lambeets S.V., Liu T., Battu A., Vaithiyalingam S., Thevuthasan S., Yang F., Guo J., Li T., Ren Y., Kovarik L., Perea D.E., Sushko M.L., Visualizing the Nanoscale Oxygen and Cation Transport Mechanisms during the Early Stages of Oxidation of Fe–Cr–Ni Alloy Using In Situ Atom Probe Tomography, *Advanced Materials Interfaces*, 9 (20), art. no. 2200134; DOI: 10.1002/admi.202200134
164. Bayoumy D., Boll T., Schliephake D., Wu X., Zhu Y., Huang A., On the complex intermetallics in an Al-Mn-Sc based alloy produced by laser powder bed fusion, *Journal of Alloys and Compounds*, 901, art. no. 163571; DOI: 10.1016/j.jallcom.2021.163571
165. Danoix F., Hoummada K., Maugis P., Rolland N., Debreux C., Blavette D., Grain size effect on interfacial segregation in nanomaterials, *Journal of Physics and Chemistry of Solids*, 164, art. no. 110620; DOI: 10.1016/j.jpcs.2022.110620
166. Li Z.H., Sasaki T.T., Uedono A., Hono K., Role of Zn on the rapid age-hardening in Mg-Ca-Zn alloys, *Scripta Materialia*, 216, art. no. 114735; DOI: 10.1016/j.scriptamat.2022.114735
167. Lloyd M.J., London A.J., Haley J.C., Gilbert M.R., Becquart C.S., Domain C., Martinez E., Moody M.P., Bagot P.A.J., Nguyen-Manh D., Armstrong D.E.J.,

- Interaction of transmutation products with precipitates, dislocations and grain boundaries in neutron irradiated W, *Materialia*, 22, art. no. 101370; DOI: 10.1016/j.mtla.2022.101370
168. Dehm G., Cairney J., Implication of grain-boundary structure and chemistry on plasticity and failure, *MRS Bulletin*, 47 (8), pp. 800 - 807; DOI: 10.1557/s43577-022-00378-3
  169. Josten J.P., Felfer P.J., Atom Probe Analysis of Nanoparticles Through Pick and Coat Sample Preparation, *Microscopy and Microanalysis*, 28 (4), pp. 1188 - 1197; DOI: 10.1017/S1431927621000465
  170. Coakley K.J., Sanford N.A., Learning Atom Probe Tomography time-of-flight peaks for mass-to-charge ratio spectrometry, *Ultramicroscopy*, 237, art. no. 113521; DOI: 10.1016/j.ultramicro.2022.113521
  171. Katnagallu S., Morgado F.F., Mouton I., Gault B., Stephenson L.T., Three-Dimensional Atomically Resolved Analytical Imaging with a Field Ion Microscope, *Microscopy and Microanalysis*, 28 (4), pp. 1264 - 1279; DOI: 10.1017/S1431927621012381
  172. Rielli V.V., Theska F., Primig S., Correlative Approach for Atom Probe Sample Preparation of Interfaces Using Plasma Focused Ion Beam Without Lift-Out, *Microscopy and Microanalysis*, 28 (4), pp. 998 - 1008; DOI: 10.1017/S1431927621000349
  173. Turuani M.J., Laurent A.T., Seydoux-Guillaume A.-M., Fougereuse D., Saxey D., Reddy S.M., Harley S.L., Reynaud S., Rickard W.D.A., Partial retention of radiogenic Pb in galena nanocrystals explains discordance in monazite from Napier Complex (Antarctica), *Earth and Planetary Science Letters*, 588, art. no. 117567; DOI: 10.1016/j.epsl.2022.117567
  174. Cuduvally R., Morris R.J.H., Oosterbos G., Ferrari P., Fleischmann C., Forbes R.G., Vandervorst W., Post-field ionization of Si clusters in atom probe tomography: A joint theoretical and experimental study, *Journal of Applied Physics*, 132 (7), art. no. 074901; DOI: 10.1063/5.0106692
  175. Du Y., Hu X., Zhang S., Song Y., Jiang H., Rong L., Precipitation behavior of Cu-NiAl nanoscale particles and their effect on mechanical properties in a high strength low alloy steel, *Materials Characterization*, 190, art. no. 112014; DOI: 10.1016/j.matchar.2022.112014
  176. Licata O.G., Sarker J., Bachhav M., Roy P., Wei X., Yang Z., Patibandla N., Zeng H., Zhu M., Jia Q., Mazumder B., Correlation between thickness dependent nanoscale structural chemistry and superconducting properties of ultrathin epitaxial NbN films, *Materials Chemistry and Physics*, 282, art. no. 125962; DOI: 10.1016/j.matchemphys.2022.125962
  177. Zhang X., Duan S., Liu T., Liu H., Shi Y., Zhou Q., Sun S., Lv Z., Wang Y., Yang X., Potential Significance of Low Tempering Treatment in Improving the Mechanical Properties of a Cold-Rolled and Intercritical Annealed Medium Mn Steel, *Steel Research International*, 93 (8), art. no. 2100814; DOI: 10.1002/srin.202100814
  178. Ren Q.-Q., Yamamoto Y., Brady M.P., Poplawsky J.D., Sigma phase evolution and nucleation mechanisms revealed by atom probe tomography in a 347H stainless steel, *Materialia*, 24, art. no. 101485; DOI: 10.1016/j.mtla.2022.101485
  179. Licata O.G., Mazumder B., Understanding the Nature of Crystallographic Bonds by Establishing the Correlation between Ion-Pair Chemistry and Their Separation in Detector Space, *Microscopy and Microanalysis*, 28 (3), pp. 680 - 688; DOI: 10.1017/S1431927622000460

180. Geng Y., Song Q., Zhang Z., Pan Y., Li H., Wu Y., Zhu H., Zhang D., Zhang J., Zhuang L., Quantifying early-stage precipitation strengthening of Al–Mg–Zn(-Cu) alloy by using particle size distribution, *Materials Science and Engineering: A*, 839, art. no. 142851; DOI: 10.1016/j.msea.2022.142851
181. Li Y., Kong Y., Xue B., Dai J., Sha G., Ping H., Lei L., Wang W., Wang K., Fu Z., Mechanically Reinforced Artificial Enamel by Mg<sup>2+</sup>-Induced Amorphous Intergranular Phases, *ACS Nano*, 16 (7), pp. 10422 - 10430; DOI: 10.1021/acsnano.2c00688
