CURRICULUM VITAE VINCENZO CRUPI

Address	Department of Engineering, University of Messina, Contrada di Dio,Sant'Agata,98166, Messina
E-mail/ PEC/ Phone	crupi.vincenzo@unime.it / crupi.vincenzo@pec.it / +39 090 6765251 (office)
ORCID ID	https://orcid.org/0000-0001-7498-4733
Author ID	23391764000 (Author Scopus ID); H-3062-2011 (Web of Science Researcher ID)
Web sites	https://scholar.google.it/citations?user=XIs4lA8AAAAJ&hl=en (Google scholar)
	https://unime.unifind.cineca.it/get/person/025350 (University of Messina)

CURRENT EMPLOYMENT

• since 26 Ottobre 2015	Full Professor at the Department of Engineering of the University of Messina, Italy Scientific field (SSD): ING/IND-02 "Naval and marine constructions and implants".

EDUCATION

• 28 April 1999	PhD degree in "Structural Mechanics" (XI cycle) from the University of Catania, Italy.
• 27 March 1995	Laurea degree cum Laude in Material Engineering from the University of Messina, Italy. He was the first graduate in the Faculty of Engineering of University of Messina.
• 25 July 1989	"Diploma di maturità classica" with full grade (60/60) from the "Liceo Classico Pitagora" of Crotone, Italy.

VISITING RESEARCHER

• 2001	Trinity College, Dublin, Ireland. Scientific contact: Prof. D. Taylor.
• 2000	Politecnico of Turin, Italy. Scientific contact: Prof. P. Calderale.
• 1998	Katholieke Universiteit Leuven, Belgium. Scientific contact: Prof. J. Vander Sloten.

INSTITUTIONAL ACTIVITY

• 1 October 2018	Coordinator of Bachelor's Degree in "Sciences and Technologies of Navigation" of the University of Messina. Period: 6 years (since 1/10/2018 to 30/09/2024).
• since 21 January 2020 to 29 November 2021	Member of the Coordinating Committee and Responsible of "Naval mechanical engineering" Area of research and service center CERISI (http://cerisi.unime.it/en.html#navalmeccanica)
• 30 October 2018	National Coordinator of scientific field ING/IND-02.
• 15 November 2021	Expert reviewer of the national qualification committee (ASN 2021) for the Academic area 09/A1 "Aeronautical and aerospace engineering and naval architecture".
• 19 February 2019	Expert reviewer of the national qualification committee (ASN 2018) for 09/A1.
• 13 February 2017	Expert reviewer of the national qualification committee (ASN 2016) for 09/A1.
• 8 February 2023	Member of the Committee for the concourse for Assistant professor in the disciplinary field "Naval Architecture and Marine Engineering" of Instituto Superior Tecnico, Lisbon, Portugal.
• since September 2017	Member of the Committees for the concourses for: 4 full professors, 5 associate professors, 3 RTDB, 4 RTDA for the SSD ING-IND/02, 1 full professor, 4 associate professors, 1 RTDB, 1 RTDA for the SSD ING-IND/01 and 1 associate professors for the SSD ING-IND/22.
• since 14 April 2022 to 2024	Delegate of the Head of the Engineering Department for the teaching activity (Prot n. 48569)
• since 4 December 2006	Member of Scientific Board of PhD School of University of Messina in: "Engineering" (since 2023), "Industrial and Information Engineering" (2022), "Chemistry and Engineering of Materials and Constructions" (2014-21),"Engineering and Chemistry of Materials" (2007-13).

RESPONSIBLE OF LABORATORIES

"Ship design", "Mechanical testing", "Large scale testing".

RESPONSIBLE OF RESEARCH GROUPS

• since 9 June 2022	Responsible of the NETTUNO (Green and lightweight design of ship and offshore structures for sustainable mobility and blue growth) research group of the University of Messina.
• since 30 May 2022	Faculty Advisor of "Messina Energy Boat" team for "Monaco Energy Boat Challenge".

