

# Jaime Mata-Falc3n

## List of Publications by Year in descending order

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Version: 2024-02-01

31  
papers

1,075  
citations

687363

13  
h-index

454955

30  
g-index

31  
all docs

31  
docs citations

31  
times ranked

518  
citing authors

#	ARTICLE	IF	CITATIONS
1	Refined extraction of crack characteristics in large-scale concrete experiments based on digital image correlation. <i>Engineering Structures</i> , 2022, 251, 113486.	5.3	39
2	Structural Design and Testing of Digitally Manufactured Concrete Structures. <i>RILEM State-of-the-Art Reports</i> , 2022, , 187-222.	0.7	3
3	Application of Distributed Fibre Optical Sensing in Reinforced Concrete Elements Subjected to Monotonic and Cyclic Loading. <i>Sensors</i> , 2022, 22, 2023.	3.8	19
4	Effective reinforcement ratio of <math>RC</math> beams: Validation of modelling assumptions with high-resolution strain data. <i>Structural Concrete</i> , 2022, 23, 1353-1369.	3.1	8
5	Towards efficient concrete structures with ultra-thin 3D printed formwork: exploring reinforcement strategies and optimisation. <i>Virtual and Physical Prototyping</i> , 2022, 17, 599-616.	10.4	8
6	Analysis of the tension chord in the flexural response of concrete elements: Methodology and application to weft-knitted textile reinforcement. <i>Engineering Structures</i> , 2022, 261, 114270.	5.3	7
7	Digitally Fabricated Keyed Concrete Connections. <i>RILEM Bookseries</i> , 2022, , 241-246.	0.4	1
8	Mesh Mould Prefabrication. <i>RILEM Bookseries</i> , 2022, , 31-36.	0.4	3
9	Pre-installed Reinforcement for 3D Concrete Printing. <i>RILEM Bookseries</i> , 2022, , 430-435.	0.4	2
10	Influence of short glass fibres and spatial features on the mechanical behaviour of weft-knitted textile reinforced concrete elements in bending. <i>Construction and Building Materials</i> , 2022, 344, 128167.	7.2	7
11	Inter-laboratory study on the influence of 3D concrete printing set-ups on the bond behaviour of various reinforcements. <i>Cement and Concrete Composites</i> , 2022, 133, 104660.	10.7	13
12	Structural behaviour of 3D printed concrete beams with various reinforcement strategies. <i>Engineering Structures</i> , 2021, 240, 112380.	5.3	68
13	Structural design possibilities of reinforced concrete beams using eggshell. , 2021, , .		2
14	Aligned Interlayer Fibre Reinforcement for Digital Fabrication with Concrete. <i>RILEM Bookseries</i> , 2021, , 87-98.	0.4	6
15	Load-deformation behaviour of weft-knitted textile reinforced concrete in uniaxial tension. <i>Materials and Structures/Materiaux Et Constructions</i> , 2021, 54, 210.	3.1	15
16	Fundamental Studies on the Use of Distributed Fibre Optical Sensing on Concrete and Reinforcing Bars. <i>Sensors</i> , 2021, 21, 7643.	3.8	27
17	Cracked Membrane Model with Fixed, Interlocked Cracks: Numerical Implementation and Validation. <i>Journal of Structural Engineering</i> , 2020, 146, .	3.4	7
18	Combined application of distributed fibre optical and digital image correlation measurements to structural concrete experiments. <i>Engineering Structures</i> , 2020, 225, 111309.	5.3	58

#	ARTICLE	IF	CITATIONS
19	Structural stay-in-place formwork for robotic in situ fabrication of non-standard concrete structures: A real scale architectural demonstrator. <i>Automation in Construction</i> , 2020, 115, 103197.	9.8	63
20	Opportunities and challenges for structural engineering of digitally fabricated concrete. <i>Cement and Concrete Research</i> , 2020, 133, 106079.	11.0	117
21	Eggshell: Ultra-Thin Three-Dimensional Printed Formwork for Concrete Structures. <i>3D Printing and Additive Manufacturing</i> , 2020, 7, 48-59.	2.9	54
22	Design and Fabrication of a Non-standard, Structural Concrete Column Using Eggshell: Ultra-Thin, 3D Printed Formwork. <i>RILEM Bookseries</i> , 2020, , 1104-1115.	0.4	8
23	Aligned Interlayer Fibre Reinforcement and Post-tensioning as a Reinforcement Strategy for Digital Fabrication. <i>RILEM Bookseries</i> , 2020, , 622-631.	0.4	9
24	From Smart Dynamic Casting to a growing family of Digital Casting Systems. <i>Cement and Concrete Research</i> , 2020, 134, 106071.	11.0	62
25	Automated crack detection and measurement based on digital image correlation. <i>Construction and Building Materials</i> , 2020, 256, 119383.	7.2	133
26	Potential Approaches for Reinforcing Complex Concrete Structures with Integrated Flexible Formwork. <i>RILEM Bookseries</i> , 2020, , 669-679.	0.4	7
27	Proposal and experimental validation of simplified strut-and-tie models on dapped-end beams. <i>Engineering Structures</i> , 2019, 183, 594-609.	5.3	34
28	Exploiting the Potential of Digital Fabrication for Sustainable and Economic Concrete Structures. <i>RILEM Bookseries</i> , 2019, , 157-166.	0.4	20
29	Compression Field Analysis of Fiber-Reinforced Concrete Based on Cracked Membrane Model. <i>ACI Structural Journal</i> , 2019, 116, .	0.2	11
30	Rethinking reinforcement for digital fabrication with concrete. <i>Cement and Concrete Research</i> , 2018, 112, 111-121.	11.0	257
31	Future directions for research on shear in structural concrete. <i>Fibre-reinforced Concrete: From Design To Structural Applications</i> , 2018, , 323-336.	0.0	7