

# Yoshikazu Araki

## List of Publications by Year in descending order

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76  
papers

1,307  
citations

394421

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361022

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76  
docs citations

76  
times ranked

948  
citing authors

#	ARTICLE	IF	CITATIONS
1	Abnormal Grain Growth Induced by Cyclic Heat Treatment. <i>Science</i> , 2013, 341, 1500-1502.	12.6	216
2	Ultra-large single crystals by abnormal grain growth. <i>Nature Communications</i> , 2017, 8, 354.	12.8	135
3	Potential of superelastic Cu-Al-Mn alloy bars for seismic applications. <i>Earthquake Engineering and Structural Dynamics</i> , 2011, 40, 107-115.	4.4	102
4	Energy harvesting potential of tuned inertial mass electromagnetic transducers. <i>Mechanical Systems and Signal Processing</i> , 2017, 84, 659-672.	8.0	64
5	Feasibility of Cu-Al-Mn superelastic alloy bars as reinforcement elements in concrete beams. <i>Smart Materials and Structures</i> , 2013, 22, 025025.	3.5	55
6	Use of shape-memory alloys in construction: a critical review. <i>Proceedings of the Institution of Civil Engineers: Civil Engineering</i> , 2016, 169, 87-95.	0.3	49
7	Integrated mechanical and material design of quasi-zero-stiffness vibration isolator with superelastic Cu-Al-Mn shape memory alloy bars. <i>Journal of Sound and Vibration</i> , 2015, 358, 74-83.	3.9	48
8	Shaking table tests of steel frame with superelastic Cu-Al-Mn SMA tension braces. <i>Earthquake Engineering and Structural Dynamics</i> , 2016, 45, 297-314.	4.4	47
9	Feasibility of tension braces using Cu-Al-Mn superelastic alloy bars. <i>Structural Control and Health Monitoring</i> , 2014, 21, 1304-1315.	4.0	38
10	Time-harmonic BEM for 2-D piezoelectricity applied to eigenvalue problems. <i>International Journal of Solids and Structures</i> , 2004, 41, 7241-7265.	2.7	34
11	Rate-dependent response of superelastic Cu-Al-Mn alloy rods to tensile cyclic loads. <i>Smart Materials and Structures</i> , 2012, 21, 032002.	3.5	32
12	Nonlinear vibration isolator with adjustable restoring force. <i>Journal of Sound and Vibration</i> , 2013, 332, 6063-6077.	3.9	32
13	Structural control with tuned inertial mass electromagnetic transducers. <i>Structural Control and Health Monitoring</i> , 2018, 25, e2059.	4.0	32
14	Loading rate and temperature dependency of superelastic Cu-Al-Mn alloys. <i>Construction and Building Materials</i> , 2014, 53, 555-560.	7.2	30
15	Plastic hinge relocation in reinforced concrete beams using Cu-Al-Mn SMA bars. <i>Engineering Structures</i> , 2018, 175, 765-775.	5.3	29
16	Criteria for assessing dynamic collapse of elastoplastic structural systems. <i>Earthquake Engineering and Structural Dynamics</i> , 2000, 29, 1177-1198.	4.4	28
17	Reaction, Phases, and Microstructure of Fly Ash-Based Alkali-Activated Materials. <i>Journal of Advanced Concrete Technology</i> , 2019, 17, 93-101.	1.8	27
18	Vertical vibration isolator having piecewise-constant restoring force. <i>Earthquake Engineering and Structural Dynamics</i> , 2009, 38, 1505-1523.	4.4	25

