

Crystal Physics

2002

Kolobov, A; Oyanagi, H; Usami, N; Tokumitsu, S; Hattori, T; Yamasaki, S; Tanaka, K; Ohtake, S; Shiraki, Y

Raman scattering and x-ray absorption studies of Ge–Si nanocrystallization

Appl. Phys. Lett.

80 (2002) 488 – 490

02-IMR0030

Suzuki, Y; Sazaki, G; Miyashita, S; Sawada, T; Tamura, K; Komatsu, H

Protein crystallization under high pressure

Biochim. Biophys. Acta–Protein Struct. Molec. Enzym.

1595 (2002) 345 – 356

02-IMR0031

Suzuki, Y; Sazaki, G; Visuri, K; Tamura, K; Nakajima, K; Yanagiya, S

Significant decrease in the solubility of glucose isomerase crystals under high pressure

Cryst. Growth Des.

2 (2002) 321 – 324

02-IMR0032

Shishido, T; Sasaki, T; Kudou, K; Okada, S; Yoshikawa, A; Ko, JM; Ye, JH; Higashi, I; Oku, M; Horiuchi, H; Fukuda, T; Kohiki, S; Nakajima, K

Solid solution range of boron and properties of the perovskite-type NdRh₃B

J. Alloy. Compd.

335 (2002) 191 – 195

02-IMR0033

Usami, N; Takahashi, T; Fujiwara, K; Ujihara, T; Sazaki, G; Murakami, Y; Nakajima, K

Strain distribution of Si thin film grown on multicrystalline–SiGe with microscopic compositional distribution

J. Appl. Phys.

92 (2002) 7098 – 7101

02-IMR0034

Sazaki, G; Miyashita, S; Nokura, M; Ujihara, T; Fujiwara, K; Usami, N; Nakajima, K

In situ observation of the Marangoni convection in a NaCl aqueous solutions under microgravity

J. Cryst. Growth

234 (2002) 516 – 522

02-IMR0035

Sazaki, G; Azuma, Y; Miyashita, S; Usami, N; Ujihara, T; Fujiwara, K; Murakami, Y; Nakajima, K

In-situ monitoring system of the position and temperature at the crystal–solution interface

J. Cryst. Growth

236 (2002) 125 – 131

02-IMR0037

Okada, S; Ogawa, M; Shishido, T; Iizumi, K; Kudou, K; Kanari, H; Nakajima, K; Rogl, P

Crystal growth of REMn₂Si₂ (RE = Y, Er) by a Pb flux method

J. Cryst. Growth

236 (2002) 617 – 620

02-IMR0036

Nakajima, K; Kusunoki, T; Azuma, Y; Usami, N; Fujiwara, K; Ujihara, T; Sazaki, G; Shishido, T

Compositional variation in Si-rich SiGe single crystals grown by multi-component zone melting method using Si seed and source crystals

J. Cryst. Growth

240 (2002) 373 – 381

02-IMR0038

Ujihara, T; Fujiwara, K; Sazaki, G; Usami, N; Nakajima, K

New method for measurement of interdiffusion coefficient in high temperature solutions based on Fick's first law

J. Cryst. Growth

241 (2002) 387 – 394

02-IMR0039

Ujihara, T; Fujiwara, K; Sazaki, G; Usami, N; Nakajima, K

Simultaneous in situ measurement of solute and temperature distributions in the alloy solutions

J. Cryst. Growth

242 (2002) 313 – 320

02-IMR0040

Fujiwara, K; Nakajima, K; Ujihara, T; Usami, N; Sasaki, G; Hasegawa, H; Mizoguchi, S; Nakajima, K

In situ observations of crystal growth behavior of silicon melt

J. Cryst. Growth

243 (2002) 275 – 282

02-IMR0041

Nishijima, Y; Otsubo, K; Tezuka, H; Nakajima, K; Ishikawa, H

InGaAs zone growth single crystal with convex solid–liquid interface toward the melt

J. Cryst. Growth

245 (2002) 228 – 236

02-IMR0042

Sato, N; Uragami, Y; Nishizaki, T; Takahashi, Y; Sasaki, G; Sugimoto, K; Nonaka, T; Masai, E; Fukuda, M; Senda, T

Crystal structures of the reaction intermediate and its homologue of an extradiol-cleaving catecholic dioxygenase