ADVISOR OF RESEARCH FELLOWS AND PHD THESES

Advisor of 5 research fellows of the University of Messina since 2013:
Filippo Cucinotta (annual research fellowship from 01/03/2013); Pasqualino Corigliano (two-year research fellowship from 01/01/2016), Pasqualino Corigliano (research fellowship from 01/01/2018 to 17/11/2019); Giulia Palomba (two research fellowships from 01/04/2021 to 30/05/2022 and from 01/04/2022 to 09/07/2023).
Advisor of 6 PhD theses of the University of Messina:
1. PhD student: Luciano Musumeci, XXV Cycle of PhD course, 2010-2012.
2. PhD student: Marco Cucinotta, XXVII Cycle, 2012-2014.
3. PhD student: Pasqualino Corigliano, XXVIII Cycle, 2013-2015. (Doctor Europaeus).
4. PhD student: Felice Sfravara, XXX Cycle, 2015-2017. (Doctor Europaeus).
5. PhD student: Giulia Palomba, XXXIII Cycle, 2018-2020. (Doctor Europaeus).
6. PhD student: Simone Scattareggia, XXXVI Cycle, 2021-2023. (Doctor Europaeus).

TEACHING ACTIVITY

• Academic year 2022/23	Course title: “Naval vessels” (NV) (SSD: ING/IND-01; CFU 6)
• Academic years 2021/22-2022/23	Course title: “Yachting” (YA) (SSD: ING/IND-02; CFU 6)
• Academic years 2021/22-2022/23	Course title: “Hydrographic vessels” (HV) (SSD: ING/IND-01; CFU 6)
• Academic years 2020/21-2022/23	Course title: “Ship design” (SDB) (SSD: ING/IND-02; CFU 6)
• Academic year 2020/21	Course title: “Shipbuilding technologies” (STE) (SSD: ING/IND-02; CFU 6)
• Academic year 2019-2020	Course title: “Maneuverability and Ship design”(MSD) (SSD: ING/IND-02; CFU 12)
• Academic year 2018-2019	Course title: “Ship theory” (ST) (SSD: ING/IND-02; CFU 6)
• Academic years 2016/17-2019/20	Course title: “Structural Integrity” (SI) (SSD: ING/IND-14; CFU 6)
• Academic years 2011/12-2019/20	Course title: “Naval outfitting and Ship design” (NOSD) (SSD: ING/IND-02; CFU 12)
• Academic years 2005/06-2009/10	Course title: “Naval outfitting” (NO) (SSD: ING/IND-02; CFU 6)
• Academic years 2004/05-2010/11	Course title: “Ship design” (SD) (SSD: ING/IND-02; CFU 6)
• since 2004	Advisor of 83 Bachelor degree theses in Naval Engineering, Industrial Engineering and Sciences and Technologies of Navigation, Maritime and air transport sciences and logistics of the University of Messina.

STUDENTS’ EVALUATIONS

COURSE	SD	NO	NOSD		SI	ST	MSD	STE	SDB	YA	HV	NV	
CFU hours	6 CFU 60 hours	6 CFU 60 hours	12 CFU 120 hours 96 hours (A.A. 2019/20)		6 CFU 60 hours 48 hours (A.A. 2019/20)	6 CFU 60 hours	12 CFU 96 hours	6 CFU 48 hours	6 CFU 48 hours	6 CFU 48 hours	6 CFU 48 hours	6 CFU 48 hours	Total CFU
2004/05	•												**6**
2005/06	• (92 %)	•											**12**
2006/07	• (85 %)	• (87 %)											**12**
2007/08	• (95 %)	• (95 %)											**12**
2008/09	• (95 %)	• (76 %)											**12**
2009/10	• (81 %)	• (99 %)											**12**
2010/11	• (97%)												**12**
2011/12			• (93 %)										**6**
2012/13				• (83-85 %)									**6**
2013/14				• (95-90 %)									**12**
2014/15				• (100 %)									**12**
2015/16				• (100 %)									**12**
2016/17				• (88-71 %)	• (100 %)								**18**
2017/18				•	• (100 %)								**18**
2018/19				•	• (94 %)	• (89 %)							**24**
2019/20				•*	• (100 %)		• (91 %)						**18**
2020/21				• (100 %)**				•(100%)	• (99 %)				**12**
2021/22									• (98 %)	•(92 %)	•(93 %)		**18**
2022/23									• (93 %)	• (97 %)	• (95 %)	• (97 %)	**24**

* This course is a proxy for Maneuverability and Ship design

** This course is a proxy for Ship design

(%) % of positive comments for the course

RESEARCH ACTIVITY

Member of journal Editorial Board

• since 21 March 2022	"Journal of Marine Science and Engineering" (JMSE) Impact factor (IF): 2.9 (JCR 2022).
• since 8 June 2020	"Metals". IF: 2.9 (JCR 2022).
• since 4 December 2018	Deputy Editor of "Journal of Mechanical Engineering Science" (JMES). IF: 2.0 (JCR 2022).
• since 03 April 2013	"Polish Maritime Research". IF: 2.0 (JCR 2022).

