Takayuki Yamada

List of Publications by Citations

159 papers	**1,989** citations
21 h-index	**40** g-index
179 ext. papers	**2,489** ext. citations
2.7 avg, IF	**5.19** L-index

#	Paper	IF	Citations
159	A topology optimization method based on the level set method incorporating a fictitious interface energy. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 2876-2891	5.7	369
158	A topology optimization method for a coupled thermal-fluid problem using level set boundary expressions. *International Journal of Heat and Mass Transfer*, **2015**, 81, 878-888	4.9	107
157	Matlab code for a level set-based topology optimization method using a reaction diffusion equation. *Structural and Multidisciplinary Optimization*, **2015**, 51, 1159-1172	3.6	75
156	A Level Set-Based Topology Optimization Method for Maximizing Thermal Diffusivity in Problems Including Design-Dependent Effects. *Journal of Mechanical Design, Transactions of the ASME*, **2011**, 133,	3	71
155	A topology optimization method based on the level set method for the design of negative permeability dielectric metamaterials. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 237-240, 192-211	5.7	69
154	A structural optimization method based on the level set method using a new geometry-based re-initialization scheme. *International Journal for Numerical Methods in Engineering*, **2010**, 83, 1580-1624	2.4	69
153	Topology optimization using a reaction-diffusion equation. *Computer Methods in Applied Mechanics and Engineering*, **2011**, 200, 2407-2420	5.7	64
152	Topology optimization of an acoustic metamaterial with negative bulk modulus using local resonance. *Finite Elements in Analysis and Design*, **2013**, 72, 1-12	2.2	59
151	Topology optimization in thermal-fluid flow using the lattice Boltzmann method. *Journal of Computational Physics*, **2016**, 307, 355-377	4.1	58
150	Topology optimization using the lattice Boltzmann method incorporating level set boundary expressions. *Journal of Computational Physics*, **2014**, 274, 158-181	4.1	56
149	Level set based topology optimization for optical cloaks. *Applied Physics Letters*, **2013**, 102, 251106	3.4	46
148	An acoustic metasurface design for wave motion conversion of longitudinal waves to transverse waves using topology optimization. *Applied Physics Letters*, **2015**, 107, 221909	3.4	41
147	A topology optimisation for three-dimensional acoustics with the level set method and the fast multipole boundary element method. *Mechanical Engineering Journal*, **2014**, 1, CM0039-CM0039	0.5	35
146	Level set-based topology optimization for 2D heat conduction problems using BEM with objective function defined on design-dependent boundary with heat transfer boundary condition. *Engineering Analysis With Boundary Elements*, **2015**, 61, 61-70	2.6	30
145	An Optimum Design Method for a Thermal-Fluid Device Incorporating Multiobjective Topology Optimization With an Adaptive Weighting Scheme. *Journal of Mechanical Design, Transactions of the ASME*, **2018**, 140,	3	26
144	Power generation enhancement of solid oxide fuel cell by cathode-electrolyte interface modification in mesoscale assisted by level set-based optimization calculation. *Journal of Power Sources*, **2011**, 196, 3485-3495	8.9	26
143	Data mining based on clustering and association rule analysis for knowledge discovery in multiobjective topology optimization. *Expert Systems With Applications*, **2019**, 119, 247-261	7.8	26

142	Topology optimization for hyperbolic acoustic metamaterials using a high-frequency homogenization method. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 335, 419-471	5.7	23
141	An immersed boundary element method for level-set based topology optimization. *International Journal for Numerical Methods in Engineering*, **2013**, 93, 960-988	2.4	23
140	Topology optimization of hyperbolic metamaterials for an optical hyperlens. *Structural and Multidisciplinary Optimization*, **2017**, 55, 913-923	3.6	21
