

CONTENTS BY KEYWORD

Amorphous materials	A new Fe-based metallic glass with a larger supercooled liquid region K. Q. Qiu <i>et al.</i>	3305
	Stabilization of amorphous titanium pyrophosphate by niobium or tantalum doping N. Imanaka <i>et al.</i>	3309
Atomic structure	Determination of the atomic structure of a $\Sigma 13$ SrTiO ₃ grain boundary J. Ayache <i>et al.</i>	3091
Bonding	Direct bonding of CMP-Cu films by surface activated bonding (SAB) method A. Shigetou <i>et al.</i>	3149
	Friction stir welding characteristics of 2017-T351 aluminum alloy sheet H. J. Liu <i>et al.</i>	3297
Cellular materials	Anisotropic and negative thermal expansion behavior in a cellular microstructure T.-C. Lim	3275
Ceramics	Effect of boundary plane on the atomic structure of [0001] $\Sigma 7$ tilt grain boundaries in ZnO F. Oba <i>et al.</i>	3067
	Determination of the atomic structure of a $\Sigma 13$ SrTiO ₃ grain boundary J. Ayache <i>et al.</i>	3091
	High temperature plastic flow and grain boundary chemistry in oxide ceramics H. Yoshida <i>et al.</i>	3129
	Preparation of (Ca, Mg) α -SiAlON powders by combustion synthesis G. Liu <i>et al.</i>	3255
	Phase transformation behaviors of aluminum hydroxides to alpha alumina in air and molten salt J. He <i>et al.</i>	3259
	Formation of an alumina–silicon carbide nanocomposite N. J. Welham <i>et al.</i>	3271
Composite materials	Formation of an alumina–silicon carbide nanocomposite N. J. Welham <i>et al.</i>	3271
Computer simulations	O ₂ oxidation reaction at the Si(100)-SiO ₂ interface: A first-principles investigation A. Bongiorno <i>et al.</i>	3047
	Atomic and electronic structure of [0001]/($\bar{1}$ 230) $\Sigma 7$ symmetric tilt grain boundary in ZnO bicrystal with linear current-voltage characteristic Y. Sato <i>et al.</i>	3059
	Comparison of the intergranular segregation for eight dilute binary metallic systems in the $\Sigma 11'$ {332} tilt grain boundary O. Hardouin Duparc <i>et al.</i>	3169
Corrosion and oxidation	Direct bonding of CMP-Cu films by surface activated bonding (SAB) method A. Shigetou <i>et al.</i>	3149
Deformation and fracture	High temperature plastic flow and grain boundary chemistry in oxide ceramics H. Yoshida <i>et al.</i>	3129
	Strength of Ag-Ni multi-layered foils J. Echigoya <i>et al.</i>	3237
	Effects of double passes of the tool on friction stir welding of polyethylene A. Arici <i>et al.</i>	3313
Deposition techniques	Sequential deposition of copper/alumina composites X. Wang <i>et al.</i>	3293
Elastic properties	Anisotropic and negative thermal expansion behavior in a cellular microstructure T.-C. Lim	3275
Electrochemistry	Sequential deposition of copper/alumina composites X. Wang <i>et al.</i>	3293
Electronic properties	Atomic and electronic structure of [0001]/($\bar{1}$ 230) $\Sigma 7$ symmetric tilt grain boundary in ZnO bicrystal with linear current-voltage characteristic Y. Sato <i>et al.</i>	3059
Functionally graded materials	Sequential deposition of copper/alumina composites X. Wang <i>et al.</i>	3293
Grain boundaries	Atomic and electronic structure of [0001]/($\bar{1}$ 230) $\Sigma 7$ symmetric tilt grain boundary in ZnO bicrystal with linear current-voltage characteristic Y. Sato <i>et al.</i>	3059
	Effect of boundary plane on the atomic structure of [0001] $\Sigma 7$ tilt grain boundaries in ZnO F. Oba <i>et al.</i>	3067
	Determination of the atomic structure of a $\Sigma 13$ SrTiO ₃ grain boundary J. Ayache <i>et al.</i>	3091
	High temperature plastic flow and grain boundary chemistry in oxide ceramics H. Yoshida <i>et al.</i>	3129
	Comparison of the intergranular segregation for eight dilute binary metallic systems in the $\Sigma 11'$ {332} tilt grain boundary O. Hardouin Duparc <i>et al.</i>	3169
	Influence of plastic deformation on occurrence of discontinuous precipitation Z. Boumerzoug <i>et al.</i>	3199
	Grain-size dependence of coercive force in sputtered and annealed iron films J. Echigoya <i>et al.</i>	3209
	The role of vicinal $\Sigma 3$ boundaries and $\Sigma 9$ boundaries in grain boundary engineering V. Randle <i>et al.</i>	3243
Hardness	Vickers hardness and deformation of Ni/Cu nano-multilayers electrodeposited on copper substrates Y. Kaneko <i>et al.</i>	3231
Imaging	Effect of boundary plane on the atomic structure of [0001] $\Sigma 7$ tilt grain boundaries in ZnO F. Oba <i>et al.</i>	3067
Interfaces	O ₂ oxidation reaction at the Si(100)-SiO ₂ interface: A first-principles investigation A. Bongiorno <i>et al.</i>	3047
	Vickers hardness and deformation of Ni/Cu nano-multilayers electrodeposited on copper substrates Y. Kaneko <i>et al.</i>	3231
	Strength of Ag-Ni multi-layered foils J. Echigoya <i>et al.</i>	3237
Magnetic materials	Grain-size dependence of coercive force in sputtered and annealed iron films J. Echigoya <i>et al.</i>	3209
Mechanical properties	Friction stir welding characteristics of 2017-T351 aluminum alloy sheet H. J. Liu <i>et al.</i>	3297
	Effects of double passes of the tool on friction stir welding of polyethylene A. Arici <i>et al.</i>	3313

