

# Chongdu Cho

## List of Publications by Year in descending order

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113  
papers

1,068  
citations

516215

16  
h-index

525886

27  
g-index

113  
all docs

113  
docs citations

113  
times ranked

983  
citing authors

#	ARTICLE	IF	CITATIONS
1	Feasibility study on a superelastic SMA damper with re-centring capability. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 473, 290-296.	2.6	65
2	Impact fracture behavior at the material of aluminum foam. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 539, 250-258.	2.6	64
3	The Investigation of a Shape Memory Alloy Micro-Damper for MEMS Applications. <i>Sensors</i> , 2007, 7, 1887-1900.	2.1	58
4	A novel approach to impose periodic boundary condition on braided composite RVE model based on RPIM. <i>Composite Structures</i> , 2017, 163, 77-88.	3.1	47
5	Comparison between Deflection and Vibration Characteristics of Rectangular and Trapezoidal profile Microcantilevers. <i>Sensors</i> , 2009, 9, 2706-2718.	2.1	38
6	Computational mechanics of laser cladding process. <i>Journal of Materials Processing Technology</i> , 2004, 153-154, 494-500.	3.1	37
7	A Study on Increasing Sensitivity of Rectangular Microcantilevers Used in Biosensors. <i>Sensors</i> , 2008, 8, 7530-7544.	2.1	34
8	Progressive damage simulation in 3D four-directional braided composites considering the jamming-action-induced yarn deformation. <i>Composite Structures</i> , 2017, 178, 330-340.	3.1	32
9	TRANSIENT THERMOELASTIC ANALYSIS OF DISK BRAKE USING THE FAST FOURIER TRANSFORM AND FINITE ELEMENT METHOD. <i>Journal of Thermal Stresses</i> , 2002, 25, 215-243.	1.1	26
10	A numerical study on bolted end-plate connection using shape memory alloys. <i>Materials and Structures/Materiaux Et Constructions</i> , 2008, 41, 1419-1426.	1.3	24
11	Effect of gas-diffusion electrode material heterogeneity on the structural integrity of polymer electrolyte fuel cell. <i>Energy</i> , 2010, 35, 5241-5249.	4.5	24
12	The influence of graphene on the dynamic mechanical behaviour of shear thickening fluids. <i>Advanced Powder Technology</i> , 2019, 30, 2416-2421.	2.0	23
13	Robustly nano-tailored honeycomb structure for high-throughput antireflection polymer films. <i>Journal of Materials Chemistry</i> , 2012, 22, 17037.	6.7	22
14	Design and Analysis of a High Sensitive Microcantilever Biosensor for Biomedical Applications. , 2008, , ,		21
15	Study on crack propagation of adhesively bonded DCB for aluminum foam using energy release rate. <i>Journal of Mechanical Science and Technology</i> , 2015, 29, 45-50.	0.7	21
16	Sobol's sensitivity analysis for a fuel cell stack assembly model with the aid of structure-selection techniques. <i>Journal of Power Sources</i> , 2016, 301, 1-10.	4.0	21
17	Quasi-static compressive behaviour of aluminium cenosphere syntactic foams. <i>Materials Science and Technology</i> , 2019, 35, 856-864.	0.8	20
18	Analysis of Real-Time Estimation Method Based on Hidden Markov Models for Battery System States of Health. <i>Journal of Power Electronics</i> , 2016, 16, 217-226.	0.9	20

