# Yoshikazu Araki

List of Publications by Year
in descending order



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|---|---|---|---|
| 76 papers | 1,307 citations | 393982 19 h-index | 360668 35 g-index |
| 76 all docs | 76 docs citations | 76 times ranked | 948 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Abnormal Grain Growth Induced by Cyclic Heat Treatment. Science, 2013, 341, 1500-1502. | 6.0 | 216 |
| 2 | Ultra-large single crystals by abnormal grain growth. Nature Communications, 2017, 8, 354. | 5.8 | 135 |
| 3 | Potential of superelastic Cuâ€“Alâ€“Mn alloy bars for seismic applications. Earthquake Engineering and Structural Dynamics, 2011, 40, 107-115. | 2.5 | 102 |
| 4 | Energy harvesting potential of tuned inertial mass electromagnetic transducers. Mechanical Systems and Signal Processing, 2017, 84, 659-672. | 4.4 | 64 |
| 5 | Feasibility of Cuâ€“Alâ€“Mn superelastic alloy bars as reinforcement elements in concrete beams. Smart Materials and Structures, 2013, 22, 025025. | 1.8 | 55 |
| 6 | Use of shape-memory alloys in construction: a critical review. Proceedings of the Institution of Civil Engineers: Civil Engineering, 2016, 169, 87-95. | 0.3 | 49 |
| 7 | Integrated mechanical and material design of quasi-zero-stiffness vibration isolator with superelastic Cuâ€“Alâ€“Mn shape memory alloy bars. Journal of Sound and Vibration, 2015, 358, 74-83. | 2.1 | 48 |
| 8 | Shaking table tests of steel frame with superelastic Cuâ€“Alâ€“Mn SMA tension braces. Earthquake Engineering and Structural Dynamics, 2016, 45, 297-314. | 2.5 | 47 |
| 9 | Feasibility of tension braces using Cu-Al-Mn superelastic alloy bars. Structural Control and Health Monitoring, 2014, 21, 1304-1315. | 1.9 | 38 |
| 10 | Time-harmonic BEM for 2-D piezoelectricity applied to eigenvalue problems. International Journal of Solids and Structures, 2004, 41, 7241-7265. | 1.3 | 34 |
| 11 | Rate-dependent response of superelastic Cuâ€“Alâ€“Mn alloy rods to tensile cyclic loads. Smart Materials and Structures, 2012, 21, 032002. | 1.8 | 32 |
| 12 | Nonlinear vibration isolator with adjustable restoring force. Journal of Sound and Vibration, 2013, 332, 6063-6077. | 2.1 | 32 |
| 13 | Structural control with tuned inertial mass electromagnetic transducers. Structural Control and Health Monitoring, 2018, 25, e2059. | 1.9 | 32 |
| 14 | Loading rate and temperature dependency of superelastic Cuâ€“Alâ€“Mn alloys. Construction and Building Materials, 2014, 53, 555-560. | 3.2 | 30 |
| 15 | Plastic hinge relocation in reinforced concrete beams using Cu-Al-Mn SMA bars. Engineering Structures, 2018, 175, 765-775. | 2.6 | 29 |
| 16 | Criteria for assessing dynamic collapse of elastoplastic structural systems. Earthquake Engineering and Structural Dynamics, 2000, 29, 1177-1198. | 2.5 | 28 |
| 17 | Reaction, Phases, and Microstructure of Fly Ash-Based Alkali-Activated Materials. Journal of Advanced Concrete Technology, 2019, 17, 93-101. | 0.8 | 27 |
| 18 | Vertical vibration isolator having piecewiseâ€constant restoring force. Earthquake Engineering and Structural Dynamics, 2009, 38, 1505-1523. | 2.5 | 25 |

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|---|---|---|---|
| 19 | Experimental characterization and performance improvement evaluation of an electromagnetic transducer utilizing a tuned inerter. JVC/Journal of Vibration and Control, 2020, 26, 56-72. | 1.5 | 23 |
| 20 | Feasibility of improved slotted bolted connection for timber moment frames. Journal of Wood Science, 2011, 57, 247-253. | 0.9 | 19 |
