Haym Benaroya

List of Publications by Year
in descending order

91 papers	2,561 citations	471371 17 h-index	197736 49 g-index
103 all docs	103 docs citations	103 times ranked	1750 citing authors

#	Article	IF	Citations
1	DYNAMICS OF TRANSVERSELY VIBRATING BEAMS USING FOUR ENGINEERING THEORIES. Journal of Sound and Vibration, 1999, 225, 935-988.	2.1	706
2	An overview of modeling and experiments of vortex-induced vibration of circular cylinders. Journal of Sound and Vibration, 2005, 282, 575-616.	2.1	548
3	Review of force reconstruction techniques. Journal of Sound and Vibration, 2014, 333, 2999-3018.	2.1	185
4	Structural Design of a Lunar Habitat. Journal of Aerospace Engineering, 2006, 19, 133-157.	0.8	115
5	Engineering of lunar bases. Acta Astronautica, 2008, 62, 277-299.	1.7	80
6	Engineering, Design and Construction of Lunar Bases. Journal of Aerospace Engineering, 2002, 15, 33-45.	0.8	78
7	Dynamic Response of Compliant Offshore Structuresâ€"Review. Journal of Aerospace Engineering, 1996, 9, 114-131.	0.8	51
8	Dynamics of Periodic and Near-Periodic Structures. Applied Mechanics Reviews, 1992, 45, 447-459.	4.5	42
9	Mechanical Vibration. , 0, , .		41
10	NON-LINEAR COUPLED TRANSVERSE AND AXIAL VIBRATION OF A COMPLIANT STRUCTURE, PART 1: FORMULATION AND FREE VIBRATION. Journal of Sound and Vibration, 2000, 237, 837-873.	2.1	39
11	A structural assessment of unrefined sintered lunar regolith simulant. Acta Astronautica, 2017, 140, 517-536.	1.7	39
12	Lunar habitats: A brief overview of issues and concepts. Reach, 2017, 7-8, 14-33.	0.4	39
13	HAMILTON'S PRINCIPLE FOR EXTERNAL VISCOUS FLUIDâ€"STRUCTURE INTERACTION. Journal of Sound and Vibration, 2000, 238, 113-145.	2.1	34
14	Random eigenvalues, algebraic methods and structural dynamic models. Applied Mathematics and Computation, 1992, 52, 37-66.	1.4	33
15	NON-LINEAR DYNAMICS OF AN ARTICULATED TOWER IN THE OCEAN. Journal of Sound and Vibration, 1996, 190, 77-103.	2.1	27
16	NON-LINEAR COUPLED TRANSVERSE AND AXIAL VIBRATION OF A COMPLIANT STRUCTURE, PART 2: FORCED VIBRATION. Journal of Sound and Vibration, 2000, 237, 875-900.	2.1	24
17	Regolith Mechanics, Dynamics, and Foundations. Journal of Aerospace Engineering, 1992, 5, 214-229.	0.8	23
18	An Overview of Lunar Base Structures: Past and Future. , 2002, , .		19

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19	Tensile-Integrity Structures for the Moon. Applied Mechanics Reviews, 1993, 46, 326-335.	4.5	18
20	Utilizing the Analytical Hierarchy Process to determine the optimal lunar habitat configuration. Acta Astronautica, 2020, 173, 145-154.	1.7	18
21	Framework for Evaluation of Lunar Base Structural Concepts. Journal of Aerospace Engineering, 1992, 5, 187-198.	0.8	17
22	Reliability of structures for the moon. Structural Safety, 1994, 15, 67-84.	2.8	16
23	Publicâ€“private models for lunar development and commerce. Space Policy, 2005, 21, 267-275.	0.8	16
24	Modelling vortex-induced fluidâ€“structure interaction. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 1231-1274.	1.6	16
25	Mechanical Vibration. , 0, , .		16
26	Dynamic response of an axially loaded tendon of a tension leg platform. Journal of Sound and Vibration, 2006, 293, 38-58.	2.1	15
27	Design of a Lunar Surface Structure. I: Design Configuration and Thermal Analysis. Journal of Aerospace Engineering, 2015, 28, .	0.8	14
28	Review of control surface freeplay. Progress in Aerospace Sciences, 2021, 127, 100729.	6.3	14
29	Response of a tension leg platform to stochastic wave forces. Probabilistic Engineering Mechanics, 1999, 14, 3-17.	1.3	13
30	Hybrid lunar inflatable structure. Acta Astronautica, 2021, 179, 42-55.	1.7	13
31	Nonlinear and Stochastic Dynamics of Compliant Offshore Structures. Solid Mechanics and Its Applications, 2002, , .	0.1	13
32	Magnesium as an ISRU-Derived Resource for Lunar Structures. Journal of Aerospace Engineering, 2013, 26, 152-159.	0.8	12
33	Special Issue on In Situ Resource Utilization. Journal of Aerospace Engineering, 2013, 26, 1-4.	0.8	12
34	Building Habitats on the Moon. , 2018, , .		12
35	Brain energetics, mitochondria, and traumatic brain injury. Reviews in the Neurosciences, 2020, 31, 363-390.	1.4	12
36	Parametric Random Excitation. I: Exponentially Correlated Parameters. Journal of Engineering Mechanics - ASCE, 1987, 113, 861-874.	1.6	11

