Gary B Marquis

List of Publications by Year
in descending order

72	1,631	304743	330143
papers	citations	22 h-index	37 g-index

73	73	73	775
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fatigue strength improvement factors for high strength steel welded joints treated by high frequency mechanical impact. International Journal of Fatigue, 2012, 44, 168-176.	5.7	109
2	Fatigue strength improvement of steel structures by high-frequency mechanical impact: proposed fatigue assessment guidelines. Welding in the World, Le Soudage Dans Le Monde, 2013, 57, 803-822.	2.5	103
3	Finite element methods for structural hot spot stress determinationâ€"a comparison of procedures. International Journal of Fatigue, 2004, 26, 1147-1157.	5.7	84
4	A review of multiaxial fatigue of weldments: experimental results, design code and critical plane approaches. Fatigue and Fracture of Engineering Materials and Structures, 2001, 24, 279-291.	3.4	68
5	The effect of nanotubes waviness on mechanical properties of CNT/SMP composites. Composites Science and Technology, 2013, 86, 164-169.	7.8	68
6	Overview of Fatigue Data for High Frequency Mechanical Impact Treated Welded Joints. Welding in the World, Le Soudage Dans Le Monde, 2012, 56, 82-96.	2.5	64
7	Failure modes and fatigue strength of improved HSS welds. Engineering Fracture Mechanics, 2010, 77, 2051-2062.	4.3	59
8	IIW Recommendations for the HFMI Treatment. IIW Collection, 2016, , .	0.1	59
9	Fatigue strength improvement of steel structures by high-frequency mechanical impact: proposed procedures and quality assurance guidelines. Welding in the World, Le Soudage Dans Le Monde, 2014, 58, 19-28.	2.5	55
10	Fatigue assessment of high frequency mechanical impact (HFMI)-improved fillet welds by local approaches. International Journal of Fatigue, 2013, 52, 57-67.	5.7	54
11	Development of Weld Quality Criteria Based on Fatigue Performance. Welding in the World, Le Soudage Dans Le Monde, 2011, 55, 79-88.	2.5	47
12	A round robin study of high-frequency mechanical impact (HFMI)-treated welded joints subjected to variable amplitude loading. Welding in the World, Le Soudage Dans Le Monde, 2013, 57, 437.	2.5	45
13	A fatigue assessment method based on weld stress. International Journal of Fatigue, 2006, 28, 1037-1046.	5.7	37
14	Effect of hydrogen on Mode II fatigue crack behavior of tempered bearing steel and microstructural changes. International Journal of Fatigue, 2010, 32, 943-951.	5.7	37
15	A parametric fracture mechanics study of welded joints with toe cracks and lack of penetration. Engineering Fracture Mechanics, 2005, 72, 1580-1609.	4.3	36
16	A simplified fatigue assessment method for high quality welded cruciform joints. International Journal of Fatigue, 2009, 31, 79-87.	5.7	35
17	Mechanical and real microstructure behavior analysis of particulate-reinforced nanocomposite considering debonding damage based on cohesive finite element method. Composite Structures, 2015, 122, 518-525.	5.8	33
18	Fatigue analysis of non-load-carrying fillet welded cruciform joints. Engineering Fracture Mechanics, 2007, 74, 399-415.	4.3	32