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19	Study on advanced multilayered magnetostrictive thin film coating techniques for MEMS application. Journal of Materials Processing Technology, 2008, 201, 678-682.	3.1	15
20	Effect of SmFe and TbFe film thickness on magnetostriction for MEMS devices. Journal of Materials Science, 2007, 42, 384-388.	1.7	14
21	Stepped piezoresistive microcantilever designs for biosensors. Journal Physics D: Applied Physics, 2012, 45, 215401.	1.3	14
22	Adaptive fuzzy sliding mode control for electric power steering system. Journal of Mechanical Science and Technology, 2017, 31, 2643-2650.	0.7	14
23	A finite thin circular beam element for out-of-plane vibration analysis of curved beams. Journal of Mechanical Science and Technology, 2009, 23, 1396-1405.	0.7	13
24	An Investigation of the Compressive Behavior of Polymer Electrode Membrane Fuel Cell's Gas Diffusion Layers under Different Temperatures. Polymers, 2018, 10, 971.	2.0	13
25	Thermo-elastic analysis for chattering phenomenon of automotive disk brake. Journal of Mechanical Science and Technology, 2001, 15, 569-579.	0.4	12
26	On self-heating in piezoresistive microcantilevers with short piezoresistor. Journal Physics D: Applied Physics, 2011, 44, 285402.	1.3	12
27	Stability of Polymer Electrolyte Membranes In Fuel Cells: Initial Attempts To Bridge Physical And Chemical Degradation Modes. Fuel Cells, 2015, 15, 196-203.	1.5	12
28	A study of the impact properties of adhesively-bonded aluminum alloy based on impact velocity. Journal of Mechanical Science and Technology, 2015, 29, 493-499.	0.7	12
29	Evaluation of three unit cell models in predicting the mechanical behaviour of 3D four-directional braided composites. Journal of Composite Materials, 2017, 51, 3757-3767.	1.2	12
30	Modelling and analysis of diaphragm integrated SU8/CB nanocomposite piezoresistive polymer microcantilever biosensor. Microsystem Technologies, 2018, 24, 3061-3068.	1.2	12
31	Characterization of Effective In-Plane Electrical Resistivity of a Gas Diffusion Layer in Polymer Electrolyte Membrane Fuel Cells through Freeze-Thaw Thermal Cycles. Energies, 2020, 13, 145.	1.6	12
32	A proposed phenomenological model for shape memory alloys. Smart Materials and Structures, 2006, 15, 393-400.	1.8	11
33	Effect of bipolar plate materials on the stress distribution and interfacial contact resistance in PEM fuel cell. International Journal of Precision Engineering and Manufacturing, 2010, 11, 583-588.	1.1	11
34	An effective inverse procedure for identifying viscoplastic material properties of polymer Nafion. Computational Materials Science, 2014, 95, 159-165.	1.4	11
35	Experimental and analytical verification of the characteristics of shear fatigue failure in the adhesive interface of porous foam materials. Journal of Mechanical Science and Technology, 2015, 29, 2333-2339.	0.7	11
36	Modeling and Two-Step Homogenization of Aperiodic Heterogenous 3D Four-Directional Braided Composites. Journal of Composites Science, 2020, 4, 179.	1.4	11