139	Topology optimization of free-layer damping material on a thin panel for maximizing modal loss factors expressed by only real eigenvalues. *Journal of Sound and Vibration*, **2015**, 358, 84-96	3.9	21
138	Multiobjective optimization using an aggregative gradient-based method. *Structural and Multidisciplinary Optimization*, **2015**, 51, 173-182	3.6	21
137	MPS-FEM PARTITIONED COUPLING APPROACH FOR FLUID-STRUCTURE INTERACTION WITH FREE SURFACE FLOW. *International Journal of Computational Methods*, **2014**, 11, 1350101	1.1	21
136	Manufacturability evaluation for molded parts using fictitious physical models, and its application in topology optimization. *International Journal of Advanced Manufacturing Technology*, **2017**, 92, 1391-1409	3.2	20
135	Topology Optimization of a Magnetic Actuator Based on a Level Set and Phase-Field Approach. *IEEE Transactions on Magnetics*, **2011**, 47, 1318-1321	2	20
134	Optimal design of electromagnetic cloaks with multiple dielectric materials by topology optimization. *Applied Physics Letters*, **2017**, 110, 201104	3.4	19
133	Topology Optimization for a Dielectric Optical Cloak Based on an Exact Level Set Approach. *IEEE Transactions on Magnetics*, **2013**, 49, 2073-2076	2	19
132	Topology optimization for locally resonant sonic materials. *Applied Physics Letters*, **2014**, 104, 191905	3.4	19
131	BMP-2 Enhances Lgr4 Gene Expression in Osteoblastic Cells. *Journal of Cellular Physiology*, **2016**, 231, 887-95	7	17
130	Optimum design of an acoustic metamaterial with negative bulk modulus in an acoustic-elastic coupled system using a level set-based topology optimization method. *International Journal for Numerical Methods in Engineering*, **2018**, 113, 1300-1339	2.4	16
129	Level Set-Based Topology Optimization for the Design of an Electromagnetic Cloak With Ferrite Material. *IEEE Transactions on Magnetics*, **2013**, 49, 2081-2084	2	16
128	Orthotropic material orientation optimization method in composite laminates. *Structural and Multidisciplinary Optimization*, **2018**, 57, 815-828	3.6	16
127	FreeFEM++ code for reaction-diffusion equation-based topology optimization: for high-resolution boundary representation using adaptive mesh refinement. *Structural and Multidisciplinary Optimization*, **2020**, 62, 439-455	3.6	15
126	A level set-based topology optimization method for optimal manifold designs with flow uniformity in plate-type microchannel reactors. *Structural and Multidisciplinary Optimization*, **2017**, 55, 1311-1327	3.6	15
125	Optimum design of a multi-functional acoustic metasurface using topology optimization based on Zwicker's loudness model. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 331, 116-137	5.7	15

124	Migration linked to FUCCI-indicated cell cycle is controlled by PTH and mechanical stress. *Journal of Cellular Physiology*, **2014**, 229, 1353-8	7	14
123	A Structural Optimization Method Incorporating Level Set Boundary Expressions Based on the Concept of the Phase Field Method. *Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A*, **2009**, 75, 550-558		14
122	Simultaneous optimization of layout and task schedule for robotic cellular manufacturing systems. *Computers and Industrial Engineering*, **2016**, 102, 396-407	6.4	14
121	FEM-Based Simulation for Workpiece Deformation in Thin-Wall Milling. *International Journal of Automation Technology*, **2015**, 9, 122-128	0.8	13
120	Shape and topology optimization based on the convected level set method. *Structural and Multidisciplinary Optimization*, **2016**, 54, 659-672	3.6	13
119	Full-scale 3D structural topology optimization using adaptive mesh refinement based on the level-set method. *Finite Elements in Analysis and Design*, **2021**, 194, 103561	2.2	12
118	Pareto frontier exploration in multiobjective topology optimization using adaptive weighting and point selection schemes. *Structural and Multidisciplinary Optimization*, **2017**, 55, 409-422	3.6	11