#	ARTICLE	IF	CITATIONS
19	Experimental characterization and performance improvement evaluation of an electromagnetic transducer utilizing a tuned inerter. <i>JVC/Journal of Vibration and Control</i> , 2020, 26, 56-72.	2.6	23
20	Feasibility of improved slotted bolted connection for timber moment frames. <i>Journal of Wood Science</i> , 2011, 57, 247-253.	1.9	19
21	Applicability of Cu-Al-Mn shape memory alloy bars to retrofitting of historical masonry constructions. <i>Earthquake and Structures</i> , 2011, 2, 233-256.	1.0	16
22	Feasibility of externally activated self-repairing concrete with epoxy injection network and Cu-Al-Mn superelastic alloy reinforcing bars. <i>Smart Materials and Structures</i> , 2014, 23, 105027.	3.5	15
23	Effectiveness of superelastic bars for seismic rehabilitation of clay unit masonry walls. <i>Earthquake Engineering and Structural Dynamics</i> , 2013, 42, 725-741.	4.4	14
24	Functional Fatigue of Polycrystalline Cu-Al-Mn Superelastic Alloy Bars under Cyclic Tension. <i>Journal of Materials in Civil Engineering</i> , 2016, 28, .	2.9	14
25	Consistent DOF reduction of tall steel frames. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 1581-1597.	4.4	13
26	Orientation Dependence of Plasticity and Fracture in Single-Crystal Superelastic Cu-Al-Mn SMA Bars. <i>Journal of Materials in Civil Engineering</i> , 2021, 33, .	2.9	13
27	MODELLING OF COLUMN BASE FOR TRADITIONAL TIMBER BUILDINGS BASED ON LOCAL COMPRESSION EXPERIMENTS AT CONTACT SURFACE BETWEEN COLUMN BASE AND FOUNDATION STONE. <i>Journal of Structural and Construction Engineering</i> , 2009, 74, 865-872.	0.5	12
28	Response of vibration-isolated object to ground motions with intense vertical accelerations. <i>Engineering Structures</i> , 2011, 33, 3610-3619.	5.3	10
29	Mechanical splicing of superelastic Cu-Al-Mn alloy bars with headed ends. <i>Smart Materials and Structures</i> , 2018, 27, 065025.	3.5	9
30	Enhancing the seismic performance of historic timber buildings in Asia by applying super-elastic alloy to a Chinese complex bracket system. <i>International Journal of Architectural Heritage</i> , 2018, 12, 734-748.	3.1	9
31	Optimum Sensitivity-Based Statistical Parameters Estimation from Modal Response. <i>AIAA Journal</i> , 2001, 39, 1166-1174.	2.6	8
32	INFLUENCE OF P-DELTA EFFECT ON DYNAMIC RESPONSE OF HIGH-RISE MOMENT-RESISTING STEEL BUILDINGS SUBJECT TO EXTREME EARTHQUAKE GROUND MOTIONS. <i>Journal of Structural and Construction Engineering</i> , 2009, 74, 1861-1868.	0.5	8
33	Finite Element Modeling of Cyclic Out-of-Plane Response of Masonry Walls Retrofitted by Inserting Inclined Stainless Steel Bars. <i>Journal of Disaster Research</i> , 2011, 6, 36-43.	0.7	8
34	Adjustable vertical vibration isolator with a variable ellipse curve mechanism. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 1345-1366.	4.4	7
35	Rubble Stone Masonry Buildings With Cement Mortar: Design Specifications in Seismic and Masonry Codes Worldwide. <i>Frontiers in Built Environment</i> , 2020, 6, .	2.3	7
36	School Buildings in Rubble Stone Masonry With Cement Mortar in Seismic Areas: Literature Review of Seismic Codes, Technical Norms and Practical Manuals. <i>Frontiers in Built Environment</i> , 2019, 5, .	2.3	6