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37	Study on Stable Estimation Method for Lead-acid Battery SOC by Extended Kalman Filter. International Journal of Control and Automation, 2014, 7, 429-438.	0.3	10
38	A Three-Dimensional Finite Element Analysis Model for SH-SAW Torque Sensors. Sensors, 2019, 19, 4290.	2.1	10
39	Effects of Freeze-Thaw Thermal Cycles on the Mechanical Degradation of the Gas Diffusion Layer in Polymer Electrolyte Membrane Fuel Cells. Polymers, 2019, 11, 428.	2.0	10
40	Review and Suggestion of Failure Theories in Voids Scenario for VARTM Processed Composite Materials. Polymers, 2021, 13, 969.	2.0	10
41	Establishing RVE model composed of dry fibers and matrix for 3D four-directional braided composites. Journal of Composite Materials, 2019, 53, 1917-1931.	1.2	9
42	Dynamic response and damage of composite shell under impact. Journal of Mechanical Science and Technology, 1999, 13, 596-608.	0.4	8
43	Combined Fatigue Life Test and Extrapolation of Turbine Disk Mortise at Elevated Temperature. Journal of Engineering for Gas Turbines and Power, 2005, 127, 863-868.	0.5	8
44	Design study of a small scale soft recovery system. Journal of Mechanical Science and Technology, 2006, 20, 1961-1971.	0.7	7
45	Magnetostrictive Micro Mirrors for an Optical Switch Matrix. Sensors, 2007, 7, 2174-2182.	2.1	7
46	Dynamic response of beam-like composite sandwich plates with transversely flexible cores. Ocean Engineering, 2015, 108, 778-788.	1.9	7
47	Ex-situ temperature and humidity aging effect on the tensile behavior of Nafion N117 membrane used in Ionic Polymer-Metal Composite actuators. Materials Letters, 2014, 124, 293-295.	1.3	6
48	A Feasibility Study of a Noncontact Torque Sensor with Multiple Hall Sensors. Journal of Sensors, 2015, 2015, 1-6.	0.6	6
49	Effect of p-type and n-type piezoresistors on characteristics of high sensitive silicon piezoresistive microcantilever designs. Microsystem Technologies, 2016, 22, 93-101.	1.2	6
50	An experimental investigation of three-dimensional mechanical characteristics of gas diffusion layers in proton electrolyte membrane fuel cells. Journal of Solid State Electrochemistry, 2019, 23, 2021-2030.	1.2	6
51	An Enhanced Genetic Algorithm for Parameter Estimation of Sinusoidal Signals. Applied Sciences (Switzerland), 2020, 10, 5110.	1.3	6
52	Multi-scale analysis and experimental research for turbine guide vanes made of 2D braided SiCf/SiC composites in high-cycle fatigue regime. International Journal of Fatigue, 2022, 156, 106697.	2.8	6
53	The effect of biaxial load on stress and strain concentrations in a finite thickness elastic plate containing a circular hole. International Journal for Numerical Methods in Engineering, 2008, 75, 103-126.	1.5	5
54	Numerical Modeling and Characterization of Micromachined Flexible Magnetostrictive Thin Film Actuator. IEEE Transactions on Magnetics, 2008, 44, 3209-3212.	1.2	5

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55	Prediction of Hot Spots by Correlating Finite Element Analysis and Measurement for an Automotive Disk Brake. Tribology Transactions, 2008, 51, 609-620.	1.1	5
56	Magnetoelastic Characteristics of the Multilayered Magnetostrictive Thin Film With Polyimide Substrate for Micro Actuator. IEEE Transactions on Magnetics, 2008, 44, 4049-4052.	1.2	5
57	Robust designed capacitive gas pressure sensor for harsh environment. , 2009, , .		5
58	An inscribed surface model for the elastic properties of armchair carbon nanotube. Journal of Mechanical Science and Technology, 2010, 24, 2233-2239.	0.7	5
59	Effect of compressive loading speed and stacking sequence on mechanical characteristics of satin weave E-glass/epoxy composites. Polymer Composites, 2012, 33, 1603-1612.	2.3	5
60	Modeling and implementation of fixed switching frequency sliding mode control to two-stage DC-DC converter. International Journal of Control, Automation and Systems, 2014, 12, 1225-1233.	1.6	5
61	Study of noncontact torque measurement method with magnetic sensor band. Journal of Mechanical Science and Technology, 2015, 29, 3897-3903.	0.7	5
62	An optimised silicon piezoresistive microcantilever sensor for surface stress studies. Microsystem Technologies, 2016, 22, 2279-2285.	1.2	5
63	Numerical Study for Brake Squeal by Machining Patterns on Frictional Surface. International Journal of Automotive Technology, 2018, 19, 281-289.	0.7	5
64	Study on the Control Algorithm of Two-Stage DC-DC Converter for Electric Vehicles. Advances in Mechanical Engineering, 2014, 6, 203793.	0.8	4
65	Two-dimensional dynamic analysis of sandwich plates with gradient foam cores. Journal of Mechanical Science and Technology, 2016, 30, 4083-4093.	0.7	4
66	Torque Measurement Technology by Using a Magnetostrictive Ring and Multiple Magnets. Actuators, 2021, 10, 124.	1.2	4
67	An Experimental Study for Machined Patterns of Friction Surface on Disc Brake Rotor in Performance Aspect. Transactions of the Korean Society of Automotive Engineers, 2016, 24, 471-479.	0.1	4
68	Development of micromagnetostrictive wireless controllable actuator. Journal of Applied Physics, 2011, 109, 07E501.	1.1	3
69	An Investigation of the Mechanical Behaviors of [45/-45/0/90] <sub>ns</sub> Satin Weave Composite at Different Loading Rates. Mechanics of Advanced Materials and Structures, 2015, 22, 367-375.	1.5	3
70	Fast Bayesian approach to model calibration of vehicle occupant restraint systems. International Journal of Crashworthiness, 2016, 21, 1-8.	1.1	3
71	Integrated approach to an optimal automotive timing chain system design. International Journal of Automotive Technology, 2017, 18, 1037-1045.	0.7	3
72	Failure behavior / characteristics of fabric reinforced polymer matrix composite and aluminum6061 on dynamic tensile loading. Journal of Mechanical Science and Technology, 2017, 31, 3661-3664.	0.7	3

