

List of submitted Papers

Topic: A - Ceramic Matrix Composites (CMC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
4	Effects of fine Si powder on the sintering behavior and mechanical properties of reaction-bonded silicon nitride matrix	Lee	Sea-Hoon	Korea Institute of Materials Science	KOREA, REPUBLIC OF
5	SiC/SiC Composites for High Temperature Applications	Kiser	James	NASA Glenn Research Center	UNITED STATES
8	Tribological behaviour of silicon nitride/carbon nanotubes nanocomposites	Belmonte	Manuel	Institute of Ceramics and Glass (CSIC)	SPAIN
9	Development and characterization of high performance SiBN3C fibers	Nöth	Andreas	Fraunhofer Institut für Silicatforschung ISC	GERMANY
11	Fatigue Behavior of Cross-Ply C/SiC Ceramic Matrix Composites at Ambient and Elevated Temperatures	Longbiao	Li	Nanjing University of Aeronautics and Astronautics	CHINA
12	Multiple zirconia interphase for SiC/SiCf composites	Utkin	Alexey	ISSCM SB RAS	RUSSIAN FEDERATION
14	Microstructure and Properties of Al ₂ O ₃ -Si ₃ N ₄ Nanocomposites	He	Ling-Feng	Nagaoka University of Technology	JAPAN
16	A new approach to the subcritical cracking of ceramic fibers	genet	martin	ens-cachan	FRANCE
17	Mechanical properties and ablation behaviors of SiC fiber / carbon matrix composites	Ogasawara	Toshio	Japan Aerospace Exploration Agency (JAXA)	JAPAN
18	Oxidation of SiC/SiC composites in Gas fast reactors in operating conditions: Thermodynamic and experimental approaches	Nicolas	Hun	CEA Cadarache	FRANCE
20	Delayed failure of Nicalon, Tyranno ZMI, Tyranno Lox-M and Tyranno grade S tows in air at intermediate temperature (150-2500°C)	Mazerat	Stéphane	LCTS	FRANCE
21	Mechanical Properties and Microstructure of Preform-Based Alumina/Aluminium Ceramic-Matrix-Composites (P-CMC)	Rötting	Jens	Robert Bosch GmbH	GERMANY
25	Fabrication of carbon fiber reinforced ultrahigh temperature ceramic composites	Wang	Yiguang	Norhtwestern polytechnical University	CHINA
29	Nucleation and control growth of SiC particles using Chemical Vapor Deposition	Thibaud	Simon	LCTS UMR 5801	FRANCE
32	Nondestructive Testing and Evaluation for Fabrication Defects and Environment Damage in Ceramic Matrix	Mei	Hui	National Key Laboratory of	CHINA
33	Manufacturing and performance integrated optimization design for ceramic matrix composites from multiphysics point of view	Zeng	Qingfeng	Northwestern Polytechnical University	CHINA
41	Microstructure and Frictional Properties of the C/SiC Brake Materials with Sandwich Structure	Fan	Shangwu	Northwestern Polytechnical University	CHINA
47	Deposition of boron-bearing species and their applications in self-healing CFCC-SiC	liu	yongsheng	National Key Laboratory of Thermostructure Composite Materials	CHINA
49	Synthesis of TiC matrix composites from Ti-C-N system by reactive arc-melting method	Tsuda	Hiroshi		JAPAN
54	Material properties of the metal-ceramic composites: FEM and micromechanical estimation	Sinchuk	Yuriy	Karlsruhe Institute of Technology	GERMANY
56	Optimal SiC particle size for self-healing in alumina- SiC composite	Nakao	Wataru	Yokohama National University	JAPAN
57	The degradation behavior of C/SiC composites in launch and re-entry environment	xiaochong	liu	Northwestern polytechnical university,China	CHINA
58	Development of a new Oxide Ceramic Matrix Composite	Machry	Thays	EADS	GERMANY
59	Manufacturing of CMCs by active filler technique followed by PIP process	Le Ber	Simon	LCTS	FRANCE
60	Microstructure changes caused by the interaction of fiber/matrix bonding and matrix shrinking during pyrolysis of CFRP to C/C composite	Sha	Jianjun	Dalian University of Technology	CHINA

