

**ADVANCES IN SCIENCE AND TECHNOLOGY:**

Vol. 76 - "5th Forum on New Materials - Part E", Proceedings of the 5th Forum on New Materials, held in Montecatini Terme, Italy, June 13-18, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 276 pages, 2010, EAN: 9783908158431, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, John A. Jansen, Kazuhiko Ishihara and Thomas J. Webster.

Vol. 75 - "5th Forum on New Materials" - Part D", Proceedings of the 5th Forum on New Materials, held in Montecatini Terme, Italy, June 13-18, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 272 pages, 2010, EAN: 9783908158424, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, David S. Ginley, Giovanni Bruno, Attilio Rigamonti and Nikolay Zheludev

Vol. 74 - "5th Forum on New Materials - Part C", Proceedings of the 5th Forum on New Materials, held in Montecatini Terme, Italy, June 13-18, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 326 pages, 2010, EAN: 9783908158417, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Kunihiro Koumoto, Nicola Romeo and Mark Mehos.

Vol. 73 - "5th Forum on New Materials - Part B", Proceedings of the 5th Forum on New Materials, held in Montecatini Terme, Italy, June 13-18, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 206 pages, 2010, EAN: 9783908158400, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Hua-Tay Lin and Kevin Fox.

Vol. 72 - "5th Forum on New Materials - Part A", Proceedings of the 5th Forum on New Materials, held in Montecatini Terme, Italy, June 13-18, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 354 pages, 2010, EAN: 9783908158394, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Cynthia Powell, Marco Vittori Antisari, Vincenzo Antonucci and Fausto Croce.

Vol. 71 - "12th International Ceramics Congress - Part J", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 148 pages, 2010, EAN: 9783908158387, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Maurizio Ferrari and Mrityunjay Singh.

Vol. 70 - "12th International Ceramics Congress - Part I", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 214 pages, 2010, EAN: 9783908158370, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and James P. Bennett.

Vol. 69 - "12th International Ceramics Congress - Part H", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 202 pages, 2010, EAN: 9783908158363, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Cristina Leonelli.

Vol. 68 - "12th International Ceramics Congress - Part G", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 222 pages, 2010, EAN: 9783908158356, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Michele Dondi.

Vol. 67 - "12th International Ceramics Congress - Part F", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 222 pages, 2010, EAN: 9783908158349, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Vojislav V. Mitic, Alois Loidl and Dino Fiorani.

Vol. 66 - "12th International Ceramics Congress - Part E", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 172 pages, 2010, EAN: 9783908158332, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Ghislain Montavon.

Vol. 65 - "12th International Ceramics Congress - Part D", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 280 pages, 2010, EAN: 9783908158325, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Sheldon Wiederhorn and Paolo Colombo.

Vol. 64 - "12th International Ceramics Congress - Part C", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 160 pages, 2010, EAN: 9783908158318, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Mark Hadfield and Alberto Passerone.

Vol. 63 - "12th International Ceramics Congress - Part B", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 437 pages, 2010, EAN: 9783908158301, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Ralf Riedel, Alexander G. Merzhanov and Chang-Chun Ge.

Vol. 62 - "12th International Ceramics Congress - Part A", Proceedings of the 12th International Ceramics Congress, held in Montecatini Terme, Italy, June 6-11, 2010 as part of CIMTEC 2010 - 12th International Ceramics Congress and 5th Forum on New Materials, CD, 246 pages, 2010, EAN: 9783908158295, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Jean-François Baumard.

Vol. 61 - "Artificial Muscle Actuators using Electroactive Polymers", Proceedings of the joint Focused Session A-12 "Artificial Muscle Actuators using Electroactive Polymers" of Symposium A "Smart Materials and Micro/Nanosystems" and Symposium E "Mining Smartness from Nature", held in Acireale, Sicily, Italy, June 8-13, 2008 as part of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", CD, 205 pages, 2008, ISBN-10: 3-908158-18-4 and ISBN-13: 978-3-908158-18-9, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini, Yoseph Bar-Cohen and Federico Carpi.

Vol. 60 - "Smart Textiles", Proceedings of the Focused Session A-11 "Smart Textiles" of Symposium A "Smart Materials and Micro/Nanosystems", held in Acireale, Sicily, Italy, June 8-13, 2008 as part of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", CD, 179 pages, 2008, ISBN-10: 3-908158-17-6 and ISBN-13: 978-3-908158-17-2, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Rita Paradiso.

Vol. 59 - "State-of-the-art Research and Application of SMAs Technologies", Proceedings of the Focused Session A-10 "State-of-the-art Research and Application of SMAs Technologies" of Symposium A "Smart Materials and Micro/Nanosystems", held in Acireale, Sicily, Italy, June 8-13, 2008 as part of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", CD, 210 pages, 2008, ISBN-10: 3-908158-16-8 and ISBN-13: 978-3-908158-16-5, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Stefano Besseghini.

Vol. 58 - "Mining Smartness from Nature", Proceedings of Symposium E "Mining Smartness from Nature" of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", held in Acireale, Sicily, Italy, June 8-13, 2008, CD, 280 pages, 2008, ISBN-10: 3-908158-15-X and ISBN-13: 978-3-908158-15-8, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Salvatore Graziani.

Vol. 57 - "Biomedical Applications of Smart Materials, Nanotechnology and Micro/Nano Engineering", Proceedings of Symposium D "Biomedical Applications of Smart Materials, Nanotechnology and Micro/Nano Engineering" of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", held in Acireale, Sicily, Italy, June 8-13, 2008, CD, 271 pages, 2008, ISBN-10: 3-908158-14-1 and ISBN-13: 978-3-908158-14-1, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Danilo De Rossi.

Vol. 56 - "Embodying Intelligence in Structures and Integrated Systems", Proceedings of Symposium C "Embodying Intelligence in Structures and Integrated Systems" of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", held in Acireale, Sicily, Italy, June 8-13, 2008, CD, 627 pages, 2008, ISBN-10: 3-908158-13-3 and ISBN-13: 978-3-908158-13-4, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Fabio Casciati.

Vol. 55 - "Smart Optics", Proceedings of Symposium B "Smart Optics" of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", held in Acireale, Sicily, Italy, June 8-13, 2008, CD, 227 pages, 2008, ISBN-10: 3-908158-12-5 and ISBN-13: 978-3-908158-12-7, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Giancarlo Righini.

Vol. 54 - "Smart Materials & Micro/Nanosystems", Proceedings of Symposium A "Smart Materials & Micro/Nanosystems" of CIMTEC 2008 - 3rd International Conference "Smart Materials, Structures and Systems", held in Acireale, Sicily, Italy, June 8-13, 2008, CD, 504 pages, 2008, ISBN-10: 3-908158-11-7 and ISBN-13: 978-3-908158-11-0, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Giuseppe D'Arrigo.

Vol. 53 - "Biomedical Applications of Nano Technologies", Proceedings of the International Symposium "Biomedical Applications of Nano Technologies" of the Forum on New Materials, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 125 pages, 2006, ISBN 3-908158-09-5 and ISBN-13 978-3908158-09-7, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Rolando Barbucci.