182. Gao X., Wang H., Li J., Lv M., Wu Z., Li Y., Sha G., Ren H., Cerium-alloyed ultra-high strength maraging steel with good ductility: Experiments, first-principles calculations and phase-field simulations, *Materials Science and Engineering: A*, 846, art. no. 143306; DOI: 10.1016/j.msea.2022.143306
183. Dubosq R., Schneider D.A., Zhou X., Gault B., Langelier B., Pleše P., Bubbles and atom clusters in rock melts: A chicken and egg problem, *Journal of Volcanology and Geothermal Research*, 428, art. no. 107574; DOI: 10.1016/j.jvolgeores.2022.107574
184. Lindgren K., Dörmstedt P., Szakalos P., Thuvander M., The Nanostructure of the Oxide Formed on Fe-10Cr-4Al Exposed in Liquid Pb, *Microscopy and Microanalysis*, 28 (4), pp. 1321 - 1334; DOI: 10.1017/S1431927621000337
185. Zhang Y., Miyamoto G., Furuhashi T., Enhanced hardening by multiple microalloying in low carbon ferritic steels with interphase precipitation, *Scripta Materialia*, 212, art. no. 114558; DOI: 10.1016/j.scriptamat.2022.114558
186. Levine S.M., Pareige C., Jiao Z., Edmondson P.D., Was G.S., Zinkle S.J., Bhattacharya A., Data on Cu- and Ni-Si-Mn-rich solute clustering in a neutron irradiated austenitic stainless steel, *Data in Brief*, 42, art. no. 108263; DOI: 10.1016/j.dib.2022.108263
187. Wang S., Gavalda-Diaz O., Luo T., Guo L., Lovell E., Wilson N., Gault B., Ryan M.P., Giuliani F., The effect of hydrogen on the multiscale mechanical behaviour of a La(Fe,Mn,Si)<sub>13</sub>-based magnetocaloric material, *Journal of Alloys and Compounds*, 906, art. no. 164274; DOI: 10.1016/j.jallcom.2022.164274
188. Sharma A., Mondal C., Makineni S.K., Chattopadhyay K., Banerjee D., Exploring the correlation between microscopic mechanisms and macroscopic behaviour in creep of a directionally solidified tungsten-free  $\gamma/\gamma'$  CoNi-base superalloy, *Acta Materialia*, 228, art. no. 117738 ; DOI: 10.1016/j.actamat.2022.117738
189. Zhao Y., Bhattacharya A., Pareige C., Massey C., Zhu P., Poplawsky J.D., Henry J., Zinkle S.J., Effect of heavy ion irradiation dose rate and temperature on  $\alpha'$  precipitation in high purity Fe-18%Cr alloy, *Acta Materialia*, 231, art. no. 117888; DOI: 10.1016/j.actamat.2022.117888
190. Bai J., Jin S., Liang C., Li X., You Z., Zhao Y., Liu L., Sha G., Microstructural origins for quench cracking of a boron steel: Boron distribution, *Materials Characterization*, 190, art. no. 112022; DOI: 10.1016/j.matchar.2022.112022
191. Jadoon S., Schindler M., Wirth M.G., Qafoku O., Kovarik L., Perea D.E., Atom probe tomography and transmission electron microscopy: a powerful combination to characterize the speciation and distribution of Cu in organic matter, *Environmental Science: Processes and Impacts*, 24 (8), pp. 1228 - 1242; DOI: 10.1039/d2em00118g
192. Prosa T.J., Oltman E., Study of LEAP® 5000 Deadtime and Precision via Silicon Pre-Sharpened-Microtip™ Standard Specimens, *Microscopy and Microanalysis*, 28 (4), pp. 1019 - 1037; DOI: 10.1017/S143192762101206X
193. Tweddle D., Johnson J.A., Kapoor M., Mileski S., Carsley J.E., Thompson G.B., Direct Observation of PFIB-Induced Clustering in Precipitation-Strengthened Al

- Alloys by Atom Probe Tomography, Microscopy and Microanalysis, 28 (2), pp. 296 - 301; DOI: 10.1017/S1431927621013970
194. Exertier F., Wang J., Fu J., Marceau R.K.W., Understanding the Effects of Graphene Coating on the Electrostatic Field at the Tip of an Atom Probe Tomography Specimen, Microscopy and Microanalysis, 28 (4), pp. 1054 - 1065; DOI: 10.1017/S1431927621012356
  195. Yu J., Zhang S., Li H., Jiang Z., Feng H., Xu P., Han P., Influence mechanism of boron segregation on the microstructure evolution and hot ductility of super austenitic stainless steel S32654, Journal of Materials Science and Technology, 112, pp. 184 - 194; DOI: 10.1016/j.jmst.2021.11.005
  196. Sasaki T.T., Sepehri-Amin H., Uzuhashi J., Ohkubo T., Hono K., Complementary and correlative (S)TEM/APT analysis of functional and structural alloys, MRS Bulletin, 47 (7), pp. 688 - 695; DOI: 10.1557/s43577-022-00374-7
  197. Kim S.-H., Yoo S.-H., Shin S., El-Zoka A.A., Kasian O., Lim J., Jeong J., Scheu C., Neugebauer J., Lee H., Todorova M., Gault B., Controlled Doping of Electrocatalysts through Engineering Impurities, Advanced Materials, 34 (28), art. no. 2203030; DOI: 10.1002/adma.202203030
  198. Shah S., Thronsen E., Hatzoglou C., Wenner S., Marioara C.D., Holmestad R., Holmedal B., Effect of cyclic ageing on the early-stage clustering in Al-Zn-Mg(-Cu) alloys, Materials Science and Engineering: A, 846, art. no. 143280; DOI: 10.1016/j.msea.2022.143280
  199. Zhang D., Darsell J.T., Wang J., Ma X., Grant G.J., Anderson I.E., Rieken J.R., Edwards D.J., Setyawan W., Horn T.J., Odette G.R., No ball milling needed: Alternative ODS steel manufacturing with gas atomization reaction synthesis (GARS) and friction-based processing, Journal of Nuclear Materials, 566, art. no. 153768; DOI: 10.1016/j.jnucmat.2022.153768