List of submitted Papers

Topic: A - Ceramic Matrix Composites (CMC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
62	A study of the sintering of silicon carbide nanoparticles to prepare ceramic fibers	Malinge	Antoine	LCTS	FRANCE
67	Modelling of CMC hybrid material structure	Modén	Carl	Fraunhofer ISC	GERMANY
69	High Temperature Creep Behaviour of Oxide/Oxide Ceramic Matrix Composites with Recrystallized Fibers	Neubrand	Achim	Fraunhofer IWM	GERMANY
70	Microstructural characterization and mechanical properties of interpenetrating light weight metal matrix composites	Scherm	Florian	University Bayreuth	GERMANY
71	The Effect of Additives on CMC Friction Pads at Elevated Temperatures	Langhof	Nico	Universität Bayreuth	GERMANY
72	Preparation and Characterization of SiC(whiskers)/Al ₅ Y ₃ O ₁₂ Composite	Simonenko	Elizaveta	N.S. Kurnakov Institute of General and Inorganic Chemistry, RAS	RUSSIAN FEDERATION
74	Rapid pyrolysis of CFRP using microwaves for the production of C-SiC composite	Park	Ho-Seon	Chair of Materials Processing	GERMANY
75	Roles of moisture and oxygen in oxidation mechanisms of silicon carbide fibers	Rebillat	Francis	University Bordeaux 1	FRANCE
79	Some considerations on SiC-CMCs for different applications	Dong	Shaoming	Shanghai Institute of Ceramics Chinese Academy of Sciences	CHINA
80	Failure mechanism maps of non-oxide CMCs	Li	Jianzhang	Northwestern Polytechnical University	CHINA
81	Thermophysical Properties and microstructure of porous SiC	Jang	Byung-Koog	National Institute for Materials Science (NIMS)	JAPAN
84	Design of hybrid ceramic-metal tubes	Spatz	Carolin	Fraunhofer ISC	GERMANY
85	The carbon black powder effect on crack generation after carbonizing process during LSI (Liquid silicon infiltration) process	Kim	Seyoung	Korea Institute of Energy Research	KOREA, REPUBLIC OF
86	Mechanical properties of C/C-SiC composites according to crack morphology change after carbonizing step during LSI (Liquid silicon infiltration) process	Han	In-Sub	Korea Institute of Energy Research	KOREA, REPUBLIC OF
87	Microstructural modelling of WHIPOX oxide/oxide CMC	Richter	Henning	German Aerospace Center	GERMANY
90	Comparison of oxide/oxide Ceramic Matrix Composites based on either woven fabric or bi-directional laminates	Pritzkow	Walter	Pritzkow Spezialkeramik	GERMANY
91	MECHANICAL PROPERTIES OF DIRECTIONALLY SOLIDIFIED Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ /ZrO ₂ EUTECTIC CERAMICS UP TO 1900K	MESA CAPAPÉ	CRISTINA	INSTITUTO DE CIENCIA DE MATERIALES DE ARAGÓN	SPAIN
92	Aqueous slurries for oxide ceramic composites. Correlation between mechanical properties and composition of the Al ₂ O ₃ powder.	Rüdinger	Arne	Fraunhofer Institut für Silicatforschung	GERMANY
94	HIGH TEMPERATURE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF DIRECTIONALLY SOLIDIFIED Al ₂ O ₃ /Er ₃ Al ₅ O ₁₂ EUTECTIC CERAMICSM	MESA CAPAPÉ	CRISTINA	INSTITUTO DE CIENCIA DE MATERIALES DE ARAGÓN	SPAIN
99	Influence of the Intergranular Phase on the Cutting Performance of Si ₃ N ₄ /SiC Knives for Wood Machining	Strehler	Claudia	Empa	SWITZERLAND
100	From MEB tilts experiments to the predictions of mechanical properties of SiC-NW reinforced SiC/SiC composite	ABCHICHE	Bruno	LCTS	FRANCE
104	Mechanical and Thermal Properties of Phenolic Resin Infiltrated Microporous Thermal Insulations	Lee	Jae Chun	Myongji University	KOREA, REPUBLIC OF
105	Prediction of lifetime in static fatigue at high temperatures for ceramic matrix composites	LOSEILLE	Olivier	CNRS - Université de Bordeaux - Laboratoire des Composites ThermoStructuraux	FRANCE
108	Composite lifetime, in static fatigue, under non-uniform stress and temperature fields	LOSEILLE	Olivier	CNRS - Université de Bordeaux - Laboratoire des Composites ThermoStructuraux	FRANCE
111	Joining of C/SiC and SiC/SiC based materials for aerospace applications	Casalegno	Valentina	Politecnico di Torino	ITALY
117	Optimization of ceramic matrix composite composition for high temperature lifetime improvement in aeronautic applications	JACQUES	Sylvain	CNRS	FRANCE
120	Prediction of the lifetime of self-healing ceramic matrix composites: applications to structural computations	Marcin	Lionel	LMT Cahcan	FRANCE

List of submitted Papers

Topic: A - Ceramic Matrix Composites (CMC)