Vol. 52 - "Spin Injection and Transport in Magnetoelectronics", Proceedings of the International Symposium "Spin Injection and Transport in Magnetoelectronics" of the Forum on New Materials, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 124 pages, 2006, ISBN 3-908158-08-7 and ISBN-13 978-3908158-08-0, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Dino Fiorani.

Vol. 51 - "Disclosing Materials at the Nanoscale", Proceedings of the International Symposium "Disclosing Materials at the Nanoscale" of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 212 pages, 2006, ISBN 3-908158-07-9 and ISBN-13 978-3908158-07-3, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Giovanni Marletta.

Vol. 50 - "Advanced Inorganic Fibrous Composites for Structural Applications - V", Proceedings of the 5<sup>th</sup> International Conference "Advanced Inorganic Fibrous Composites for Structural Applications" of the Forum on New Materials, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 185 pages, 2006, ISBN 3-908158-06-0 and ISBN-13 978-3908158-06-6, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Mrityunjay Singh.

Vol. 49 - "Materials in Clinical Applications - VII", Proceedings of the 7<sup>th</sup> International Conference "Materials in Clinical Applications" of the Forum on New Materials, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 311 pages, 2006, ISBN 3-908158-05-2 and ISBN-13 978-3908158-05-9, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Roberto Giardino.

Vol. 48 - "Diamond and Other New Carbon Materials - IV", Proceedings of the 4<sup>th</sup> International Conference "Diamond and Other New Carbon Materials" of the Forum on New Materials, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 177 pages, 2006, ISBN 3-908158-04-4 and ISBN-13 978-3908158-04-2, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Emilia Cappelli.

Vol. 47 - "Science and Engineering of Novel Superconductors - V", Proceedings of the 5<sup>th</sup> International Conference "Science and Engineering of Novel Superconductors" of the Forum on New Materials, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 260 pages, 2006, ISBN 3-908158-03-6 and ISBN-13 978-3908158-03-5, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Attilio Rigamonti.

Vol. 46 - "Mass and Charge Transport in Inorganic Materials - III", Proceedings of the 3<sup>rd</sup> International Conference "Mass and Charge Transport in Inorganic Materials" of the Forum on New Materials, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 202 pages, 2006, ISBN 3-908158-02-8 and ISBN-13 978-3908158-02-8, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Vincenzo Buscaglia.

Vol. 45 - "11<sup>th</sup> International Ceramics Congress", Proceedings of the 11<sup>th</sup> International Ceramics Congress, part of CIMTEC 2006 - 11<sup>th</sup> International Ceramics Congress and 4<sup>th</sup> Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006, CD, 2691 pages, 2006, ISBN 3-908158-01-X and ISBN-13 978-3908158-01-1, Editor Pietro Vincenzini.

Vol. 44 - Modeling and Simulating Materials Nanoworld, Proceedings of the Special Symposium "Modeling and Simulating Materials Nanoworld" (Part C), of the 3rd International Conference "Computational Modeling

and Simulation of Materials", part of CIMTEC Conferences, held in Acireale, Sicily, Italy, May 30-June 4, 2004, Hardbound, XII + 396 pages, 2004, ISBN: 88-86538-47-2, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Francesco Zerbetto.

Vol. 43 - Computational Modeling and Simulation of Materials III - Part B, Proceedings of the 3rd International Conference "Computational Modeling and Simulation of Materials", held in Acireale, Sicily, Italy, May 30-June 4, 2004, Hardbound, XIV + 672 pages, 2004, ISBN: 88-86538-46-4, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Alessandro Lami.

Vol. 42 - Computational Modeling and Simulation of Materials III - Part A, Proceedings of the 3rd International Conference "Computational Modeling and Simulation of Materials", held in Acireale, Sicily, Italy, May 30-June 4, 2004, Hardbound, XVIII + 874 pages, 2004, ISBN: 88-86538-45-6, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Alessandro Lami.

Vol. 41 - Materials in Clinical Applications - VI, Proceedings of the 6th International Conference "Materials in Clinical Applications" of the Forum on New Materials, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XIV+458 pages, 2003, ISBN: 88-86538-43-X, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Rolando Barbucci.

Vol. 40 - Advanced Inorganic Structural Fiber Composites - IV, Proceedings of the 4th International Conference "Advanced Inorganic Fiber Composites for Structural Applications" of the Forum on New Materials, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XII+312 pages, 2003, ISBN: 88-86538-42-1, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Claudio Badini.

Vol. 39 - Diamond and Other Carbon Materials - III, Proceedings of the 3rd International Conference "Diamond and Other Carbon Materials - Fundamental Physical Properties and Electronic Applications" of the Forum on New Materials, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XII+246 pages, 2003, ISBN: 88-86538-41-3, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Paolo Ascarelli.

Vol. 38 - Science and Engineering of HTC Superconductivity - IV, Proceedings of the 4th International Conference "Science and Engineering of HTC Superconductivity" of the Forum on New Materials, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XIV+468 pages, 2003, ISBN: 88-86538-40-5, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Sergio Cerasara.

Vol. 37 - Mass and Charge Transport in Inorganic Materials - II, Proceedings of the 2nd International Conference "Mass and Charge Transport in Inorganic Materials - Fundamentals to Devices" of the Forum on New Materials, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XIV+420 pages, 2003, ISBN: 88-86538-39-1, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Vincenzo Buscaglia.

Vol. 36 - Computational Modelling and Simulation of Materials - II, Proceedings of the 2nd International Conference "Computational Modelling and Simulation of Materials" of the Forum on New Materials, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XII+326 pages, 2003, ISBN: 88-86538-38-3, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Alessandro Lami.

Vol. 35 - Refractories: Trends in Research and Applications, Proceedings of the International Symposium B2 "Refractories: Trends in Research and Applications" of the 10th International Ceramics Congress, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XII+294 pages, 2003, ISBN: 88-86538-37-5, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Giovanni Aliprandi.

Vol. 34 - Science for New Technology of Silicate Ceramics, Proceedings of the International Symposium B1 "Science for New Technology of Silicate Ceramics" of the 10th International Ceramics Congress, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XII+364 pages, 2003, ISBN: 88-86538-36-7, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Michele Dondi.

Vol. 33 - 10th International Ceramics Congress - Part D, Proceedings of the 10th International Ceramics Congress, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XXII+1118 pages, 2003, ISBN: 88-86538-35-9, Editor Pietro Vincenzini.

Vol. 32 - 10th International Ceramics Congress - Part C, Proceedings of the 10th International Ceramics Congress, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XXII+956 pages, 2003, ISBN: 88-86538-34-0, Editor Pietro Vincenzini.

Vol. 31 - 10th International Ceramics Congress - Part B, Proceedings of the 10th International Ceramics Congress, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XVIII+612 pages, 2003, ISBN: 88-86538-33-2, Editor Pietro Vincenzini.

