

Table of Contents

Introduction

Speeches

A New Electrostatic Dispersion Method for Fine Powder in Air

Z. Xu and S.C. Lu 1

A Super Highly Sensitive Glucose Biosensor Based on Ag/PPy Nanoparticle-Ethyl Cellulose Hybrid Materials

X.Z. Ren, P.X. Zhang, J.H. Liu and Q.L. Zhang 15

Application of Silica Fume in China

X.H. Liu, X.D. Lv, J.X. Fu, P. Peng and G.S. Gai 21

Controlled Synthesis of Homogeneous Carbon Nano-Capsules Based on Biomaterials

Y.L. An, Y.Q. Liu and X. Yuan 27

Development of Mineral Processing Flowsheet for Hematite Beneficiation in Yezhugou, Liaoning, China

Z.F. Lu, W.Z. Yin, X.L. Chang and Y.X. Han 33

Effect of Heat Treatment on Properties of Mineral Attapulgite

Q.G. Tang, J.S. Liang, J.P. Meng, F. Wang, L.W. Li and Y.X. Li 41

Effect of Mineral Composite Materials with Far Infrared Radiation on Diesel Oil Combustion

G. Xue, X.M. Wu, J.S. Liang, Y. Ding and L.H. Liu 47

Facile Controlled Synthesis of Mg(OH)₂ Nanoparticles with Novel Shapes

J.H. Wang, X. Li, J.W. Ye, Y. Lin and G.L. Ning 55

Flow Field Characteristic Analyses of a Turbo Air Classifier's Rotor Cage and its Structurally Improved Counterpart

Q.L. Yang, J.X. Liu and Y.B. Zhou 59

Leaching Mineral Elements from Chinese Maifan-Stone

X.H. Liu, J.X. Fu, L. Li, X.D. Lv, P. Peng and G.S. Gai 69

Mechanism of Far Infrared Emission from Mineral Tourmaline Fine Powders

L.J. Han and J.S. Liang 77

One High Efficiency Production Line of Clinker and Slag Grinding Separately by Roller Mill in Cement Industry

N.C. Liu and Z.F. Li 83

Preparation and Characterization of Surface Modification of Sphalerite Concentrate with Sodium Lignosulfonate

P. Peng, J.X. Ke, L.H. Zhang, P.F. Fu and X.H. Liu 91

Preparation and Properties of Nanocomposites Containing Polypropylene and Palygorskite

F. Wang, Q.G. Tang and J.S. Liang 97

Preparation and Properties of Thermal Insulation Latex Paint for Exterior Wall Based on Defibred Sepiolite and Hollow Glass Microspheres

F. Wang, J.S. Liang, Q.G. Tang, N. Wang and L.W. Li 103

Preparation and Properties of Thermal Insulation Putty for Exterior Wall Containing Sepiolite Composite Materials

F. Wang, J.S. Liang, Q.G. Tang, Y. Ding and N. Wang 109

Preparation of Nano- MgO and Investigation of its Infrared Absorption Properties

Y.M. Zhu, Y.X. Han, X.Y. Wang and X. Wang 115

Preparation of SiO₂ Coated Cenosphere and Characterization of the Composite Powder

Y. Su, X.D. Lv, G.S. Gai and Y.F. Yang 121

Preparation of Nano Titanium Dioxide Using Industrial Raw Material

P.X. Zhang, D.Y. Zhang, Q. Qiu, L. Jing and X.Z. Ren 129

Production Status of Nano-Sized Powder Materials in China

X.D. Lü, X.H. Liu and G.S. Gai 141

Research on Potential Control Flotation of Molybdenite

W.Z. Yin, L.R. Zhang and Y.Z. Ding 147

Research on the Mechanism of the Dissociation of Potassium Shale during Roasting

Y.X. Han, J. Liu and W.Z. Yin 155

Surface Encapsulation of Nano-CaCO₃ Particle by <i>In Situ</i> Emulsion Polymerization	163
M.S. Yang and Y. Quan	
Study of Organic Modification for SrAl₂O₄:Eu²⁺, Dy³⁺ Phosphors	169
X.D. Lü, X.H. Liu and G.S. Gai	
Study on Size Distribution of Oolitic Hematite	177
L.B. Zhao	
Surface Coating of TiO₂ Powder	183
P.X. Zhang, D.Y. Zhang, Q. Qiu, L. Jing and X.Z. Ren	
Surface Modification of Basic Magnesium Sulfate Whiskers	191
Y.X. Han, L.X. Li, X. Chen, S.B. Zhang, Y.B. Wang and X.C. Wei	
Surface Modification of SrAl₂O₄:Eu²⁺, Dy³⁺ Phosphors Using Silica Encapsulation	199
R.F. Li, J.W. Ye, J.H. Wang, X.B. Lu, Y. Lin and G.L. Ning	
Synthesis and Characterization of LiFePO₄ / PPy Composite Powders	205
X.Z. Ren, X. Li, P.X. Zhang, J.H. Liu, Q.L. Zhang and Z.K. Luo	
The Effect of Posterior Disposal Process on Gel Viscosity of Montmorillonite/Octadecyl Trimethyl Ammonium Chloride Complexes	211
J. Qiu, G.F. Wang, Y.Q. Liu, X.J. Lu and L.J. Sun	
Toughening of Polypropylene with Calcium Sulfate Whiskers Treated by Coupling Agents	225
X.L. Wang, Y.M. Zhu, Y.X. Han, Z.T. Yuan and W.Z. Yin	