

CURRICULUM VITAE

Address: University of Ioannina
Department of Materials Science and Engineering
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PERSONAL DATA

Marital status: Married, 2 children
Date of birth: September 1st, 1973
Place of birth: Chicago, USA
Nationality: Greek

CURRENT POSITION

2018 – present: Assistant Professor in “Experimental Mechanics and Fracture of Materials”, permanent term, Department of Materials Science and Engineering, University of Ioannina,

PREVIOUS POSITIONS

- 2017, Visiting Professor, Università degli Studi della Campania Luigi Vanvitelli - Seconda Università degli Studi di Napoli, Naples, Italy
- 2014-2018: Assistant Professor, temporary term, Department of Materials Science and Engineering, University of Ioannina
- 2010-2014: Lecturer, temporary term, Department of Materials Science and Engineering, University of Ioannina
- 2007-2011: Collaborating Educative Staff member, Hellenic Open University, Post-Graduate Educational Program on Quality Assurance
- 2007-2008: Lecturer (Hellenic Presidential Decree 407/80), University of Patras, Dept. of Materials Science
- 2004-2010: Professor (fixed term), Technical Educational Institute of Patras, Dept. of Mechanical Engineering

EDUCATION

- 1991-1996: Diploma in Chemical Engineering, Dipl.-Ing., July 1996, Dept. of Chemical Engineering, University of Patras, Graduation grade: 7.44/10
Diploma specialization on Transport Phenomena, Supervisor Prof. Alk. Payatakes
- 1996-1998: Master of Science (M.Sc.), September 1998
Dept. of Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA, USA
Specialization on the field of Air Pollution, Supervised by Prof. Spiros Pandis
M.Sc. Thesis Title: "The Mass Accommodation Coefficient of Ammonium Nitrate Aerosol"
- 1998-2003: Doctor of Philosophy (Ph.D.), July 2003
Dept. of Mechanical Engineering and Aeronautics, University of Patras
Carried out at the Institute for Energy (IE), Directorate General Joint Research Centre (JRC), European Commission, Petten, The Netherlands
Specialization on the field of Ceramic Matrix Composite materials, Supervised by Professors Vassilis Kostopoulos and Costas Galiotis (Dept. of Materials Science, Univ. of Patras) and Dr. Ir. Marc Steen (Unit Head, IE/JRC)
Ph.D. Thesis title: "Characterization of the Fracture Behaviour of Ceramic Matrix Composite Materials"

RESEARCH INTERESTS

Nanotechnology

- Processing and characterization of mechanical, transport and smart properties of nano-modified (graphene, carbon nanotubes) ceramics and cement-based materials
- Dispersion of carbon nanospecies in aqueous media
- Synthesis of graphene and aligned carbon nanotube arrays
- Processing and characterization of composites with aligned CNT

Experimental Fracture Behaviour of Materials

- Damage monitoring by Infrared Thermography
- Micromechanics of reinforcement
- Fracture, crack growth
- Residual properties

RESEARCH INNOVATIONS & BREAKTHROUGHS

- Successful polymer impregnation of mm-high vertically aligned carbon nanotube forests, synthesized in house by Chemical Vapor Deposition, for the production and characterization of z-reinforced nanocomposite mats
- Development of fully-dense nano-modified multifunctional ceramic materials by high shear compaction and spark plasma sintering
- Significant contribution towards optimization of sonication parameters for the homogeneous dispersion of carbon nanotube in aqueous solutions provided important answers
- Development of "smart" cement with embedded nanoscale strain and damage sensors
- Assessment of crack propagation in ceramic composites using infrared thermography
- Development of revolutionary technique for the fast assessment of the fatigue limit of materials
- First experimental proof of residual stress-related common intersection points during cyclic loading of ceramic matrix composites
- First experimental measurement, at the microscale, of bridging stresses