ID	Abstract-Title	Mainauthor	Affiliation	Country
121	Toward a Virtual CMC Yarn	Tranquart Bastien	Laboratoire de Mecanique et Technologie de Cachan	FRANCE
125	Ceramic Composites for Aerospace Application	Handrick Karin E.	MT Aerospace AG	GERMANY
129	Failure of C/C composites by mode I and II delamination	Krause Thomas	University of Bremen	GERMANY
130	Evaluation of Mechanical Properties of Ceramic Fibres at Room and High Temperature	Koch Dietmar	University of Bremen	GERMANY
131	Mechanical and fatigue evolution of CMC under air at intermediate temperatures	Maurin Romain	INSA Lyon MATEIS	FRANCE
132	Lifetime prediction with acoustic emission during static fatigue tests on ceramic matrix composite at high temperature under air	Maillet Emmanuel	INSA Lyon	FRANCE
134	AFM and Bundle tensile test, complementary tools to characterize fiber defect size distribution	Foray Genevieve	Université de Lyon, INSA-Lyon	FRANCE
138	Notch sensitivity of CMC during creep and tensile tests at intermediate temperature	Picard Martin	INSA	FRANCE
139	Si-SiC foam cores for high temperature sandwich structures	Pusterla Simone	SUPSI-ICIMSI	SWITZERLAND
140	A modelling approach for mechanical properties of ceramic matrix composites based on the single lamina properties	Tushtev Kamen	University of Bremen	GERMANY
142	Investigation of damping properties and failure behaviour of ceramic matrix composites fabricated by liquid silicon infiltration process	Wielage Bernhard	Technische Universität Chemnitz	GERMANY
143	EFFECT OF FREQUENCY AND ENVIRONMENT ON THE FATIGUE BEHAVIOR OF AN ADVANCED SiC-BASED CERAMIC MATRIX COMPOSITE	Ruggles-Wrenn Marina	Air Force Institute of Technology	UNITED STATES
147	Impact Behavior of a SiC/SiC Composite at an Elevated Temperature	Verrilli Michael	GE Aviation	UNITED STATES
149	Numerical simulation of the stress-strain situation in hybrid ceramic-metal tubes	Maile Karl	Materialprüfungsanstalt Universität Stuttgart	GERMANY
150	Melt infiltration of porous C/C preforms via FASTsint®	Konschak Alexander	Fraunhofer ISC	GERMANY
151	Sub Micron Sized Surface Patterning for Sintered Ceramics via Nanoimprint Forming Process	Nakayama Tadachika	University of York	JAPAN
152	Creep Behavior of Oxide CMC Based on Polymer (OXIPOL)	Klatt Enrico	German Aerospace Centre	GERMANY
153	Fabrication and Properties of SiBNC/SiC Composites	Klatt Enrico	German Aerospace Centre	GERMANY
154	Manufacture and Characterization of OXIPOL Based on Different Oxide Fibers	Denis Sandrine	German Aerospace Center (DLR)	GERMANY
157	Numerical and experimental real defect analysis for C/C-SiC under bending load	Hofmann Severin	DLR, Institute of Structures and Design	GERMANY
158	Development, Manufacture and Characterization of C/C-SiC Components Based on Filament Winding	Frieß Martin	German Aerospace Center (DLR)	GERMANY
159	Development of Highly Porous SiC Based CMCs for Solar Absorber Structures	Schmidt Jens	German Aerospace Center	GERMANY
161	Mechanical properties and microstructures on manufacturing processes of monolithic SiC and Cf/SiC composite using polyacrylonitrile	SungHun Kim	Institute of Advanced Energy, Kyoto University	JAPAN
162	Physical-mechanical and tribotechnical investigations of antifrictional CMC with SiC matrix	Kulik Alexey	Baltic State Technical University	RUSSIAN FEDERATION
163	CMC produced by a Liquid Silicon Infiltration Process for frictional applications in combination with different riders	Kulik Victor	Baltic State Technical University	RUSSIAN FEDERATION
164	Mechanical properties and microstructures of C/C-SiC composite plates by wet filament winding technique	Breede Fabian	German Aerospace Center (DLR)	GERMANY
165	Synthesis and Structural Investigation of Precursors for Non-Oxide Ceramic Fibers	Clauß Bernd	Institute of Textile Chemistry and Chemical Fibers, ITCF	GERMANY
167	Nonlinear Dynamics in the friction interfaces of brakes	Ostermeyer Georg	institute of Dynamics and Vibrations	GERMANY
168	Processing and characterisation of OFC with Al2O3-ZrO2 composite matrix	Eckardt Christian	Fraunhofer Institut für Silicatforschung	GERMANY
169	On the tribology of vehicle brake systems with CMC discs: impact of CMC material properties on friction layer dynamics	Ostermeyer Georg	institute of Dynamics and Vibrations	GERMANY

List of submitted Papers

Topic: A - Ceramic Matrix Composites (CMC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
170	Preparation of continuous ceramic nanofibers for high-temperature applications	Salles	Vincent	Université Claude Bernard-Lyon1	FRANCE
174	New green body manufacturing method to create short fibre C/SiC ceramic matrix composites (CMC) via the LSI process	Fuchs	Oliver	Fraunhofer ISC	GERMANY
178	Strength Changes during Oxidation of SiC Fibers	Hay	Randy	AFRL/RXLN	UNITED STATES
179	Resin Concept for Manufacturing of Carbon Fiber reinforced Ceramics-C/SiC	Kunz	Dieter	Neue Materialien Bayreuth GmbH	GERMANY
181	Friction Surface Development on Carbon Fibre Reinforced Carbon-Silicon Carbide	Wu	Houzheng	Loughborough University	UNITED KINGDOM
182	Development of hybrid CMC forming dies for high temperature precision forging of titanium aluminide based alloys	Hufenbach	Werner	Technische Universität Dresden	GERMANY
183	Understanding microstructure development by the liquid silicon infiltration in carbon fibre/carbon preforms	Leatherbarrow	Andy	Loughborough University	UNITED KINGDOM
186	Stress, matrix cracking, temperature, environment, and life of SiC/SiC Woven Composites	Morscher	Gregory	University of Akron	UNITED STATES
188	Properties of Chopped Fiber Reinforced Geopolymer Composites	Kriven	Waltraud (Trudy)	University of Illinois at Urbana-Champaign	UNITED STATES
189	CMC's produced by the geopolymer route	Kriven	Waltraud (Trudy)	University of Illinois at Urbana-Champaign	UNITED STATES
190	Simplified Theoretical Analysis of Short Fibers in Porous Ceramic Matrix	Pereira da Silva	João Gustavo	UFSC - Federal University of Santa Catarina	BRAZIL
191	Advanced Inorganic Fibers and their applications	Ishikawa	Toshihiro	Ube Industries, Ltd.	JAPAN
192	Design of High Performance Hybrid Ceramics	KAGAWA	YUTAKA	THE UNIVERSITY OF TOKYO	JAPAN
193	Ceramic composites with designed reinforcement architectures for hot structures	Marshall	David	Teledyne Scientific Company	UNITED STATES
195	Physicochemical interactions between MWCNTs and the ceramic matrix in SiCN fibers	Flores	Octavio-Jun	University of Bayreuth	GERMANY
196	Effect of microstructure on hardness & fracture toughness of MWCNT /alumina nanocomposites	Das	Probal	Central Glass and Ceramic Research Institute	INDIA
197	Preforming technologies for composites with non-polymeric matrices	Kot	Adam	Institut für Textiltechnik (ITA), RWTH Aachen University	GERMANY
198	Kinetics of liquid silicon infiltration into C/C-preforms	Meinhardt	Jürgen	Fraunhofer-Institut für Silicatforschung ISC	GERMANY
199	Microstructural and strength stability of SiC/SiC composites in a moisture environment	Bhatt	Ramakrishna	NASA Glenn Research Center, MS 106-1	UNITED STATES
200	Calculation of consistent single layer properties of laminated composites using an inverse approach based on laminate theory	Schäuble	Ralf	Fraunhofer IWM	GERMANY
201	Mechanical and thermal qualification of the Expert capsule nose and flaps	ERBA	Francesca	ESTEC/ESA	NETHERLANDS
202	Health Monitoring of SiC/SiC through Electrical Resistance	Smith	Craig	Ohio Aerospace Institute	UNITED STATES
203	Oxide Fiber Coatings for Lifetime Extension of Ceramic-Matrix Composites	Cinibulk	Michael	Air Force Research Laboratory	UNITED KINGDOM
204	Development of SiCf/SiC Composite by CVI with whisker	Park	Ji Yeon	Korea Atomic Energy Research Institute	KOREA, REPUBLIC OF
208	Using Computed Tomography for Non-Destructive Evaluation of CMC Structure Components	Ullmann	Thomas	German Aerospace Center (DLR)	GERMANY
210	Computed Tomography Analysis of Crack Propagation during In-Situ Loading of C/SiC Specimens	Hausherr	Jan Marcel	Universität Bayreuth	GERMANY
211	Determination of the fibre orientation in short fibre C/SiC Composites using the Structure Tensor and Local X-Ray Transform	Krause	Michael	Universität	GERMANY
212	Correlation Between Fibre Orientation and Mechanical Properties of Short Fibre C/SiC Composites	Hausherr	Jan Marcel	Universität Bayreuth	GERMANY
214	OVERLOAD AND ENVIRONMENTAL EFFECTS ON FATIGUE DURABILITY OF A MELT INFILTRATED SIC/SIC COMPOSITE	ZAWADA	LARRY	USAF	UNITED STATES
216	Comparison of Predicted Strain Fields and Experimental Values Measured using Strain Visualization Techniques	Chamberlain	Adam	Rolls-Royce Corporation	UNITED STATES