Vol. 30 - 10th International Ceramics Congress - Part A, Proceedings of the 10th International Ceramics Congress, part of CIMTEC 2002-10th International Ceramics Congress and 3rd Forum on New Materials, held in Florence, July 14-18, 2002, Hardbound, XX+736 pages, 2003, ISBN: 88-86538-32-4, Editor Pietro Vincenzini.

Vol. 29 - Mass and Charge Transport in Inorganic Materials - Fundamentals to Devices - I, Proceedings of the International Conference on "Mass and Charge Transport in Inorganic Materials", held in Lido di Jesolo, Venice, May 28-June 2, 2000, 2 volumes, Hardbound, XXII+XXII+1530 pages, 2000, ISBN: 88-86538-30-8, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Vincenzo Buscaglia.

Vol. 28 - Materials in Clinical Applications - V, Proceedings of Topical Symposium XI "Materials in Clinical Applications" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XVI+518 pages, 1999, ISBN: 88-86538-29-4, Editor Pietro Vincenzini.

Vol. 27 - Innovative Light Emitting Materials, Proceedings of Topical Symposium X "Innovative Light Emitting Materials" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XVI+462 pages, 1999, ISBN: 88-86538-28-6, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Gian Carlo Righini

Vol. 26 - Solid State Chemical and Biochemical Sensors, Proceedings of Topical Symposium IX "Solid State Chemical and Biochemical Sensors" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XVI+546 pages, 1999, ISBN: 88-86538-27-8, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Leonello Dori.

Vol. 25 - Smart Materials Systems, Proceedings of Topical Symposium VIII "Smart Materials Systems" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XIV+416 pages, 1999, ISBN: 88-86538-26-X, Editor Pietro Vincenzini.

Vol. 24 - Innovative Materials in Advanced Energy Technologies, Proceedings of Topical Symposium VII "Innovative Materials in Advanced Energy Technologies" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XVIII+818 pages, 1999, ISBN: 88-86538-25-1, Editor Pietro Vincenzini.

Vol. 23 - Science and Engineering of HTC Superconductivity - III, Proceedings of Topical Symposium VI "Science and Engineering of HTC Superconductivity" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XX+820 pages, 1999, ISBN: 88-86538-24-3, Editor Pietro Vincenzini.

Vol. 22 - Advanced Structural Fiber Composites - III, Proceedings of Topical Symposium V "Advanced Structural Fiber Composites" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XIV+402 pages, 1999, ISBN: 88-86538-23-5, Editor Pietro Vincenzini.

Vol. 21 - Diamond Films - II, Proceedings of Topical Symposium IV "Diamond Films: Synthesis, Processing and Applications" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XVI+466 pages, 1999, ISBN: 88-86538-22-7, Editor Pietro Vincenzini.

Vol. 20 - Surface Engineering, Proceedings of Topical Symposium III "Surface Engineering" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XVIII+702 pages, 1999, ISBN: 88-86538-21-9, Editor Pietro Vincenzini.

Vol. 19 - Surface and Near-Surface Analysis of Materials, Proceedings of Topical Symposium II "Development and Modern Applications of Surface and Near-Surface Analysis of Materials" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XIV+260 pages, 1999, ISBN: 88-86538-20-0, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Sergio Valeri.

Vol. 18 - Computational Modeling and Simulation of Materials - I, Proceedings of Topical Symposium I "Computational Modeling and Simulation of Materials" of the Forum on New Materials of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XVI+556 pages, 1999, ISBN: 88-86538-19-7, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Alessandra Degli Esposti.

Vol. 17 - Ceramics: Getting into the 2000's - Part E, Proceedings of the World Ceramics Congress, part of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XX+708 pages, 1999, ISBN: 88-86538-18-9, Editor Pietro Vincenzini.

Vol. 16 - Ceramics: Getting into the 2000's - Part D, Proceedings of the World Ceramics Congress, part of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XX+978 pages, 1999, ISBN: 88-86538-17-0, Editor Pietro Vincenzini.

Vol. 15 - Ceramics: Getting into the 2000's - Part C, Proceedings of the World Ceramics Congress, part of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XXII+1148 pages, 1999, ISBN: 88-86538-16-2, Editor Pietro Vincenzini.

Vol. 14 - Ceramics: Getting into the 2000's - Part B, Proceedings of the World Ceramics Congress, part of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XX+884 pages, 1999, ISBN: 88-86538-15-4, Editor Pietro Vincenzini.

Vol. 13 - Ceramics: Getting into the 2000's - Part A, Proceedings of the World Ceramics Congress, part of the 9th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 14-19, 1998, Hardbound, XX+878 pages, 1999, ISBN: 88-86538-14-6, Editor Pietro Vincenzini.

Vol. 12 - Materials in Clinical Applications - IV, Proceedings of Topical Symposium VIII on "Materials in Clinical Applications" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XVIII+816 pages, 1995, ISBN: 88-86538-11-1, Editor Pietro Vincenzini.

Vol. 11 - Advanced Materials in Optics, Electro-Optics and Communication Technologies, Proceedings of Topical Symposium VII "Advanced Materials in Optics, Electro-Optics and Communication Technologies" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XVI+559 pages, 1995, ISBN: 88-86538-10-3, Series Editor Pietro Vincenzini, Editors Pietro Vincenzini and Gian Carlo Righini.

Vol. 10 - Intelligent Materials and Systems, Proceedings of Topical Symposium VI "Intelligent Materials and Systems" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XII+342 pages, 1995, ISBN: 88-86538-09-X, Editor Pietro Vincenzini.

Vol. 9 - High Performance Materials in Engine Technology, Proceedings of Topical Symposium V "High Performance Materials in Engine Technology" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XIV+532 pages, 1995, ISBN: 88-86538-08-1, Editor Pietro Vincenzini.

Vol. 8 - Superconductivity and Superconducting Materials Technologies - II, Proceedings of Topical Symposium IV "Superconductivity and Superconducting Materials Technologies" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XVIII+786 pages, 1995, ISBN: 88-86538-07-3, Editor Pietro Vincenzini.

Vol. 7 - Advanced Structural Fiber Composites - II, Proceedings of Topical Symposium III "Advanced Structural Fiber Composites" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XVI+849 pages, 1995, ISBN: 88-86538-06-5, Editor Pietro Vincenzini.

Vol. 6 - New Diamond and Diamond-Like Films - I, Proceedings of Topical Symposium II "New Diamond and Diamond-Like Films" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XII+362 pages, 1995, ISBN: 88-86538-05-7, Editor Pietro Vincenzini.

Vol. 5 - Advances in Inorganic Films and Coatings, Proceedings of Topical Symposium I "Advances in Inorganic Films and Coatings" of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XVI+659 pages, 1995, ISBN: 88-86538-04-9, Editor Pietro Vincenzini.

Vol. 4 - New Horizons for Materials, Proceedings of the General Section of the Forum on New Materials of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XIX+789 pages, 1995, ISBN: 88-86538-03-0, Editor Pietro Vincenzini.

Vol. 3 - Ceramics: Charting the Future, Proceedings of the World Ceramics Congress, part of the 8th CIMTEC-World Ceramics Congress and Forum on New Materials, held in Florence, June 28-July 4, 1994, Hardbound, XL+2951 pages, 1995, 4 volumes, ISBN: 88-86538-02-2, Editor Pietro Vincenzini.