Guest Editor of Special Issues

• 22 April 2022	""The Application of Additive Manufacturing Technology for Marine Structures". JMSE
• 8 June 2020	"Welded and Adhesive Joints for Marine Applications". Metals
• 7 November 2016	"Lightweight Design in Transportation Engineering", 232(8), April 2018. JMES
• 16 November 2015	"Wood Science, Engineering and Technology", 231(1), January 2017. JMES
• 8 November 2012	"Fatigue Analysis and Design in Transportation Engineering", 229(7), May 2015. JMES

AWARDS

• 26 October 2021 11 October 2022	Inclusion in the list of the top 2 % most-cited scientists in various disciplines for the years 2020 and 2021 (Stanford University) https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3 https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/5
• 16 October 2020	Inclusion in the 160.000 top-scientists list according to a study, published on Plos Biology. https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.300 0918
• 11 September 2021	Inclusion in the top italian scientists list https://topitalianscientists.org/home

FUNDED PROJECTS

Scientific Responsible of Research Projects

• 2017 - 2019	Scientific Responsible of the Research Unity of the University of Messina for the Research Project PRIN CLEBJOINT. Code: 2015PN8CEA_003
• 2012 - 2013	Scientific Responsible of the Research Unity of the University of Messina for the Research Project PRIN "Innovative methods for the fatigue prediction of ship welded joints" Code: 2009AEBN29_002
•2012 - 2014	Scientific Responsible of the Research Project funded by the PON "Specialization course in the design of hulls with the application of innovative methods" Code: PON02_00153_2939534
•2013 - 2015	Scientific Responsible of the Research Project funded by the Italian Ministry of Foreign Affarirs. Project of Particular Relevance within the frame of the Executive Programme for Scientific and Technological Cooperation between Italy and China for the years 2013-2015. Title: "Advanced sandwich materials for lightweight structures". Code: PGR00566

Participation to Research Projects

•2023 - 2025	"SAMOTHRACE", PNRR. Reference of Task 4.2 "Applications of sensors for sustainable, safe and intermodal mobility".
•2021 - 2024	"DAS PHANTOMSHIFFE". Code: F/190001/01-02-03/X44
•2021 - 2023	"EOLO". Code: ARS01_01044
•2019 - 2022	"THALASSA". Code: ARS01_00293.
•2019 - 2022	"AEROMAT". Code: ARS01_01147
•2012 - 2015	"CERISI". Code: A03_00422
•2012 - 2015	"HIDRA". Code: PON02_00153_2939534
•2011 - 2015	"STEM-STELO". Code: PON01_02380
• 2009- 2012	"LIVE". Code: MS01_00007
• 2009	"MIMOSA"
• 2009	"Transport Innovation Center of Competence - C.C.I.T."
• 2005-2007	"SINAVE"
• 2003 - 2004	PRIN "Correlation between morphological and mechanical properties of sandwich panels made of light alloy for applications in the naval field".

REVIEWER OF RESEARCH PROJECTS Reviewer of projects for: Government of the Russian Federation, Croatian Science Foundation, Polish National Science Centre, Chilean Government, Czech Science Foundation, University of Campania Luigi Vanvitelli, Italy, University of Florence, Italy, Liguria Region, Italy.