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37	Symmetry limit theory for elastic-perfectly plastic continua in the shakedown region. Journal of the Mechanics and Physics of Solids, 2000, 48, 2035-2056.	4.8	5
38	EXPERIMENTAL STUDY ON TWO-DIMENSIONAL CONTACT MODELS FOR COLUMN BASE OF TRADITIONAL TIMBER BUILDINGS. Journal of Structural and Construction Engineering, 2004, 69, 117-122.	0.5	5
39	Mixed Integer Nonlinear Least-Squares Problem for Damage Detection in Truss Structures. Journal of Engineering Mechanics - ASCE, 2005, 131, 659-667.	2.9	5
40	STATIC FRICTION COEFFICIENT BETWEEN COLUMN BASE AND FOUNDATION STONE OF JAPANESE TRADITIONAL TIMBER BUILDINGS. AIJ Journal of Technology and Design, 2009, 15, 405-409.	0.3	5
41	DEVELOPMENT OF TURNBUCKLE BRACE WITH Cu-Al-Mn SUPERELASTIC ALLOY TO REDUCE RESIDUAL DEFORMATION. Journal of Structural and Construction Engineering, 2014, 79, 163-172.	0.5	4
42	Cost Analysis of Mountain Schools in Nepal: Comparison of Earthquake Resistant Features in Rubble Stone Masonry vs. Concrete Block Masonry. Frontiers in Built Environment, 2019, 5, .	2.3	4
43	Rate-dependent projection operators for frictional contact constraints. International Journal for Numerical Methods in Engineering, 2003, 57, 923-954.	2.8	3
44	VERTICAL SEISMIC ISOLATION DEVICE USING CONSTANT LOAD SUPPORTING MECHANISMS. Journal of Structural and Construction Engineering, 2008, 73, 1511-1518.	0.5	3
45	INTERACTIVE SECTION DETERMINATION METHOD OF STEEL STRUCTURES WITH MEMBER GROUPING PROCESSES. Journal of Structural and Construction Engineering, 2011, 76, 1161-1169.	0.5	3
46	Application of Cu-Al-Mn superelastic alloy bars as reinforcement elements in concrete beams. , 2012, , .		3
47	Feasibility of Cu-Al-Mn superelastic alloy bar as a self-sensor material. Journal of Intelligent Material Systems and Structures, 2015, 26, 364-370.	2.5	3
48	Feasibility of Roll-Threading Superelastic Cu-Al-Mn SMA Rods. Journal of Materials in Civil Engineering, 2021, 33, .	2.9	3
49	Evaluation of Gamma Radiation Shielding Performance of Cylindrical Concrete Containers Using Soil Volume Source Contaminated by Radioactive Cesium. Concrete Research and Technology, 2013, 24, 43-52.	0.1	3
50	Steady-state limit analysis of elastoplastic trusses under cyclic loads. International Journal of Solids and Structures, 1999, 36, 3051-3071.	2.7	2
51	STABILITY DESIGN OF PLANE STEEL FRAMES USING LINEARIZED BUCKLING ANALYSIS : Part 1 A basic framework and application to an unbraced frame. Journal of Structural and Construction Engineering, 2004, 69, 211-218.	0.5	2
52	STABILITY DESIGN OF PLANE STEEL FRAMES USING LINEARIZED BUCKLING ANALYSIS : Part 2 Formulation for earthquake loading and application to a braced frame. Journal of Structural and Construction Engineering, 2005, 70, 129-136.	0.5	2
53	ESTIMATION OF SEMI-RIGID CHARACTERISTICS FOR COLUMN-NUKI JOINTS OF TRADITIONAL TIMBER ARCHITECTURE BASED ON LOCAL COMPRESSION EXPERIMENTS. Journal of Structural and Construction Engineering, 2008, 73, 1577-1584.	0.5	2
54	Pinning retrofit technique in masonry with application of polymer-cement pastes as bonding agents. Earthquake and Structures, 2013, 5, 477-497.	1.0	2