Vol. 2 - Innovative Materials. Prospects and Problems in a Competitive Industrial Context, Proceedings of the International Conference on "Innovative Materials", held in Modena, June 4-6, 1992, Hardbound, X+746 pages, 1993, Editor Pietro Vincenzini.

Vol. 1 - Science of Ceramics 12, Proceedings of the Twelfth International Conference "Science of Ceramics" held in Saint Vincent, June 27-30, 1983, Hardbound, XVI+770 pages, 1984, Editor Pietro Vincenzini.

#### **MATERIALS SCIENCE MONOGRAPHS:**

Vol. 70 - High Temperature Superconductors, Proceedings of the Satellite Symposium 4 on High Temperature Superconductors of the 7th International Meeting on Modern Ceramics Technologies (7th CIMTEC-World Ceramics Congress), held in Trieste, Italy, July 2-5, 1990, Hardbound, XVIII+996 pages, 1991, ISBN: 0-444-89061-0, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 69 - Ceramics in Substitutive and Reconstructive Surgery, Proceedings of the Satellite Symposium 3 on Ceramics in Substitutive and Reconstructive Surgery of the 7th International Meeting on Modern Ceramics Technologies (7th CIMTEC-World Ceramics Congress), held in Montecatini Terme, Italy, June 27-30, 1990, Hardbound, XIV+650 pages, 1991, ISBN: 0-444-89060-2, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 68 - Advanced Structural Inorganic Composites, Proceedings of the Satellite Symposium 2 on Advanced Structural Inorganic Composites of the 7th International Meeting on Modern Ceramics Technologies (7th CIMTEC-World Ceramics Congress), held in Montecatini Terme, Italy, June 27-30, 1990, Hardbound, XVI+826 pages, 1991, ISBN: 0-444-89059-9, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 67 - High Performance Ceramic Films and Coatings, Proceedings of the Satellite Symposium 1 on High Performance Ceramic Films and Coatings of the 7th International Meeting on Modern Ceramics Technologies (7th CIMTEC-World Ceramics Congress), held in Montecatini Terme, Italy, June 27-30, 1990, Hardbound, XIV+760 pages, 1991, ISBN: 0-444-89058-0, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 66A-B-C-D - Ceramics Today – Tomorrow's Ceramics, Proceedings of the 7th International Meeting on Modern Ceramics Technologies (7th CIMTEC-World Ceramics Congress), held in Montecatini Terme, Italy, June 24-30, 1990, 4 Volumes, Hardbound, XXXVI+3310 pages, 1991, ISBN: 0-444-88365-7, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 39 - Ceramics in Clinical Applications, Proceedings of the International Symposium on Bioceramics (BIOTEC) organized as a Satellite Symposium of the World Congress on High Tech Ceramics, the 6th International Meeting on Modern Ceramics Technologies (6th CIMTEC), held in Milan, Italy, June 26-28, 1986, Hardbound, XIV+476 pages, 1987, ISBN: 0-444-42777-5, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 38A-B-C - High Tech Ceramics, Proceedings of the World Congress on High Tech Ceramics, the 6th International Meeting on Modern Ceramics Technologies (6th CIMTEC), held in Milan, Italy, June 24-28, 1986, 3 Volumes, Hardbound, XXXII+3080 pages, 1987, ISBN: 0-444-42776-7 (Set), 0-444-42773-2 (Vol. 38A), 0-444-42774-0 (Vol. 38B), 0-444-42775-9 (Vol. 38C), Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 17 - Ceramics in Surgery, Proceedings of the 2nd International Symposium Bioceramics (2<sup>nd</sup> BIOSIMP), held in Lignano Sabbiadoro, Italy, June 16-19, 1982, Hardbound, XII+408 pages, 1983, ISBN: 0-444-42172-6, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 16 - Ceramic Powders, Proceedings of the 5th International Meeting on Modern Ceramics Technologies, held in Lignano Sabbiadoro, Italy, June 14-19, 1982, Hardbound, XVI+1025 pages, 1983, ISBN: 0-444-42171-8, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

Vol. 6 - Energy and Ceramics, Proceedings of the 4th International Meeting on Modern Ceramics Technologies, held in Saint-Vincent, Italy, May 28-31, 1979, Hardbound, XX+1292 pages, 1980, ISBN: 0-444-41864-4, Elsevier Science Publishers, UK, Editor Pietro Vincenzini.

#### **OTHERS:**

Fundamentals of Ceramic Engineering, Proceedings of the First International Course on Ceramics, held in Bogotá, Colombia, October 10-15, 1988, Hardbound, X+264 pages, 1991, ISBN: 1-85166-434-3, Elsevier Science Publishers, Editor Pietro Vincenzini.

Advances in Ceramics Processing, Proceedings of the 3rd International Meeting on Modern Ceramics Technologies (3rd CIMTEC), held in Rimini, Italy, May 27-31, 1977, Hardbound, 356 pages, 1978, Ceramurgica Srl, Faenza, Italy, Editor Pietro Vincenzini.

Single-firing and Automation - Monocottura e Automazione, Proceedings of 2nd CIMTEC, held in Faenza-Cesenatico, Italy, May 28-30, 1973, Hardbound, 170 pages, 1973, Ceramurgica Srl, Faenza, Italy, Editor Pietro Vincenzini.

#### **MONOGRAPHS IN MATERIALS AND SOCIETY:**

Vol. 8 - Ceramic Materials in Energy Systems for Sustainable Development, Proceedings of FORUM 2008 of the World Academy of Ceramics held in Chianciano Terme, Italy, July 6-8, 2008, Hardbound, XVI + 376 pages, June 2009, ISBN: 978-88-86538-50-3, Series Editor Pietro Vincenzini, Editor Ludwig J. Gauckler.

Vol. 7 - ABC of Contemporary Ceramic Materials, authored by Roman Pampuch, Professor-emeritus of AGH University of Science and Technology, Krakow, Poland, 2008, Hardbound, X + 206 pages, ISBN: 978-88-86538-49-7, Series Editor Pietro Vincenzini, Author Roman Pampuch.

Vol. 6 - Lessons in Nanotechnology - From Traditional and Advanced Ceramics, Proceedings of FORUM 2004 of the World Academy of Ceramics held in Faenza/Cesenatico, Italy, May 2004, Hardbound, XIV+244 pages, 2005, ISBN: 88-86538-48-0, Series Editor Pietro Vincenzini, Editor Jean-François Baumard.

Vol. 5 - The Art of Ceramics - The Blend of Art and Science in Technology, Proceedings of FORUM 2000 of the Academy of Ceramics held in Ravello/Sorrento, Italy, June 2000, Hardbound, XVI+246 pages, 2001, ISBN: 88-86538-31-6, Series Editor Pietro Vincenzini, Editor Nils Claussen.

