Gary B Marquis

List of Publications by Year
in descending order

72 papers	1,631 citations	304743 22 h-index	330143 37 g-index
73 all docs	73 docs citations	73 times ranked	775 citing authors

#	Article	IF	Citations
1	An efficient stress intensity factor evaluation method for interacting arbitrary shaped 3D cracks. Theoretical and Applied Fracture Mechanics, 2020, 109, 102767.	4.7	7
2	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
3	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
4	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
5	Fatigue strength evaluation of small defect at stress concentration. Procedia Structural Integrity, 2017, 7, 351-358.	0.8	22
6	IIW Recommendations for the HFMI Treatment. IIW Collection, 2016, , .	0.1	59
7	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
8	Fatigue crack growth behavior of amorphous particulate reinforced composites. Composite Structures, 2016, 153, 782-790.	5.8	19
9	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
10	Microstructure-sensitive investigation on the plastic deformation and damage initiation of amorphous particles reinforced composites. Composite Structures, 2016, 142, 130-139.	5.8	17
11	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
12	Material characterization of high-frequency mechanical impact (HFMI)-treated high-strength steel. Materials and Design, 2016, 89, 205-214.	7.0	20
13	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
14	Fatigue improvement of welded steel joints by high frequency mechanical impact treatment. Materialwissenschaft Und Werkstofftechnik, 2015, 46, 136-144.	0.9	3
15	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
16	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
17	Equivalent crack approach for fatigue life assessment of welded joints. Engineering Fracture Mechanics, 2015, 149, 144-155.	4.3	12
18	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

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19	Shear fatigue of the bonded and frictional interface under constant normal pre-stress. International Journal of Fatigue, 2015, 70, 1-12.	5.7	5
20	A constitutive model for interface problems with frictional contact and cohesion. European Journal of Mechanics, A/Solids, 2015, 49, 205-213.	3.7	5
21	Notch stress analyses of highâ€frequency mechanical impactâ€improved welds by using Ï_fâ€‰=â€‰1â€‰mm and Ï_fâ€‰=â€‰Ïâ€‰+â€‰1â€‰mm approaches. Fatigue and Fracture of Materials and Structures, 2014, 37, 561-569.	3.4	13
22	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
23	Micromechanical modeling of nanocomposites considering debonding and waviness of reinforcements. Composite Structures, 2014, 110, 1-6.	5.8	30
24	Micromechanical modeling of nanocomposites considering debonding of reinforcements. Composites Science and Technology, 2014, 93, 38-45.	7.8	12
25	Fatigue Life Assessment of Welded Joints by the Equivalent Crack Length Method. , 2014, 3, 1822-1827.		13
26	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
27	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
28	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
29	Experimental Verification of HFMI Treatment of Large Structures. , 2014, , .		3
30	The effect of nanotubes waviness on mechanical properties of CNT/SMP composites. Composites Science and Technology, 2013, 86, 164-169.	7.8	68
31	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
32	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
33	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
34	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
35	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
36	Shear damage simulation of adhesive reinforced bolted lap-connection interfaces. Engineering Fracture Mechanics, 2013, 109, 341-352.	4.3	8

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37	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
38	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
39	Behavior of Compressive Residual Stresses in High Strength Steel Welds Induced by High Frequency Mechanical Impact Treatment. , 2013, , .		4
40	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
41	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
42	Mesoscale modelling of crack nucleation from defects in steel. International Journal of Fatigue, 2012, 41, 64-71.	5.7	19
43	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
44	Development of Data Sheets for Statistical Evaluation of Fatigue Data. Journal of Iron and Steel Research International, 2011, 18, 70-78.	2.8	4
45	Fatigue of bonded steel interfaces under cyclic shear loading and static normal stress. Engineering Fracture Mechanics, 2011, 78, 1644-1656.	4.3	6
46	Durability of advanced fabricated structures. Materialwissenschaft Und Werkstofftechnik, 2011, 42, 1050-1058.	0.9	2
47	A parametric shear damage evolution model for combined clamped and adhesively bonded interfaces. Engineering Fracture Mechanics, 2011, 78, 163-174.	4.3	16
48	Shear decohesion of clamped abraded steel interfaces reinforced with epoxy adhesive. International Journal of Adhesion and Adhesives, 2011, 31, 550-558.	2.9	14
49	Pattern optimization of eccentrically loaded multi-fastener joints. Structural and Multidisciplinary Optimization, 2010, 40, 597-609.	3.5	9
50	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
51	Failure modes and fatigue strength of improved HSS welds. Engineering Fracture Mechanics, 2010, 77, 2051-2062.	4.3	59
52	A simplified fatigue assessment method for high quality welded cruciform joints. International Journal of Fatigue, 2009, 31, 79-87.	5.7	35
53	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
54	Assessment of Subzero Fracture of Welded Tubular K-Joint. Journal of Structural Engineering, 2008, 134, 181-188.	3.4	2

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55	Fatigue analysis of non-load-carrying fillet welded cruciform joints. Engineering Fracture Mechanics, 2007, 74, 399-415.	4.3	32
56	Fatigue Life Estimation of Ultrasonic Impact Treated Welds Using a Local Strain Approach. Steel Research International, 2006, 77, 896-900.	1.8	12
57	Improving the Accuracy of Structural Hot-spot Stress Approach. Steel Research International, 2006, 77, 901-905.	1.8	1
58	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
59	A fatigue assessment method based on weld stress. International Journal of Fatigue, 2006, 28, 1037-1046.	5.7	37
60	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
61	Modelling and fatigue life assessment of complex structures. Materialwissenschaft Und Werkstofftechnik, 2005, 36, 678-684.	0.9	6
62	State-of-the-art and future trends in multiaxial fatigue assessment. Materialpruefung/Materials Testing, 2005, 47, 260-266.	2.2	4
63	High Cycle Variable Amplitude Fatigue of a Nodular Cast Iron. , 2005, , 215-231.		0
64	Interaction equations for multiaxial fatigue assessment of welded structures. Fatigue and Fracture of Engineering Materials and Structures, 2004, 27, 991-1003.	3.4	15
65	Finite element methods for structural hot spot stress determinationâ€"a comparison of procedures. International Journal of Fatigue, 2004, 26, 1147-1157.	5.7	84
66	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
67	Long-life multiaxial fatigue of a nodular graphite cast iron. European Structural Integrity Society, 2003, , 105-122.	0.1	6
68	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
69	Endurance Limit Design of Spheroidal Graphite Cast Iron Components Based on Natural Defects. , 2000, , 411-426.		1
70	Crack propagation under cyclic hydraulic pressure loading. International Journal of Fatigue, 1997, 19, 543-550.	5.7	3
71	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
72	Service Load Fatigue Testing of Railway Bogie Components. , 0, , 342-342-13.		0