  200. Hearn W., Lindgren K., Persson J., Hryha E., In situ tempering of martensite during laser powder bed fusion of Fe-0.45C steel, Materialia, 23, art. no. 101459; DOI: 10.1016/j.mtla.2022.101459
  201. Kanetani K., Ushioda K., Carbon Migration Behavior during Rolling Contact in Tempered Martensite and Retained Austenite of Carburized SAE4320 Steel [浸炭焼入れしたSAE4320 鋼の焼戻しマルテンサイトと残留オーステナイトにおける転がり接触に伴う炭素の移動挙動], Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 108 (1), pp. 64 - 75; DOI: 10.2355/TETSUTOHAGANE.TETSU-2021-073
  202. Li X., Li H., Liu L., Deng X., Wang Z., The formation mechanism of complex carbides in Nb-V microalloyed steel, Materials Letters, 311, art. no. 131544; DOI: 10.1016/j.matlet.2021.131544
  203. Qu J., Yang W., Wu T., Ren W., Huang J., Yu H., Zhao C., Griffith M.J., Zheng R., Ringer S.P., Cairney J.M., Atom probe specimen preparation methods for nanoparticles, Ultramicroscopy, 233, art. no. 113420; DOI: 10.1016/j.ultramic.2021.113420
  204. Fleißner-Rieger C., Schönmaier H., Musi M., Stadler M., Gschiel H., Turk C., Pfeifer T., Clemens H., Formation and evolution of precipitates in an additively manufactured near- $\alpha$  titanium base alloy, Materialia, 21, art. no. 101366; DOI: 10.1016/j.mtla.2022.101366
  205. Liu T., Pei Z., Barton D., Thompson G.B., Brewer L.N., Characterization of nanostructures in a high pressure die cast Al-Si-Cu alloy, Acta Materialia, 224, art. no. 117500; DOI: 10.1016/j.actamat.2021.117500

206. Niu M.C., Yang K., Luan J.H., Wang W., Jiao Z.B., Cu-assisted austenite reversion and enhanced TRIP effect in maraging stainless steels, *Journal of Materials Science and Technology*, 104, pp. 52 - 58; DOI: 10.1016/j.jmst.2021.06.055
207. Tiwari J.K., Mandal A., Sathish N., Kumar S., Ashiq M., Nagini M., Sharma R.K., Agrawal A.K., Rajput P., Srivastava A.K., Effect of graphene addition on thermal behavior of 3D printed graphene/AlSi10Mg composite, *Journal of Alloys and Compounds*, 890, art. no. 161725; DOI: 10.1016/j.jallcom.2021.161725
208. Wu X., Lan S., Li X., Yang M., Wu Z., Wei X., He H., Naeem M., Zhou J., Lu Z., Gilbert E.P., Ma D., Wang X.-L., Continuous chemical redistribution following amorphous-to-crystalline structural ordering in a Zr-Cu-Al bulk metallic glass, *Journal of Materials Science and Technology*, 101, pp. 285 - 293; DOI: 10.1016/j.jmst.2021.05.062
209. Han B., He F., Xia L., Wang Z., Kai J.J., Effect of Ti/Al Ratio on the Elemental Partitioning in the Face-Centered Cubic-Based  $\gamma$ - $\gamma'$  Dual-Phase High Entropy Alloy Studied by Atom Probe Tomography, *Frontiers in Materials*, 9, art. no. 806237; DOI: 10.3389/fmats.2022.806237
210. Gault B., Khanchandani H., Kim S.-H., Varanasi R.S., Prithiv T.S., Stephenson L.T., Hydrogen and deuterium charging of lifted-out specimens for atom probe tomography, *Open Research Europe*, 1, art. no. 122; DOI: 10.12688/openreseurope.14176.2
211. Zimmerman J.D., Bennett R.A., Niyonkuru P., Jaskot M.B., Proudian A.P., Effects of Guest Clustering Morphology in Phosphorescent OLEDs, *Digest of Technical Papers - SID International Symposium*, 53 (1), pp. 334 - 336; DOI: 10.1002/sdtp.15488
212. Zou Y., Wu X., Tang S., Zhu Q., Song H., Guo M., Cao L., Correlation between bulk and precipitate composition in Al-Zn-Mg-Cu alloys, *Philosophical Magazine Letters*, 102 (2), pp. 41 - 52; DOI: 10.1080/09500839.2021.1998690
213. Schindler M., Schreckenbach M., Akbari Alavijeh M., Wirth M.G., Qafoku O., Kovarik L., Perea D.E., Deciphering the Distribution and Crystal-Chemical Environment of Arsenic, Lead, Silica, Phosphorus, Tin, and Zinc in a Porous Ferrihydrite Grain Using Transmission Electron Microscopy and Atom Probe Tomography, *ACS Earth and Space Chemistry*, 6 (3), pp. 558 - 570; DOI: 10.1021/acsearthspacechem.1c00374
214. Huang L., Ma K., Belkacemi L.T., Loyer-Prost M., Meslin E., Toijer E., Messina L., Domain C., Vidal J., Nastar M., Impact of the local microstructure fluctuations on radiation-induced segregation in dilute Fe-Ni and Ni-Ti model alloys: A combined modeling and experimental analysis, *Acta Materialia*, 225, art. no. 117531; DOI: 10.1016/j.actamat.2021.117531
215. Zeisl S., Lassnig A., Hohenwarter A., Mendez-Martin F., Precipitation behavior of a Co-free Fe-Ni-Cr-Mo-Ti-Al maraging steel after severe plastic deformation, *Materials Science and Engineering: A*, 833, art. no. 142416; DOI: 10.1016/j.msea.2021.142416
216. Zhang Y., Sato M., Miyamoto G., Furuhashi T., Strengthening of Low Carbon Steel by Nano-sized Vanadium Carbide in Ferrite and Tempered Martensite, *ISIJ International*, 62 (10), pp. 2016 - 2024; DOI: 10.2355/isijinternational.ISIJINT-2022-156
217. Tacchetto T., Reddy S.M., Fougere D., Clark C., Saxey D.W., Rickard W.D.A., Crystal plasticity enhances trace element mobility in garnet, *Geology*, 50 (12), pp. 1387 - 1392; DOI: 10.1130/G50283.1

218. Chen S., Ma G., Wu G., Godfrey A., Huang T., Huang X., Strengthening mechanisms in selective laser melted 316L stainless steel, *Materials Science and Engineering: A*, 832, art. no. 142434; DOI: 10.1016/j.msea.2021.142434
