

Jan Wastiels

List of Publications by Year in descending order

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92
papers

2,476
citations

186265

28
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214800

47
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all docs

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docs citations

99
times ranked

1740
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of Loading Orientation and Knitted Versus Woven Transversal Connections in 3D Textile Reinforced Cement (TRC) Composites. Applied Sciences (Switzerland), 2020, 10, 4517.	2.5	9
2	Editorial on Special Issue "Textile-Reinforced Cement Composites: New Insights into Structural and Material Engineering". Applied Sciences (Switzerland), 2020, 10, 576.	2.5	1
3	Experimental and numerical evaluation of textile reinforced cement (TRC) sandwich walls in compression: A geometrical study. Construction and Building Materials, 2020, 240, 117904.	7.2	9
4	Durability of sandwich beams with textile reinforced cementitious composite faces. Construction and Building Materials, 2019, 229, 116832.	7.2	13
5	Experimental study and benchmarking of 3D textile reinforced cement composites. Cement and Concrete Composites, 2019, 104, 103352.	10.7	21
6	Thermomechanical Behavior of Textile Reinforced Cementitious Composites Subjected to Fire. Applied Sciences (Switzerland), 2019, 9, 747.	2.5	27
7	Validation of a Numerical Bending Model for Sandwich Beams with Textile-Reinforced Cement Faces by Means of Digital Image Correlation. Applied Sciences (Switzerland), 2019, 9, 1253.	2.5	23
8	Fatigue Behaviour of Textile Reinforced Cementitious Composites and Their Application in Sandwich Elements. Applied Sciences (Switzerland), 2019, 9, 1293.	2.5	14
9	Experimental investigation of the buckling behaviour of Textile Reinforced Cement sandwich panels with varying face thickness using Digital Image Correlation. Construction and Building Materials, 2019, 194, 24-31.	7.2	16
10	Flexural impact response of textile reinforced inorganic phosphate cement composites (TRC). Construction and Building Materials, 2018, 163, 296-304.	7.2	6
11	A layered-wise, composite modelling approach for fibre textile reinforced cementitious composites. Cement and Concrete Composites, 2018, 94, 107-115.	10.7	18
12	Investigation of 3D TRC TM s by Means of Three Point Bending Tests on Short Beam Specimens. Proceedings (mdpi), 2018, 2, 397.	0.2	0
13	Repeated Loading of Cement Composite Sandwich Beams. Proceedings (mdpi), 2018, 2, .	0.2	1
14	Influence of environmental loading on the tensile and cracking behaviour of textile reinforced cementitious composites. Construction and Building Materials, 2018, 181, 325-334.	7.2	29
15	Experimental Investigation and Benchmarking of 3D Textile Reinforced Cementitious Composites. RILEM Bookseries, 2018, , 400-408.	0.4	0
16	Influence of Weathering Conditions on TRC Sandwich Renovation Panels. RILEM Bookseries, 2018, , 659-667.	0.4	1
17	Buckling Behaviour of Structural Insulating Sandwich Walls with Textile Reinforced Cement Faces. RILEM Bookseries, 2018, , 535-543.	0.4	0
18	Use of early acoustic emission to evaluate the structural condition and self-healing performance of textile reinforced cements. Mechanics Research Communications, 2017, 81, 26-31.	1.8	14

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19	Synthesis of hydroxysodalite zeolite by alkali-activation of basalt powder rich in calc-plagioclase. <i>Advanced Powder Technology</i> , 2017, 28, 473-480.	4.1	24
20	Recommendation of RILEM TC 232-TDT: test methods and design of textile reinforced concrete. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 4923-4927.	3.1	171
21	Hydrated lime/potassium carbonate as alkaline activating mixture to produce kaolinitic clay based inorganic polymer. <i>Applied Clay Science</i> , 2016, 126, 278-286.	5.2	29
22	Bending crack behaviour of plain concrete beams externally reinforced with TRC. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 5303-5314.	3.1	12
23	Development of inorganic polymer by alkali-activation of untreated kaolinitic clay: Reaction stoichiometry, strength and dimensional stability. <i>Construction and Building Materials</i> , 2015, 91, 251-259.	7.2	39
24	Dissolution behavior of Jordanian clay-rich materials in alkaline solutions for alkali activation purpose. Part I. <i>Applied Clay Science</i> , 2015, 115, 238-247.	5.2	32
25	Durability of alkali activated cement produced from kaolinitic clay. <i>Applied Clay Science</i> , 2015, 104, 229-237.	5.2	95
26	Study of the crack pattern and its evolution by DIC of RC beams externally reinforced with TRC and CFRP. , 2015, , 116-116.		0
27	Application of Acoustic Emission on the Characterization of Fracture in Textile Reinforced Cement Laminates. <i>Scientific World Journal</i> , The, 2014, 2014, 1-7.	2.1	10
28	Bending fracture of textile reinforced cement laminates monitored by acoustic emission: Influence of aspect ratio. <i>Construction and Building Materials</i> , 2014, 70, 370-378.	7.2	28
29	Effect of curing conditions on the dimensional and thermal stability of calcium phosphate cement for elevated temperature applications. <i>Cement and Concrete Research</i> , 2014, 66, 102-109.	11.0	15
30	TRC or CFRP strengthening for reinforced concrete beams: An experimental study of the cracking behaviour. <i>Engineering Structures</i> , 2014, 77, 49-56.	5.3	37
31	Bending of beams externally reinforced with TRC and CFRP monitored by DIC and AE. <i>Composite Structures</i> , 2014, 112, 113-121.	5.8	67
32	Development and experimental validation of a lightweight Stay-in-Place composite formwork for concrete beams. <i>Construction and Building Materials</i> , 2014, 63, 33-39.	7.2	26
33	Blast performance of a sacrificial cladding with composite tubes for protection of civil engineering structures. <i>Composites Part B: Engineering</i> , 2014, 65, 131-146.	12.0	32
34	Influence of geometry on the fracturing behavior of textile reinforced cement monitored by acoustic emission. <i>Proceedings of SPIE</i> , 2014, , .	0.8	0
35	Response of pultruded composite tubes subjected to dynamic and impulsive axial loading. <i>Composites Part B: Engineering</i> , 2013, 55, 537-547.	12.0	28
36	Characterization of alkali activated kaolinitic clay. <i>Applied Clay Science</i> , 2013, 75-76, 120-125.	5.2	77