List of submitted Papers

Topic: A - Ceramic Matrix Composites (CMC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
218	Design and System Integration of Ceramic Brake Discs	Renz	Ralph	Dr. Ing. h.c. F. Porsche AG	GERMANY
221	Experimental characterization of the porosity distribution in CVI SiC/SiC composites and consequences on the elastic behaviour from homogenization techniques	GELEBART	Lionel	CEA Saclay	FRANCE
227	Synthesis of Ti-Al Materials by Thermal Explosion	Boyarchenko	Olga	Russian Academy of Sciences	RUSSIAN FEDERATION
228	Joining and coating of ceramic matrix composites for nuclear applications	Ferraris	Monica	Politecnico di Torino	ITALY
236	SHS of functional ceramics based on Ti-Ni-Al-NiO	Kamynina	Olga	Russian Academy of Sciences	RUSSIAN FEDERATION
238	Novel Processing of Porous Oxide Ceramic Matrix Composites	Wamser	Thomas	Universität Bayreuth	GERMANY
243	Damage Evolution Behaviors of Carbon Fiber-SiC Matrix Composites under Concentrated Load	KAGAWA	YUTAKA	THE UNIVERSITY OF TOKYO	JAPAN
244	Development study of hybrid ceramics brake disk for high speed train brake system	Goto	Ken	Japan Aerospace Exploration Agency	JAPAN
246	CMC TPS and Hot Structures for Hypersonic Vehicles	Glass	David	NASA Langley Research Center	UNITED STATES
249	CVI : A VERSATILE CMC-PROCESSING TECHNIQUE REVISITED	Naslain	Roger	University of Bordeaux	FRANCE
250	A further advance in the technology of oxide fibres as reinforcement for heat resistant composites	Mileiko	Sergei	Solid State Physics Institute	UNITED KINGDOM
251	Fuel-Cooled Ceramic Composite Monobloc Structures for Dual-Mode Ramjets and Liquid Rocket Engines	Beyer	Steffen	Astrium Space Transportation	UNITED KINGDOM
254	Sintering, microstructure and oxidation behaviour of ultra high temperature ceramic composites	Lee	W.E.	Imperial College London	UNITED KINGDOM
255	Integration Science and Technology of Ceramic Matrix Composites: Technical Challenges and Opportunities	Singh	Mrityunjay	Ohio Aerospace Institute, NASA Glenn Research Center	UNITED STATES
256	Influence of Fibre Length on Mechanical Properties of Fabric Reinforced C/C-SiC	Zuber	Christian	German Aerospace Center (DLR)	GERMANY
260	Development of SiC/SiC materials for fuel claddings for Gaz Fast Reactors	David	Patrick	Commissariat à l'Energie Atomique	FRANCE
263	Fabrication and Mechanical Properties of Three-Dimensional Al ₂ O ₃ /YAG Composite Using Hollow Spherical Al ₂ O ₃ Powder Prepared by Spray Pyrolysis Method	Yoshida	Katsumi	Tokyo Institute of Technology	JAPAN
264	Fabrication of Three-Dimensional Al ₂ O ₃ /YAG Composites Using Porous Al ₂ O ₃ Ceramics Prepared by α -Al ₂ O ₃ Powder and Their Mechanical Properties	Yoshida	Katsumi	Tokyo Institute of Technology	JAPAN
265	Properties of ultra highly porous silicon carbide by the gelation-freezing method	Fukushima	Manabu	National Institute of Advanced Industrial Science and Technology	JAPAN
266	Development of a CMC turbine vane	Nakamura	Takeshi	IHI Corporation	JAPAN
267	An accurate approach of the nitridation process of TiSi ₂ powder	Maille	Laurence	University Bordeaux 1	FRANCE
268	Manufacture and Use of High Performance Ceramic Matrix Composites for Aerospace Applications	Wilhelmi	Christian	EADS Innovation Works	GERMANY
271	Reaction Formed Alumina-Alumina FRCMC's	Janssen	Rolf	TU Hamburg-Harburg	GERMANY
273	A Prepreg-Approach for Low Cost Oxide-Oxide Composites	Guglielmi	Paula	TU Hamburg-Harburg	GERMANY
274	Thermal conductivity of neutron-irradiated silicon carbide composites	Kato	Yutai	Oak Ridge National Laboratory	UNITED STATES
276	Formation of ultra-high temperature binary and ternary ceramic carbides by pressureless reactive melt infiltration (PRMI)	Gugel	Franziska	University Bayreuth	GERMANY
278	Novel synthesis route for porous matrix of ceramic oxide composites	Freitas Berti	Lucas	Federal University of Santa Catarina	GERMANY
279	Thermo-mechanical Design of the ASTRIUM C/SiC Experiment on SHEFEX II	Knoche	Ralf	ASTRIUM GmbH Space Transportation	GERMANY

