

Table of Contents

Preface

Sol-Gel Production of Silica Microparticles

T. Adachi, J. Kawashima, M. Shoshi, M. Matsubara, K. Sakai and T. Nakasone 1

Synthesis of Zircon-Based Ceramic Pigments via Sol-Gel Methods

C. Agrafiotis and C.J. Stournaras 7

Sol-Gel Ceramic Pigments

A. Atkinson, J. Doorbar, D.L. Segal and P.J. White 15

Characterization of Oxide Layers Deposited by Sol-Gel

K. Bange 21

Mechanical Precision in Sol-Gel Manufacturing of 3-D Components

L. Costa 33

On the Thermal and Photochemical Stabilities of Photochromic Spirooxazine Dyes

Encapsulated in Ormocer Matrices Derived by Sol-Gel Processing 41

L.K. Hou, B. Hoffmann, M. Mennig and H. Schmidt

Sol-Gel Coatings on Large Glass Substrates for Multilayer Interference Systems

E.K. Hussmann 49

A SiO₂-ZrO₂ Gel Film Doped with Organic Pigments Made by the Sol-Gel Method for Contrast Enhancement of Color Picture Tubes

T. Itou and H. Matsuda 67

Sol-Gel-Derived Coatings on Steel Sheets

K. Izumi, N. Minami and Y. Uchida 77

Preparation of High Sinterable Ba(Mg_{1/3}Ta_{2/3})O₃ Powders by Hydrolysis of Metal Alkoxides

S. Katayama, I. Yoshinaga, T. Nagai and M. Sugiyama 89

Development of HUD Combiner for Automotive Windshield Application

K. Makita, H. Inaba and H. Sakai 97

Optical Disk Substrate Fabricated by the Sol-Gel Method

A. Matsuda, Y. Matsuno, Y. Mitsunashi, N. Tohge and T. Minami 111

Preparation of Lithium Chloroboracite from Alkoxides

T. Nagase, H. Wada, K. Sakane and T. Kitamura 121

Local Repairing of Lining Glass Layer by the Alumina Powder Composite Sol-Gel Method

R. Ota, T. Hara, T. Wakasugi, J. Fukunaga and A. Miyake 129

Flat Ceramic Ultrafiltration Membranes and Modules Coated by the Sol-Gel Technique

K. Pflanz, N. Stroh and R. Riedel 135

Emerging Applications of Sol-Gel Technology

E.J.A. Pope 141

Sol-Gel Optical Fiber Preforms

A. Sarkar, F. Kirkbir and S. Raychaudhuri 153

Production of Dispersible Aluminas and Their Use in Different Applications

J. Schimanski 161

Sol-Gel Applications for Membranes

R. Soria 171

Development of Wet Chemical Processing in Nippon Sheet Glass

K. Takemura, K. Doushita, K. Yokoi and T. Mizuno 177

Commercial Development of Sol-Gel Technology in Australia

G.E. Tulloch and S.M. Tulloch 185

Novel Corrosion Resistant Hard-Coatings for Metal Surfaces

G.W. Wagner, S. Sepeur, R. Kasemann and H. Schmidt 193

Characterization of Aluminium Phosphate Gel

C. Weber, R. Field and H.H. Höfer 199

Advanced Manufacturing Process for ZnO Surge Arrester Disks

G.H. Wiseman 209