J. Mol. Biol.

321 (2002) 621 – 636

02-IMR0043

Ujihara, T; Fujiwara, K; Sazaki, G; Usami, N; Nakajima, K

Evaluation of the diffusion coefficients in liquid GaGe binary alloys using a novel method based on Fick's first law

J. Non-Cryst. Solids

312 (2002) 196 – 202

02-IMR0044

Shishido, T; Ye, JH; Okada, S; Kudou, K; Oku, M; Obara, K; Sugawara, T; Yoshikawa, A; Ishizawa, Y; Ogawa, M; Izumi, K; Higashi, I; Amano, T; Kohiki, S; Kawazoe, Y; Nakajima, K

Boron–carbon atomic ratio dependence on the hardness and oxidation resistance of solid solutions of perovskite-type borocarbide $YRh_3B_xC_{1-x}$ ($0 \leq x \leq 1$)

Jpn. J. Appl. Phys. Part 1 – Regul. 41 (2002) 3031 – 3032

Pap. Short Notes Rev. Pap.

02-IMR0045

Usami, N; Takahashi, T; Fujiwara, K; Ujihara, T; Sasaki, G; Murakami, Y; Nakajima, K

Evidence of the presence of built-in strain in multicrystalline SiGe with large compositional distribution

Jpn. J. Appl. Phys. Part 1 – Regul. 41 (2002) 4462 – 4465

Pap. Short Notes Rev. Pap.

02-IMR0046

Kitahara, K; Yamazaki, R; Kurosawa, T; Nakajima, K; Moritani, A

Analysis of stress in laser-crystallized polysilicon thin films by Raman scattering spectroscopy

Jpn. J. Appl. Phys. Part 1 – Regul. 41 (2002) 5055 – 5059

Pap. Short Notes Rev. Pap.

02-IMR0047

Usami, N; Fujiwara, K; Ujihara, T; Sazaki, G; Yaguchi, H; Murakami, Y; Nakajima, K

Control of macroscopic absorption coefficient of multicrystalline SiGe by microscopic compositional distribution

Jpn. J. Appl. Phys. Part 2 – Lett. 41 (2002) L37 – L39

02-IMR0048

Okada, S; Kudou, K; Mori, T; Iizumi, K; Shishido, T; Tanaka, T; Nakajima, K; Rogl, P

REMn₂Si₂ (RE = Y, Tb, Dy, Ho) single crystals grown from lead flux and magnetic properties

Jpn. J. Appl. Phys. Part 2 – Lett. 41 (2002) L555 – L558

02-IMR0049

Kudou, K; Okada, S; Mori, T; Iizumi, K; Shishido, T; Tanaka, T; Higashi, I; Nakajima, K; Rogl, P; Andersson, YB; Lundstrom, T

Crystal growth and properties of AlLiB₁₄

Jpn. J. Appl. Phys. Part 2 – Lett. 41 (2002) L928 – L930

02-IMR0050

Usami, N; Azuma, Y; Ujihara, T; Sazaki, G; Fujiwara, K; Murakami, Y; Nakajima, K

Fabrication of SiGe bulk crystals with uniform composition as substrates for Si-based heterostructures

Mater. Sci. Eng. B–Solid State 89 (2002) 364 – 367
Mater. Adv. Technol.

02-IMR0051

Sato, N; Nakajima, K; Usami, N; Takahashi, H; Muramatsu, A; Matsubara, E

Preparation of a TiO₂ film coated Si device for photo-decomposition of water by CVD method using Ti(OPri)₄(4)

Mater. Trans. 43 (2002) 1533 – 1536

02-IMR0052

Mikami, M; Nakamura, S; Itoh, M; Nakajima, K; Shishido, T

Lattice dynamics and dielectric properties of yttrium oxysulfide

Phys. Rev. B 65 (2002) Art. No. 094302 –

02-IMR0053

Nakajima, K; Usami, N; Fujiwara, K; Murakami, Y; Ujihara, T; Sazaki, G; Shishido, T

Melt growth of multicrystalline SiGe with large compositional distribution for new solar cell applications

Sol. Energy Mater. Sol. Cells 72 (2002) 93 – 100

02-IMR0054

Nakajima, K; Usami, N; Fujiwara, K; Murakami, Y; Ujihara, T; Sazaki, G; Shishido, T

Growth and properties of SiGe multicrystals with microscopic compositional distribution for high-efficiency solar cells

Sol. Energy Mater. Sol. Cells 73 (2002) 305 – 320

02-IMR0055