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55	DEFORMATION CONCENTRATION TO LOWER STORIES IN HIGH-RISE STEEL BUCKLING-RESTRAINED BRACED FRAMES SUBJECT TO LONG-PERIOD EARTHQUAKE GROUND MOTIONS. <i>Journal of Structural and Construction Engineering</i> , 2013, 78, 743-752.	0.5	2
56	Adhesion characteristics of geopolymer mortar to concrete and rebars. <i>MATEC Web of Conferences</i> , 2019, 258, 01012.	0.2	2
57	Chemical Resistance of Cu-Al-Mn Superelastic Alloy Bars in Acidic and Alkaline Environments. <i>Journal of Materials in Civil Engineering</i> , 2021, 33, .	2.9	2
58	OUT-OF-PLANE FLEXURAL STRENGTH OF HISTORIC BRICK WALLS UNDER MONOTONIC LOADING REINFORCED BY INSERTING STAINLESS PINS. <i>AIJ Journal of Technology and Design</i> , 2007, 13, 147-152.	0.3	1
59	SEISMIC RETROFIT OF HISTORIC MASONRY CONSTRUCTIONS BY INSERTING STAINLESS PINS. <i>Journal of Structural and Construction Engineering</i> , 2009, 74, 167-176.	0.5	1
60	PROPOSAL OF ELASTIC BUCKLING STRENGTH FORMULA FOR COLUMNS IN STEEL MOMENT FRAMES CONSIDERING ANTI-SYMMETRIC AXIAL FORCES CAUSED BY HORIZONTAL LOADS. <i>Journal of Structural and Construction Engineering</i> , 2010, 75, 2045-2054.	0.5	1
61	SHAPE AND SECTION OPTIMIZATION FOR FREE-FORM STEEL STRUCTURES CONSIDERING CONNECTION COST. <i>Journal of Structural and Construction Engineering</i> , 2011, 76, 2123-2132.	0.5	1
62	Radiation Shielding Properties and Freeze-Thaw Durability of High-Density Concrete for Storage of Radioactive Contaminated Soil in Fukushima. , 2018, , 97-109.		1
63	Rubble Stone Masonry Buildings with Cement Mortar: Base Shear Seismic Demand Comparison for Selected Countries Worldwide. <i>Frontiers in Built Environment</i> , 2021, 7, .	2.3	1
64	FORMULATIONS FOR PLANE BEAM-COLUMN ELEMENT WITH GENERALIZED PLASTIC HINGES AT BOTH ENDS : Application of kinematic hardening rules to singular yield surfaces, revisited. <i>Journal of Structural and Construction Engineering</i> , 2007, 72, 51-58.	0.5	1
65	A development of optimized radiation shielding design method for contaminated soil in Fukushima. <i>Progress in Nuclear Science and Technology</i> , 2014, 4, 51-55.	0.3	1
66	Steady-State Limit of Elastoplastic Trusses for the Plastic Shakedown Region. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2000, 67, 581-589.	2.2	0
67	Vertical Vibration Isolation Device Using Constant Load Supporting Mechanism. , 2008, , .		0
68	TANGENT STIFFNESS MATRIX OF 3D BEAM-COLUMN ELEMENT AT APEX OF YIELD SURFACE FOR GENERALIZED PLASTIC HINGES. <i>Journal of Structural and Construction Engineering</i> , 2008, 73, 2129-2134.	0.5	0
69	OPTIMUM DESIGN METHOD FOR A STEEL FRAME CONSIDERING PRIOR INFORMATION ON PARAMETERS USING BAYESIAN INFORMATION CRITERION. <i>Journal of Structural and Construction Engineering</i> , 2009, 74, 2021-2028.	0.5	0
70	EXPERIMENTAL EVALUATION OF QUASI-FIRE-RESISTIVE PERFORMANCE OF STEEL-TIMBER COMPOSITE MEMBERS USING HIGH-STRENGTH BOLTS. <i>AIJ Journal of Technology and Design</i> , 2011, 17, 543-547.	0.3	0
71	BENDING PROPERTIES OF STEEL-TIMBER COMPOSITE AXIAL MEMBERS FORMED WITH FRICTION-TYPE CONNECTIONS USING TORSHEAR-TYPE HIGH-STRENGTH BOLTS. <i>Journal of Structural and Construction Engineering</i> , 2011, 76, 591-598.	0.5	0
72	THE AUTHOR'S ANSWER TO DISCUSSION BY HITOSHI KUWAMURA. <i>Journal of Structural and Construction Engineering</i> , 2012, 77, 515-516.	0.5	0

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73	EXAMINING MECHANISMS BEHIND DEFORMATION CONCENTRATION INTO LOWER STORIES BASED ON MODAL DECOMPOSITION USING TANGENT STIFFNESS MATRIX. Journal of Structural and Construction Engineering, 2014, 79, 1491-1501.	0.5	0
74	A DESIGN METHOD FOR OPTIMAL TRUSS STRUCTURES WITH REDUNDANCY BASED ON COMBINATORIAL RIGIDITY THEORY. Journal of Structural and Construction Engineering, 2014, 79, 583-592.	0.5	0
75	Development of Single Crystal Cu-Al-Mn Superelastic Alloy and Its Application to Seismic Resistance Engineering. Materia Japan, 2021, 60, 54-56.	0.1	0
76	Abnormal Grain Growth Induced by Cyclic Heat Treatment and Fabrication of Cu-Based Shape Memory Alloy Single Crystal. Materia Japan, 2019, 58, 137-143.	0.1	0