

Jan Wastiels

List of Publications by Year in descending order

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92
papers

2,476
citations

185998

28
h-index

214527

47
g-index

99
all docs

99
docs citations

99
times ranked

1740
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-temperature synthesized aluminosilicate glasses. <i>Journal of Materials Science</i> , 1996, 31, 71-79.	1.7	198
2	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.	1.3	171
3	Reaction mechanism, kinetics and high temperature transformations of geopolymers. <i>Journal of Materials Science</i> , 2007, 42, 2982-2996.	1.7	170
4	Low-temperature synthesized aluminosilicate glasses. <i>Journal of Materials Science</i> , 1996, 31, 80-85.	1.7	134
5	Experimental study on the axial crushing behaviour of pultruded composite tubes. <i>Polymer Testing</i> , 2010, 29, 224-234.	2.3	104
6	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.	3.1	101
7	Durability of alkali activated cement produced from kaolinitic clay. <i>Applied Clay Science</i> , 2015, 104, 229-237.	2.6	95
8	Characterization of alkali activated kaolinitic clay. <i>Applied Clay Science</i> , 2013, 75-76, 120-125.	2.6	77
9	Bending of beams externally reinforced with TRC and CFRP monitored by DIC and AE. <i>Composite Structures</i> , 2014, 112, 113-121.	3.1	67
10	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.	2.3	59
11	Stochastic matrix-cracking model for textile reinforced cementitious composites under tensile loading. <i>Materials and Structures/Materiaux Et Constructions</i> , 2006, 39, 777-786.	1.3	56
12	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.	2.3	54
13	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.	5.9	51
14	Durability modelling of glass fibre reinforcement in cementitious environment. <i>Materials and Structures/Materiaux Et Constructions</i> , 2005, 38, 155-162.	1.3	50
15	Close-range blast loading on empty recyclable metal beverage cans for use in sacrificial cladding structure. <i>Engineering Structures</i> , 2011, 33, 1966-1987.	2.6	39
16	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.	3.2	39
17	TRC or CFRP strengthening for reinforced concrete beams: An experimental study of the cracking behaviour. <i>Engineering Structures</i> , 2014, 77, 49-56.	2.6	37
18	Structural analysis of small span textile reinforced concrete shells with double curvature. <i>Composites Science and Technology</i> , 2009, 69, 1790-1796.	3.8	36

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19	Thermal hardening and structure of a phosphorus containing cementitious model material. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 88, 723-729.	2.0	35
20	Production of monetite-based Inorganic Phosphate Cement (M-IPC) using hydrothermal post curing (HTPC). <i>Cement and Concrete Research</i> , 2011, 41, 30-37.	4.6	35
21	Evaluation of a low temperature hardening Inorganic Phosphate Cement for high-temperature applications. <i>Cement and Concrete Research</i> , 2011, 41, 38-45.	4.6	33
22	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.	5.9	32
23	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.	2.6	32
24	Form finding methodology for force-modelled anticlastic shells in glass fibre textile reinforced cement composites. <i>Engineering Structures</i> , 2011, 33, 2603-2611.	2.6	31
25	Behaviour of concrete under multiaxial stresses – A review. <i>Cement and Concrete Research</i> , 1979, 9, 35-44.	4.6	30
26	Durability of glass fibre reinforced composites experimental methods and results. <i>Composites Part A: Applied Science and Manufacturing</i> , 2006, 37, 207-215.	3.8	30
27	Hydrated lime/potassium carbonate as alkaline activating mixture to produce kaolinitic clay based inorganic polymer. <i>Applied Clay Science</i> , 2016, 126, 278-286.	2.6	29
28	Influence of environmental loading on the tensile and cracking behaviour of textile reinforced cementitious composites. <i>Construction and Building Materials</i> , 2018, 181, 325-334.	3.2	29
29	Response of pultruded composite tubes subjected to dynamic and impulsive axial loading. <i>Composites Part B: Engineering</i> , 2013, 55, 537-547.	5.9	28
30	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.	3.2	28
31	Thermomechanical Behavior of Textile Reinforced Cementitious Composites Subjected to Fire. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 747.	1.3	27
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.	3.2	26
33	Durability modelling of glass fibre reinforcement in cementitious environment. <i>Materials and Structures/Materiaux Et Constructions</i> , 2005, 38, 155-162.	1.3	26
34	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.	1.0	25
35	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.	2.3	24
36	Synthesis of hydroxysodalite zeolite by alkali-activation of basalt powder rich in calc-plagioclase. <i>Advanced Powder Technology</i> , 2017, 28, 473-480.	2.0	24