(Continued)

Metals and alloys	Friction stir welding characteristics of 2017-T351 aluminum alloy sheet H. J. Liu <i>et al.</i>	3297
	Comparison of the intergranular segregation for eight dilute binary metallic systems in the $\Sigma 11'$ {332} tilt grain boundary O. Hardouin Duparc <i>et al.</i>	3169
	The role of vicinal $\Sigma 3$ boundaries and $\Sigma 9$ boundaries in grain boundary engineering V. Randle <i>et al.</i>	3243
Microstructure	Influence of plastic deformation on occurrence of discontinuous precipitation Z. Boumerzoug <i>et al.</i>	3199
	Preparation of (Ca, Mg) α -SiAlON powders by combustion synthesis G. Liu <i>et al.</i>	3255
Multilayer structure	Strength of Ag-Ni multi-layered foils J. Echigoya <i>et al.</i>	3237
Nanocomposites	Formation of an alumina-silicon carbide nanocomposite N. J. Welham <i>et al.</i>	3271
	Modified layered double hydroxides nanocomposites with the polyoxyethylene sulfate Q. Z. Yang <i>et al.</i>	3287
Nanomaterials	Grain-size dependence of coercive force in sputtered and annealed iron films J. Echigoya <i>et al.</i>	3209
	Modified layered double hydroxides nanocomposites with the polyoxyethylene sulfate Q. Z. Yang <i>et al.</i>	3287
Optical materials and properties	Stabilization of amorphous titanium pyrophosphate by niobium or tantalum doping N. Imanaka <i>et al.</i>	3309
Phase transformations	Influence of plastic deformation on occurrence of discontinuous precipitation Z. Boumerzoug <i>et al.</i>	3199
	Phase transformation behaviors of aluminum hydroxides to alpha alumina in air and molten salt J. He <i>et al.</i>	3259
Polymers	Modified layered double hydroxides nanocomposites with the polyoxyethylene sulfate Q. Z. Yang <i>et al.</i>	3287
	Effects of double passes of the tool on friction stir welding of polyethylene A. Arici <i>et al.</i>	3313
Powder technology	Phase transformation behaviors of aluminum hydroxides to alpha alumina in air and molten salt J. He <i>et al.</i>	3259
Rapidly solidified materials	A new Fe-based metallic glass with a larger supercooled liquid region K. Q. Qiu <i>et al.</i>	3305
Semiconductors	O ₂ oxidation reaction at the Si(100)-SiO ₂ interface: A first-principles investigation A. Bongiorno <i>et al.</i>	3047
Thermal properties	Anisotropic and negative thermal expansion behavior in a cellular microstructure T.-C. Lim	3275
	Stabilization of amorphous titanium pyrophosphate by niobium or tantalum doping N. Imanaka <i>et al.</i>	3309
Thin and thick film coatings	Vickers hardness and deformation of Ni/Cu nano-multilayers electrodeposited on copper substrates Y. Kaneko <i>et al.</i>	3231
Transmission electron microscopy	Determination of the atomic structure of a $\Sigma 13$ SrTiO ₃ grain boundary J. Ayache <i>et al.</i>	3091