TEACHING EXPERIENCE

10/2007-05/2011	Mathematics for Quality Assurance Hellenic Open University, Post-Graduate Educational Program on Quality Assurance
02/2004 -7/2010	Materials Technology Technical Educational Institute of Patras, Dept. of Mechanical Engineering
10/2004-8/2008	University of Patras, Dept. of Materials Science 1. Physical Chemistry Laboratory (5 th semester) 2. Materials Science III Laboratory (4 th semester) 3. Composite Materials (7 th semester, Teaching Assistant) 4. Materials Science III Laboratory
1997-1998	Graduate Course "Advanced Heat and Mass Transfer" (06-704), Carnegie Mellon University, Dept. of Chemical Engineering, Pittsburgh, USA (Teaching Assistant)

In University of Ioannina, Dept. of Materials Science and Engineering

(please see analytical details in corresponding section, page 18)

2013 - today	Mechanics of Materials
2010 - today	Experimental Mechanical Behavior and Quality Control Laboratory
2010 - today	Fracture Mechanics
2010 - today	Concrete Technology Laboratory
10/2013 - 2/2014	Introduction to Materials Science

SUPERVISION OF MASTER and PhD THESES

- Supervision of 22 Master Theses in the Post-Graduate Educational Program on Quality Assurance of the Hellenic Open University (please see analytical details in corresponding section, page 20)
- **Co-supervision of 7 PhD theses in the Dept. of Materials Science and Engineering of the University of Ioannina** (please see analytical details in corresponding section, page 20)
- **Supervision of a PhD thesis (Mr. Konstantinos Bardis) in the Dept. of Materials Science and Engineering, University of Ioannina** (please see analytical details in corresponding section, page 20)

RESEARCH EXPERIENCE

- 07/1994 Research and operational report on "Optimization of the Physical Processes in the Raw Material Desiccator of the Copper Smelting Factory of Rio Tinto Metal S.A." (Practice, Research and Development Department, Rio Tinto Metal S.A. Metallurgical Company, Huelva, Spain)
- 10/1998-02/2000 Raman and fluorescence spectroscopy on ceramic materials and glasses. Development of methodologies for direct in situ mapping of stress fields developing in ceramic materials during real testing time. Study of the effects of radiation penetration depth, exposure time, radiation intensity, scatterer's grain size, raman probe geometry on the characteristics of the Raman- and fluorescence-active vibrations of the crystal's lattice. (FORTH/ICE-HT, Patras)
- 03/2000-02/2003 Characterization of the fracture behavior of ceramic and ceramic-matrix composite materials through mechanical testing and analytical fracture mechanics modeling. Study of the statistical fiber failure by means of i) mechanical testing of fibre bundles in conventional and high temperatures, and ii) statistical approximation methods, especially the 2-parameter Weibull model. (IE/JRC, European Commission, Petten, The Netherlands)
- 03/2003-09/2003 Micromechanics of fiber failure in composite materials and study of the role of the interphase. Mathematical modeling of the bridging and pull-out mechanisms and of their correlation during fracture of brittle-matrix composite materials. Development of a model for simulating the fracture behavior of composite materials by convoluting the contributions of individual failure micromechanisms, also using experimentally-determined boundary conditions. (FORTH/ICE-HT, Patras)
- 10/2003-12/2004 Coordination of the operational research and business plan team of the Dept. of Materials Science for the foundation of the company "Composite Materials in Construction", in the context of the Research Program "Development of Entrepreneurship and Innovation in the University of Patras". (Dept. of Materials Science, University of Patras)
- 08 -11/2004 Development of a world wide web database platform and node for the spreading of knowledge in the field of nanostructured materials", in the context of the European Network of Excellence "Nanofun-Poly: Nanostructured and Functional Polymer-based Materials and Nanocomposites" European Commission, 6th Framework Programme. (FORTH/ICE-HT, Patras)
- 03/2004 -12/2007 Identification and assessment of the damage micromechanisms in ceramic matrix composite materials in static and fatigue loading conditions via LRM-based in-situ measurement of stress fields. (Dept. of Materials Science, University of Patras)
- 06/2007 - 06/2010 Processing of carbon nanotubes, characterization of their mechanical properties in dynamic loading conditions. Development of methodologies for processing of composite materials reinforced by CNTs. (FORTH/ICE-HT, Patras)