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37	Low velocity axial impact crushing performance of empty recyclable metal beverage cans. International Journal of Impact Engineering, 2011, 38, 622-636.	2.4	23
38	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.	1.3	23
39	Use of hyper-shell structures with textile reinforced cement matrix composites in lightweight constructions. Composites Science and Technology, 2009, 69, 1341-1347.	3.8	22
40	Shell Elements of Textile Reinforced Concrete Using Fabric Formwork: A Case Study. Advances in Structural Engineering, 2012, 15, 677-689.	1.2	22
41	Experimental study and benchmarking of 3D textile reinforced cement composites. Cement and Concrete Composites, 2019, 104, 103352.	4.6	21
42	A layered-wise, composite modelling approach for fibre textile reinforced cementitious composites. Cement and Concrete Composites, 2018, 94, 107-115.	4.6	18
43	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.	3.2	16
44	Effect of curing conditions on the dimensional and thermal stability of calcium phosphate cement for elevated temperature applications. Cement and Concrete Research, 2014, 66, 102-109.	4.6	15
45	DEFORMATION ANALYSIS OF A MODULAR CONNECTION SYSTEM BY DIGITAL IMAGE CORRELATION. Experimental Techniques, 2002, 26, 37-40.	0.9	14
46	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.	1.0	14
47	Fatigue Behaviour of Textile Reinforced Cementitious Composites and Their Application in Sandwich Elements. Applied Sciences (Switzerland), 2019, 9, 1293.	1.3	14
48	Development of impregnation technique for glass fibre mats to process textile reinforced cementitious composites. Plastics, Rubber and Composites, 2010, 39, 195-199.	0.9	13
49	Durability of sandwich beams with textile reinforced cementitious composite faces. Construction and Building Materials, 2019, 229, 116832.	3.2	13
50	Bending crack behaviour of plain concrete beams externally reinforced with TRC. Materials and Structures/Materiaux Et Constructions, 2016, 49, 5303-5314.	1.3	12
51	Modular pedestrian bridge with concrete deck and IPC truss girder. Engineering Structures, 2003, 25, 449-459.	2.6	11
52	Application of Acoustic Emission on the Characterization of Fracture in Textile Reinforced Cement Laminates. Scientific World Journal, The, 2014, 2014, 1-7.	0.8	10
53	Influence of Loading Orientation and Knitted Versus Woven Transversal Connections in 3D Textile Reinforced Cement (TRC) Composites. Applied Sciences (Switzerland), 2020, 10, 4517.	1.3	9
54	Experimental and numerical evaluation of textile reinforced cement (TRC) sandwich walls in compression: A geometrical study. Construction and Building Materials, 2020, 240, 117904.	3.2	9