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37	Stay-in-Place Formwork of TRC Designed as Shear Reinforcement for Concrete Beams. <i>Advances in Materials Science and Engineering</i> , 2013, 2013, 1-9.	1.8	25
38	Durability models for GRC: uncertainties on strength predictions. <i>Plastics, Rubber and Composites</i> , 2012, 41, 77-87.	2.0	7
39	Tensile behaviour of different high performance fibre reinforced cements. , 2012, , 145-154.		0
40	Shell Elements of Textile Reinforced Concrete Using Fabric Formwork: A Case Study. <i>Advances in Structural Engineering</i> , 2012, 15, 677-689.	2.4	22
41	Determination of linear thermal expansion coefficient by using digital image correlation. , 2012, , 421-425.		0
42	Industrial Processing Technique for Textile Reinforced Cement Composites with Structural Use. <i>RILEM Bookseries</i> , 2012, , 511-518.	0.4	2
43	Close-range blast loading on empty recyclable metal beverage cans for use in sacrificial cladding structure. <i>Engineering Structures</i> , 2011, 33, 1966-1987.	5.3	39
44	Form finding methodology for force-modelled anticlastic shells in glass fibre textile reinforced cement composites. <i>Engineering Structures</i> , 2011, 33, 2603-2611.	5.3	31
45	Production of monetite-based Inorganic Phosphate Cement (M-IPC) using hydrothermal post curing (HTPC). <i>Cement and Concrete Research</i> , 2011, 41, 30-37.	11.0	35
46	Evaluation of a low temperature hardening Inorganic Phosphate Cement for high-temperature applications. <i>Cement and Concrete Research</i> , 2011, 41, 38-45.	11.0	33
47	Crushing and energy absorption performance of different geometrical shapes of small-scale glass/polyester composite tubes under quasi-static loading conditions. <i>Composite Structures</i> , 2011, 93, 992-1007.	5.8	101
48	Low velocity axial impact crushing performance of empty recyclable metal beverage cans. <i>International Journal of Impact Engineering</i> , 2011, 38, 622-636.	5.0	23
49	Performance of Sacrificial Cladding Structure Made of Empty Recyclable Metal Beverage Cans under Large-Scale Air Blast Load. <i>Applied Mechanics and Materials</i> , 2011, 82, 416-421.	0.2	6
50	Comparative study of the quasi-static energy absorption of small-scale composite tubes with different geometrical shapes for use in sacrificial cladding structures. <i>Polymer Testing</i> , 2010, 29, 381-396.	4.8	59
51	Parametric study of crushing parameters and failure patterns of pultruded composite tubes using cohesive elements and seam, Part I: Central delamination and triggering modelling. <i>Polymer Testing</i> , 2010, 29, 729-741.	4.8	54
52	Parametric study of crushing parameters and failure patterns of pultruded composite tubes using cohesive elements and seam: Part II " Multiple delaminations and initial geometric imperfections. <i>Polymer Testing</i> , 2010, 29, 803-814.	4.8	24
53	Comparison of the crushing performance of hollow and foam-filled small-scale composite tubes with different geometrical shapes for use in sacrificial cladding structures. <i>Composites Part B: Engineering</i> , 2010, 41, 434-445.	12.0	51
54	Development of impregnation technique for glass fibre mats to process textile reinforced cementitious composites. <i>Plastics, Rubber and Composites</i> , 2010, 39, 195-199.	2.0	13