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19	Micromechanical modeling of nanocomposites considering debonding and waviness of reinforcements. Composite Structures, 2014, 110, 1-6.	5.8	30
20	A finite element study on residual stress stability and fatigue damage in high-frequency mechanical impact (HFMI)-treated welded joint. International Journal of Fatigue, 2017, 94, 16-29.	5.7	30
21	Lightweight design with welded high-frequency mechanical impact (HFMI) treated high-strength steel joints from S700 under constant and variable amplitude loadings. International Journal of Fatigue, 2016, 91, 466-474.	5.7	28
22	A Guideline for Fatigue Strength Improvement of High Strength Steel Welded Structures Using High Frequency Mechanical Impact Treatment. Procedia Engineering, 2013, 66, 98-107.	1.2	26
23	Interaction effect of adjacent small defects on the fatigue limit of a medium carbon steel. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 130-144.	3.4	22
24	Fatigue strength evaluation of small defect at stress concentration. Procedia Structural Integrity, 2017, 7, 351-358.	0.8	22
25	Material characterization of high-frequency mechanical impact (HFMI)-treated high-strength steel. Materials and Design, 2016, 89, 205-214.	7.0	20
26	The influence of interacting small defects on the fatigue limits of a pure iron and a bearing steel. International Journal of Fatigue, 2020, 135, 105560.	5.7	20
27	LONG LIFE SPECTRUM FATIGUE OF CARBON AND STAINLESS STEEL WELDS. Fatigue and Fracture of Engineering Materials and Structures, 1996, 19, 739-753.	3.4	19
28	Mesoscale modelling of crack nucleation from defects in steel. International Journal of Fatigue, 2012, 41, 64-71.	5.7	19
29	Fatigue crack growth behavior of amorphous particulate reinforced composites. Composite Structures, 2016, 153, 782-790.	5.8	19
30	Application studies for fatigue strength improvement of welded structures by high-frequency mechanical impact (HFMI) treatment. Engineering Structures, 2016, 106, 422-435.	5.3	19
31	Behavior of Compressive Residual Stresses in High Strength Steel Welds Induced by High Frequency Mechanical Impact Treatment. Journal of Pressure Vessel Technology, Transactions of the ASME, 2014, 136, .	0.6	17
32	Fatigue assessment of highâ€frequency mechanical impact (HFMI)â€treated welded joints subjected to high mean stresses and spectrum loading. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 1167-1180.	3.4	17
33	Microstructure-sensitive investigation on the plastic deformation and damage initiation of amorphous particles reinforced composites. Composite Structures, 2016, 142, 130-139.	5.8	17
34	A parametric shear damage evolution model for combined clamped and adhesively bonded interfaces. Engineering Fracture Mechanics, 2011, 78, 163-174.	4.3	16
35	Fatigue design of axially-loaded high frequency mechanical impact treated welds by the effective notch stress method. Materials & Design, 2014, 58, 543-550.	5.1	16
36	IIW Recommendations on High Frequency Mechanical Impact (HFMI) Treatment for Improving the Fatigue Strength of Welded Joints. IIW Collection, 2016, , 1-34.	0.1	16

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37	Interaction equations for multiaxial fatigue assessment of welded structures. Fatigue and Fracture of Engineering Materials and Structures, 2004, 27, 991-1003.	3.4	15
38	Observations on fatigue crack paths in the corners of cold-formed high-strength steel tubes. Engineering Fracture Mechanics, 2008, 75, 833-844.	4.3	15
39	Lightweight Potential of Welded High-strength Steel Joints from S700 Under Constant and Variable Amplitude Loading by High-frequency Mechanical Impact (HFMI) Treatment. Procedia Engineering, 2015, 101, 467-475.	1.2	15
40	Shear decohesion of clamped abraded steel interfaces reinforced with epoxy adhesive. International Journal of Adhesion and Adhesives, 2011, 31, 550-558.	2.9	14
41	Notch stress analyses of highâ€frequency mechanical impactâ€improved welds by using Ï‹sub›f‹/sub›â€‰‹b›=â€‰1â€‰mm and Ï‹sub›f‹/sub›â€‰=â€‰Ïâ€‰+â€‰1â€‰mm approaches‹/b›. Fatigue and Fracture of Materials and Structures, 2014, 37, 561-569.	1.8	13
42	Fatigue Life Assessment of Welded Joints by the Equivalent Crack Length Method. , 2014, 3, 1822-1827.		13
43	Fatigue Life Estimation of Ultrasonic Impact Treated Welds Using a Local Strain Approach. Steel Research International, 2006, 77, 896-900.	1.8	12
44	Micromechanical modeling of nanocomposites considering debonding of reinforcements. Composites Science and Technology, 2014, 93, 38-45.	7.8	12
45	Equivalent crack approach for fatigue life assessment of welded joints. Engineering Fracture Mechanics, 2015, 149, 144-155.	4.3	12
46	Pattern optimization of eccentrically loaded multi-fastener joints. Structural and Multidisciplinary Optimization, 2010, 40, 597-609.	3.5	9
47	Shear damage simulation of adhesive reinforced bolted lap-connection interfaces. Engineering Fracture Mechanics, 2013, 109, 341-352.	4.3	8
48	Fatigue experiments and finite element analysis of bolted/bonded double lap joints. Welding in the World, Le Soudage Dans Le Monde, 2014, 58, 771-785.	2.5	8
49	An efficient stress intensity factor evaluation method for interacting arbitrary shaped 3D cracks. Theoretical and Applied Fracture Mechanics, 2020, 109, 102767.	4.7	7
50	Influence of mechanical mismatching on the failure of welded joints by void nucleation and coalescence. International Journal of Pressure Vessels and Piping, 2003, 80, 647-654.	2.6	6
51	Long-life multiaxial fatigue of a nodular graphite cast iron. European Structural Integrity Society, 2003, , 105-122.	0.1	6
52	Modelling and fatigue life assessment of complex structures. Materialwissenschaft Und Werkstofftechnik, 2005, 36, 678-684.	0.9	6
53	Fatigue of bonded steel interfaces under cyclic shear loading and static normal stress. Engineering Fracture Mechanics, 2011, 78, 1644-1656.	4.3	6
54	Shear fatigue of the bonded and frictional interface under constant normal pre-stress. International Journal of Fatigue, 2015, 70, 1-12.	5.7	5