219. Ghosh S., Rakha K., Reza S., Somani M., Kömi J., Atomic scale characterization of carbon partitioning and transition carbide precipitation in a medium carbon steel during quenching and partitioning process, *Materials Today: Proceedings*, 62 (P14), pp. 7570 - 7573; DOI: 10.1016/j.matpr.2022.04.649
220. Modak P., Mandal A., Gupta R., Karmakar A., Sarkar S.K., Ahlawat S., Haldar A., Mitra R., Neogy S., Biswas A., Chakrabarti D., Phenomenal Effect of Stable (Ti, Mo)C Nano-Sized Precipitates in Retarding the Recrystallization and Grain Growth in High-Strength Ferritic Steel, *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, 53 (2), pp. 689 - 705; DOI: 10.1007/s11661-021-06550-9
221. Zhou X., Wei Y., Kühbach M., Zhao H., Vogel F., Darvishi Kamachali R., Thompson G.B., Raabe D., Gault B., Revealing in-plane grain boundary composition features through machine learning from atom probe tomography data, *Acta Materialia*, 226, art. no. 117633; DOI: 10.1016/j.actamat.2022.117633
222. Kim S.-H., Antonov S., Zhou X., Stephenson L.T., Jung C., El-Zoka A.A., Schreiber D.K., Conroy M., Gault B., Atom probe analysis of electrode materials for Li-ion batteries: Challenges and ways forward, *Journal of Materials Chemistry A*, 10 (9), pp. 4926 - 4935; DOI: 10.1039/d1ta10050e
223. Monschein S., Ragger K.S., Fasching J., Zügner D., Schnitzer R., Microstructural, Chemical, and Crystallographic Investigations of Dynamic Strain-Induced Ferrite in a Microalloyed QT Steel, *Metals*, 12 (2), art. no. 313; DOI: 10.3390/met12020313
224. Wang J., Li W., Zhu X., Zhang L., Effect of martensite morphology and volume fraction on the low-temperature impact toughness of dual-phase steels, *Materials Science and Engineering: A*, 832, art. no. 142424; DOI: 10.1016/j.msea.2021.142424
225. Dumas P., Duguay S., Hilario F., Gauthier A., Blavette D., Uphill phosphorus diffusion in carbon co-implanted silicon, *Journal of Applied Physics*, 131 (11), art. no. 115102; DOI: 10.1063/5.0074682
226. Shin W.-S., Park C., Kim Y.-J., Growth behaviors of aluminum nitride in steel during laser nitriding: Insights into interfacial energy and segregation throughout its growth habit, *Materials Characterization*, 183, art. no. 111625; DOI: 10.1016/j.matchar.2021.111625
227. Moon J., Lee C.-H., Jo H.-H., Kim S.-D., Hong H.-U., Chung J.-H., Lee B.H., Microstructure and High-Temperature Strength in the Weld Coarse-Grained Heat-Affected Zone of Fire-Resistant Steels and the Effects of Mo and Nb Additions, *Metals and Materials International*, 28 (4), pp. 966 - 974; DOI: 10.1007/s12540-020-00947-8
228. Fazi A., Stiller K., Andrén H.-O., Thuvander M., Cold sprayed Cr-coating on Optimized ZIRLO™ claddings: the Cr/Zr interface and its microstructural and chemical evolution after autoclave corrosion testing, *Journal of Nuclear Materials*, 560, art. no. 153505; DOI: 10.1016/j.jnucmat.2022.153505
229. Van Vreeswijk S.H., Monai M., Oord R., Schmidt J.E., Vogt E.T.C., Poplawsky J.D., Weckhuysen B.M., Nano-scale insights regarding coke formation in zeolite SSZ-13 subject to the methanol-to-hydrocarbons reaction, *Catalysis Science and Technology*, 12 (4), pp. 1220 - 1228; DOI: 10.1039/d1cy01938d
230. Zhang J., Lu F., Zhang C., Zhao Q., Huang T., Wang D., Zhang J., Zhang J., Su H., Liu L., On the tungsten segregation at  $\gamma/\gamma'$  interface in a Ni-based single-crystal superalloy, *Vacuum*, 197, art. no. 110863; DOI: 10.1016/j.vacuum.2021.110863

231. Barrès Q., Tissot O., Meslin E., Mouton I., Arnal B., Loyer-Prost M., Pareige C., Effect of grain boundary planes on radiation-induced segregation (RIS) at near  $\Sigma 3$  grain boundaries in Fe-Cr alloy under ion irradiation, *Materials Characterization*, 184, art. no. 111676; DOI: 10.1016/j.matchar.2021.111676
232. Jenkins B.M., Haley J., Moody M.P., Hyde J.M., Grovenor C.R.M., APT and TEM study of behaviour of alloying elements in neutron-irradiated zirconium-based alloys, *Scripta Materialia*, 208, art. no. 114323; DOI: 10.1016/j.scriptamat.2021.114323
233. Gomell L., Haeger T., Roscher M., Bishara H., Heiderhoff R., Riedl T., Scheu C., Gault B., Microstructure manipulation by laser-surface remelting of a full-Heusler compound to enhance thermoelectric properties, *Acta Materialia*, 223, art. no. 117501; DOI: 10.1016/j.actamat.2021.117501
234. Zhang Y., Inoue K., Ishimaru M., Tokunaga T., Era P.H., Investigation of Nanoscale Phase Formation in Rapidly Solidified Fe<sub>20</sub>Co<sub>20</sub>Ni<sub>20</sub>Cr<sub>20</sub>B<sub>20</sub>1xSix Alloys, *Materials Transactions*, 63 (9), pp. 1211 - 1216; DOI: 10.2320/matertrans.MT-M2022058
235. Zhang Z., Zhou B., Wang J.-A., Liu W., Redistribution of substitutional alloying elements between  $\alpha$ -Fe matrix and cementite after long-term tempering in a low alloying steel, *Philosophical Magazine*, 102 (24), pp. 2525 - 2538; DOI: 10.1080/14786435.2022.2112315
236. Cai X., Hu X., Zheng L., Li D., Redistribution of C and N Atoms in High Nitrogen Martensitic Stainless Steel During Cryogenic Treatment, *Acta Metallurgica Sinica (English Letters)*, 35 (4), pp. 591 - 595; DOI: 10.1007/s40195-021-01265-7