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55	Experimental study on the axial crushing behaviour of pultruded composite tubes. Polymer Testing, 2010, 29, 224-234.	4.8	104
56	Structural analysis of small span textile reinforced concrete shells with double curvature. Composites Science and Technology, 2009, 69, 1790-1796.	7.8	36
57	Study of strength durability models for GRC: Theoretical overview. Composites Part A: Applied Science and Manufacturing, 2009, 40, 2020-2030.	7.6	7
58	Use of hyper-shell structures with textile reinforced cement matrix composites in lightweight constructions. Composites Science and Technology, 2009, 69, 1341-1347.	7.8	22
59	Validation of digital image correlation technique for impact loading applications. , 2009, , .		7
60	Numerical axial impact study of pultruded circular and square composite tubes. , 2009, , .		0
61	IMPACT STUDY OF TEXTILE REINFORCED CEMENTITIOUS MATERIALS: TEST METHOD AND PRELIMINARY RESULTS. , 2009, , 111-120.		0
62	Study of blast load on recyclable empty metal cans. , 2009, , .		0
63	Experimental and numerical study of pultruded composite tubes under blast loading. , 2009, , .		1
64	Evaluation of the strand in cement (SIC) test for GRCs with improved durability. Materials and Structures/Materiaux Et Constructions, 2008, 41, 1109-1116.	3.1	4
65	Thermal hardening and structure of a phosphorus containing cementitious model material. Journal of Thermal Analysis and Calorimetry, 2007, 88, 723-729.	3.6	35
66	Reaction mechanism, kinetics and high temperature transformations of geopolymers. Journal of Materials Science, 2007, 42, 2982-2996.	3.7	170
67	Durability aspects of AR-glass-reinforcement in textile reinforced concrete, Part 2: Modelling and exposure to outdoor weathering. , 2007, , 389-395.		2
68	Durability of glass fibre reinforced composites experimental methods and results. Composites Part A: Applied Science and Manufacturing, 2006, 37, 207-215.	7.6	30
69	The Effect of Durability on the Design of Self-Bearing Sandwich Panels with Cementitious Composite Faces. , 2006, , 99-108.		2
70	Stochastic matrix-cracking model for textile reinforced cementitious composites under tensile loading. Materials and Structures/Materiaux Et Constructions, 2006, 39, 777-786.	3.1	56
71	Modular grid-based design concept for fibre reinforced composite shells. WIT Transactions on the Built Environment, 2006, , .	0.0	0
72	Durability modelling of glass fibre reinforcement in cementitious environment. Materials and Structures/Materiaux Et Constructions, 2005, 38, 155-162.	3.1	50

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73	Durability modelling of glass fibre reinforcement in cementitious environment. Materials and Structures/Materiaux Et Constructions, 2005, 38, 155-162.	3.1	26
74	Construction and Experimental Analysis of a Pedestrian Bridge with Concrete Deck and IPC Truss Girder. Science and Engineering of Composite Materials, 2004, 11, .	1.4	2
75	Modular pedestrian bridge with concrete deck and IPC truss girder. Engineering Structures, 2003, 25, 449-459.	5.3	11
76	Numerical analysis and experimental validation for static loads of a composite bridge structure. Composite Structures, 2003, 62, 235-243.	5.8	8
77	MEASUREMENT OF THE DURABILITY OF GLASS FIBRE REINFORCED CONCRETE AND INFLUENCE OF MATRIX ALKALINITY. , 2003, , 163-172.		4
78	Experimental and Numerical Analysis of Matrix Cracking in Brittle Composites. , 2003, , 95-108.		0
79	Design and Experimental Analysis of Modular Pedestrian Bridge with Concrete Deck and IPC Truss Girder. , 2003, , 325-335.		0
80	Modelling of an IPC-concrete modular pedestrian bridge. Computers and Structures, 2002, 80, 2133-2144.	4.4	7
81	DEFORMATION ANALYSIS OF A MODULAR CONNECTION SYSTEM BY DIGITAL IMAGE CORRELATION. Experimental Techniques, 2002, 26, 37-40.	1.5	14
82	Stress computation methods for hybrid inorganic phosphate cement-concrete cross-section. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2001, 215, 187-193.	1.1	0
83	Stress computation methods for hybrid inorganic phosphate cement-concrete cross-section. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2001, 215, 187-193.	1.1	0
84	Low-temperature synthesized aluminosilicate glasses. Journal of Materials Science, 1996, 31, 71-79.	3.7	198
85	Low-temperature synthesized aluminosilicate glasses. Journal of Materials Science, 1996, 31, 80-85.	3.7	134
86	Mineral polymer tooling system for making prototype fibre reinforced composite parts. Journal of Materials Processing Technology, 1995, 48, 757-764.	6.3	4
87	Fracture Mechanical Characterisation of Mineral Polymer matrix Composites.. , 1991, , 83-92.		1
88	Mineral Polymer Matrix Composites. , 1989, , 587-592.		6
89	Strength representation of concrete and other materials in the octahedral stress space. Cement and Concrete Research, 1982, 12, 625-631.	11.0	4
90	Behaviour of concrete under multiaxial stresses - A review. Cement and Concrete Research, 1979, 9, 35-44.	11.0	30

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91	Use of Local Raw Materials for Construction Purposes. <i>Advances in Science and Technology</i> , 0, , .	0.2	6
92	Modeling a Modular Pedestrian Bridge Composed of a Concrete Deck and a Truss Girder with IPC Sandwich Panels. , 0, , .		1