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73	Effect of Heat Treatment on Crack Propagation and Performance of Disk Brake with Cross Drilled Holes. International Journal of Automotive Technology, 2019, 20, 177-185.	0.7	3
74	Effect of Ankle Torque on the Ankle-Foot Orthosis Joint Design Sustainability. Materials, 2021, 14, 2975.	1.3	3
75	Thermal Characteristics of Microcantilever Biosensors. Communications in Computer and Information Science, 2011, , 166-176.	0.4	3
76	Transmission Error Influences by Initial Tension of Timing Chain System. Transactions of the Korean Society of Automotive Engineers, 2017, 25, 133-139.	0.1	3
77	Effects of elastic energy of thin films on bending of a cantilevered magnetostrictive film-substrate system. Journal of Mechanical Science and Technology, 2004, 18, 622-629.	0.4	2
78	Investigation on the magnetomechanical behavior of trilayered GM actuator. Journal of Rare Earths, 2008, 26, 264-267.	2.5	2
79	Design and Analysis of Laminated Stainless Steel Membrane-Based Microsensors. IEEE Sensors Journal, 2008, 8, 182-187.	2.4	2
80	Dynamic Compressive Behaviors of Multi Directional Woven Composite Laminates at Different Strain Rates. Polymers and Polymer Composites, 2014, 22, 169-176.	1.0	2
81	Modeling and Numerical Characterization of High Sensitive Microcantilever Biosensors with Parabolic Piezoresistor. Nano, 2018, 13, 1850055.	0.5	2
82	Investigation on Mechanical Properties of a Carbon Paper Gas Diffusion Layer through a 3-D Nonlinear and Orthotropic Constitutive Model. Energies, 2021, 14, 6341.	1.6	2
83	Development of Computational Model for Spot Welding and Effect Analysis on Welding Conditions. Transactions of the Korean Society of Automotive Engineers, 2015, 23, 642-649.	0.1	2
84	A Design Feasibility Study of a Turbine Blade Disc Interface (Dovetail) Made By Four-Directional Braided Ceramic Matrix Composite (Sic/Sic). International Journal of Aeronautical and Space Sciences, 0, , 1.	1.0	2
85	Ultimate strength prediction of continuous fiber-reinforced brittle matrix composites. Journal of Mechanical Science and Technology, 1996, 10, 49-56.	0.1	1
86	Design and Analysis of Electro-mechanical Characteristics of Micromachined Stainless Steel Pressure Sensor. , 2006, , .		1
87	Modified boundary layer analysis for a mode III crack problem. Journal of Mechanical Science and Technology, 2008, 22, 653-661.	0.7	1
88	THE STUDY OF INSCRIBED SURFACE OF ARMCHAIR CARBON NANOTUBES. Modern Physics Letters B, 2010, 24, 2021-2029.	1.0	1
89	Study on Edge Thickening Flow Forming Using the Finite Elements Analysis. , 2011, , .		1
90	On accuracy of sensitivity relations for piezoresistive microcantilevers used in surface stress studies. International Journal of Precision Engineering and Manufacturing, 2014, 15, 2133-2140.	1.1	1