237. Zhang P., Yang X., Wang Y., Huang S., Xu Y., Song H., Effect of aging temperature on ordered structure of Ni-Cr-Al-Fe precision resistance alloy, *Materials Characterization*, 186, art. no. 111798; DOI: 10.1016/j.matchar.2022.111798
238. Qiu N., Shen Z., Zuo X., Zhou G., Controlling the nucleation of multiple precipitates in precipitation-strengthened steel through Mo partitioning, *Materials Science and Technology (United Kingdom)*, 38 (12), pp. 876 - 881; DOI: 10.1080/02670836.2022.2067613
239. Pei R., Woo S.K., Yi S., Al-Samman T., Effect of solute clusters on plastic instability in magnesium alloys, *Materials Science and Engineering: A*, 835, art. no. 142685; DOI: 10.1016/j.msea.2022.142685
240. Lin W.T., Yeli G.M., Wang G., Lin J.H., Zhao S.J., Chen D., Liu S.F., Meng F.L., Li Y.R., He F., Lu Y., Kai J.J., He-enhanced heterogeneity of radiation-induced segregation in FeNiCoCr high-entropy alloy, *Journal of Materials Science and Technology*, 101, pp. 226 - 233; DOI: 10.1016/j.jmst.2021.05.053
241. Liu J., Taylor S.D., Qafoku O., Arey B.W., Colby R., Eaton A., Bartrand J., Shutthanandan V., Manandhar S., Perea D.E., Visualizing the Distribution of Water in Nominally Anhydrous Minerals at the Atomic Scale: Insights From Atom Probe Tomography on Fayalite, *Geophysical Research Letters*, 49 (2), art. no. e2021GL094914; DOI: 10.1029/2021GL094914
242. Zschiesche H., Aygar A.M., Langelier B., Szkopek T., Botton G.A., Atomic scale chemical ordering in franckeite - A natural van der Waals superlattice, *Journal of Physics Condensed Matter*, 34 (5), art. no. 055403; DOI: 10.1088/1361-648X/ac3451
243. Sasaki H., Akiya S., Oba Y., Onuma M., Giddings A.D., Ohkubo T., Characterization of Precipitated Phase in Cu-Ni-Si Alloy by Small-Angle X-ray Scattering, Small Angle Neutron Scattering and Atom Probe Tomography, *Materials Transactions*, 63 (10), pp. 1384 - 1389; DOI: 10.2320/matertrans.MT-D2022003

244. Eriksson J., Sundell G., Tejlund P., Andrén H.-O., Thuvander M., Nanoscale chemistry of Zircaloy-2 exposed to three and nine annual cycles of boiling water reactor operation — an atom probe tomography study, *Journal of Nuclear Materials*, 561, art. no. 153537; DOI: 10.1016/j.jnucmat.2022.153537
245. Laube S., Kauffmann A., Schellert S., Seils S., Tirunilai A.S., Greiner C., Eggeler Y.M., Gorr B., Christ H.-J., Heilmaier M., Formation and thermal stability of two-phase microstructures in Al-containing refractory compositionally complex alloys, *Science and Technology of Advanced Materials*, 23 (1), pp. 692 - 706; DOI: 10.1080/14686996.2022.2132118
246. Jia Z., Xie Z., Xiang K., Ding L., Weng Y., Liu Q., Effect of heat treatment and extrusion processing on the microstructure and mechanical properties of spray formed 7055 alloy, *Materials Characterization*, 183, art. no. 111619; DOI: 10.1016/j.matchar.2021.111619
247. Chalasan D., Mohammadi M., Prospects of additively manufactured nickel aluminum bronzes for marine applications, *Quality Analysis of Additively Manufactured Metals: Simulation Approaches, Processes, and Microstructure Properties*, pp. 627 - 687; DOI: 10.1016/B978-0-323-88664-2.00019-1
248. Douguet P., Da Rosa G., Maugis P., Drillet J., Hoummada K., Effect of boron segregation on bainite nucleation during isothermal transformation, *Scripta Materialia*, 207, art. no. 114286; DOI: 10.1016/j.scriptamat.2021.114286
249. Dalapati P., Weikum E.M., Beainy G., Di Russo E., Houard J., Moldovan S., Vella A., Chauveau J.M., Hugues M., Le Biavan N., Tchernycheva M., Julien F.H., Saghi Z., Rigutti L., Polarization-resolved photoluminescence study of an atom probe tip containing a ZnO-(Mg,Zn)O heterostructure, *Proceedings of SPIE - The International Society for Optical Engineering*, 12002, art. no. 120020I; DOI: 10.1117/12.2614670
250. Shin W.-S., Baik S.-I., Seidman D.N., Lee K.-A., Park C., Kim Y.-J., Analysis of antioxidation behavior of cryo-milled oxide-dispersion-strengthened ferritic steel incorporated with formation of Y–Ti–O(N) nano-precipitates, *Acta Materialia*, 225, art. no. 117589; DOI: 10.1016/j.actamat.2021.117589
251. Akopyan T.K., Belov N.A., Letyagin N.V., Milovich F.O., Lukyanchuk A.A., Fortuna A.S., Influence of indium trace addition on the microstructure and precipitation hardening response in Al–Si–Cu casting aluminum alloy, *Materials Science and Engineering: A*, 831, art. no. 142329; DOI: 10.1016/j.msea.2021.142329
252. Nomoto K., Cui X.-Y., Breen A., Ceguerra A.V., Perez-Wurfl I., Conibeer G., Ringer S.P., Effects of thermal annealing on the distribution of boron and phosphorus in p-i-n structured silicon nanocrystals embedded in silicon dioxide, *Nanotechnology*, 33 (7), art. no. 075709; DOI: 10.1088/1361-6528/ac38e6
253. Gwalani B., Song M., Silverstein J., Escobar J., Wang T., Pole M., Johnson K., Jasthi B.K., Devaraj A., Ross K., Thermal stability and mechanical properties of cold-sprayed Nickel-Yttria coating, *Scripta Materialia*, 207, art. no. 114281; DOI: 10.1016/j.scriptamat.2021.114281