Vol. 4 - Role of Ceramics in a Self-Sustaining Environment, Proceedings of FORUM '96 of the Academy of Ceramics held in Cracow, Poland, June 1996, Hardbound, XII+206 pages, 1997, ISBN: 88-86538-13-8, Series Editor Pietro Vincenzini, Editors Roman Pampuch and Krzysztof Haberko.

Vol. 3 - Ceramics and Society, Proceedings of FORUM '92 of the Academy of Ceramics held in Assisi, Italy, June 1992, Hardbound, XVI+158 pages, 1995, ISBN: 88-86538-12-X, Series Editor Pietro Vincenzini, Editor Richard John Brook.

Vol. 2 - The Ceramics Cultural Heritage, Proceedings of the homonymous International Conference held in Florence, Italy, June 28 to July 2, 1994, Hardbound, XVI+848 pages, 1995, ISBN: 88-86538-01-4, Editor Pietro Vincenzini.

Vol. 1 - Ceramics in Architecture, Proceedings of the homonymous International Conference held in Florence, Italy, June 28 to July 2, 1994, Hardbound, XIV+616 pages, 1995, ISBN: 88-86538-00-6, Editor Pietro Vincenzini.

*A selection of papers:*

## **TRADITIONAL CERAMICS**

P. VINCENZINI, "Determinazione quantitativa del quarzo contenuto in rocce di natura feldspatica con tecniche di diffrattometria X", *La Ceramica*, XX (1967) 11.

P. VINCENZINI, "In merito all'abrasione dei materiali ceramici smaltati da pavimentazione", *Atti da conferenza Nazionale della ceramica*, Vicenza, 1967, pp. 57-72

G. ORTELLI, P. VINCENZINI, "Sulla formazione di solfati di calcio epigenitici in materiali argillosi in correlazione col fenomeno delle efflorescenze", *La Ceramica*, XXI (1968) 21.

P. VINCENZINI, "Impiego di un metodo elettroacustico nell'analisi di alcune variazioni strutturali in un tipo di porcellana tecnica", *La Ceramica*, XXI (1968) 3.

G. ORTELLI, P. VINCENZINI, "Trasformazioni chimico-fisiche provocate dalla cottura nella composizione di una tipica argilla italiana di età pliocenica", *La Chimica e L'Industria*, 50 (1968) 1091.

P. VINCENZINI, G. ORTELLI, "Analisi di alcune caratteristiche dilatometriche di un'argilla silico-calcareo", *La Ceramica*, XXI (1968) 3.

T. EMILIANI, G. VECCHI, P. VINCENZINI, "Indagine sui metodi di controllo indicativi dell'attitudine alle efflorescenze dei laterizi, in relazione al ruolo che la tessitura dei cotti gioca nel fenomeno efflorescente", *Proceedings of the XIth International Ceramic Congress, Madrid 1968*, 603.

P. VINCENZINI, "Analisi di alcune caratteristiche meccaniche del laterizio di produzione italiana", *Proceedings of the XIth International Ceramic Congress, Madrid 1968*, 551, 567. Ripubblicato su: "L'Industria Italiana dei Laterizi" n° 6 (1968) 225.

P. VINCENZINI, "Analisi sperimentale della resistenza all'urto dei materiali ceramici", *Ceramurgia* 1 (1971) 174.

P. VINCENZINI, G. ORTELLI, "Olasz téglagyok vizsgálata", *Epitoanyag* XXXIII (1971) 29.

P. VINCENZINI, G. ORTELLI, "Analisi di alcune caratteristiche tecnologiche di argille italiane da laterizi in relazione alla composizione chimica, mineralogica e granulometrica", *Ceramurgia* (1971) 29.

- C. FIORI, G. ORTELLI, P. VINCENZINI, "Mineralogy and green properties of Italian clays used in the brick and tile industry", Proceedings of the International Seminary on Clay Mineralogy and Ceramic products and Processes, Milan, 1973, pp. 149, Ripubblicato su "La Ceramica" **4** (1974) 13.
- T. EMILIANI, P. VINCENZINI, "Transformation induced by heat treatments in Italian brick and tile clays", Proceedings of the International Seminar on Clay Mineralogy and Ceramic Processes and Products, Milan, 1973, 159-178. Ripubblicato su "La Ceramica" **4** (1974) 19.
- P. VINCENZINI, G. ORTELLI, G. BIFFI, "TiO<sub>2</sub> as an opacifier of ceramic glazes maturing in the range 900-1100 °C", Proceedings XIII International Ceramic Congress, 1974, pp. 184, 204.
- P. VINCENZINI, "Le prove di Laboratorio nella previsione del comportamento al gelo dei materiali ceramici per l'edilizia", Ceramurgia **4** (1974) 176.
- P. VINCENZINI, "Ricerche sui requisiti tecnologici dei laterizi di produzione italiana: parte I - Il diametro critico nella previsione del comportamento al gelo", L'Industria Italiana dei Laterizi n°5 (1974) 87.
- P. VINCENZINI, "Ricerche sui requisiti tecnologici dei laterizi di produzione italiana: parte II Indagine sulle caratteristiche di post dilatazione", L'Industria Italiana dei Laterizi n°6 (1974) 123.
- P. VINCENZINI, G. BIFFI, G. ORTELLI, "L'impiego del TiO<sub>2</sub> come opacificante di smalti ceramici cuocenti nell'intervallo termico 900 – 1000 °C", Ceramurgia **5** (1975) 3.
- G. BIFFI, G. ORTELLI, P. VINCENZINI, "Ceramic glazes opacified with CaTiSiO<sub>5</sub>", Ceramurgia International **1** (1975) 34 (Short communication).
- P. VINCENZINI, C. FIORI, "Caratteristiche di post-espansione di argille italiane da laterizi", La Ceramica **1** (1976) 3.
- T. EMILIANI, G. ORTELLI, P. VINCENZINI, "Il controllo di qualità nell' industria dei laterizi", Atti 10° Congresso Nazionale Laterizi 23/32, 1970.
- G. BIFFI, P. VINCENZINI, "Development of sphene-opacified ceramic glasses. Their behaviour with industrial ceramic stains, Proceedings 3rd CIMTEC (Rimini 1976)", Grafiche Galeati - Imola, 1978, p. 299.
- P. VINCENZINI, C. FIORI, "Italian Clays for the production of building ceramics: their characteristics and same technical properties, Proceedings 3rd CIMTEC (Rimini 1976)", Grafiche Galeati, Imola, 1978, p. 253.
- G. BIFFI, P. VINCENZINI, "Influenza dell'atmosfera e della durata della cottura sullo sviluppo del colore in smalti opacificati con sfene", Ceramurgia **8** (1978) 5.
- G. BIFFI, P. VINCENZINI, "Development of white and coloured sphene-opacified glazes", Chimica e Industria **61** (1979) 461.
- G. BIFFI, A. CREMA, P. VINCENZINI, "I leganti organici nell'industria del laterizio. Risultati di prove di aggiunta di lignosulfonato di calcio", L'Industria Italiana dei Laterizi **26** (1982) 71.
- G. BIFFI, P. VINCENZINI, A. CREMA, "Recent experiments on the effect of calcium lignosulfonate on some technological characteristics of Italian clays for heavy clay products", Ceramic Powders, P. Vincenzini, Ed., Elsevier Scientific Publishing Company, 1983, p. 229-246.
- G. ORTELLI, P. VINCENZINI, "Proposte per il riutilizzo dei fanghi dei piastrellifici ceramici sulla base di sperimentazioni di laboratorio", Ceramurgia **13** (1983) 47.
- P. VINCENZINI, G. ORTELLI, "Influenza di aggiunte di fanghi ceramici sull'attitudine alle efflorescenze di un'argilla da laterizi", Ceramurgia **13** (1983) 241, L'Industria Italiana dei Laterizi XXXVIII (1984) 75-82.
- P. VINCENZINI, G. BIFFI, G. ORTELLI, "Tubi in gres per fognature. Requisiti tecnologici, procedimenti di lavorazione e caratteristiche di impiego", Ceramurgia **13** (1983) 129-138.