List of submitted Papers

Topic: A - Ceramic Matrix Composites (CMC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
281	Abrasive wear of composite SiC-Si-ceramics	Garshin	Anatoly	State Polytechnical University	RUSSIAN FEDERATION
283	C/C-SiC telescope structure for the laser communication terminal in TerraSAR-X	Heidenreich	Bernhard	DLR, Institute of Structures and	GERMANY
284	Mechanical behaviour at intermediate temperatures of ceramic matrix composites	Fantozzi	Gilbert	INSA Lyon	FRANCE
286	Tailoring of CMC-Materials for Industrial Applications	Weiss	Roland	Schunk Kohlenstofftechnik GmbH	GERMANY
288	Thermostuctural material in aerospace industry : applications and standardisation	BOURGEON	Michel	Snecma Propulsion Solide	FRANCE
289	European Ceramic Fiber Position - New Ways for Advanced Ceramic Materials	Jäger	Hubert	SGL CARBON GmbH	GERMANY
291	Brazing of C/SiC to niobium alloy C103 using Cu-based brazing fillers	Zhang	Xiangyu	Shanghai Institute of Ceramics, Chinese Academy of Sciences	CHINA
292	Fabrication, microstructures, mechanical properties and high temperature performance of tungsten matrix composites reinforced by TiC and ZrC particles	Zhou	Yu	Harbin Institute of Technology	CHINA
294	Development of Environmental Barrier Coatings for High-Temperature Si-based Ceramic and Composite Components	Lin	Hua-Tay	Oak Ridge National Laboratory	UNITED STATES
296	Polymer derived ceramic fibers	Sporn	Dieter		GERMANY
300	Recent Accomplishments in NITE-SiC/SiC Component R & Ds for Energy/Environmental Application	Kohyama	Akira		JAPAN

Topic: B - Polymer Derived Ceramics (PDC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
6	Porous Ceramics from Pre ceramic Polymers	Colombo	Paolo	University of Padova	ITALY
10	Polymer-derived large diameter SiC fibers	Nöth	Andreas	Fraunhofer Institut für Silicatforschung ISC	GERMANY
26	Oxidation and corrosion behavior of polymer derived ceramics	Wang	Yiguang	Norhtwestern polytechnical University	CHINA
27	Effect of boron on the properties and microstructures of Cf/SiC-BN composites	Wang	Zhen	Shanghai Institute of Ceramics Chinese Academy of Sciences	CHINA
39	Structure of nanoporous carbon membranes for gas separation	Kaltenborn	Nadine	Hermisdorfer Institut für Technische Keramik e.V.	GERMANY
46	Recent Progress of Non-oxide CMCs at NPU	Zhang	Litong	Northwestern Polytechnical University	CHINA
48	Silicon nitride based ceramics derived from organic precursors	Yin	Xiaowei	Northwestern Polytechnical University	CHINA
51	SiC/SiCN CMC for high temperature application produced via a PIP process	Oberländer	Andreas	FhG IKTS Dresden	GERMANY
55	Qualitative and Quantitative Studies of Polysiloxanes Thermal Degradation	POURNY	Manuel	Université de Bordeaux, Laboratory for ThermoStructural Composites (LCTS)	FRANCE
128	Cf/SiCm CMC - SiC foam sandwich preparation and characterization	Ortona	Alberto	SUPSI	SWITZERLAND
133	Designing nanostructured SiCN ceramics	Inzenhofer	Kathrin	Universität Bayreuth	GERMANY
135	Polysilazane-based composite coatings on steel	Günthner	Martin	University of Bayreuth	GERMANY
136	Functional polymer derived ceramic coatings	Kraus	Tobias	University of Bayreuth	GERMANY
137	Metal modified, porous SiCN-Precursor Ceramics	Schmalz	Thomas	University of Bayreuth	GERMANY
146	The atomic scale structure of polymer-derived SixC1-x amorphous ceramics by high-energy X-ray diffraction and reverse Monte Carlo modelling	Suzuya	Kentaro	Japan Atomic Energy Agency (JAEA)	JAPAN
155	Si3N4/SiC(N) materials based on pre ceramic polymers and ceramic powder	Degenhardt	Ulrich	Universität Bayreuth	GERMANY
156	Design, processing and properties of Si-based nanostructured ceramic materials using the polymer-derived ceramics (PDCs) route.	Samuel	Bernard	Université de Lyon	FRANCE

HT-CMC7 - International Conference on High Temperature Ceramic Matrix Composites
List of submitted Papers