254. Siva Kumar M.B., Prabhu D., Sadhasivam M., Manjusha B., Chandrasekaran N., Pradeep K.G., Sundararajan G., Gopalan R., Enhancing the coercivity of Nd-Cu-diffused Nd-Fe-B permanent magnets by Nb-assisted grain boundary pinning, *Materials Research Letters*, 10 (12), pp. 780 - 787; DOI: 10.1080/21663831.2022.2104139
255. López-Galán O.A., Ramos M., Nogan J., Ávila-García A., Boll T., Heilmaier M., The electronic states of ITO–MoS<sub>2</sub>: Experiment and theory, *MRS Communications*, 12 (2), pp. 137 - 144; DOI: 10.1557/s43579-021-00126-9

256. Azhari I.E., Barrirero J., Valle N., García J., von Fieandt L., Engstler M., Soldara F., Llanes L., Mücklich F., Impact of temperature on chlorine contamination and segregation for Ti(C,N) CVD thin hard coating studied by nano-SIMS and atom probe tomography, *Scripta Materialia*, 208, art. no. 114321; DOI: 10.1016/j.scriptamat.2021.114321
257. Massey C.P., Edmondson P.D., Gussev M.N., Mao K., Gräning T., Nizolek T.J., Maloy S.A., Sornin D., de Carlan Y., Dryepondt S.N., Hoelzer D.T., Insights from microstructure and mechanical property comparisons of three pilgered ferritic ODS tubes, *Materials and Design*, 213, art. no. 110333; DOI: 10.1016/j.matdes.2021.110333
258. Lin W., Wang W., Zhu S., Chen Z., Fan C., Concurrent (Fe,Mo)<sub>2</sub>C carbides and Cu-rich clusters precipitation in ferritic steel containing copper during aging, *Philosophical Magazine*; DOI: 10.1080/14786435.2022.2084792
259. Yoo S.-H., Kim S.-H., Woods E., Gault B., Todorova M., Neugebauer J., Origins of the hydrogen signal in atom probe tomography: Case studies of alkali and noble metals, *New Journal of Physics*, 24 (1), art. no. 013008; DOI: 10.1088/1367-2630/ac40cd
260. Zeisl S., Schnitzer R., Cooling Rate Controlled Aging of a Co-Free Fe-Ni-Cr-Mo-Ti-Al Maraging Steel, *Metals*, 12 (4), art. no. 538; DOI: 10.3390/met12040538
261. Lindgren K., Frisk K., Sundaram M.V., Thuvander M., Atom probe tomography characterisation of powder forged connecting rods alloyed with vanadium and copper, *Philosophical Magazine*, DOI: 10.1080/14786435.2022.2089758
262. Chiabrera F., Baiutti F., Diercks D., Cavallaro A., Aguadero A., Morata A., Tarancón A., Visualizing local fast ionic conduction pathways in nanocrystalline lanthanum manganite by isotope exchange-atom probe tomography, *Journal of Materials Chemistry A*, 10 (5), pp. 2228 - 2234; DOI: 10.1039/d1ta10538h
263. Gwalani B., Liu J., Lambeets S., Olszta M., Poplawsky J., Shyam A., Devaraj A., Rapid assessment of interfacial stabilization mechanisms of metastable precipitates to accelerate high-temperature Al-alloy development, *Materials Research Letters*, 10 (12), pp. 771 - 779; DOI: 10.1080/21663831.2022.2102947
264. Ulbricht A., Hernández-Mayoral M., Oñorbe E., Etienne A., Radiguet B., Hirschmann E., Wagner A., Hein H., Bergner F., Effect of Neutron Flux on an Irradiation-Induced Microstructure and Hardening of Reactor Pressure Vessel Steels, *Metals*, 12 (3), art. no. 369; DOI: 10.3390/met12030369
265. Platl J., Bodner S., Hofer C., Landefeld A., Leitner H., Turk C., Nielsen M.-A., Demir A.G., Previtali B., Keckes J., Schnitzer R., Cracking mechanism in a laser powder bed fused cold-work tool steel: The role of residual stresses, microstructure and local elemental concentrations, *Acta Materialia*, 225, art. no. 117570; DOI: 10.1016/j.actamat.2021.117570
266. Kurita K., Kadono T., Okuyama R., Onaka-Masada A., Shigematsu S., Hirose R., Kobayashi K., Suzuki A., Okuda H., Koga Y., Silicon Wafer Gettering Design for Advanced CMOS Image Sensors Using Hydrocarbon Molecular Ion Implantation: A Review, *IEEE Journal of the Electron Devices Society*, 10, pp. 720 - 727; DOI: 10.1109/JEDS.2021.3135656
267. Ahuja V., Bhatt A.K., Varjani S., Choi K.-Y., Kim S.-H., Yang Y.-H., Bhatia S.K., Quantum dot synthesis from waste biomass and its applications in energy and bioremediation, *Chemosphere*, 293, art. no. 133564; DOI: 10.1016/j.chemosphere.2022.133564

268. Liu L., Jiang J.-T., Cui X.-Y., Zhang B., Zhen L., Ringer S.P., Correlation between precipitates evolution and mechanical properties of Al-Sc-Zr alloy with Er additions, *Journal of Materials Science and Technology*, 99, pp. 61 - 72; DOI: 10.1016/j.jmst.2021.05.031
269. Xue J., Jin S., Hu R., Xue F., Sha G., Ion-irradiation-induced clustering in Fe-Mn-Ni-(Si) steels: Nucleation, growth and chemistry evolution, *Journal of Nuclear Materials*, 560, art. no. 153477; DOI: 10.1016/j.jnucmat.2021.153477
270. Zhang J., Liu Y., Hu C., Jiang Y., Addad A., Ji G., Song C., Zhai Q., The effect of Cr content on intragranular  $\kappa$ -carbide precipitation in Fe-Mn-Al-(Cr)-C low-density steels: A multiscale investigation, *Materials Characterization*, 186, art. no. 111801; DOI: 10.1016/j.matchar.2022.111801
271. Küchler S., Vojtech V., Gerstl S.S.A., Schäublin R.E., Löffler J.F., Thermally Decomposed Binary Fe-Cr Alloys: Toward a Quantitative Relationship Between Strength and Structure, *Advanced Engineering Materials*, 24 (3), art. no. 2100909; DOI: 10.1002/adem.202100909