- 10/2007 Training on the synthesis, by chemical vapor deposition, of aligned carbon nanotube arrays at the NanoTech Institute of the University of Texas at Dallas under the collaboration of Prof. Ray Baughman (UTD, Dallas, USA).
- 07/2010 - Investigation of fracture behavior, crack growth and residual stresses in ceramic matrix composite using non-destructive methods such as thermography and acoustic emission (Dept. of Materials Science and Engineering, University of Ioannina)
- 12/2012 - Processing and properties of CNT-reinforced ceramic matrix composites and CNT-reinforced concrete (Dept. of Materials Science and Engineering, University of Ioannina)
- 09/2014 - Collaboration with the research group of Prof. Hui Mei, Northwestern Polytechnical University, Xian, China on ceramic nanocomposites.
- 12/2015 - Collaboration with the research group of Prof. Gilbert Fantozzi at the National Institute of Applied Sciences of Lyon (INSA Lyon, France) for the development of a novel method for the fabrication of high performance multifunctional ceramic composites with carbon nanotube reinforcements.
- 03/2015 - Collaboration with the R&D department of TITAN S.A. cement company for the production of smart cement with embedded nanoscale damage sensors
- 06/2016 - Collaboration with the University of Texas, USA and University of Naples, Italy, for the production of shape memory alloy coatings for greatly improving the structural integrity of metallic structures
- 2018 - Collaboration with undisclosed overseas industrial partner for development of hierarchical smart ceramics with synergistic effects of nano- and micro-scale fillers

PARTICIPATION IN INTERNATIONAL AND NATIONAL RESEARCH PROJECTS

As leader/principal investigator

7/2015-6/2018	“InnoSMART: An Innovative Method for Improving the Structural Integrity using SMA Revolutionary Technology”, European Commission, Horizon 2020, Future and Emerging Technologies (FET-OPEN), Leader of the University of Ioannina (UOI) team, Total Budget: 1,995k€ UOI-Allocated Budget: 525k€
9/2015-2/2019	“Complnnova: An Advanced Methodology for the Inspection and Quantification of Damage on Aerospace Composites and Metals using an Innovative Approach”, European Commission, Horizon 2020, Future and Emerging Technologies (FET-OPEN), Leader of the University of Ioannina (UOI) team, Total Budget: 2,495k€ UOI-Allocated Budget: 512k€

FET-OPEN projects are highly competitive high-risk projects with a success rate of 1.7%.

As participant/beneficiary

01/1997-08/1998	Project R-823514-01-0, United States of America Environmental Protection Agency (US EPA)
10/1998-09/1999	<ul style="list-style-type: none">• EPET/M7: “Design, construction and installation of a composite bridge”• CEC, BRITE/EURAM “CERCO”: Ceramic Components for Industrial Gas Turbines
10/1999-02/2000	Petten/S-1 «Raman Investigations on Ceramic Matrix Composites»
03/2000-12/2002	EPG/Gas Turbines “CFCC”: Characterization of ceramic matrix composite materials used in thermal gas turbines
01/2001-02/2003	CEC, “VaFTeM”: Evaluation of ceramic fiber test methods
03/2003-09/2003	EIXH-30: Study of the fracture behavior of ceramic matrix composite materials and identification of intrinsic damage parameters via experimental and analytical determination of bridging stresses»
10/2003-12/2004	“Development of Entrepreneurship and Innovation in the University of Patras”, Managing Authority of Operational Program for Education and Initial Vocational Training (O.P. “Education”), Ministry of National Education and Religious Affairs
02/2004-08/2006	“Archimedes Program: Support for Research Groups at TEI”, Managing Authority of Operational Program for Education and Initial Vocational Training (O.P. “Education”), Ministry of National Education and Religious Affairs
8-11/2004	Network of Excellence «Nanofun-Poly: Nanostructured and Functional Polymer-based Materials and Nanocomposites», European Commission, 6 th Framework Programme
3/2004-12/2007	“Pythagoras Program: Support for Research Groups at Universities”, Managing Authority of Operational Programme for Education and Initial Vocational Training II (O.P. “Education” II), Ministry of National Education and Religious Affairs
1-7/2007	Network of Excellence «Nanofun-Poly: Nanostructured and Functional Polymer-based Materials and Nanocomposites», European Commission, 6 th Framework Programme