Status: 30.07.2010

Topic: B - Polymer Derived Ceramics (PDC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
173	Fabrication and characterisation of carbon fibre reinforced ceramic matrix composites derived from Si-based preceramic polymers	Herrmann	Christian	Fraunhofer Institute for Silicate Research ISC	GERMANY
177	Microstructure Related Properties of Carbon-Rich SiCO and SiCN Polymer-Derived Ceramics	Mera	Gabriela	TU Darmstadt	GERMANY
185	Silicon Carbonitride/Zirconia Ceramic Nanocomposites ? Synthesis and High Temperature Behavior	Linck	Christoph	Institut für Materialwissenschaft	GERMANY
215	Enabling Factors for Affordable Large-Size CMCs	Blum	Yigal	SRI International	UNITED STATES
220	Low temperature densification of non-oxide ceramic composites by using polymer derived Si(Al)OC as a sintering aid	Sajgalik	Pavol	Institute of Inorganic Chemistry, Slovak Academy of Sciences	SLOVAKIA
223	Phenyl borosiloxane derived Ceramic Matrix Composites	Sreejith	K. J.	Vikram Sarabhai Space Centre	INDIA
225	Interface formation between preceramic polymers and metal supports	Kappa	Mathias	BTU Cottbus	GERMANY
230	Paper Derived Multilayer CMC	Greil	Peter	University	GERMANY
231	SiC ceramic micropatterns from polycarbosilanes	Zollfrank	Cordt	University	GERMANY
232	Processing of polymer derived ceramics with low-cost active fillers	Schlier	L.	University	GERMANY
233	Polymer Derived Ceramic Laminate Structures	Steinau	M.	University	GERMANY
235	Preceramic polymer derived C/C-SiC composites for high temperature applications	SWAMINATHAN	B.	VSSC	INDIA
240	Netlike Structured Surfaces from Preceramic Polymers	Woiton	Michael	Bavarian Center for Applied Energy Research	GERMANY
241	Microstructure and Process Condition for the Best Mechanical Performances of PIP-SiC/SiC Composites	Kotani	Masaki	Japan Aerospace Exploration Agency	JAPAN
252	Nanostructured boron- and silicon-based mesoporous materials via the preceramic polymer route	MIELE	Philippe	LMI - UMR 5615	FRANCE
253	Porous Silicon Oxycarbide Glasses from Hybrid Aerogels	Soraru	Gian Domenico	University of Trento	ITALY
258	Mesoporous Silicon Carbide Materials - A new high temperature stable catalyst support	Borchardt	Lars	TU Dresden	GERMANY
275	M@SiCN Catalysts	Kempe	Rhett	Universität Bayreuth	GERMANY
287	RTM-Materials Based on Silazane-Resin-Systems	Bauer	Monika	Fraunhofer PYCO	GERMANY
290	Polymer Derived Ceramic Coatings: Processing, Properties and Application	Bordia	Rajendra	University of Washington	UNITED STATES
299	Polymer-Derived Ceramics: 40 Years of Research and Innovation in Advanced Ceramics	Ralf	Riedel	TU Darmstadt	GERMANY
301	Ceramic fibers of the next generation	Sextl	Gerhard	Thema B	GERMANY

Topic: C - Thermal and Environmental Barrier Coatings (TEBC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
23	Water vapor corrosion behavior of Cf/SiC composites with various EBCs prepared by slurry and brushing method	Hong	Zhiliang	Northwestern Polytechnical University	CHINA
30	YSZ Environmental Barrier Coatings for Oxide/Oxide Ceramic Matrix Composites	Mechnich	Peter	DLR	GERMANY
40	Synthesis of fine-dispersed Gd ₂ Hf ₂ O ₇ and study of the compound vaporization processes	Simonenko	Elizaveta	N.S. Kurnakov Institute of General and Inorganic Chemistry	RUSSIAN FEDERATION
43	The oxidation behavior of ZrB ₂ -SiC coating on C/C composites from 800 °C to 1500 °C	zhou	haijun	Shanghai Institute of Ceramics	CHINA
45	Precised Determination of Passive/Active Oxidation and Oxidation Transition of CVD-SiC	Yoshinaka	Toshinari	Japan Aerospace Exploration Agency	JAPAN
50	Environmental Barrier Coatings for Ceramic Matrix Composites	Klemm	Hagen	FhG IKT Dresden	GERMANY
52	Accurate Quantitative Evaluation of Active Oxidation Rate of SiC under Elevated Temperatures	Kubota	Yuuki	Tokyo University of Science	JAPAN
73	The use of yttrium silicates as environmental barrier coatings: an overall method to evaluate their capabilities of protection	Rebillat	Francis	University Bordeaux 1	FRANCE
97	Nanolaminated Al ₂ O ₃ coatings deposited by MOCVD	Eils	Nadine Karin	German Aerospace Center (DLR)	GERMANY
98	High-temperature hot corrosion behavior of Sm ₂ Zr ₂ O ₇ thermal barrier oxides by V ₂ O ₅ and Na ₂ SO ₄ in air	Ouyang	jia-Hu	Harbin Institute of Technology	CHINA
107	Comparison of Water Vapour Corrosion Behavior of Plasma Sprayed Mullite And Zircon Based Environmental Barrier Coatings (EBCs).	Altuncu	Ekrem	Sakarya University	TURKEY
122	Self Healing Properties of Thermal Barrier Coating Consist of B ₄ C and SiC	Altuncu	Ekrem	Sakarya University	TURKEY
224	Performance of Environmental Barrier Coatings in CMAS Environments	Levi	Carlos	University of California, Santa Barbara	UNITED STATES
226	Ultrahigh Temperature Coatings for Extreme Environments	Raj	Rishi	University of Colorado	UNITED STATES
239	Advanced Environmental Barrier Coatings for SiC/SiC Ceramic Matrix Composites: Performance and Directions	Zhu	Dongming	NASA Glenn Research Center	UNITED STATES
242	Analysis of Delamination Behavior of TBC/EBC Layer under Complicated Thermal/Mechanical Loading Conditions	Kitazawa	Rumi	The University of Tokyo	JAPAN
248	CMAS attack of novel EB-PVD ceramic coatings with various zirconia/zirconate-based compositions	Schulz	Uwe	German Aerospace Center	GERMANY
257	Long Term Behaviour of Advanced CMC-Materials in Space-Propulsion Relevant Environments	Schmidt-Wimmer	Stephan	EADS-ASTRIUM ST-GmbH	GERMANY
269	Environmental barrier coatings for fibre reinforced ceramics	Vaßen	Robert	Forschungszentrum Jülich GmbH	GERMANY