REVIEWER ACTIVITY

Acta Astronaut, Acta Metall Sin, Addit Manuf, Adv Eng Mater, Adv Mater Sci Eng, Appl Sci-Basel, Compos Part B-Eng, Compos Sci Technol, Compos Struct, Constr Build Mater, Eng Fail Anal, Eng Fract Mech, Eng Struct, Exp Mech, Fatigue Fract Eng M, Indian J Eng Mater S, Infrared Phys Techn, Int J Fatigue, Int J Impact Eng, Int J Mater Res, Int J Mech Sci, Int J Nonlin Mech, Int J Struct Integr, J Adhesion, J Braz Soc Mech Sci, J Compos Mater, J Comput Des Eng, J Eng Mech, J Eng Res, J Imaging, J Manufacturing Process, J Mater Civil Eng, J Mater Eng Perform, J Mater Process Tech, J Mater Res Technol, J Mater Sci, J Mech Sci Technol, J Reinf Plast Comp, J Sandw Struct Mater, J Ship Res, Lat Am J Solids Stru, Mar Struct, Materials, Math Comput Appl, Mater Charact, Mater Design, Mech Adv Mater Struc, Mech Based Des Struc, Mech Res Commun, Metall Mater Trans A, Metals-Basel, Ocean Eng, P I Mech Eng C-J Mec, P I Mech Eng L-J Mat, Rev Adv Mater Sci, Ships Offshore Struc, Shock Vib, Steel Res Int, Strain, Structures, Struct Eng Mech, South Forests, Theor Appl Fract Mec, Thin Wall Struct, Wood Mater Sci Eng

RESEARCH TOPICS:

1. **LIGHT-WEIGHT STRUCTURES AND GREEN MATERIALS IN SHIPBUILDING**
2. **INNOVATIVE METHODS FOR FATIGUE PREDICTION**

KEYWORDS

-Lightweight structures; Sandwich structures; **Honeycomb structures**; **Additive manufacturing materials;** Foams;
-**Fatigue**; Mechanical behaviour; Impact; Buckling; Torsion; Fracture mechanics; Collapse modes; Limit states; Failure map;
-**Fatigue of welded joints**; Joining techniques; **Bimetallic joints;** Adhesives;
-**Fatigue life prediction models**; Theoretical approach; Prediction models; **Full-scale test**; Size effect; Optimization and design;
-**Ship design**; **Biomimetics; Bioinspired designs**; Material selection charts;
-Green ship; **Sustainable mobility**; **Blue growth;** Sustainable design (for recycling, for environment, eco-design), Blue economy; **Wood**;
-**Safety and security of navigation; Sensors for boats**; Ship collisions; **Energy absorption; Crashworthiness**; **Stealth technology;**
-**Off-shore structures; Marine structures**; Submarine cables; Robotic Additive Manufacturing; Unmanned vehicles.

PUBLICATIONS Author of about 160 scientific publications in international and national journals and conferences

SCIENTIFIC PARAMETERS (DATE: 26/08/2023)

Citation Count (from Scopus): **2562;** 2003 (excluded self citations of all authors)
h-Index (from Scopus): **33**; 26 (excluded self citations of all authors).
Citation Count (from Isi Web of Science): **2214;** 1895 (excluded self citations);
h- Index (from Isi Web of Science): **29**;
Citation Count (from Google Scholar) : **3331**;
h-Index (from Google Scholar) : **35**

PUBLICATIONS IN JOURNALS WITH IF **65** (24 publications as first author)

PUBLICATIONS IN Q1 JOURNALS **35** (from JCR 2022); **34** (from SCIMAGO 2022)

- Composites Part B: Engineering (IF = 13.2, publications = 2),
- Materials and Design (IF = 8.4, publications = 1),
- Materials Science and Engineering A (IF = 6.4, publications = 1),
- Thin Walled Structures (IF = 6.4, publications = 1),
- International Journal of Fatigue (IF = 6.0, publications = 6),
- Theoretical and Applied Fracture Mechanics (IF = 5.3, publications = 2),
- International Journal of Impact Engineering (IF = 5.1, publications = 4),
- Ocean Engineering (IF = 5.0, publications = 2),
- Polymer (IF = 4.6, Articoli = 1),
- Engineering Failure Analysis (IF = 4.0, publications = 1),
- Marine Structures (IF = 3.9, publications = 3),
- Journal of Sandwich Structures and Materials (IF = 3.9, publications = 3),
- Mechanics Based Design of Structures and Machines (IF = 3.9, publications = 1),
- Journal of Marine Science and Engineering (IF = 2.9, publications = 7).