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55	Numerical analysis and experimental validation for static loads of a composite bridge structure. <i>Composite Structures</i> , 2003, 62, 235-243.	3.1	8
56	Modelling of an IPC-concrete modular pedestrian bridge. <i>Computers and Structures</i> , 2002, 80, 2133-2144.	2.4	7
57	Study of strength durability models for GRC: Theoretical overview. <i>Composites Part A: Applied Science and Manufacturing</i> , 2009, 40, 2020-2030.	3.8	7
58	Durability models for GRC: uncertainties on strength predictions. <i>Plastics, Rubber and Composites</i> , 2012, 41, 77-87.	0.9	7
59	Validation of digital image correlation technique for impact loading applications. , 2009, , .		7
60	Use of Local Raw Materials for Construction Purposes. <i>Advances in Science and Technology</i> , 0, , .	0.2	6
61	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
62	Flexural impact response of textile reinforced inorganic phosphate cement composites (TRC). <i>Construction and Building Materials</i> , 2018, 163, 296-304.	3.2	6
63	Mineral Polymer Matrix Composites. , 1989, , 587-592.		6
64	Strength representation of concrete and other materials in the octahedral stress space. <i>Cement and Concrete Research</i> , 1982, 12, 625-631.	4.6	4
65	Mineral polymer tooling system for making prototype fibre reinforced composite parts. <i>Journal of Materials Processing Technology</i> , 1995, 48, 757-764.	3.1	4
66	MEASUREMENT OF THE DURABILITY OF GLASS FIBRE REINFORCED CONCRETE AND INFLUENCE OF MATRIX ALKALINITY. , 2003, , 163-172.		4
67	Evaluation of the strand in cement (SIC) test for GRCs with improved durability. <i>Materials and Structures/Materiaux Et Constructions</i> , 2008, 41, 1109-1116.	1.3	4
68	Construction and Experimental Analysis of a Pedestrian Bridge with Concrete Deck and IPC Truss Girder. <i>Science and Engineering of Composite Materials</i> , 2004, 11, .	0.6	2
69	The Effect of Durability on the Design of Self-Bearing Sandwich Panels with Cementitious Composite Faces. , 2006, , 99-108.		2
70	Durability aspects of AR-glass-reinforcement in textile reinforced concrete, Part 2: Modelling and exposure to outdoor weathering. , 2007, , 389-395.		2
71	Industrial Processing Technique for Textile Reinforced Cement Composites with Structural Use. <i>RILEM Bookseries</i> , 2012, , 511-518.	0.2	2
72	Repeated Loading of Cement Composite Sandwich Beams. <i>Proceedings (mdpi)</i> , 2018, 2, .	0.2	1

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73	Editorial on Special Issue "Textile-Reinforced Cement Composites: New Insights into Structural and Material Engineering", Applied Sciences (Switzerland), 2020, 10, 576.	1.3	1
74	Modeling a Modular Pedestrian Bridge Composed of a Concrete Deck and a Truss Girder with IPC Sandwich Panels. , 0, , .		1
75	Experimental and numerical study of pultruded composite tubes under blast loading. , 2009, , .		1
76	Fracture Mechanical Characterisation of Mineral Polymer matrix Composites.. , 1991, , 83-92.		1
77	Influence of Weathering Conditions on TRC Sandwich Renovation Panels. RILEM Bookseries, 2018, , 659-667.	0.2	1
78	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.	0.7	0
79	Tensile behaviour of different high performance fibre reinforced cements. , 2012, , 145-154.		0
80	Determination of linear thermal expansion coefficient by using digital image correlation. , 2012, , 421-425.		0
81	Influence of geometry on the fracturing behavior of textile reinforced cement monitored by acoustic emission. Proceedings of SPIE, 2014, , .	0.8	0
82	Investigation of 3D TRC™s by Means of Three Point Bending Tests on Short Beam Specimens. Proceedings (mdpi), 2018, 2, 397.	0.2	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.	0.7	0
84	Experimental and Numerical Analysis of Matrix Cracking in Brittle Composites. , 2003, , 95-108.		0
85	Design and Experimental Analysis of Modular Pedestrian Bridge with Concrete Deck and IPC Truss Girder. , 2003, , 325-335.		0
86	Modular grid-based design concept for fibre reinforced composite shells. WIT Transactions on the Built Environment, 2006, , .	0.0	0
87	Numerical axial impact study of pultruded circular and square composite tubes. , 2009, , .		0
88	IMPACT STUDY OF TEXTILE REINFORCED CEMENTITIOUS MATERIALS: TEST METHOD AND PRELIMINARY RESULTS. , 2009, , 111-120.		0
89	Study of blast load on recyclable empty metal cans. , 2009, , .		0
90	Study of the crack pattern and its evolution by DIC of RC beams externally reinforced with TRC and CFRP. , 2015, , 116-116.		0

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91	Experimental Investigation and Benchmarking of 3D Textile Reinforced Cementitious Composites. RILEM Bookseries, 2018, , 400-408.	0.2	0
92	Buckling Behaviour of Structural Insulating Sandwich Walls with Textile Reinforced Cement Faces. RILEM Bookseries, 2018, , 535-543.	0.2	0