

目 次

先進セラミックス研究センター設立にあたって	1
〈総説〉	
火炎溶融法にて育成したサファイアについて	3
川南修一・安達信泰・太田敏孝	
炭化珪素質セラミックスハニカムの環境技術への応用	9
羽山清寿	
〈解説〉	
水素を還元剤とする NO 選択還元反応	15
羽田政明	
粉末 X 線回折法による相組成分析と球形試料の吸収補正	23
井田 隆	
層状亜鉛水酸化物を利用した機能性粒子の作製	29
山下誠司・白井 孝・藤 正督・高井千加	
Developing Applications of Electrically Conductive Alumina with in Situ Nano-carbon Networks (NCN)	35
Chunxi Hai, Takashi Shirai, Masayoshi Fuji, Chika Takai	
Application of Ionic Liquids on Microscopic Observation of Hydrated Materials	45
Chisato Takahashi, Takashi Shirai, Masayoshi Fuji	
〈体験記〉	
サバティカル報告 — Eat, Play, Love Nature —	53
太田敏孝	
〈研究業績〉	63
〈センターニュース〉	87

Contents

Establishment of New Center “Advanced Ceramics Research Center”	1
⟨Review⟩	
Sapphire Grown by Flame-Fusion Method	
Shuichi Kawaminami, Nobuyasu Adachi, Toshitaka Ota	3
Application of Silicon Carbide Ceramics Honeycomb for the Environmental Technologies	
Seiji Hayama	9
A Review of Selective Reduction of NO with Hydrogen as Reductant	
Masaaki Haneda	15
Quantitative Phase Analysis by Powder X-ray Diffraction Method and Absorption Correction for Sphere	
Takashi Ida	23
Fabrication of Functional Particles Using Layered Zinc Hydroxide Compounds	
Seiji Yamashita, Takashi Shirai, Masayoshi Fuji, Chika Takai	29
Developing Applications of Electrically Conductive Alumina with in Situ Nano-carbon Networks (NCN)	
Chunxi Hai, Takashi Shirai, Masayoshi Fuji, Chika Takai	35
Application of Ionic Liquids on Microscopic Observation of Hydrated Materials	
Chisato Takahashi, Takashi Shirai, Masayoshi Fuji	45
⟨Report⟩	
Report on Sabbatical Leave - Eat, Play, Love Nature -	
Toshitaka Ota	53
⟨Research Activity⟩	63
⟨News⟩	87