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91	A method for epistemic uncertainty quantification and application to uniaxial tension modeling of polymers. Journal of Mechanical Science and Technology, 2015, 29, 1199-1206.	0.7	1
92	Study of Dynamic Behavior of Magnetostrictively Patterned Flexible Micro-Wings. IEEE Transactions on Magnetics, 2019, 55, 1-4.	1.2	1
93	An Experimental Study for Machined Patterns of Friction Surface on Two-pieces Disc Brake Rotor in Performance Aspect. Transactions of the Korean Society of Automotive Engineers, 2017, 25, 581-589.	0.1	1
94	Evaluation of Occupant Protection of Passenger Vehicles at IIHS Side Impact. Transactions of the Korean Society of Automotive Engineers, 2014, 22, 46-51.	0.1	1
95	Effect of Protection Design Parameters on Mine Blast Impact Characteristics. Journal of the Korean Society for Precision Engineering, 2018, 35, 521-529.	0.1	1
96	Investigations for Design Estimation of an Anisotropic Polymer Matrix Composite Plate with a Central Circular Hole under Uniaxial Tension. Polymers, 2022, 14, 1977.	2.0	1
97	A Novel Electronic Wedge Brake Based on Active Disturbance Rejection Control. Energies, 2022, 15, 5096.	1.6	1
98	Path stability of a crack with an eigenstrain. Journal of Mechanical Science and Technology, 2006, 20, 1428-1435.	0.7	0
99	EFFECT OF COMPRESSIVE RESIDUAL STRESS INDUCED DURING FABRICATING PROCESS IN THE CORE OF CLAMPED SANDWICH PLATE UNDER SHOCK LOADING. International Journal of Modern Physics B, 2008, 22, 1195-1200.	1.0	0
100	Effect of Substrate Type on Overall Performance of Magnetostrictive Thin Film Cantilever Actuator for MEMS. , 2009, , .		0
101	Online statistical estimation methods for the internal resistance of nickel-hydrogen batteries. , 2009, , .		0
102	A New Extension of Cauchy's Born Rule for Monolayer Crystal Films. Nanoscale Research Letters, 2010, 5, 863-867.	3.1	0
103	SOC Estimation of Lead-Acid Batteries Based on UKF. , 2010, , .		0
104	Micromechanically motivated constitutive model to characterize the hygrothermomechanical response of polymer electrolyte membrane. Journal of Mechanical Science and Technology, 2015, 29, 1145-1150.	0.7	0
105	Development of a Reinforced Bend with Shear Control Ring for District Heating. Energy Procedia, 2017, 116, 510-517.	1.8	0
106	A Novel Genetic Algorithm Applied to Parameter Estimation of Passive Surface Acoustic Wave Torque Sensing Signal. , 2018, , .		0
107	Development of Modeling Method for Computational Analysis of 3D Printing Model. Transactions of the Korean Society of Automotive Engineers, 2021, 29, 257-264.	0.1	0
108	OS10-1-5 Heat flow analysis of judder in the disk brake by using thermocouple. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _OS10-1-5--_OS10-1-5-.	0.0	0

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109	P-26 Estimation of Magnetostrictive Properties of Tb <sub>0.24</sub> Dy <sub>0.76</sub> Fe <sub>2-x</sub> Ni <sub>x</sub> Thin Films. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _P-26-1_-P-26-4_.	0.0	0
110	OS4-7-2 Life Cycle Analysis of Automotive Junction Box Fuse by One-side Excitation Durability Measurement. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _OS4-7-2-1-_OS4-7-2-5.	0.0	0
111	STUDY ON SOFTENING CONSTITUTIVE MODEL OF SOFT ROCK USING STRAIN SPACE BASED UNIFIED STRENGTH THEORY. , 2009, , .		0
112	A Study on Traffic Accident Reconstruction through Vehicle Crash Test. Transactions of the Korean Society of Automotive Engineers, 2013, 21, 58-63.	0.1	0
113	Effect of High Hardness Armor Plate Sequences on Ballistic Impact Response. Journal of the Korean Society for Precision Engineering, 2017, 34, 417-424.	0.1	0