2012 - 2015	«Optimal operation and maintenance of bridges road networks”, New Knowledge Programme, Operational Programme Thessaly-Central Greece-Epirus 2007 - 2013, funded by the Region of Epirus, budget €150k
11/2012-10/2015	“Deformation, Yield and Failure of Graphenes and Graphene-based Nanocomposites ERC-10”, General Secretariat of Research and Technology, Hellas
10/2013-10/2015	“Nano-Modified Smart Concrete”, Project «Cooperation 2011», National Strategic Reference Framework (NSRF) 2007 -2013

INVITED AND KEYNOTE PRESENTATIONS IN INTERNATIONAL CONFERENCES

1. INVITED TALK: Carbon nanotube-reinforced ceramic matrix composites: processing and properties, *8th International Conference on High Temperature Ceramic Matrix Composites (HTCMC-8)*, 22-26 September 2013, Xi'an, China
2. KEYNOTE TALK: Damage evaluation in glass-ceramic matrix composites via combined infrared thermography and acoustic emission, *8th International Conference on High Temperature Ceramic Matrix Composites (HTCMC-8)*, 22-26 September 2013, Xi'an, China
3. INVITED TALK: Towards perfecting density and tube dispersion in CNT-reinforced ceramics, *2nd China International Congress on Composite Materials (CCCM-2)*, 21-23 September 2015, Zhenjiang, China
4. INVITED TALK: Novel methods for monitoring damage in aeronautical and structural components, *China Third International Congress on Composite Materials (CCCM-3)*, 22-25 October 2017, Hangzhou, China

PARTICIPATION IN CONFERENCE ORGANIZATION

1. 11th European Conference on Composite Materials, ECCM11, may 31-June 3, 2004, Rhodes, Greece
2. 3rd International Symposium on “Nanostructured and functional polymer-based materials and Nanocomposites”, Nanofun-Poly Network of Excellence, May 13-15, 2007, Corfu, Greece
3. 5th Conference in Emerging Technologies in NDT, September 19-21, 2011, Ioannina, Greece
4. European Conference/Workshop on the Synthesis, Characterization and Applications of Graphene (GrapHEL), September 27-30, 2012, Mykonos, Greece
5. Industrial Technologies 2014, April 9-11, 2014, Athens, Greece
6. Graphene Week, September 25-29, 2017, Athens, Greece

COLLABORATIONS

- Prof. Hui Mei, Northwestern Polytechnical University, Xi'an, China
- Prof. Costas Galiotis, Dept. of Chemical Engineering, University of Patras, Greece
- Prof. Ray Baughman, University of Texas at Dallas, USA
- Dr. Mehdi Estili, National Institute for Materials Science (NIMS), Japan
- Prof. Gilbert Fantozzi, MATEIS Laboratory, INSA Lyon, France
- Prof. Nathalie Godin, MATEIS Laboratory, INSA Lyon, France
- Prof. Dino Musmarra, Second University of Naples, Italy
- Dr. Simone Musso, Schlumberger-Doll Research Center, Cambridge, MA, USA

- Prof. Dimitris Aggelis, Professor, Free University of Brussels, Belgium
- Prof. Anthony Kontsos, Drexel University, Philadelphia, USA
- Dr. Ir. Marc Steen, Unit Head, Institute for Energy, European Commission, The Netherlands