G. ORTELLI, P. VINCENZINI, "Reduction of efflorescence in brick through addition of ceramic sludges", Am. Ceram. Soc. Bull. **63** (1984) 1025-1029.

G. ORTELLI, P. VINCENZINI, "Ceramic sludge-additives to brickmaking clays prevent efflorescence", Ziegelindustrie International **38** (1985) 186.

## HIGH TECH CERAMICS

P. VINCENZINI, "Analisi di alcuni aspetti della devetrificazione in composizioni del sistema  $\text{Li}_2\text{O} - \text{Al}_2\text{O}_3 - \text{B}_2\text{O}_3 - \text{SiO}_2$ ", La Ricerca Scientifica, **39** (1969) 3.

P. VINCENZINI, "Sintering kinetics and physical properties of some compositions on the  $\text{Li}_4\text{SiO}_4\text{-Zn}_2\text{SiO}_4$  join", Science of Ceramics, Vol. VI, 1972, XI-1, Ripubblicato su Ceramurgia **2** (1972) 114.

P. VINCENZINI, "Devitrification in  $\text{Li}_2\text{O} - \text{ZnO} - \text{SiO}_2$  - glasses and some physical properties of crystallized products", Proceedings of the XIth International Conference on Silicates, Budapest, 1973, 1039.

P. VINCENZINI, B. MARCHESE, "Proprietà e microstrutture di vetroceramici del sistema  $\text{Li}_2\text{O-ZnO-SiO}_2$ ", Ceramurgia **4** (1974) 91.

P. VINCENZINI, "La pressatura a caldo del nitrato di silicio: analisi dei meccanismi di densificazione", Ceramurgia **5** (1975) 184.

P. VINCENZINI, G.N. BABINI, "Impianto per la pressatura a caldo sotto vuoto di materiali ceramici", Ceramurgia **6** (1976).

P. VINCENZINI, P. NANNI, "Principi di sinterizzazione in ceramurgia - Capitolo 9, 2° parte del trattato: Principi di Ceramurgia e Tecnologia Ceramica", ECIG, Genova pp. 201-238.

P. VINCENZINI, "I vetroceramici - Capitolo 38, VIII parte del trattato: Principi di Ceramurgia e Tecnologia Ceramica", ECIG, Genova, pp. 939-962.

P. VINCENZINI, "Refrattari non tradizionali - Capitolo 41, VIII parte del trattato: "Principi di Ceramurgia e Tecnologia Ceramica", ECIG, Genova, pp. 1025-1056.

G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Densification kinetics of vacuum hot pressed sodium beta-aluminas", Ceramurgia International **3** (1977) 147.

A. BELLOSI, P. VINCENZINI, "Crystallite growth of a sodium beta-alumina powder determined by X-Ray line broadening", Ceramurgia International **3** (1977) 78.

P. VINCENZINI, "Prospettive della ricerca sul nitrato di silicio: il nitrato di silicio reaction sintered e hot pressed", Ceramurgia **8** (1978) 179.

P. VINCENZINI, A. BELLOSI, A. CAVALLI, "Microstructures developed during the pressure sintering of beta-aluminas", La Chimica e l'Industria **60** (1978) 581.

P. VINCENZINI, A. BELLOSI, G.N. BABINI, "Influence of the characteristics of the starting powders in the sintering kinetics of sodium beta-aluminas pressure sintered under vacuum", Materials Chemistry **3** (1978) 129.

P. VINCENZINI, "Recenti sviluppi nella ricerca sui materiali azoto-ceramici", Ceramurgia **7** (1977) 217.

G.N. BABINI, P. VINCENZINI, "Applicazioni della microscopia elettronica ad alta tensione - I MATERIALI CERAMICI", in: Microscopia elettronica ad alta tensione, edito a cura della Commissione MEAT del C.N.R., Bologna, 1978, pp. 100.

- A. BELLOSI, P. VINCENZINI, "Grain growth during sintering of alumina substrates", *Ceramurgia International* **5** (1979) 89.
- A. BELLOSI, P. VINCENZINI, "Microstructural observations on sintered alpha alumina", *Materials Chemistry* **4** (1979) 721.
- G. FIORI, G. FUSAROLI, A. KRAJEWSKI, P. VINCENZINI, "On the fracture strength of tape-casted alumina substrates", *Ceramurgia International* **5** (1979) 124.
- G. DE PORTU, P. VINCENZINI, "Young's modulus – Porosity relationship for alumina substrates", *Ceramurgia International* **5** (1979) 165.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Hot-pressing of silicon nitride with ceria additions", *Ceramurgia International* **6** (1980) 91.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Densification kinetics of silicon nitride hot pressed with ceria additions", *Material Chemistry* **5** (1980) 267.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Mechanisms of densification of silicon nitride hot pressed with magnesia additions", *Analisi di Chimica* 1980 pag. 507.
- G. DE PORTU, P. VINCENZINI, "Young's modulus of silicon nitride hot pressed with ceria additions", *Ceramurgia International* **6** (1980) 129.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Precipitation of CeO<sub>2</sub> crystals in a glassy oxide phase formed during oxidation of CeO<sub>2</sub> – doped hot pressed silicon nitride", *Ceramurgia International* **6** (1980) 150.
- A. BELLOSI, C. FIORI, P. VINCENZINI, "Fine-grained tape-casted alumina substrates: processing, microstructure and properties", *La Chimica e L'Industria* **62** (1980) 913.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Oxidation of silicon nitride hot-pressed with ceria additions", *Special Ceramics 7, Proc. of the Brith. Ceram. Soc., D. Taylor and P. Popper, Eds., 1981* pag. 169-179.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Comportamento all'ossidazione del nitruro di silicio pressato a caldo con addizioni di MgO", *La Ceramica XXXIV* (1981) 11-20.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, A. GIACHELLO, P.C. MARTINENGO, "Characterization of silicon nitride obtained by direct nitridation of silicon compacts in a protective bed", *Silicates Industriels 7-8* (1981) 127-134.
- G. DE PORTU, P. VINCENZINI, "Influence of some microstructural parameters on the Young's modulus of silicon nitride hot pressed with various densification aids", *Proceed. XIII Conference on Silicate Industry and Silicate Science, 1981*, p. 256-270.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Oxidation of silicon nitride hot pressed with CeO<sub>2</sub> and SiO<sub>2</sub> additions", *Ceramics International* **7** (1981) 78.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Oxidation of silicon nitride hot-pressed with ceria", *J. Amer. Ceram. Soc.* **64** (1981) 578.
- G. CELOTTI, G.N. BABINI, A. BELLOSI, P. VINCENZINI, "A new CeO<sub>2</sub> form obtained as oxidation product of CeO<sub>2</sub> - SiO<sub>2</sub> - doped hot-pressed silicon nitride", *Journal Applied Crystallography* **15** (1982) 55.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Oxidation behaviour of Si<sub>3</sub>N<sub>4</sub> hot-pressed with various sintering aids", *Science of Ceramics, Vol. XI, R. Carlsson and S. Karlsson Eds., Swedish Ceramic Society, 1981*, p. 291.
- C. FIORI, P. VINCENZINI, "Tape casted alumina and mullite substrates", *Proceedings "International Conference on the trends in passive components: materials, technologies, processing", Paris 1982*, p. 203.