TOTAL IMPACT FACTOR (JCR 2022) **244.80**

AVERAGE IMPACT FACTOR (JCR 2022) **3.77**

EVALUATION BY ANVUR (ITALIAN NATIONAL AGENCY FOR THE EVALUATION OF UNIVERSITIES AND RESEARCH INSTITUTES)

RESULTS OF EVALUATION RESEARCH QUALITY VQR 2004 – 2010: **6 EXCELLENT PAPERS**

RESULTS OF EVALUATION RESEARCH QUALITY VQR 2011 – 2014: **4 EXCELLENT PAPERS**

RESULTS OF EVALUATION RESEARCH QUALITY VQR 2015 – 2019: **9 EXCELLENT PAPERS (7 CLASS A, 2 CLASS B)**

SCIENTIFIC COLLABORATIONS

- Universidade de Lisboa – Portugal (Prof. Y. Garbatov, Dr. L. Sutherland) [35, 39, 40, 44]
- Trinity College Dublin – Ireland (Prof. D. Taylor), [12, 13, 49]
- University of Michigan – United States (Prof. P. Dong) [19]
- Southern Illinois University – United States (Prof. S. Abrate), [42]
- University TUHH di Amburgo – Germany, (Prof. W. Fricke), [18]
- Hunan University – China (Prof. XG Wang), [5 – 8]
- Dalian University of Technology – China (Prof. C. Wu),
- Iran University of Science and Technology (Dr. H. Mozafari), [30, 33, 34, 45]
- Hitit Universit – Turkey (Dr. E. Kara), [29, 36, 41, 42]
- Qatar University, Doha – Qatar (Prof. A.M. Hamouda), [45]
- Russian Academy of Sciences, Perm, Russian Federation (Dr. O. Plekhov),
- University of Wolverhampton, United Kingdom (Dr. A. Baroutaji), [50]
- Katholieke Universiteit Leuven, Belgium (Prof. J. Vander Sloten),
- Politehnica University of Timisoara, Romania (Prof. E. Linul), [30]
- University of Trieste (Prof. A. Marinò), [14, 15, 46, 47, 48]
- University of Napoli Parthenope (Prof. A. Scamardella),
- Politecnico di Torino (Prof A. Audenino), [1]
- University of Napoli Federico II (Prof. A. Squillace, Prof. M. Altosole), [11]
- University of Modena e Reggio Emilia (Prof. E. Dragoni), [24]
- Università della Calabria (Prof. C. Maletta, Prof. L. Bruno), [4]
- University of Catania (Prof. G. La Rosa),
- CNR-ITAE Messina,
- Sicilian cluster of maritime transport NAVTEC, Messina,
- Unione Internationale Motonautique (S. Abrami),
- Shipyards (Fincantieri, Intermarine, Liberty, Zancle 757),
- Caronte & Tourist Company.

LIST OF SOME RELEVANT PUBLICATIONS

INNOVATIVE METHODS FOR FATIGUE PREDICTION

THERMOGRAPHIC METHOD

1. A.L. Audenino, V. Crupi, E.M. Zanetti "Correlation between thermography and internal damping in metals", **Int. J. Fatigue**, Vol. 25, n. 4, pp. 343-351 2003.
2. V. Crupi "An Unifying Approach to assess the structural strength", **Int. J. Fatigue**, Vol. 30, n. 7, pp. 1150-1159, 2008. **VQR 2004 – 2010: excellent**
3. V. Crupi, E. Guglielmino, G. Risitano, F. Tavilla "Experimental analyses of SFRP material under static and fatigue loading by means of thermographic and DIC techniques", **Compos. Pt. B-Eng.**, Vol. 77, n. 2, pp. 268 – 277, 2015.
4. C. Maletta, L. Bruno, P. Corigliano, V. Crupi, E. Guglielmino "Crack-tip thermal and mechanical hysteresis in Shape Memory Alloys under fatigue loading" **Mater. Sci. Eng. A-Struct.**, Vol. 616, Issue 1, pp. 281-287, 2014. **VQR 2011 – 2014: excellent**