117	Local-in-time adjoint-based topology optimization of unsteady fluid flows using the lattice Boltzmann method. *Mechanical Engineering Journal*, **2017**, 4, 17-00120-17-00120	0.5	11
116	Level set-based topology optimisation of a compliant mechanism design using mathematical programming. *Mechanical Sciences*, **2011**, 2, 91-98	1.3	11
115	Isogeometric topology optimization of anisotropic metamaterials for controlling high-frequency electromagnetic wave. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 1218-1247	2.4	11
114	Three-dimensional topology optimization of a fluid-structure system using body-fitted mesh adaption based on the level-set method. *Applied Mathematical Modelling*, **2022**, 101, 276-308	4.5	11
113	Topology optimization of a no-moving-part valve incorporating Pareto frontier exploration. *Structural and Multidisciplinary Optimization*, **2017**, 56, 839-851	3.6	10
112	A level set-based topology optimization method for simultaneous design of elastic structure and coupled acoustic cavity using a two-phase material model. *Journal of Sound and Vibration*, **2017**, 404, 15-30	3.9	10
111	Design of Compliant Thermal Actuators Using Structural Optimization Based on the Level Set Method. *Journal of Computing and Information Science in Engineering*, **2011**, 11,	2.4	10
110	Gradient-based multiobjective optimization using a distance constraint technique and point replacement. *Engineering Optimization*, **2016**, 48, 1226-1250	2	9
109	Level Set-Based Topology Optimization for the Design of Light-Trapping Structures. *IEEE Transactions on Magnetics*, **2014**, 50, 729-732	2	9
108	Reaction-diffusion equation based topology optimization combined with the modified conjugate gradient method. *Finite Elements in Analysis and Design*, **2018**, 140, 84-95	2.2	9
107	Optimization of dispersive coefficients in the homogenization of the wave equation in periodic structures. *Numerische Mathematik*, **2018**, 140, 265-326	2.2	9

106	Development of implantable catheter flow sensor into inside of bronchi for laboratory animal. *Microsystem Technologies*, **2017**, 23, 175-185	1.7	8
105	Robust topology optimization of optical cloaks under uncertainties in wave number and angle of incident wave. *International Journal for Numerical Methods in Engineering*, **2020**, 121, 3926-3954	2.4	8
104	Single-domain (110) PbTiO3 thin films: Thermodynamic theory and experiments. *Physical Review B*, **2016**, 93,	3.3	8
103	Detection of both heartbeat and respiration signals from airflow at mouth by using single catheter flow sensor **2015**,		8
102	Robust topology optimization of thin plate structure under concentrated load with uncertain load position. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2016**, 10, JAMDSM0057-JAMDSM0057	0.6	8
101	Detection of kinetic heartbeat signals from airflow at mouth by catheter flow sensor with temperature compensation **2016**,		8
100	Extraction of heartbeat signal from airflow at mouth by flow sensor **2015**,		7
99	β-adrenergic receptor activation suppresses bone morphogenetic protein (BMP)-induced alkaline phosphatase expression in osteoblast-like MC3T3E1 cells. *Journal of Cellular Biochemistry*, **2015**, 116, 1144-52	4.7	7
98	Level set-based topology optimization of thin plate structure for maximizing stiffness under out-of-plane deformation. *Transactions of the JSME (in Japanese)*, **2014**, 80, DSM0054-DSM0054	0.2	6
97	. *IEEE Sensors Journal*, **2017**, 17, 4369-4377	4	6
96	Topology optimization for multi-material structures based on the level set method. *Transactions of the JSME (in Japanese)*, **2017**, 83, 17-00069-17-00069	0.2	6
95	Multiobjective Topology Optimization for a Multi-layered Morphing Flap Considering Multiple Flight Conditions. *Transactions of the Japan Society for Aeronautical and Space Sciences*, **2020**, 63, 90-100	0.8	5
94	Level set-based topology optimization for the design of a peltier effect thermoelectric actuator. *Structural and Multidisciplinary Optimization*, **2017**, 55, 1671-1683	3.6	5