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37	The Neumann series/Born approximation applied to parametrically excited stochastic systems. Probabilistic Engineering Mechanics, 1987, 2, 74-81.	1.3	11
38	Applied Mechanics of Lunar Exploration and Development. Applied Mechanics Reviews, 1993, 46, 272-277.	4.5	11
39	NON-LINEAR STOCHASTIC DYNAMICS OF TENSION LEG PLATFORMS. Journal of Sound and Vibration, 1999, 220, 27-65.	2.1	11
40	Design of a Lunar Surface Structure. II: Seismic Structural Analysis. Journal of Aerospace Engineering, 2015, 28, .	0.8	11
41	Waves, normal modes and frequencies in periodic and near-periodic rods. Part I. Wave Motion, 1994, 20, 315-338.	1.0	10
42	Waves, normal modes and frequencies in periodic and near-periodic rods. Part II. Wave Motion, 1994, 20, 339-358.	1.0	10
43	Comparison of linear and nonlinear responses of a compliant tower to random wave forces. Chaos, Solitons and Fractals, 2002, 14, 269-291.	2.5	10
44	Economic and Technical Issues for Lunar Development. Journal of Aerospace Engineering, 1998, 11, 111-118.	0.8	9
45	Cable Structures and Lunar Environment. Journal of Aerospace Engineering, 1992, 5, 297-310.	0.8	7
46	Special Issue on Localization and the Effects of Irregularities in Structures. Applied Mechanics Reviews, 1996, 49, 56-56.	4.5	7
47	An examination of non-linear and passive technology transfer in the space sector: Consideration of the Contingent Effectiveness Model as a basis for formal modeling. Space Policy, 2016, 38, 39-47.	0.8	7
48	Vibration localization in multi-coupled and multi-dimensional near-periodic structures. Wave Motion, 1996, 23, 67-82.	1.0	6
49	Special Issue on Applied Mechanics of a Lunar Base. Applied Mechanics Reviews, 1993, 46, 266-266.	4.5	5
50	The lunar environment. , 2018, , 42-84.		5
51	Parametric Random Excitation. II: Whiteâ€Noise Parameters. Journal of Engineering Mechanics - ASCE, 1987, 113, 875-884.	1.6	4
52	ISRUs on Moon and Mars Create Synergistic Interdependencies. , 2006, , 1.		4
53	Space Colony from a Commercial Asteroid Mining Company Town. AIP Conference Proceedings, 2008, , .	0.3	4
54	Investigation of Monte Carlo simulation in FAA program KRASH. Journal of Aircraft, 1994, 31, 367-375.	1.7	3

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55	Performance-Based Engineering for Lunar Settlements. , 2006, , 1.		3
56	Dynamics of a Duffing nanomechanical resonator coupled to a single-electron transistor: A master equation approach. Physical Review B, 2008, 78, .	1.1	3
57	A Parameter Study of Localization. Shock and Vibration, 1996, 3, 1-10.	0.3	2
58	Reliability and damage. , 2018, , 249-285.		2
59	Random Eigenvalues and Structural Dynamic Models. , 1991, , 11-32.		2
60	DYNAMIC MODELLING OF TENSION LEG PLATFORMS. , 1998, , 279-303.		2
61	Markov chain transition probabilities and experimental data. Applied Mathematics and Computation, 1989, 29, 107-121.	1.4	1
62	A discrete inverse vibration problem with parameter uncertainty. Applied Mathematics and Computation, 1995, 69, 313-333.	1.4	1
63	Wave localization in disordered periodic laminated materials. , 1995, , .		1
64	Wave propagation and localization in disordered periodic laminated materials. Composite Structures, 1996, 36, 59-70.	3.1	1
65	A Large Deflection Model for Thin, Rectangular Plates Subjected to Blast Loading. , 2006, , .		1
66	ISRU for Lunar Surface Structures. , 2008, , .		1
67	Understanding mitochondria and the utility of optimization as a canonical framework for identifying and modeling mitochondrial pathways. Reviews in the Neurosciences, 2022, 33, 657-690.	1.4	1
68	Nonrecursive statistics for integral equation solutions. Applied Mathematics and Computation, 1987, 24, 275-280.	1.4	0
69	Probabilistic aircraft structural dynamics models. , 1991, , .		0
70	Random eigenvalues and aging aircraft structural dynamic models - Aninverse problem. , 1991, , .		0
71	Reliability of structures for the moon. , 1995, , .		0
72	Reflections on Fifty Years. Applied Mechanics Reviews, 1997, 50, T17-T18.	4.5	0

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73	Economically Viable Lunar Development. , 1998, , 780.		0
74	The Great Debate: The Moon First. , 2000, , 438.		0
75	Commerce at a Lunar Base. , 2000, , 234.		0
76	Nanotechnology: An Overview for Space Applications. , 2002, , 1.		0
77	Study of the Mechanical Properties of Single-Walled Carbon Nanotubes. , 2008, , .		0
78	Rutgers 2007 Symposium on Lunar Settlements. , 2008, , .		0
79	A Holistic Approach to Lunar Settlements. , 2010, , .		0
80	Magnesium As an ISRU-Derived Resource for Lunar Structures. , 2012, , .		0
81	Advanced methodologies. , 2018, , 299-306.		0
82	Overview and context. , 2018, , 12-41.		0
83	Thermal design. , 2018, , 208-223.		0
84	Extended Hamiltonâ€™S Principle for Fluid-Structure Interaction. Fluid Mechanics and Its Applications, 2003, , 491-506.	0.1	0
85	Extended Hamiltonâ€™s Principle for Fluid-Structure Interaction. , 2003, , .		0
86	Mars 2034â€“2169. , 2010, , 365-381.		0
87	Architecture for an Asteroid-Mining Spacecraft. , 2013, , 403-413.		0
88	Some remarks on random eigenvalues and structural dynamic models. , 1991, , .		0
89	Normal modes and frequencies in disordered periodic rods. , 1994, , .		0
90	Passive vibration suppression through the utilization of the localization phenomenon. , 1995, , .		0

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91	Mercury, Venus and Titan. , 2015, , 289-335.		0