JOURNAL EDITORSHIP ACTIVITIES

Associate Editor, Advanced Composites Letters

Member of the Editorial Board, MDPI Ceramics

JOURNAL REVIEWERSHIP ACTIVITIES

- IEEE Transactions on industrial Electronics (IF 6.4)
- Carbon (IF 6.2)
- Polymer Reviews (IF 6.2)
- Nature Scientific Reports (IF 5.5)
- IOP Nanotechnology (IF 3.8)
- Composites Part A: Applied Science and Manufacturing (IF 3.7)
- Composites Science and Technology (IF 3.6)
- Materials and Design (IF 3.2)
- Chemometrics and Intelligent Laboratory Systems (IF 2.3)
- Journal of the European Ceramic Society (IF 2.3)
- Journal of the American Ceramic Society (IF 2.2)
- Ceramics International (IF 2.1)
- Materials Science and Engineering Part A (IF 2.0)
- Materials Chemistry and Physics (IF 2.0)
- Composites Part B: Engineering (IF 1.7)
- Experimental Mechanics (IF 1.5)
- Polymer Composites (IF 1.4)
- Advances in Applied Ceramics (IF 1.1)
- Journal of Composite Materials (IF 1.0)
- Journal of Reinforced Plastics and Composites (IF 0.7)

AWARDS, HONORS, SCHOLARSHIPS, ACHIEVEMENTS

1991-1992	Second entry place at the Department of Chemical Engineering of the University of Patras, During the 1991 Greek National University Entrance Examinations. Scholarship by the State Scholarships Foundation
06/1996-08/1998	Post-Graduate Scholarship, Carnegie Mellon University, Pittsburgh, PA, U.S.A.
10/1998-02/2000 & 03-09/2003	Post-Graduate Scholarship, FORTH/ICE-HT, Patras
03/2000-02/2003 11/2003	Research Scholarship, Directorate General JRC, European Commission, Brussels Second position at the European contest "Best Publications of 2003" within the Research Institutes of the European Commission for the paper: Direct In Situ Measurements of Bridging Stresses in CFCCs, 2003, <i>Acta Materialia</i> , 51 , 5359
03/2007-02/2008	Post-Doctoral Scholarship, State Scholarships Foundation

4/10/2013

“Most Downloaded Paper” award from the journal *Materials Sciences and Applications* for the paper:

Konstantinos G. Dassios, 2012, Poly(vinyl alcohol)-infiltrated carbon nanotube carpets, *Materials Sciences and Applications*, **3**, 658-663

12/2016

Highly Cited Research 2014-2016 award from Elsevier’s *Mechanics Research Communications*, for the paper:

Rapid evaluation of the fatigue limit in composites using infrared lock-in thermography and acoustic emission, 2013, *Mechanics Research Communications*, **54**, 14

FOREIGN LANGUAGES

English (fluent), French (fluent), Italian (moderate)

PROFESSIONAL MEMBERSHIPS

American Ceramic Society, European Society for Composite Materials, Technical Chamber of Greece

2. LIST OF PUBLICATIONS

A. Publications in international peer-reviewed journals

1. Konstantinos G. Dassios and Spyros N. Pandis, 1998, Evaporation of Ammonium Nitrate Aerosol and the effect of organic coatings, *Journal of Aerosol Science* **29**, S983-984
2. Konstantinos G. Dassios and Spyros N. Pandis, 1999, The Mass Accommodation Coefficient of Ammonium Nitrate Aerosol, *Atmospheric Environment* **33**, 2993-3003
3. Celia N. Cruz, Konstantinos G. Dassios and Spyros N. Pandis, 2000, The Effect of Dioctyl Phthalate films on the Ammonium Nitrate Aerosol Evaporation Rate, *Atmospheric Environment* **34**, 3897-3905
4. Konstantinos G. Dassios, Marc Steen, and Constantina Filiou, 2003, Mechanical Properties of Alumina Nextel 720 Fibres at Room and Elevated Temperatures: Tensile Bundle Testing, *Materials Science and Engineering A*, **349**, 63-72
5. Konstantinos G. Dassios, Costas Galiotis, Vassilis Kostopoulos and Marc Steen, 2003, Direct In Situ Measurements of Bridging Stresses in CFCCs, *Acta Materialia*, **51**, 5359-5373

Note: Paper achieved second position at the 2003 European contest "The Best Publications of 2003» within the Research Institutes of the European Commission