93	Optimal shape design of flux barriers in IPM synchronous motors using the phase field method. *COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, **2014**, 33, 998-1016	0.7	5
92	A Topology Optimization Method for Geometrically Nonlinear Problems Incorporating Level Set Boundary Expressions and a Particle Method. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2013**, 7, 630-643	0.6	5
91	3D-Printed Micro-Tweezers with a Compliant Mechanism Designed Using Topology Optimization. *Micromachines*, **2021**, 12,	3.3	5
90	A heuristic approach for actuator layout designs in deformable mirror devices based on current value optimization. *Structural and Multidisciplinary Optimization*, **2018**, 58, 1243-1254	3.6	5
89	A topology optimization method in rarefied gas flow problems using the Boltzmann equation. *Journal of Computational Physics*, **2019**, 395, 60-84	4.1	4

88	Geometric shape features extraction using a steady state partial differential equation system. *Journal of Computational Design and Engineering*, **2019**, 6, 647-656	4.6	4
87	Topology optimization for fluid flows using the MPS method incorporating the level set method. *Computers and Fluids*, **2019**, 188, 86-101	2.8	4
86	Driving force profile design in comb drive electrostatic actuators using a level set-based shape optimization method. *Structural and Multidisciplinary Optimization*, **2015**, 51, 369-383	3.6	4
85	Topological derivative for an acoustic-elastic coupled system based on two-phase material model. *Mechanical Engineering Letters*, **2016**, 2, 16-00246-16-00246	0.5	4
84	A Structural Optimization Method Incorporating Level Set Boundary Expressions Based on the Concept of the Phase Field Method. *Journal of Environment and Engineering*, **2011**, 6, 567-578		4
83	Design Study of Lightweight Automatic Transmission Parts for Vehicles Using Level Set-Based Topology Optimization **2016**,		4
82	Reliability-based topology optimization under shape uncertainty modeled in Eulerian description. *Structural and Multidisciplinary Optimization*, **2019**, 59, 75-91	3.6	4
81	Thermal Performance Optimization in Electric Vehicle Power Trains by Locally Orthotropic Surface Layer Design. *Journal of Mechanical Design, Transactions of the ASME*, **2018**, 140,	3	4
80	Topology optimization considering the distortion in additive manufacturing. *Finite Elements in Analysis and Design*, **2021**, 193, 103558	2.2	4
79	Transparotid excision of rhabdomyosarcoma in masseter muscle: A case report. *Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology*, **2015**, 27, 45-48	0.4	3
78	CO-JP-7 A Layout Design Optimization Method for Multi-robot Assembly Systems. *The Proceedings of Mechanical Engineering Congress Japan*, **2012**, 2012, _CO-JP-7-1-_CO-JP-7-9	0	3
77	Robust Design Using Level-Set Based Topology Optimization for Coupled Thermal and Structural Problems **2010**,		3
76	Topology Optimization for Coupled Thermal and Structural Problems Using the Level Set Method(Mechanical Systems). *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2010**, 76, 36-43		3
75	Structural Optimization of Compliant Thermal Micro-Actuators Based on the Level Set Method **2008**,		3
74	Optimum design and thermal modeling for 2D and 3D natural convection problems incorporating level set-based topology optimization with body-fitted mesh. *International Journal for Numerical Methods in Engineering*,	2.4	3
73	Thickness Constraints for Topology Optimization Using the Fictitious Physical Model **2019**, 483-490		3
72	Topology optimization of acoustic metasurfaces by using a two-scale homogenization method. *Applied Mathematical Modelling*, **2021**, 98, 465-497	4.5	3
71	FGF Suppresses Poldip2 Expression in Osteoblasts. *Journal of Cellular Biochemistry*, **2017**, 118, 1670-1677	4.7	2

70	Implantable catheter flow sensor with legs in air passage for laboratory animal **2014**,		2
69	Level Set-Based Topology Optimization for the Design of a Ferromagnetic Waveguide. *IEEE Transactions on Magnetics*, **2012**, 48, 3072-3075	2	2