272. Prithiv T.S., Kloenne Z., Li D., Shi R., Zheng Y., Fraser H.L., Gault B., Antonov S., Grain boundary segregation and its implications regarding the formation of the grain boundary  $\alpha$  phase in the metastable  $\beta$ -Titanium Ti-5Al-5Mo-5V-3Cr alloy, *Scripta Materialia*, 207, art. no. 114320; DOI: 10.1016/j.scriptamat.2021.114320
273. Jacob K., Roy A., Gururajan M.P., Jaya B.N., Effect of dislocation network on precipitate morphology and deformation behaviour in maraging steels: Modelling and experimental validation, *Materialia*, 21, art. no. 101358; DOI: 10.1016/j.mtla.2022.101358
274. Carter M., Gasparrini C., Douglas J.O., Riddle N., Edwards L., Bagot P.A.J., Hardie C.D., Wenman M.R., Moody M.P., On the influence of microstructure on the neutron irradiation response of HIPed SA508 steel for nuclear applications, *Journal of Nuclear Materials*, 559, art. no. 153435; DOI: 10.1016/j.jnucmat.2021.153435
275. Qian F., Jin S., Wan D., Li W., Cheng X., Sha G., Li Y., Synergistic effects of Cd, Si and Cr additions on precipitation strengthening and thermal stability of dispersoids in AA3003 alloy, *Materials Science and Engineering: A*, 832, art. no. 142422; DOI: 10.1016/j.msea.2021.142422
276. Weng Y., Ding L., Xu Y., Jia Z., Sun Q., Chen F., Sun X., Cong Y., Liu Q., Effect of In addition on the precipitation behavior and mechanical property for Al-Mg-Si alloys, *Journal of Alloys and Compounds*, 895, art. no. 162685; DOI: 10.1016/j.jallcom.2021.162685
277. Gemma R., Lu Y., Seils S., Boll T., Asano K., Chemical characterization of Mg<sub>0.25</sub>Mn<sub>0.75</sub>-H(D) nanocomposites by Atom Probe Tomography (APT), *Journal of Alloys and Compounds*, 896, art. no. 163015; DOI: 10.1016/j.jallcom.2021.163015
278. Valdes-Tabernero M.A., Monclus M.A., Sabirov I., Molina-Aldareguia J.M., Petrov R.H., Wang J., Timokhina I., The effect of ultrafast heating rate on the elemental distribution between phases in a low carbon steel, *European Journal of Materials*, 2 (1), pp. 172 - 186; DOI: 10.1080/26889277.2022.2060761
279. Cui Z., Jiang H., Zhang D., Song Y., Yan D., Rong L., Effect of Natural Aging on Precipitation Strengthening Behaviors in Al-Mg-Si Alloy, *Metals*, 12 (3), art. no. 470; DOI: 10.3390/met12030470
280. Qiao Y., Zhao Y., Zhang Z., Liu B., Li F., Tong H., Wu J., Zhou Z., Xu Z., Zhang Y., Single-wedge lift-out for atom probe tomography al/ni multilayers specimen preparation based on dual-beam-fib, *Micromachines*, 13 (1), art. no. 35; DOI: 10.3390/mi13010035

281. Poplawsky J.D., Pillai R., Ren Q.-Q., Breen A.J., Gault B., Brady M.P., Measuring oxygen solubility in Ni grains and boundaries after oxidation using atom probe tomography, *Scripta Materialia*, 210, art. no. 114411; DOI: 10.1016/j.scriptamat.2021.114411
282. Liu Z.-B., Yang Z., Liang J.-X., Yang Z.-Y., Sheng G.-M., Atomic-scale characterization of multiple precipitating species in a precipitation-hardened martensitic stainless steel, *Journal of Iron and Steel Research International*, 29 (2), pp. 207 - 214; DOI: 10.1007/s42243-021-00711-1
283. Pereira V.S.M., Davis T.P., Mayoral M.H., Kumar A., Schut H., Sietsma J., Investigation of coarsening of oxide nanoparticles at 1400 K and its effect on the microstructure formation of an ODS Eurofer steel, *Materials Characterization*, 185, art. no. 111723; DOI: 10.1016/j.matchar.2022.111723
284. Bikmukhametov I., Beladi H., Wang J., Tari V., Rollett A.D., Hodgson P.D., Timokhina I., Interface characteristics and precipitation during the austenite-to-ferrite transformation of a Ti-Mo microalloyed steel, *Journal of Alloys and Compounds*, 893, art. no. 162224; DOI: 10.1016/j.jallcom.2021.162224
285. Borrelly T., Huang T.-Y., Yang Y.-C., Goldman R.S., Quivy A.A., On the importance of atom probe tomography for the development of new nanoscale devices, 36th Symposium on Microelectronics Technology, SBMICRO 2022 - Proceedings; DOI: 10.1109/SBMICRO55822.2022.9881039
286. Zhou B.C., Yu C.Y., Qiu S., Yang T., Luan J.H., Xu X.Q., Luo Z.C., Jiao Z.B., Atomistic study of Al partitioning and its influence on nanoscale precipitation of Cu-rich nanocluster-strengthened steels, *Materials Characterization*, 184, art. no. 111687; DOI: 10.1016/j.matchar.2021.111687
287. Peng Z., Meiners T., Lu Y., Liebscher C.H., Kostka A., Raabe D., Gault B., Quantitative analysis of grain boundary diffusion, segregation and precipitation at a sub-nanometer scale, *Acta Materialia*, 225, art. no. 117522; DOI: 10.1016/j.actamat.2021.117522
288. Zheng W., Zhou B., Ren Z., Xu X., Yang G., Qiao X., Yan D., Qian G., Fan X., Fluorescence–Phosphorescence Manipulation and Atom Probe Observation of Fully Inorganic Silver Quantum Clusters: Imitating from and Behaving beyond Organic Hosts, *Advanced Optical Materials*, 10 (2), art. no. 2101632; DOI: 10.1002/adom.202101632
289. Field D.M., Limmer K.R., Hornbuckle B.C., Pierce D.T., Moore K.E., Sebeck K.M., Alloy Partitioning Effect on Strength and Toughness of  $\kappa$ -Carbide Strengthened Steels, *Materials*, 15 (5), art. no. 1670; DOI: 10.3390/ma15051670