6. Konstantinos G. Dassios and Costas Galiotis, 2004, Fluorescence Studies of Polycrystalline Al₂O₃ Composite Constituents: Piezo-Spectroscopic Calibration and Applications, *Applied Physics A*, **79**, 647-659
7. Konstantinos G. Dassios, V. Kostopoulos, and M. Steen, 2005, Intrinsic Parameters in the Fracture of Carbon/Carbon Composites, *Composites Science and Technology* **65** [6], 883-897
8. Konstantinos G. Dassios and Costas Galiotis, 2006, Direct measurement of fibre bridging in notched glass-ceramic matrix composites, *Journal of Materials Research* **21**, 1150-1160
9. Konstantinos G. Dassios, Vassilis Kostopoulos and Marc Steen, 2007, A micromechanical bridging law model for CFCCs, *Acta Materialia* **55**, 83-92
10. Konstantinos G. Dassios, 2007, A review of the pull-out mechanism in the fracture of brittle-matrix fibre-reinforced composites, *Advanced Composites Letters* **16**, 17-24
11. Vassilis Kostopoulos, Thodoros Loutas and Konstantinos G. Dassios, 2007, Fracture Behavior and Damage Mechanisms Identification of SiC/Glass Ceramic Composites Using AE Monitoring, *Composites Science and Technology* **67** (7-8), 1740-1746
12. P. Karapappas, S. Tsantzalis, E. Fiamegou, A. Vavouliotis, K. Dassios, V. Kostopoulos, 2008, Multi-Wall Carbon Nanotubes Chemically Grafted on Reinforcing Carbon Fibres, *Advanced Composites Letters* **17**, 103-107
13. Konstantinos G. Dassios, Christos Koimtzoglou and Costas Galiotis, 2009, Effect of Fatigue on the Interface Integrity of Unidirectional C_f-Reinforced Epoxy Resin Composites, *Acta Materialia*, **57**, 2800-2811
14. Christos Koimtzoglou, Konstantinos G. Dassios and Costas Galiotis, 2009, Effect Of Processing And Loading Conditions Upon The Fatigue Behavior of a Cf/Epoxy Laminate,

15. Konstantinos G. Dassios, Simone Musso and Costas Galiotis, 2012, Compressive behavior of MWCNT/epoxy composite mats, *Composites Science and Technology* **72 (9)** , 1027-1033
16. Konstantinos G. Dassios, 2011, Energy Dissipation in Ceramic Matrix Composites, *Journal of Engineering and Technology ISSN 2161-7155* **1 (3)**, 44-56
17. Konstantinos G. Dassios and Costas Galiotis, 2012, Polymer–nanotube interaction in MWCNT/poly(vinyl alcohol) composite mats, *Carbon* **50**, 4291–4301
18. Konstantinos G. Dassios and Theodore E. Matikas, 2012, Large-Scale Interfacial Damage and Residual Stresses in a Glass-Ceramic Matrix Composite, *Composite Interfaces* **19 (8)**, 523-531
19. Konstantinos G. Dassios and Theodore E. Matikas, 2013, Damage Assessment in a SiC-fiber reinforced Ceramic Matrix Composite, *Journal of Engineering*, Vol 2013, Article ID 486326, 6 pages, DOI: 0.1155/2013/486326
20. Konstantinos G. Dassios, Dimitrios G. Aggelis, Evangelos Z. Kordatos and Theodore E. Matikas, 2013, Cyclic Loading of a SiC-Fiber Reinforced Ceramic Matrix Composite Reveals Damage Mechanisms and Thermal Residual Stress State, *Composites Part A: Applied Science and Manufacturing* **44**, 105-113
21. Fotini Ravani, Konstantinos Papagelis, Vassileios Dracopoulos, John Parthenios, Konstantinos G. Dassios, Angeliki Siokou and Costas Galiotis, 2013, Graphene production by dissociation of camphor molecules on nickel substrate, *Thin Solid Films* **527**, 31–37
22. Konstantinos G. Dassios, 2012, Poly(vinyl alcohol)-infiltrated carbon nanotube carpets, *Materials Sciences and Applications* **3**, 658-663