List of submitted Papers

Topic: E - Carbon/Carbon Composites

ID	Abstract-Title	Mainauthor		Affiliation	Country
7	Sol-gel synthesis of a TiO ₂ or TiN layer on the matrix of a Carbon/Carbon composite	Fontaine	Florian	LCTS	FRANCE
34	Stressed oxidation and ablation behaviors of C/C and C/SiC composites in simulated applied environments	Luan	Xingang	Northwestern Polytechnical University	CHINA
83	Examination of the Non-Destructive Evaluation using impedance measurement to C/C composites.	Koyama	Masashi	Tokyo University of Science	JAPAN
102	Synthesis under moderate pressures of high density Carbon/Carbon containing a hybrid matrix	Dourges	Marie-Anne	University Bordeaux 1	FRANCE
106	Ultra fast rotating anodes for high power x-ray tubes	Pietig	Rainer	Philips Technologie GmbH Forschungslabororien	GERMANY
109	Analytical and numerical analysis of the deformation behaviour of fast rotating C/C composite structures with coupled requirements regarding strength and thermal conductivity	Pietig	Rainer	Philips Technologie GmbH Forschungslabororien	GERMANY
110	Micromechanical Modeling of CFCs Using Different Pore Approximations	Piat	Romana	Karlsruhe Institute of Technology	GERMANY
113	Atomic Layer Deposition of Alumina onto Carbon Fibers: Oxidation Barrier Coating	Roy	Amit Kumar	Chemnitz University of Technology	GERMANY
123	Effect of densification parameters on the structure and properties of two dimensional Carbon- Carbon composites	Golestanifard	Farhad	Iran University of Science and Technology	IRAN, ISLAMIC REPUBLIC OF
124	Development of ceramic composites by CVI technology: validation of process codes	Burgio	Federica	ENEA - Faenza Research Centre	ITALY
148	Tensile Strength and Tensile Fracture Mechanism of Carbon/Carbon Composites	Hatta	Hiroshi	Japan Aerospace Exploration Agency	JAPAN
184	Oxidation behavior of ZrB ₂ /SiC-coated carbon-carbon composites in dry air and water vapor	Aoki	Takuya	Japan Aerospace Exploration Agency	JAPAN
245	Tensile strength enhancement of carbon-carbon composites at high temperature at more than 2273 K	Goto	Ken	Japan Aerospace Exploration Agency	JAPAN
285	Electrical properties of C/C and C/C-SiC ceramic fibre composites	Srivastava	Vijay	BHU	INDIA
295	Modelling Chemical Vapour Infiltration in C/C composites : numerical tools based on μ -CT images	Vignoles	Gerard		FRANCE

List of submitted Papers

Topic: F - MAX-Phases

ID	Abstract-Title	Mainauthor		Affiliation	Country
31	Characterization of the ultra-high temperature ablation of Ti ₂ AlC ceramics	SONG	Guiming	Delft University of Technology	NETHERLANDS
37	Development of Novel Damage Tolerant Nitrides, Hf ₃ AlN and Zr ₃ AlN, from Theoretical Prediction to Experimental Investigations	Li	Fangzhi	Institute of Metal Research	CHINA
38	High Temperature Behavior of Oxidation Resistant Cr ₂ AlC Coating	Li	Jingjing	Institute of Metal Research	CHINA
44	Fabrication and properties of Cf/SiC-Ti ₃ SiC ₂ composites from a polymer rout by in-situ reaction	Yang	Jinshan	Shanghai Institute of Ceramics, Chinese Academy of Sciences	CHINA
61	Evolution of Ti ₃ SiC ₂ under ion irradiation	Le Flem	Marion	CEA Saclay	FRANCE
66	Repeatable Crack Healing of Ti ₂ AlC Ceramic at high temperature	Li	Shibo	Delft University of Technology	NETHERLANDS
77	Understanding the mechanisms of defects in MAX phases	Wang	Jingyang	Institute of Metal Research	CHINA
89	Synthesis, Microstructural characterization, Mechanical properties and deformation mechanisms of Ti ₃ Sn _{1-x} Al _x C ₂ solid solutions	DUBOIS	Sylvain	Institut Pprime, Département de Physique et Mécanique des Matériaux	FRANCE
95	Synthesis, characterization and mechanical properties of Ti ₃ Al _{1-x} Sn _x C ₂ (x=0, 0.2)	Bei	Guo-Ping	Université de Poitiers	FRANCE
96	Evaluation of Ti ₃ SiC ₂ coatings deposited by HTCVD from Methyltrichlorosilane and Titanium tetrachloride	LUCA	Sorana	ACERDE	FRANCE
103	Elementary plasticity mechanisms of MAX phases studied by compression under gas confining pressure and nanoindentation	THILLY	Ludovic	Institut Pprime	FRANCE
126	Prospective and challenges for the applications of MAX phases	Zhou	Yanchun	Institute of Metal Research, Chinese Academy of Sciences	CHINA
145	Experimental atomic scale analyses of ion irradiation effects in Ti ₃ SiC ₂	Pareige	Philippe	Rouen University	FRANCE
222	Wetting and reactivity of Ag-Cu-Ti melts with Ti ₃ SiC ₂	DEZELLUS	Olivier	Université Lyon 1	FRANCE
234	Nb ₂ AlC-MAX-phase composites	Zhang	W.	University	GERMANY
247	Anisotropy of the electronic properties of Cr ₂ AlC investigated by Electron Energy-Loss Spectroscopy and ab initio calculations	Bugnet	Matthieu	University of Poitiers	FRANCE
282	The MAX Phases: Ductile, Machinable Ternary Carbides and Nitrides For High Temperature and Other Applications	Barsoum	Michel W.	Drexel University	UNITED STATES
293	First principle phase diagram in the Ti-Si-C system	Sikora	Thierry	LEM ONERA-CNRS	FRANCE

