

List of Publications

Papers

1. Oxygen-Binding to Simple Cobaltporphyrins Combined with Polyvinylimidazole, *Macromol. Symp.*, **186**, 135-139 (2002),
Hiromi Shinohara, Takayuki Arai, Hiroyuki Nishide
2. Preparation and Structure of the Thin Membrane of Polymeric Cobaltporphyrin Complex,
Kobunshi Ronbunshu, **59**(10), 656-660 (2002),
Hiromi Shinohara, Aiko Nakao, Hiroyuki Nishide
3. Analysis of Facilitated Oxygen Transport through the Polymeric Cobaltporphyrin Membrane with a Fluctuation Concentration Model,
J. Membr. Sci., (to be submitted),
Hiromi Shinohara, Hirotugu Arai, Hiroyuki Nishide, Yong Soo Kang
3. An Optical Sensing Material for Trace Analysis of Oxygen. Metalloporphyrin Dispersed in Poly(1-trimethylsilyl-1-propyne) Film,
Polymer J., **34**(6), 411-417 (2002),
Yutaka Amao, Ichiro Okura, Hiromi Shinohara, Hiroyuki Nishide
5. High Oxygen Permeation and Persistent Oxygen-Carrying in a Poly(vinylimidazole-co- fluoroalkyl methacrylate)-Cobaltporphyrin Membrane,
Polymer J., **33**(10), 807-811 (2001),
Baoqing Shentu, Hiromi Shinohara, Hiroyuki Nishide
6. Reversible Oxygen-Binding to the Cobalt-Tetraphenylporphyrin Complexed with Polymeric Imidazole at Low Temperature,
Porphyrins, **9**, 65-71 (2000),
Hiromi Shinohara, Hiroyuki Nishide, Eishun Tsuchida
7. Platinum Porphyrin Embedded in Poly(1-trimethylsilyl-1-propyne) Film as an Optical Sensor for Trace Analysis of Oxygen,
Analyst, **125**, 1911-1914 (2000),
Yutaka Amao, Keisuke Asai, Ichiro Okura, Hiromi Shinohara, Hiroyuki Nishide

Book

Measurement of the Oxygen-Binding Rate Constants to the Cobaltporphyrin-Polymer Complex in the Solid State. in “Metal Complexes and Metals in Macromolecules”, Edited by D. Wöhrle, Weinheim: Wiley-VCH, 401-403 (2003)

Hiromi Shinohara, Hiroyuki Nishide

Patent

Patent No. 2001-251402 “The Polymeric Thin Membrane with high oxygen transport ability”

Hiroyuki Nishide, Hiromi Shinohara

Presentation

1. Facilitated Oxygen Transport through the Membranes of Simple and Planar Cobaltporphyrins
The International Congress on Membranes and Membrane Processes (2002.7 Toulouse, France)
Hiromi Shinohara, Takayuki Arai, Hirotugu Arai, Hiroyuki Nishide
2. Facilitated Oxygen Transport through Cobaltporphyrin Membranes and its Analysis
24th Annual Meeting of the Membrane Society of Japan (2002.5, Tokyo)
Hiromi Shinohara, Takayuki Arai, Hirotugu Arai, Hiroyuki Nishide
3. Facilitated Oxygen Transport through Cobalt-tetraphenylporphyrin Membranes and its Analysis
The 1st Conference of Aseanian Membrane Society (2002.5, Tokyo)
Hiromi Shinohara, Hirotugu Arai, Takayuki Arai, Hiroyuki Nishide, Jong Hak Kim, Yong Soo Kang
4. Thin Membrane of Polymeric Cobaltporphyrin and Facilitated Oxygen Transport through the Membrane
Membrane Symposiums of the Membrane Society of Japan 2001 (2001.11, Kyoto)
Hiromi Shinohara, Takayuki Arai, Hirotugu Arai, Hiroyuki Nishide

5. Thin Membrane of the Polymer Cobaltporphyrin Complex and Facilitated Oxygen Transport
50th Symposium on Macromolecules of the Society of Polymer Science (2001.9, Tokyo)
Hiromi Shinohara, Takayuki Arai, Hiroyuki Nishide
6. Oxygen-Binding to Simple Cobaltporphyrin-Polyvinylimidazole Complexes
9th International Symposium on Macromolecule-Metal Complexes (2001.8, New York)
Hiromi Shinohara, Takayuki Arai, Hiroyuki Nishide
7. Oxygen-Binding to the Cobalt-tetraphenylporphyrin Fixed in Polymer Membrane
50th Annual Meeting of the Society of Polymer Science (2001.5, Osaka)
Hiromi Shinohara, Takayuki Arai, Hiroyuki Nishide
8. Reversible Oxygen-Binding to the Tetraphenylporphyrinatocobalt(II)s Complexed with Polymeric Imidazole at Low Temperature
5th International Porphyrin-Heme Symposium (2000.10, Sendai)
Hiromi Shinohara, Takayuki Arai, Hiroyuki Nishide, Eishun Tsuchida
9. Reversible Oxygen-Binding to the Cobalt-Tetraphenylporphyrin Complexed with Polymeric Imidazole at Low Temperature
49th Symposium on Macromolecules of the Society of Polymer Science (2000.9, Sendai)
Hiromi Shinohara, Hiroyuki Nishide, Eishun Tsuchida