Note: Most downloaded paper as reported on October 4th, 2013

23. Konstantinos G. Dassios and Theodore E. Matikas, 2013, Residual Stress-Related Common Intersection Points in the Mechanical Behavior of Ceramic Matrix Composites Undergoing Cyclic Loading, *Experimental Mechanics*, 53 (6), 1033-1038
24. Konstantinos G. Dassios, Evangelos Z. Kordatos, Dimitris G. Aggelis, Theodore E. Matikas, 2013, Non-Destructive Damage Evaluation in Ceramic Matrix Composites for Aerospace Applications, *The Scientific World Journal*, 715945
25. Evangelos Z. Kordatos, Dimitrios G. Aggelis, Konstantinos G. Dassios, Theodore E. Matikas, 2013, In-Situ Monitoring of Damage Evolution in Glass Matrix Composites during Cyclic Loading using Nondestructive Techniques, *Applied Composite Materials*, 20 (5), p. 961-973
26. Evangelos Z. Kordatos, Konstantinos G. Dassios, Dimitrios G. Aggelis, Theodore E. Matikas, Rapid evaluation of the fatigue limit in composites using infrared lock-in thermography and acoustic emission, *Mechanics Research Communications*, 55, p. 14-20

Note: Received Elsevier award of “Highly Cited Research” for years 2014-2016

27. Dimitris G. Aggelis, Konstantinos G. Dassios, Evangelos Z. Kordatos, Theodore E. Matikas, 2013, Damage accumulation in cyclically-loaded glass-ceramic matrix composites monitored by acoustic emission, *The Scientific World Journal*, Vol 2013, Article ID 869467, 10 pages, DOI: 10.1155/2013/869467

28. Hui Mei, Qianglai Bai, Konstantinos G. Dassios, Haiqing Li, Laifei Cheng, Costas Galiotis, 2014, Morphological and microstructural property comparison of bulk and aligned CVD-grown carbon nanotubes, *Advanced Composites Letters*, 23, p. 5-10

29. Konstantinos G. Dassios, Evangelos Z. Kordatos, Dimitris G. Aggelis, Theodore E. Matikas, 2014, Crack growth monitoring in ceramic matrix composites by combined infrared thermography and acoustic emission, *Journal of the American Ceramic Society*, 97, p. 251-257

30. Konstantinos G. Dassios, Evangelos Z. Kordatos, Dimitris G. Aggelis, Theodore E. Matikas, 2014, Damage evaluation in glass-ceramic matrix composites via combined infrared thermography and acoustic emission, *Ceramic Transactions*, 248, p. 615-632

31. Konstantinos G. Dassios, 2014, Carbon nanotube-reinforced ceramic matrix composites: Processing and properties, *Ceramic Transactions*, 248, p. 133-157

32. Konstantinos G. Dassios, Panagiota Alafogianni, Stelios K. Antiohos, Christos Leptokaridis, Nektaria Marianthi Barkoula, Theodore E. Matikas, 2015, Optimization of sonication parameters for homogeneous surfactant assisted dispersion of multiwalled carbon nanotubes in aqueous solutions, *Journal of Physical Chemistry C*, 119, p. 7506-7516

33. Konstantinos G. Dassios, Guillaume Bonnefont, Gilbert Fantozzi, Theodore E. Matikas, 2015, Novel highly scalable carbon nanotube-strengthened ceramics by high shear compaction and spark plasma sintering, *Journal of the European Ceramic Society*, 35, p. 2599-2606

34. Konstantinos G. Dassios, 2015, A Geometry-Invariant Fracture Law for Ceramic-Matrix Composites, *Journal of Composite Materials*, 49, 65-74

35. Hui Mei, Qianglai Bai, Konstantinos G. Dassios, Tianming Ji, Shanshan Xiao, Haiqing Li, Laifei Cheng, Costas Galiotis, 2015, Oxidation resistance of aligned carbon nanotube-reinforced silicon carbide composites, *Ceramics International*, 41, p. 12495-12498