- G. BIFFI, D. DALLE FABBRICHE, P. PONTI, P. VINCENZINI, "Esperienze sulla fabbricazione di protesi d'anca in allumina densa", *Ceramurgia* **12** (1982) 157.
- G.N. BABINI, P. VINCENZINI, "Oxidation kinetics of hot-pressed silicon nitride", *Materials Chemistry* **7** (1982) 773 - 786.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Oxidation of silicon nitride hot pressed with  $Y_2O_3 + MgO$ ", *J. Mater. Science* **18** (1983) 231-244.
- P. VINCENZINI, G.N. BABINI, A. BELLOSI, "Mechanisms of densification during the hot pressing of silicon nitride powder containing magnesia and ceria as sintering aids", *Proc. 9th Int. Symp. on the Reactivity of Solids*, Ed. by K. Dyrek, J. Haber, J. Nowotny, Elsevier Scientific Publishing Company, p. 1001-1010.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, R. VISANI, "Thermal expansion behaviour of hot pressed silicon nitride", *Ceramic Powders*, P. Vincenzini Ed., Elsevier Scientific Publishing Company, 1983, p. 939-930.
- G.N. BABINI, P. VINCENZINI, "Oxidation kinetics hot-pressed silicon nitride", *Progress in Nitrogen Ceramics*, NATO/ASI Nitrogen Ceramics, F.L. Riley Ed., NATO/ASI Series, Series E: Applied Sciences – No. 65, Martinus Nijhoff Publishers, 1983, p. 427-438.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Hot pressed materials of the  $Si_3N_4-Y_2O_3-SiO_2$  system", *Proc. 12th International Conf. "Science of Ceramics"*, Saint-Vincent, June 27-30, 1983, P. Vincenzini Ed., Ceramurgica S.r.l., 1984, p. 169-178.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, S. TARLAZZI, "Structure and morphology of oxidized hot-pressed  $Si_3N_4-Y_2O_3-SiO_2$  compositions as related to characteristics of the intergranular phase", *Proc. 12th Int. Conf. "Science of Ceramics"*, Saint-Vincent, June 27-30, 1983, P. Vincenzini Ed., Ceramurgica S.r.l., 1984, p. 449-464.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, D. DALLE FABBRICHE, R. VISANI, "Oxidation behaviour of  $Si_3N_4-ZrO_2$  composites", *Proc. 12th Int. Conf. "Science of Ceramics"*, Saint-Vincent, June 27-30, 1983, P. Vincenzini Ed., Ceramurgica S.r.l., 1984, p. 471-479.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "A diffusion model for the oxidation of hot pressed  $Si_3N_4-Y_2O_3-SiO_2$  materials", *J. Mats. Sci.* **19** (1984) 1029.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Densification and  $\alpha-\beta$  transformation mechanisms during the hot pressing of  $Si_3N_4-Y_2O_3-SiO_2$  compositions", *Materials Chemistry and Physics* **11** (1984) 365-400.
- P. VINCENZINI, G.N. BABINI, "The influence of secondary phases on densification, microstructure and properties of hot-pressed silicon nitride", in *Sintered Metal-Ceramic Composites*, Edited by G.S. Upadhyaya, Elsevier Science Publishers B.V., Amsterdam, 1984, pp. 425-454.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Sintering mechanisms and structure formation in dense nitrogen ceramics", *Proceed. 10th Siliconf, Budapest*, 1985, p. 169-177.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Effect of secondary phases on the thermal stability of materials hot pressed from the  $Si_3N_4-MgO-Y_2O_3-ZrO_2$  system", *Proc. 10th Int. Symp. on the Reactivity of Solids*, Ed. by P. Barret and L.C. Dufour, Elsevier Scientific Publishing Co. (1985) 827-832.
- G.N. BABINI, E. RONCARI, P. VINCENZINI, "Thermoanalytical investigation of the synthesis  $\gamma-LiAlO_2$ ", *Proc. 10th Int. Symp. on the Reactivity of Solids*, Ed. by P. Barret and L.C. Dufour, Elsevier Scientific Publishing Co. (1985) 841-845.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, "Factors influencing structural evolution in the oxide of hot pressed  $Si_3N_4-Y_2O_3-SiO_2$  materials", *J. Matls. Science* **19** (1984) 3487-3497.
- G.N. BABINI, A. BELLOSI, P. VINCENZINI, " $Si_3N_4$  a basso contenuto di impurezze pressato a caldo con  $MgO$ : comportamento all'ossidazione e caratteristiche dilatometriche", *Ceramurgia* **14** (1984) 51.