QUANTITATIVE THERMOGRAPHIC METHOD

5. XG Wang, V Crupi, XL Guo, YG Zhao "Quantitative Thermographic Methodology for fatigue assessment and stress measurement", **Int. J. Fatigue**, Vol. 32, n. 12, pp. 1970-1976, 2010.
6. XG Wang, V Crupi, C. Jiang, E. Guglielmino "Quantitative Thermographic Methodology for fatigue life assessment in a multiscale energy dissipation framework" **Int. J. Fatigue**, Vol. 81, pp. 249-256, 2015. **VQR 2015 – 2020: excellent, class A**
7. X.G. Wang, V. Crupi, C. Jiang, E.S. Feng, E. Guglielmino, C.S. Wang "Energy-based approach for fatigue life prediction of pure copper" **Int. J. Fatigue**, Vol. 104, pp. 243-250, 2017.
8. E.S. Feng, X.G. Wang, C. Jiang, V. Crupi "Quantitative thermographic method for fatigue life prediction under variable amplitude loading" Fatigue Fract Eng Mater Struct., Vol. 45, Issue 4, pp.1199–1212, 2022.

VERY HIGH CYCLE FATIGUE

9. V. Crupi, G. Epasto, E. Guglielmino, G. Risitano "Thermographic method for very high cycle fatigue design in transportation engineering", Proc. Inst. Mech. Eng. Part C-J. Eng. Mech. Eng. Sci., Vol. 229, n. 7, pp. 1260-1270, 2015.
10. V. Crupi, G. Epasto, E. Guglielmino, G. Risitano "Analysis of temperature and fracture surface of AISI4140 steel in very high cycle fatigue regime" **Theor. Appl. Fract. Mech.**, Vol. 80, pp. 22 -30, 2015.
11. V. Crupi, G. Epasto, E. Guglielmino, A. Squillace "Influence of microstructure [alpha + beta and beta] on very high cycle fatigue behaviour of Ti-6Al-4V alloy", **Int. J. Fatigue**, Vol. 95, pp. 64-75, 2017. **VQR 2015 – 2020: excellent, class A**

HIGH CYCLE FATIGUE ASSESSMENT OF WELDED JOINTS BY CDM AND TM

12. G. Crupi, V. Crupi, E. Guglielmino, D. Taylor "Fatigue assessment of welded joints using critical distance and other methods", **Eng. Fail. Anal.**, Vol. 12, n. 1, pp. 129-142, 2005. **VQR 2004 – 2010: excellent**
13. V. Crupi, E. Guglielmino, A. Risitano, D. Taylor "Different methods for fatigue assessment of T welded joints used in ship structures", J. Ship Res., Vol. 51, n. 2, pp. 150-159, 2007. **VQR 2004 – 2010: excellent**
14. V. Crupi, E. Guglielmino, M. Maestro, A. Marinò "Fatigue analysis of butt welded AH36 steel joints: Thermographic Method and design S–N curve", **Mar. Struct.**, Vol. 22, n. 3, pp. 373-386, 2009. **VQR 2004 – 2010: excellent**
15. V. Crupi, G. Epasto, E. Guglielmino, A. Marinò "Influence of Weld-Porosity Defects on Fatigue Strength of AH36 Butt Joints Used in Ship Structures", Metals, Vol 11, Issue 3, 444, 2021.

LOW CYCLE FATIGUE ASSESSMENT OF WELDED JOINTS BY TM

16. V. Crupi, G. Chiofalo, E. Guglielmino "Using Infrared Thermography in Low-Cycle Fatigue Studies of Welded Joints", Weld. J., Vol. 89, n. 9, pp. 195-200, 2010.
17. V. Crupi, G. Chiofalo, E. Guglielmino "Infrared investigations for the analysis of low cycle fatigue processes in carbon steels", Proc. Inst. Mech. Eng. Part C-J. Eng. Mech. Eng. Sci., Vol. 225, n. 4, pp. 833 – 842, 2011.
18. P. Corigliano, V. Crupi, W. Fricke, N. Friedrich, E. Guglielmino "Experimental and numerical analysis of fillet-welded joints under low-cycle fatigue loading by means of full-field techniques", Proc. Inst. Mech. Eng. Part C-J. Eng. Mech. Eng. Sci., Vol. 229, n. 7, pp. 1327-1338, 2015.
19. P. Corigliano, V. Crupi, X. Pei, P. Dong "DIC-based structural strain approach for low-cycle fatigue assessment of AA 5083 welded joints", **Theor. Appl. Fract. Mech.**, Vol. 116, Article number 103090, 2021.