36. Panagiota Alafogianni, Konstantinos G. Dassios, Sofia Farmaki, Stelios K. Antiohos, Theodore E. Matikas, Nektaria Marianthi Barkoula, 2016, On the efficiency of UV-vis spectroscopy in assessing the dispersion quality in sonicated aqueous suspensions of carbon nanotubes, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 495, pp. 118-124

37. Panagiota T. Dalla, Konstantinos G. Dassios, Ilias K. Tragazikis, Dimitris A. Exarchos, Theodore E. Matikas, Carbon nanotubes and nanofibers as strain and damage sensors for smart cement, 2016, *Materials Today Communications*, 8, pp. 196-204

38. Ilias K. Tragazikis, Konstantinos G. Dassios Tragazikis, , Dimitris A. Exarchos, Panagiota T. Dalla, Theodore E. Matikas, Acoustic emission investigation of the mechanical performance of carbon nanotube-modified cement-based mortars, *Construction and Building Materials*, 122, pp. 518-524

39. Shanshan Xiao, Hui Mei, Daoyang Han, Konstantinos G. Dassios, Laifei Cheng, Ultralight lamellar amorphous carbon foam nanostructured by SiC nanowires for tunable electromagnetic wave absorption, 2017, *Carbon*, 122, pp. 718-725

40. Tragazikis, I.K., Dassios, K.G., Dalla, P.T., Exarchos, D.A., Matikas, T.E. Acoustic emission investigation of the effect of graphene on the fracture behavior of cement mortars, 2018, *Engineering Fracture Mechanics*, Article in Press
41. De Crescendo, C., Karatza, D., Musmarra, D., Chianese, S., Baxevanis, T., Dalla, P.T., Exarchos, D.A., Dassios, K.G., Matikas, T.E., Ni-Ti Shape Memory Alloy Coatings for Structural Applications: Optimization of HVOF Spraying Parameters, 2018, *Advances in Materials Science and Engineering*, Art. No. 7867302
42. Exarchos, D.A., Dalla, P.T., Tragazikis, I.K., Dassios, K.G., Zafeiropoulos, N.E., Karabela, M.M., Crescendo, C.D., Karatza, D., Musmarra, D., Chianese, S., Matikas, T.E., Development and characterization of high performance Shape Memory Alloy coatings for structural aerospace applications, 2018, *Materials* 11(5), Art. No. 832
43. Han, D., Mei, H., Xiao, S., Dassios, K.G., Cheng, L., A review on the processing technologies of carbon nanotube/silicon carbide composites, 2018, *Journal of the European Ceramic Society* 38(11), pp. 3695-3708
44. Mei, H., Yan, Y., Geng, L., Dassios, K.G., Zhang, H., Cheng, L., First printing of continuous fibers into ceramics, 2018, *Journal of the American Ceramic Society*, <https://doi.org/10.1111/jace.16234>
45. Alafogianni P., Dassios K.G., Tsakiroglou C.D., Matikas T.E., Barkoula N.M., Effect of CNT addition and dispersive agents on the transport properties and microstructure of cement mortars, 2019, *Construction and Building Materials* 197, pp. 251-261
46. Chang, P., Mei, H., Zhou, S., Dassios, K.G., Cheng, L., 3D printed electrochemical energy storage devices, 2019, *Journal of Materials Chemistry A* 7, pp. 4230-4258

B. Publications in Reviewed Proceedings of International Conferences

1. Konstantinos G. Dassios and Spyros N. Pandis, Evaporation of Ammonium Nitrate in the Presence of Organic Compounds *Proceedings of the 17th Annual Conference of the American Association for Aerosol Research*, 22-26 June 1998, Cincinnati, Ohio
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3. Konstantinos G. Dassios, Marc Steen and Constantina Filiou, The Statistical Properties of Alumina Fibres to 1200oC, *Proceedings of the 2nd National Conference on Composite Materials, Hellas-Comp 2001*, June 7-9, 2001, University of Patras, Greece
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