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55	A constitutive model for interface problems with frictional contact and cohesion. European Journal of Mechanics, A/Solids, 2015, 49, 205-213.	3.7	5
56	An aging aircraft's wing under complex multiaxial spectrum loading: Fatigue assessment and repairing. International Journal of Fatigue, 2006, 28, 652-656.	5.7	4
57	Development of Data Sheets for Statistical Evaluation of Fatigue Data. Journal of Iron and Steel Research International, 2011, 18, 70-78.	2.8	4
58	Fatigue crack growth of arbitrary planar cracks in welded components. Welding in the World, Le Soudage Dans Le Monde, 2013, 57, 425.	2.5	4
59	Behavior of Compressive Residual Stresses in High Strength Steel Welds Induced by High Frequency Mechanical Impact Treatment. , 2013, , .		4
60	State-of-the-art and future trends in multiaxial fatigue assessment. Materialpruefung/Materials Testing, 2005, 47, 260-266.	2.2	4
61	Crack propagation under cyclic hydraulic pressure loading. International Journal of Fatigue, 1997, 19, 543-550.	5.7	3
62	Experimental Verification of HFMI Treatment of Large Structures. , 2014, , .		3
63	Fatigue improvement of welded steel joints by high frequency mechanical impact treatment. Materialwissenschaft Und Werkstofftechnik, 2015, 46, 136-144.	0.9	3
64	The effect of interacting small defects on the fatigue limit of a medium carbon steel. Procedia Structural Integrity, 2016, 2, 3322-3329.	0.8	3
65	Assessment of Subzero Fracture of Welded Tubular K-Joint. Journal of Structural Engineering, 2008, 134, 181-188.	3.4	2
66	Durability of advanced fabricated structures. Materialwissenschaft Und Werkstofftechnik, 2011, 42, 1050-1058.	0.9	2
67	The effect of clamping stress on the fatigue strength of bonded high-strength steel interfaces. Welding in the World, Le Soudage Dans Le Monde, 2013, 57, 285.	2.5	2
68	Improving the Accuracy of Structural Hot-spot Stress Approach. Steel Research International, 2006, 77, 901-905.	1.8	1
69	Endurance Limit Design of Spheroidal Graphite Cast Iron Components Based on Natural Defects. , 2000, , 411-426.		1
70	A Method for Obtaining the Dynamic Stress History from a Flexible Multibody Simulation Using Sub-Modeling#. Mechanics Based Design of Structures and Machines, 2013, 41, 316-336.	4.7	0
71	High Cycle Variable Amplitude Fatigue of a Nodular Cast Iron. , 2005, , 215-231.		0
72	Service Load Fatigue Testing of Railway Bogie Components. , 0, , 342-342-13.		0