68	Level Set-Based Robust Topology Optimization for Coupled Thermal and Structural Problems Considering Uncertainty. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2011**, 77, 1-13		2
67	Topology Optimization Based on the Level Set Method Using Mathematical Programming. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2011**, 77, 4001-4014		2
66	A Level Set-Based Topology Optimization Method Using the Boundary Element Method in Three Dimension. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2012**, 78, 228-239		2
65	Level Set-Based Topology Optimization Method for Thermal Problems(Mechanical Systems). *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2009**, 75, 2868-2876		2
64	Design of Compliant Thermal Actuators Using Structural Optimization Based on the Level Set Method **2008**,		2
63	A study on topology optimization using the level-set function and BEM **2012**,		2
62	Level-set based topology optimization considering milling directions via fictitious physical model. *Mechanical Engineering Journal*, **2020**, 7, 20-00226-20-00226	0.5	2
61	Level set-based topology optimization for graded acoustic metasurfaces using two-scale homogenization. *Finite Elements in Analysis and Design*, **2021**, 196, 103606	2.2	2
60	Multi-material topology optimization based on symmetric level set function using the material definition with perfect symmetric property. *Transactions of the JSME (in Japanese)*, **2021**, 87, 20-00412-20-00412	0.2	2
59	Minimizing creep deformation via topology optimization. *Finite Elements in Analysis and Design*, **2022**, 207, 103758	2.2	2
58	Topology optimization method for incompressible viscous flow applying an immersed boundary method. *Transactions of the JSME (in Japanese)*, **2018**, 84, 17-00551-17-00551	0.2	1
57	Level set-based topology optimization of steady state incompressible viscous flows under outflow rate inequality constraint. *Transactions of the JSME (in Japanese)*, **2014**, 80, DSM0213-DSM0213	0.2	1
56	Topology optimization with geometrical constraints based on fictitious physical models (The geometrical constraint for molding and milling). *Transactions of the JSME (in Japanese)*, **2017**, 83, 17-00081-17-00081	0.2	1
55	Topology optimization for unification deposit thickness on electroplating process. *Transactions of the JSME (in Japanese)*, **2017**, 83, 17-00185-17-00185	0.2	1
54	Structural Optimization of a Brake Disc. *Journal of the Japan Society for Precision Engineering*, **2014**, 80, 763-770	0.1	1
53	Level Set-Based Robust Topology Optimization Using Stationary Stochastic Process Model. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2012**, 78, 928-942		1

52	A Level Set-Based Topology Optimization Using the Lattice-Boltzmann Method. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2013**, 79, 2152-2163		1
51	Topology Optimization Method Using Level Set Boundary Expressions in Navier Stokes Flow **2012**,		1
50	Level Set-Based Robust Topology Design Considering Spatial Uncertainty **2012**,		1
49	Reliability-Based Topology Optimization Incorporating Level Set Boundary Expressions(Mechanical Systems). *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2009**, 75, 2633-2641		1
48	An Optimum Design Method for Capacitive Micromachined Ultrasonic Transducers : Level Set-Based Topology Optimization Method Incorporating Uniform Cross-Section Surface Constraints. *Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A*, **2010**, 76, 1403-1411		1
47	A New Structural Optimization Method Based on the Level Set Method for Vibration Problems and Heat Conduction Problems **2008**,		1
46	Level set-based structural topology optimization of thermal deformation control structures using thermoelectric devicesThermoelectric Devices **2010**,		1
45	Proposal of Multi-layered Compliant Mechanism as Internal Mechanism of Morphing Wing. *Aerospace Technology Japan the Japan Society for Aeronautical and Space Sciences*, **2019**, 18, 151-159	0.1	1