List of submitted Papers

Topic: G - Ultra High Temperature Ceramics (UHTC)

ID	Abstract-Title	Mainauthor		Affiliation	Country
2	Densification and microstructure of ZrB ₂ containing nano-SiC or Si ₃ N ₄ powder	Lee	Sea-Hoon	Korea Institute of Materials Science	KOREA, REPUBLIC OF
3	Synthesis of Al ₃ BC ₃ and Al ₄ SiC ₄ powder and their application as a sintering additive of SiC	Lee	Sea-Hoon	Korea Institute of Materials Science	KOREA, REPUBLIC OF
13	Modification of components of UHTC composites with refractory carbides	Baklanova	Natalya	Institute of Solid State Chemistry and Mechanochemistry SB RAS	RUSSIAN FEDERATION
15	Microstructure and Properties of Zr(Hf)-Al(Si)-C Ceramics	He	Ling-Feng	Nagaoka University of Technology	CHINA
22	A new method to evaluate materials behavior under hypersonic flow	Parthasarathy	Triplicane A.	Materials and Manufacturing Directorate	UNITED STATES
28	Synthesis and microstructure of HfAl ₄ C ₄	Hongqiang	Nian	Institute of Metal Research	CHINA
64	Influence of Oxide Additives and Starting Particle Size of SiC on Densification and Mechanical Properties of Hot-pressed SiC	Hirata	Yoshihiro	Kagoshima University	JAPAN
65	ZrB ₂ -based ceramic composites reinforced with SiC short fibers or whiskers	Bellosi	Alida	ISTEC-CNR	ITALY
68	Synthesis of nanocrystalline titanium, zirconium and hafnium carbides via sol-gel technique	Ignatov	Nikolay	IGIC RAS	RUSSIAN FEDERATION
76	Oxidation tests, in a solar furnace above 2300K in air, on ZrB ₂ -SiC materials	Andréani	Anne-Sophie	University Bordeaux 1	FRANCE
118	Experimental Results of Long Time Tests of Porous Burners with Ceramic Housing for High Temperature Application in Glass Industry	Jovicic	Vojislav	Friedrich-Alexander-Universität Erlangen-Nürnberg	GERMANY
141	HAFNIUM CARBIDE DEPOSITION ON CARBON AND SILICON CARBIDE SUBSTRATES	Szwedek	Olivier	CEA Le Ripault	FRANCE
144	Sol Gel Synthesis of Nano Sized SiC and B ₄ C Powders	najafi	abolhasan	IUST	IRAN, ISLAMIC REPUBLIC OF
160	HAFNIUM BASED CERAMICS FABRICATED BY HOT PRESSING AND Electric Field Assisted Sintering	Gasch	Matthew	NASA Ames Research Center	UNITED STATES
166	UHTCs: Issues and Prospects	Johnson	Sylvia	NASA-Ames Research Center	UNITED STATES
172	High-Temperature Oxidation Testing of UHTC Composites	Paul	Anish	Loughborough University	UNITED KINGDOM
175	Tape casting and pressureless sintering of ZrB ₂ -SiC composites	Biamino	Sara	Politecnico di Torino	ITALY
176	Novel Polymer-Derived Group IV Metal Diboride-Based Ceramic Composites - Preparation and High-Temperature Behavior	Ionescu	Emanuel	Technische Universität Darmstadt	GERMANY
187	In situ, high temperature, synchrotron studies of monoclinic to tetragonal phase transformation in HfO ₂ and Ta ₂ O ₅ - doped HfO ₂ system	Kriven	Waltraud M.	University of Illinois at Urbana-Champaign	UNITED STATES
194	Mechanical properties and oxidation behaviour of MoSi ₂ /TaSi ₂ -doped ultra-refractory ceramic composites	Sciti	Diletta	CNR	ITALY
205	PROTECTIVE UHTC COATINGS AND MATRICES CONSISTING OF ZrB ₂ /SiC COMPOSITES	Blum	Yigal	SRI International	UNITED STATES
209	Microstructure Control in SRBSN (Sintered Reaction Bonded Silicon Nitride)	Kim	Hai-Doo	Korea Institute of Materials Science	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
213	Microstructure and high temperature characteristics of Melt Growth Composites	Nakagawa	Narihito	JUTEM	JAPAN
217	Self-propagating high-temperature synthesis and Structure Formation in nanostructured mechanoactivated Ti-BN System.	Shkodich	Natalia	University of Erlangen-Nürnberg	RUSSIAN FEDERATION
259	UHTC Sol Gel Coatings to Improve the High-Temperature Oxidation Resistance of Carbon Preforms	Venugopal	Saranya	Loughborough University	UNITED KINGDOM
270	Fabrication of Dense Si ₃ N ₄ based Ceramics via Rapid Reaction-Bonding and Post Sintering	Ohji	Tatsuki	National Institute of Advanced Industrial Science and Technology (AIST)	JAPAN