290. Gruber H., Hryha E., Lindgren K., Cao Y., Rashidi M., Nyborg L., The effect of boron and zirconium on the microcracking susceptibility of IN-738LC derivatives in laser powder bed fusion, *Applied Surface Science*, 573, art. no. 151541; DOI: 10.1016/j.apsusc.2021.151541
291. Costa A.M.S., Oliveira J.P., Escobar J.D., Salvador C.A.F., Monteiro M.J., Poplawsky J.D., Nunes C.A., Ramirez A.J., Tschiptschin A.P., On the effect of elemental partitioning to secondary phases after solution and aging heat treatments in a Co-Ni-based superalloy, *Materials Letters*, 309, art. no. 131377; DOI: 10.1016/j.matlet.2021.131377
292. Wang J., Li W., Zhu X., You L., Zhang L., Characterization of the Trace Phosphorus Segregation and Mechanical Properties of Dual-Phase Steels, *Acta Metallurgica Sinica (English Letters)*, 35 (2), pp. 341 - 352; DOI: 10.1007/s40195-021-01261-x

293. Ber L.B., Rogozhkin S.V., Khomich A.A., Zaluzhnyi A.G., Distribution of Alloying Element Atoms between  $\gamma$ - and  $\gamma'$ -Phase Particles in a Heat-Resistant Nickel Alloy, *Physics of Metals and Metallography*, 123 (2), pp. 163 - 177; DOI: 10.1134/S0031918X22020028
294. Croné P., Zhou T., Hedström P., Odqvist J., Gudmundson P., Faleskog J., Continuum plasticity modelling of work hardening for precipitation-hardened martensitic steel guided by atom probe tomography, *Materials and Design*, 215, art. no. 110463; DOI: 10.1016/j.matdes.2022.110463
295. Knipfer B., Xu S., Kirch J.D., Botez D., Mawst L.J., Analysis of interface roughness in strained InGaAs/AlInAs quantum cascade laser structures ( $\lambda \sim 4.6 \mu\text{m}$ ) by atom probe tomography, *Journal of Crystal Growth*, 583, art. no. 126531; DOI: 10.1016/j.jcrysgro.2022.126531
296. Sone N., Jinno D., Miyamoto Y., Okuda R., Yamamura S., Jinno Y., Lu W., Han D.-P., Okuno K., Mizutani K., Nakajima S., Koyama J., Ishimura S., Mayama N., Iwaya M., Takeuchi T., Kamiyama S., Akasaki I., Analysis of impurity doping in tunnel junction grown on core-shell structure composed of GaInN/GaN multiple-quantum-shells and GaN nanowire, *Japanese Journal of Applied Physics*, 61 (1), art. no. 012002; DOI: 10.35848/1347-4065/ac3728
297. Liu H., Li Q., The characterization of a nanoscale MnNi cluster in thermally aged reactor pressure vessel steels, *Materials Research Express*, 9 (2), art. no. 026531; DOI: 10.1088/2053-1591/ac5550
298. Zhu X., Li Y., Wang R., Liu W., Liu X., Irradiation and thermal effects on the mechanical properties and solute cluster evolution of Fe-Cu alloy, *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, 511, pp. 118 - 122; DOI: 10.1016/j.nimb.2021.11.023
299. Tkadletz M., Schalk N., Lechner A., Hatzenbichler L., Holec D., Hofer C., Deluca M., Sartory B., Lyapin A., Julin J., Czettel C., Influence of B content on microstructure, phase composition and mechanical properties of CVD Ti(B,N) coatings, *Materialia*, 21, art. no. 101323; DOI: 10.1016/j.mtla.2022.101323
300. Zhang Y.D., Jin S.B., Jiang C.L., Yang J., Sha G., Formation of high-temperature inner oxide scale on low alloy steels: Segregation, partitioning and transformation reactions, *Corrosion Science*, 195, art. no. 109980; DOI: 10.1016/j.corsci.2021.109980
301. Korte-Kerzel S., Hickel T., Huber L., Raabe D., Sandlöbes-Haut S., Todorova M., Neugebauer J., Defect phases—thermodynamics and impact on material properties, *International Materials Reviews*, 67 (1), pp. 89 - 117; DOI: 10.1080/09506608.2021.1930734
302. Yang R., Feng Z., Huang T., Wu G., Godfrey A., Huang X., Unprecedented age-hardening and its structural requirement in a severely deformed Al-Cu-Mg alloy, *Scripta Materialia*, 206, art. no. 114240; DOI: 10.1016/j.scriptamat.2021.114240
303. Varanasi R.S., Lipińska-Chwałek M., Mayer J., Gault B., Ponge D., Mechanisms of austenite growth during intercritical annealing in medium manganese steels, *Scripta Materialia*, 206, art. no. 114228; DOI: 10.1016/j.scriptamat.2021.114228
304. Agrawal P., Karthikeyan S., Makineni S.K., Gault B., Banerjee D., Dynamic strain aging in the intermediate temperature regime of near- $\alpha$  titanium alloy, IMI 834: Experimental and modeling, *Acta Materialia*, 222, art. no. 117436; DOI: 10.1016/j.actamat.2021.117436
305. Dahlström A., Danoix F., Hedström P., Odqvist J., Zapolsky H., Effect of Stress on Spinodal Decomposition in Binary Alloys: Atomistic Modeling and Atom Probe

Tomography, Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 53 (1), pp. 39 - 49; DOI: 10.1007/s11661-021-06467-3

306. Zhu X., Fan Q., Wang D., Gong H., Gao Y., Qian F., Jin S., Sha G., A new dynamic recrystallization mechanism in adiabatic shear band of an  $\alpha/\beta$  dual phase titanium alloy: Composition redistribution, Scripta Materialia, 206, art. no. 114229; DOI: 10.1016/j.scriptamat.2021.114229
307. Johny J., Prymak O., Kamp M., Calvo F., Kim S.-H., Tymoczko A., El-Zoka A., Rehbock C., Schürmann U., Gault B., Kienle L., Barcikowski S., Multidimensional thermally-induced transformation of nest-structured complex Au-Fe nanoalloys towards equilibrium, Nano Research, 15 (1), pp. 581 - 592; DOI: 10.1007/s12274-021-3524-7