44	An acoustic metasurface design for wave motion conversion of longitudinal waves to transverse waves using topology optimization		1
43	A wavelength selective emitter design method using hyperbolic tangent level set-based shape optimization. *Optics Communications*, **2020**, 463, 125405	2	1
42	Topology optimization of dynamic problems based on finite deformation theory. *International Journal for Numerical Methods in Engineering*, **2021**, 122, 4486-4506	2.4	1
41	Level set-based topology optimization targeting micropumps employing an induced-charge electro-osmosis flow. *Transactions of the JSME (in Japanese)*, **2016**, 82, 15-00406-15-00406	0.2	1
40	Level Set-Based Topology Optimization with Manufacturing Constraint with Manufacturing Directions via Fictitious Physical Model **2019**,		1
39	A design method of spatiotemporal optical pulse using level-set based time domain topology optimization. *International Journal for Numerical Methods in Engineering*, **2019**, 117, 605-622	2.4	1
38	Level set-based topology optimization for two dimensional turbulent flow using an immersed boundary method. *Journal of Computational Physics*, **2021**, 446, 110630	4.1	1
37	Topology optimization for unifying deposit thickness in electroplating process. *Structural and Multidisciplinary Optimization*, **2020**, 62, 1767-1785	3.6	0
36	Shape sensitivity for a two-phase heat conduction problem considering nanoscale effects. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2018**, 12, JAMDSM0003-JAMDSM0003	0.6	0
35	A formulation for optimal design problem of compliant displacement magnification mechanisms based on effective energy concept. *Mechanical Engineering Letters*, **2017**, 3, 17-00453-17-00453	0.5	0

#	Reference		
34	Topology optimization with a closed cavity exclusion constraint for additive manufacturing based on the fictitious physical model approach. *Additive Manufacturing*, **2022**, 52, 102630	6.1	0
33	Topology optimization for transient response problems involving thermoelastic materials. *Finite Elements in Analysis and Design*, **2022**, 201, 103695	2.2	0
32	Topology optimization for the elastic field using the lattice Boltzmann method. *Computers and Mathematics With Applications*, **2022**, 110, 123-134	2.7	0
31	Extended level set method: A multiphase representation with perfect symmetric property, and its application to multi-material topology optimization. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 393, 114742	5.7	0
30	Topology optimization for acoustic structures considering viscous and thermal boundary layers using a sequential linearized Navier-Stokes model. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 394, 114863	5.7	0
29	Topology optimization method for unsteady state incompressible viscous flow based on a level set immersed boundary method. *Transactions of the JSME (in Japanese)*, **2019**, 85, 18-00423-18-00423	0.2	
28	Optimum design of lattice structures based on continuum expression using micropolar continuum theory. *Transactions of the JSME (in Japanese)*, **2016**, 82, 16-00171-16-00171	0.2	
27	Robust topology optimization of compliant mechanism using multiobjective optimization method. *Transactions of the JSME (in Japanese)*, **2016**, 82, 16-00178-16-00178	0.2	
26	Imposing geometrical constraint in topology optimization for additive manufacturing. *Transactions of the JSME (in Japanese)*, **2019**, 85, 18-00508-18-00508	0.2	
25	Topology optimization of acoustic metamaterials with negative mass density using a level set-based method. *Mechanical Engineering Journal*, **2014**, 1, DSM0040-DSM0040	0.5	
24	A local search-based bi-objective optimization considering distance constraints. *Transactions of the JSME (in Japanese)*, **2014**, 80, DSM0389-DSM0389	0.2	
23	A topology optimization method for rarefied gas flows. *Transactions of the JSME (in Japanese)*, **2017**, 83, 17-00135-17-00135	0.2	
22	Structural Optimization of Electrostatic Actuators Based on the Level Set Method. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2013**, 79, 3234-3247		