FATIGUE ASSESSMENT OF BIMETALLIC JOINTS

20. P. Corigliano, V. Crupi, E. Guglielmino, A.M. Sili "Full-field analysis of AL/FE explosive welded joints for shipbuilding applications", **Mar. Struct.**, Vol. 57, n. 1, pp. 207-218, 2018. **VQR 2015 – 2020: excellent, class A**
21. P. Corigliano, V. Crupi, E. Guglielmino. "Non linear finite element simulation of explosive welded joints of dissimilar metals for shipbuilding applications", **Ocean Eng.**, Vol. 160, Issue 15, pp. 346-353, 2018. **VQR 2015 – 2020: excellent, class A**
22. P. Corigliano, V. Crupi. "Fatigue analysis of TI6AL4V/INCONEL 625 dissimilar welded joints", **Ocean Eng.**, Vol. 221, 108582, 2021.
23. G Palomba, P Corigliano, V Crupi, G Epasto, E Guglielmino "Static and Fatigue Full-Scale Tests on a Lightweight Ship Balcony Overhang with Al/Fe Structural Transition Joints", **J. Mar. Sci. Eng.**, Vol. 10, n. 10, Article 1382, 2022.

TORSION ON ADHESIVE JOINTS

24. P. Corigliano, M. Ragni, D. Castagnetti, V. Crupi, E. Dragoni, E. Guglielmino "Measuring the static shear strength of anaerobic adhesives in finite thickness under high pressure", J. Adhes., Vol. 97, Issue 8, pp. 783 – 800, 2021.

LIGHT-WEIGHT STRUCTURES AND GREEN MATERIALS IN SHIPBUILDING

25. G. Palomba, G. Epasto, V. Crupi "Lightweight sandwich structures for marine applications: a review", Mech. Adv. Mater. Struct., Vol. 29, n. 26, pp. 4839–4864, 2022.
26. V Crupi, G. Epasto, F Napolitano, G Palomba, I. Papa. P. Russo "Green Composites for Maritime Engineering: A Review", **J. Mar. Sci. Eng.**, Vol. 11, Article 599, 2023.

ALUMINIUM FOAM SANDWICHES

27. V. Crupi, R. Montanini "Aluminium foam sandwiches collapse modes under static and dynamic three point bending", **Int. J. Impact Eng.**, Vol. 34, n. 3, pp. 509 - 521, 2007. **VQR 2004 – 2010: excellent**
28. V. Crupi, G. Epasto, E. Guglielmino "Low-velocity impact strength of sandwich materials", **J. Sandw. Struct. Mater.**, Vol. 13, n. 4, pp. 409 - 426, 2011.
29. V. Crupi, E. Kara, G. Epasto, E. Guglielmino, H. Aykul "Prediction model for the impact response of glass fibre reinforced aluminium foam sandwiches", **Int. J. Impact Eng.**, Vol. 77, pp. 97 – 107, 2015. **VQR 2015 – 2020: excellent, class B**
30. H Mozafari, F Distefano, G Epasto, L Gu, E Linul, V Crupi "Design of an Innovative Hybrid Sandwich Protective Device for Offshore Structures", **J. Mar. Sci. Eng.**, Vol. 10, n. 10, Article 1385, 2022.

ALUMINIUM HONEYCOMB SANDWICHES

31. V. Crupi, G. Epasto, E. Guglielmino "Comparison of aluminium sandwiches for lightweight ship structures: Honeycomb vs. foam", **Mar. Struct.**, Vol. 30, n. 1, pp. 74-96, 2013. **VQR 2011 – 2014: excellent**
32. V. Crupi, G. Epasto, E. Guglielmino "Collapse modes in aluminium honeycomb sandwich panels under bending and impact loading", **Int. J. Impact Eng.**, Vol. 43, n. 2, pp. 6 – 15, 2012. **VQR 2011 – 2014: excellent**
33. V. Crupi, G. Epasto, E. Guglielmino, H. Mozafari, S. Najafian "Computed tomography-based reconstruction and finite element modelling of honeycomb sandwiches under low-velocity impacts", **J. Sandw. Struct. Mater.**, Vol. 16, n. 4, pp. 377-397, 2014. **VQR 2011 – 2014: excellent**
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