

# Laboratory:High Purity Metallic Materials 2000-2004

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| 著者                           | Institute for Materials Research, Tohoku University                               |
| journal or publication title | List of Publications 2000-2004  |
| URL                          | <a href="http://hdl.handle.net/10097/56472">http://hdl.handle.net/10097/56472</a> |

Nomura, N; Yoshimi, K; Konno, T; Hanada, S

*Fracture toughness improvement of TiC by Nb and Mo*

J. Mater. Sci. Lett. 19 (2000) 1879 – 1881

00-IMR0195

Abiko, K; Iijima, Y; Hino, M; Hishinuma, A

*Special issue on ultra-high purity metals –*

Mater. Trans. JIM 41 (2000) 1 – 1

00-IMR0196

Abiko, K; Takaki, S; Yokota, T; Satoh, S

*Formation of giant columnar grains in high-purity iron by*

Mater. Trans. JIM 41 (2000) 102 – 108

00-IMR0197

Hidaka, T; Abiko, K

*In-situ observation of transformation behavior in high-purity Fe-Ni*

Mater. Trans. JIM 41 (2000) 116 – 121

00-IMR0198

Suzuki, T; Nomura, N; Yoshimi, K; Hanada, S

*Microstructure and creep of Mo-ZrC in-situ*

Mater. Trans. JIM 41 (2000) 1164 – 1167

00-IMR0217

Wakai, E; Hishinuma, A; Abe, H; Takaki, S; Abiko, K

*Microstructural evolution of Fe-Cr-W model alloys during Fe<sup>+</sup> ion*

Mater. Trans. JIM 41 (2000) 1176 – 1179

00-IMR0218

Wakai, E; Hishinuma, A; Usami, K; Kato, Y; Takaki, S; Abiko, K

*Damage structures and mechanical properties of high-purity Fe-9Cr alloys irradiated by*

Mater. Trans. JIM 41 (2000) 1180 – 1183

00-IMR0219

Yano, K; Abiko, K

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Mater. Trans. JIM 41 (2000) 122 – 129

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Ohta, J; Kako, K; Mayuzumi, M; Kusanagi, H; Abiko, K

*In situ transmission electron microscopy of carbide precipitation in Fe-50 % Cr alloys at elevated temperatures*

Mater. Trans. JIM 41 (2000) 130 – 135

00-IMR0200

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Nomura, N; Yoshimi, K; Hanada, S  
*Mechanical properties of Mo-Nb-TiC in-situ composites synthesized by*  
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Asahina, M; Harima, N; Takaki, S; Abiko, K  
*High-temperature mechanical properties of a high-purity Cr-Ni*  
Mater. Trans. JIM 41 ( 2000 ) 178 – 183

00-IMR0202

Kako, K; Takaki, S; Abiko, K  
*Effect of grain size on the deformation properties of a high-purity Fe-50Cr alloy at 293 and 773*  
Mater. Trans. JIM 41 ( 2000 ) 184 – 193

00-IMR0203

Isozaki, S; Abiko, K  
*Role of tungsten in the mechanical properties of a high-purity Fe-50mass%Cr alloy at 293-773*  
Mater. Trans. JIM 41 ( 2000 ) 194 – 196

00-IMR0204

Kanou, G; Harima, N; Takaki, S; Abiko, K  
*Mechanical properties of a high-purity 60 mass%Cr-Fe*  
Mater. Trans. JIM 41 ( 2000 ) 197 – 202

00-IMR0205

Takaki, S; Abiko, K  
*Ultra-purification of electrolytic iron by cold-crucible induction melting and induction-heating floating-zone melting in ultra-high vacuum*  
Mater. Trans. JIM 41 ( 2000 ) 2 – 6

00-IMR0206

Nakajima, T; Morimoto, Y; Takaki, S; Abiko, K  
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Mater. Trans. JIM 41 ( 2000 ) 22 – 27

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*Why do we study ultra-high purity base*  
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00-IMR0209

- Ashino, T; Takada, K; Morimoto, Y; Yasuhara, H; Kurosaki, M; Abiko, K  
*Determination of trace amounts of carbon in high-purity iron by infrared absorption after combustion: Pretreatment of reaction accelerator and ceramic crucible*  
Mater. Trans. JIM 41 ( 2000 ) 47 – 52  
00-IMR0210
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- Takada, K; Ashino, T; Morimoto, Y; Yasuhara, H; Kurosaki, M; Abiko, K  
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- Sugihara, M; Yamazaki, Y; Takaki, S; Abiko, K; Iijima, Y  
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- Ogawa, T; Harima, N; Takaki, S; Abiko, K  
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- Takahashi, M; Yoshimi, S; Ohshima, K; Watanabe, Y  
*Atomic and magnetic short-range order in a Pt-8.8 at. % Mn spin-glass*  
Phys. Rev. B 61 ( 2000 ) 3528 – 3533  
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Miura, E; Yoshimi, K; Hanada, S

*Solid-solution strengthening by oxygen in Nb-Ta and Nb-Mo single*

Phys. Status Solidi A-Apl. Res. 185 (2001) 357 – 372

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Miura, E; Yoshimi, K; Hanada, S

*Oxygen-molybdenum interaction with dislocations in Nb-Mo single crystals at elevated temperatures*

Acta Mater. 50 (2002) 2905 – 2916

02-IMR0191

Wakai, E; Miwa, Y; Hashimoto, N; Robertson, JP; Klueh, RL; Shiba, K; Abiko, K; Furuno, S; Jitsukawa, S

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*Chemical form of precipitate by coprecipitation with palladium for separation of trace elements in high-purity metals*

Mater. Trans. 43 (2002) 111 – 115

02-IMR0195

Kinomura, A; Takaki, S; Nakano, Y; Hayashi, Y; Horino, Y; Abiko, K

*Neutron activation analysis of ultrahigh-purity Ti-Al alloys in comparison with glow-discharge mass spectrometry*

Mater. Trans. 43 (2002) 116 – 120

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Yokota, T; Satoh, S; Abiko, K; Takaki, S

*Formation of mono-layer honeycomb structure in high-purity iron by single pass hot-rolling*

Mater. Trans. 43 (2002) 125 – 128

02-IMR0197

Ogawa, T; Harima, N; Takaki, S; Abiko, K

*Influence of purity and cooling-rate on the microstructure of hot-forged pure irons*

Mater. Trans. 43 (2002) 129 – 134

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*Effect of tungsten on mechanical properties of high-purity 60 mass% Cr-Fe alloys*

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*Mechanical properties of ultrahigh-purity Ti-45 mol%Al alloy*

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Mater. Trans. 43 (2002) 178 – 181

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Mater. Trans. 43 (2002) 2897 – 2902

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02-IMR0203

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*Determination of trace amounts of sulfur in high-purity iron by infrared absorption after combustion: Selection and pre-treatment of reaction accelerators*

Phys. Status Solidi A–Appl. Res. 189 (2002) 123 – 132

02-IMR0205

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*Volume and grain-boundary self-diffusion in a high-purity Fe-50 mass % Cr alloy*

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*Effect of titanium carbide precipitates on the ductility of 30 mass% chromium ferritic*

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Mater. Trans. 45 (2004) 365 – 368

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