21	Topology Optimization of Magnetostrictive Actuator Problems Based on the Ideas of Level Set Method and Phase Field Method. *Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A*, **2013**, 79, 164-176		
20	Topology Optimization for the Design of Acoustic Metamaterials Using Level Set-Based Boundary Expressions. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2013**, 79, 2138-2151		
19	Effects of Parameters of Level Set-Based Robust Topology Optimization on Robust Optimum Configuration. *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2013**, 79, 2233-2237		
18	Topology Optimization for Unifying Deposit Thickness in Electroplating Process **2018**, 1767-1782		
17	A fundamental study on topology optimization for turbulent flows. *The Proceedings of OPTIS*, **2018**, 2018.13, 109	0	

16	Level set-based topology optimization for free surface flow using MPS method. *The Proceedings of OPTIS*, **2018**, 2018.13, 106	0
15	Simultaneous optimization of electric current and layout of actuators for shape control. *The Proceedings of OPTIS*, **2018**, 2018.13, 307	0
14	Multi-objective optimization for Train scheduling of lines with transmit based signaling system. *The Proceedings of OPTIS*, **2018**, 2018.13, 123	0
13	Clustering method for pareto-optimal solution set obtained by 3D multiobjective topology optimization. *The Proceedings of OPTIS*, **2018**, 2018.13, 308	0
12	J1240103 Level set based-topology optimization of heat control devices. *The Proceedings of Mechanical Engineering Congress Japan*, **2015**, 2015, _J1240103--_J1240103-	0
11	A study to realize acoustic cloak using topology optimization based on level-set method.. *The Proceedings of the Dynamics & Design Conference*, **2016**, 2016, 444	0
10	Topology optimization for the design of acoustic metasurface incorporating acoustic-elastic coupling effect based on two-phase material model. *The Proceedings of Design & Systems Conference*, **2016**, 2016.26, 2317	0
9	Evaluation Method of Wave Dispersive Effect in Heterogeneous Media Using a Non-convex and Multimodal Optimization Method. *The Proceedings of Design & Systems Conference*, **2016**, 2016.26, 1301	0
8	Robust Topology Optimization for Enlarging the Bandwidth of an Electromagnetic Cloaking. *The Proceedings of Mechanical Engineering Congress Japan*, **2017**, 2017, J1210204	0
7	030 A Level Set-Based Topology Optimization Considering Manufacturing Requirements. *The Proceedings of the Materials and Mechanics Conference*, **2010**, 2010, 569-571	0
6	Study on Electric Intensity Dependency of Laser Action in Randomly Distributed Dielectric Rod. *IEEJ Transactions on Electronics, Information and Systems*, **2012**, 132, 89-95	0.1
5	J122025 A study of the optimum design of the locally resonant sonic materials using the level set based-topology optimization method. *The Proceedings of Mechanical Engineering Congress Japan*, **2012**, 2012, _J122025-1-_J122025-2	0
4	1214 Multiobjective optimization based on a local search technique considering distance constraints : adaptive adjustment of the number of points. *Proceedings of the Optimization Symposium*, **2014**, 2014.11, _1214-1_-_1214-5_	
3	Topology optimization with geometrical feature constraints based on the partial differential equation system for geometrical features (Overhang constraints considering geometrical singularities in additive manufacturing). *Transactions of the JSME (in Japanese)*, **2019**, 85, 19-00129-19-00129	0.2
2	Topology optimization of transient response problems using step by step integration method (Formulation of analytical sensitivity with displacement as an unknown quantity and synthesis of vibration control structure). *Transactions of the JSME (in Japanese)*, **2021**, 87, 20-00382-20-00382	0.2
1	Multi-material robust topology optimization considering uncertainty of material properties. *Transactions of the JSME (in Japanese)*, **2021**, 87, 21-00138-21-00138	0.2