| 21 | Applicability of Cu-Al-Mn shape memory alloy bars to retrofitting of historical masonry constructions. Earthquake and Structures, 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. Smart Materials and Structures, 2014, 23, 105027. | 1.8 | 15 |
| 23 | Effectiveness of superelastic bars for seismic rehabilitation of clayâ€unit masonry walls. Earthquake Engineering and Structural Dynamics, 2013, 42, 725-741. | 2.5 | 14 |
| 24 | Functional Fatigue of Polycrystalline Cu-Al-Mn Superelastic Alloy Bars under Cyclic Tension. Journal of Materials in Civil Engineering, 2016, 28, . | 1.3 | 14 |
| 25 | Consistent DOF reduction of tall steel frames. Earthquake Engineering and Structural Dynamics, 2017, 46, 1581-1597. | 2.5 | 13 |
| 26 | Orientation Dependence of Plasticity and Fracture in Single-Crystal Superelastic Cu-Al-Mn SMA Bars. Journal of Materials in Civil Engineering, 2021, 33, . | 1.3 | 13 |
| 27 | MODELLING OF COLUMN BASE FOR TRADITIONAL TIMBER BUILDINGS BASED ON LOCAL COMPRESSION EXPERIMENTS AT CONTACT SURFACE BETWEEN COLUMN BASE AND FOUNDATION STONE. Journal of Structural and Construction Engineering, 2009, 74, 865-872. | 0.2 | 12 |
| 28 | Response of vibration-isolated object to ground motions with intense vertical accelerations. Engineering Structures, 2011, 33, 3610-3619. | 2.6 | 10 |
| 29 | Mechanical splicing of superelastic Cuâ€“Alâ€“Mn alloy bars with headed ends. Smart Materials and Structures, 2018, 27, 065025. | 1.8 | 9 |
| 30 | Enhancing the seismic performance of historic timber buildings in Asia by applying super-elastic alloy to a Chinese complex bracket system. International Journal of Architectural Heritage, 2018, 12, 734-748. | 1.7 | 9 |
| 31 | Optimum Sensitivity-Based Statistical Parameters Estimation from Modal Response. AIAA Journal, 2001, 39, 1166-1174. | 1.5 | 8 |
| 32 | INFLUENCE OF P-DELTA EFFECT ON DYNAMIC RESPONSE OF HIGH-RISE MOMENT-RESISTING STEEL BUILDINGS SUBJECT TO EXTREME EARTHQUAKE GROUND MOTIONS. Journal of Structural and Construction Engineering, 2009, 74, 1861-1868. | 0.2 | 8 |
| 33 | Finite Element Modeling of Cyclic Out-of-Plane Response of Masonry Walls Retrofitted by Inserting Inclined Stainless Steel Bars. Journal of Disaster Research, 2011, 6, 36-43. | 0.4 | 8 |
| 34 | Adjustable vertical vibration isolator with a variable ellipse curve mechanism. Earthquake Engineering and Structural Dynamics, 2017, 46, 1345-1366. | 2.5 | 7 |
| 35 | Rubble Stone Masonry Buildings With Cement Mortar: Design Specifications in Seismic and Masonry Codes Worldwide. Frontiers in Built Environment, 2020, 6, . | 1.2 | 7 |
| 36 | School Buildings in Rubble Stone Masonry With Cement Mortar in Seismic Areas: Literature Review of Seismic Codes, Technical Norms and Practical Manuals. Frontiers in Built Environment, 2019, 5, . | 1.2 | 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. | 2.3 | 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. | 0.2 | 5 |
| 39 | Mixed Integer Nonlinear Least-Squares Problem for Damage Detection in Truss Structures. Journal of Engineering Mechanics - ASCE, 2005, 131, 659-667. | 1.6 | 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. | 0.1 | 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. | 0.2 | 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, . | 1.2 | 4 |
| 43 | Rate-dependent projection operators for frictional contact constraints. International Journal for Numerical Methods in Engineering, 2003, 57, 923-954. | 1.5 | 3 |
| 44 | VERTICAL SEISMIC ISOLATION DEVICE USING CONSTANT LOAD SUPPORTING MECHANISMS. Journal of Structural and Construction Engineering, 2008, 73, 1511-1518. | 0.2 | 3 |