- P. VINCENZINI, "Stato attuale della ricerca e delle applicazioni dei ceramici ingegneristici non a base di ossidi. Parte I: i materiali disponibili", *Ceramurgia XVI* (1986) p. 3-29.
- P. VINCENZINI, "Stato attuale della ricerca e delle applicazioni dei ceramici ingegneristici non a base di ossidi. Parte II: applicazioni attuali e potenziali", *Ceramurgia XVI* (1986) pp. 103-121.
- P. VINCENZINI, "Ceramic Education in Italy", in *Ceramic Engineering Education Worldwide*, Edited by L.C. Klein and R.C. Bradt, The American Ceramic Society Inc., 1986, pp. 79-101.
- P. VINCENZINI, A. BELLOSI, G.N. BABINI, "Thermal instability of  $\text{Si}_3\text{N}_4\text{-ZrO}_2$  composites", *Ceramics International* **12** (1986) 133-146.
- P. VINCENZINI, "R&D Strategies of Advanced Ceramics in Italy", *Ceramics Japan*, **22** (1987) 858-865.
- A. BELLOSI, P. VINCENZINI, G.N. BABINI, " $\text{Si}_3\text{N}_4\text{-Al}_2\text{O}_3\text{-ZrO}_2$  hot pressed composites", *Materials Chemistry and Physics* **18** (1987) 205-229.
- A. BELLOSI, P. VINCENZINI, G.N. BABINI, "Stability of  $\text{Si}_3\text{N}_4\text{-Al}_2\text{O}_3\text{-ZrO}_2$  composites in oxygen environments", *J. Mater. Sci.* **23** (1988) 2348-2354.
- P. VINCENZINI, "Il ruolo dello stato di agglomerazione delle polveri nella formatura ceramica", *CERAMURGIA* **18** (1988) 107-122.
- P. VINCENZINI, "Advanced ceramics: paving the way to innovation", *Materials Science Forum*, Volumes 34-38, Trans Tech Publications, 1988, pp. 39-49.
- M. POPPI, P. VINCENZINI, "A novel firing concept to ceramics sintering", *Proceedings of the International Institute for the Science of Sintering Symposium*, Tokyo, Japan, Edited by: S. Somiya, M. Shimada, M. Yoshimura and R. Watanabe, Elsevier Applied Science, 1988, pp. 363-368.
- A. BELLOSI, V. BIASINI and P. VINCENZINI, "Influence of power characteristics on some processing steps of silicon nitride ceramics", *Ibidem*, pp. 968-973.
- P. VINCENZINI, "Status and research prospects in the high tech ceramics area", *Science of Sintering Vol. 20* (1988), N. 2/3.
- P. VINCENZINI, "Science of Sintering", Vol. 20 (1988), N. 1-2 (Guest Editor), pp. 93-165.
- P. VINCENZINI, "Prodotti ceramici: prospettive nella ricerca e negli impieghi in un contesto in continua evoluzione. Parte 1a: definizioni e classificazioni", *Ceramurgia* **19** (1989) pp. 60-73.
- P. VINCENZINI, "Prodotti ceramici: prospettive nella ricerca e negli impieghi in un contesto in continua evoluzione. Parte 2a: Mercati e prospettive di ricerca e sviluppo", *Ceramurgia* **19** (1989) pp. 118-131.
- P. VINCENZINI, G. APPIANO, F. BROSSA and S. MERIANI, "Stability of Thermal barrier Coatings", *Proceedings of the 3rd International Symposium on "Ceramic Materials and Components for Engines"*, Las Vegas, Nov. 27-30, 1988, V.J. Tennery, Ed., The American Ceramic Society Inc., 1989, pp. 201-210.
- P. VINCENZINI, "Strategie di ricerca e sviluppo dei nuovi materiali ceramici in Italia", *Prometeus 7*, Nuovi Materiali Ceramici, a cura di P. Bisogno e A. Forti, Ed. Franco Angeli, 1989, Pag. 202-222.
- P. VINCENZINI, "Surfaces in Ceramics Technology", Keynote Lecture, *Proceedings International Meeting "Surface Engineering Practice"*, K.N. Strafford, P.K. Datta and J.S. Gray Eds.; Ellis Horwood, UK, 1990, pp. 207-232.
- P. VINCENZINI, "CERAMICHE TECNICHE AVANZATE: Una nuova generazione di prodotti per l'innovazione tecnologica (1a Parte)", *Unificazione e Certificazione*, **5** (1990) 17-25.
- P. VINCENZINI, "CERAMICHE TECNICHE AVANZATE: Una nuova generaione di prodotti per l'innovazione Tecnologica (2a Parte)", *Unificazione e Certificazione*, **6** (1990) 30-35.

- P. VINCENZINI, "Zirconia Thermal Barrier Coatings for Engine Applications", *Industrial Ceramics* (1990)113-126.
- P. VINCENZINI, "Ceramics: Some Approaches to the Meaning of the term and Research Prospects, in *Fundamentals of Ceramic Engineering*", P. Vincenzini Ed., Elsevier Applied Science, London-New York, pp. 1-25, 1991.
- P. VINCENZINI, "Ceramiche Tecniche Avanzate: Una nuova generazione di prodotti per l'innovazione tecnologica", *Il Giornale dell'officina XXXVI* (1991) 39-41.
- P. VINCENZINI Ed., "Ceramics Today-Tomorrow's Ceramics", *Proceedings of the 7th CIMTEC*, Montecatini, Italy, June 24-30, 1990, *Materials Science Monographs* 66, Edited by P. Vincenzini, 4 volumes, 3300 pages, Elsevier Science Publishers, The Netherlands, 1991.
- C. FIORI, P. VINCENZINI, Restoration of the ancient wall mosaics in "Basilica of San Vitale" with the use of alumina ceramic anchorages, *Industrial Ceramics* 12 (1992) 115-120.
- P. VINCENZINI, "Innovative Materials. Problems and prospects in a competitive industrial context", *Proceedings of the International Conference on "Innovative Materials"*, Modena June 4-6, 1992, P. Vincenzini Ed., Techna srl, Faenza, 1992, pp 744.
- P. VINCENZINI, B. FABBRI, "The Italian Ceramics Industry", *Industrial Ceramics* **13** (1993) 123-140.
- P. VINCENZINI and S. APPIANO, "Durability of Zirconia thermal barrier Coatings", *Journal of Materials Synthesis and Processing* **1** (1993) 17-24.
- P. VINCENZINI, R. DE GIOIA, C. FIORI, A. TOGNANA, "L'industria Italiana delle Ceramiche Tradizionali", *CERAMURGIA XXIV* (1994) 101-108.
- P. VINCENZINI, A. RAVAGLIOLI, A. KRAJEWSKI, "Ceramic Coatings: An Ancient Art with a Bright Future", *Surface Engineering*, Vol. 1, P.K. Datta and J.S. Gray Eds., UK, The Royal Society of Chemistry, 1993, pp. 303-319.
- P. VINCENZINI, A. RAVAGLIOLI, A. KRAJEWSKI, "Needs and opportunities for the standardization of biomaterials: The case of bioceramics", in "New Horizons for Materials", *Proceedings 8th CIMTEC*, *Advances in Science and technology* 4, P. Vincenzini Ed., Techna, Faenza, Italy, 1995, PP. 655-670.
- P. VINCENZINI, R. DE GIOIA, C. FIORI, A. TOGNANA, "The Italian industry of traditional ceramics", *Industrial Ceramics* **15** (1995) 77-85.
- P. VINCENZINI, "VAMAS-Planning the Future", *Industrial Ceramics* **15** (1995) 111-114.
- P. VINCENZINI, "Classificazione delle ceramiche tecniche avanzate", *Ceramurgia* **25** (1995) 67-80.
- P. VINCENZINI, "Some issues related to the standardization of implantable ceramics", *Ceramic Transactions*, Vol. 66, "Challenges in Ceramic product, manufacture and commercialization, American Ceramic Society, 1996, pp. 131-148.
- P. VINCENZINI, "I materiali ceramici in ortopedia e traumatologia", in "Trattato di Biomeccanica, Ortopedia e Traumatologia", curato da F. Pipino e A. Quagliariella, UTET, Torino, 1996, PP 145-265.
- P. VINCENZINI, "Normazione delle Ceramiche Tecniche Avanzate: Stato attuale e implicazioni per una più efficace penetrazione del mercato", *Ceramurgia XXVII* (1997) pp. 297-312.