| 45 | INTERACTIVE SECTION DETERMINATION METHOD OF STEEL STRUCTURES WITH MEMBER GROUPING PROCESSES. Journal of Structural and Construction Engineering, 2011, 76, 1161-1169. | 0.2 | 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. | 1.4 | 3 |
| 48 | Feasibility of Roll-Threading Superelastic Cu-Al-Mn SMA Rods. Journal of Materials in Civil Engineering, 2021, 33, . | 1.3 | 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. | 1.3 | 2 |
| 51 | STABILITY DESIGN OF PLANE STEEL FAMES 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. | 0.2 | 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. | 0.2 | 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. | 0.2 | 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. Journal of Structural and Construction Engineering, 2013, 78, 743-752. | 0.2 | 2 |
| 56 | Adhesion characteristics of geopolymer mortar to concrete and rebars. MATEC Web of Conferences, 2019, 258, 01012. | 0.1 | 2 |
| 57 | Chemical Resistance of Cu-Al-Mn Superelastic Alloy Bars in Acidic and Alkaline Environments. Journal of Materials in Civil Engineering, 2021, 33, . | 1.3 | 2 |
| 58 | OUT-OF-PLANE FLEXURAL STRENGTH OF HISTORIC BRICK WALLS UNDER MONOTONIC LOADING REINFORCED BY INSERTING STAINLESS PINS. AIJ Journal of Technology and Design, 2007, 13, 147-152. | 0.1 | 1 |
| 59 | SEISMIC RETROFIT OF HISTORIC MASONRY CONSTRUCTIONS BY INSERTING STAINLESS PINS. Journal of Structural and Construction Engineering, 2009, 74, 167-176. | 0.2 | 1 |
| 60 | PROPOSAL OF ELASTIC BUCKLING STRENGTH FORMULA FOR COLUMNS IN STEEL MOMENT FRAMES CONSIDERING ANTI-SYMMETRIC AXIAL FORCES CAUSED BY HORIZONTAL LOADS. Journal of Structural and Construction Engineering, 2010, 75, 2045-2054. | 0.2 | 1 |
| 61 | SHAPE AND SECTION OPTIMIZATION FOR FREE-FORM STEEL STRUCTURES CONSIDERING CONNECTION COST. Journal of Structural and Construction Engineering, 2011, 76, 2123-2132. | 0.2 | 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. Frontiers in Built Environment, 2021, 7, . | 1.2 | 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. Journal of Structural and Construction Engineering, 2007, 72, 51-58. | 0.2 | 1 |
| 65 | A development of optimized radiation shielding design method for contaminated soil in Fukushima. Progress in Nuclear Science and Technology, 2014, 4, 51-55. | 0.3 | 1 |
| 66 | Steady-State Limit of Elastoplastic Trusses for the Plastic Shakedown Region. Journal of Applied Mechanics, Transactions ASME, 2000, 67, 581-589. | 1.1 | 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. Journal of Structural and Construction Engineering, 2008, 73, 2129-2134. | 0.2 | 0 |
| 69 | OPTIMUM DESIGN METHOD FOR A STEEL FRAME CONSIDERING PRIOR INFORMATION ON PARAMETERS USING BAYESIAN INFORMATION CRITERION. Journal of Structural and Construction Engineering, 2009, 74, 2021-2028. | 0.2 | 0 |
| 70 | EXPERIMENTAL EVALUATION OF QUASI-FIRE-RESISTIVE PERFORMANCE OF STEEL-TIMBER COMPOSITE MEMBERS USING HIGH-STRENGTH BOLTS. AIJ Journal of Technology and Design, 2011, 17, 543-547. | 0.1 | 0 |
| 71 | BENDING PROPERTIES OF STEEL-TIMBER COMPOSITE AXIAL MEMBERS FORMED WITH FRICTION-TYPE CONNECTIONS USING TORSHEAR-TYPE HIGH-STRENGTH BOLTS. Journal of Structural and Construction Engineering, 2011, 76, 591-598. | 0.2 | 0 |
| 72 | THE AUTHOR'S ANSWER TO DISCUSSION BY HITOSHI KUWAMURA. Journal of Structural and Construction Engineering, 2012, 77, 515-516. | 0.2 | 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. | 0.2 | 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. | 0.2 | 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 |