

# Ashok V Kumar

## List of Publications by Year in descending order

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33  
papers

299  
citations

933447

10  
h-index

888059

17  
g-index

33  
all docs

33  
docs citations

33  
times ranked

203  
citing authors

#	ARTICLE	IF	CITATIONS
1	Implicit boundary method for finite element analysis using non-conforming mesh or grid. International Journal for Numerical Methods in Engineering, 2008, 74, 1421-1447.	2.8	45
2	Finite element analysis of covered microstents. Journal of Biomechanics, 2005, 38, 1221-1227.	2.1	40
3	Topology optimization using B-spline finite elements. Structural and Multidisciplinary Optimization, 2011, 44, 471-481.	3.5	38
4	Implicit boundary method for analysis using uniform B-spline basis and structured grid. International Journal for Numerical Methods in Engineering, 2008, 76, 1993-2028.	2.8	37
5	Implicit boundary method for determination of effective properties of composite microstructures. International Journal of Solids and Structures, 2009, 46, 2514-2526.	2.7	21
6	Load and Boundary Condition Calibration Using Full-field Strain Measurement. Experimental Mechanics, 2006, 46, 569-578.	2.0	14
7	A Sequential Optimization Algorithm Using Logarithmic Barriers: Applications to Structural Optimization. Journal of Mechanical Design, Transactions of the ASME, 2000, 122, 271-277.	2.9	10
8	Step Function Representation of Solid Models and Application to Mesh Free Engineering Analysis. Journal of Mechanical Design, Transactions of the ASME, 2006, 128, 46-56.	2.9	10
9	Finite Element Analysis Using Nonconforming Mesh. Journal of Computing and Information Science in Engineering, 2008, 8, .	2.7	10
10	Magnetostatic Analysis Using Implicit Boundary Finite-Element Method. IEEE Transactions on Magnetics, 2010, 46, 1159-1166.	2.1	10
11	Immersed boundary modal analysis and forced vibration simulation using step boundary method. Finite Elements in Analysis and Design, 2017, 126, 1-12.	3.2	10
12	Three-Dimensional Magnetostatic Analysis Using Structured Mesh and Nodal Elements. IEEE Transactions on Magnetics, 2011, 47, 198-206.	2.1	9
13	Mesh independent analysis of shell-like structures. International Journal for Numerical Methods in Engineering, 2012, 91, 472-490.	2.8	9
14	Method for imposing boundary conditions on Reissner-Mindlin plates for analysis using structured background mesh. Computers and Structures, 2014, 138, 1-11.	4.4	8
15	Isoparametric B-Spline Elements for Immersed Boundary Explicit Dynamic Simulation. Journal of Computing and Information Science in Engineering, 2020, 20, .	2.7	5
16	Investigation of Localized Deformation in NiAl Single Crystals. Journal of Engineering Materials and Technology, Transactions of the ASME, 1998, 120, 206-211.	1.4	3
17	Investigation of Strain Hardening in NiAl Single Crystals Using Three-Dimensional FEA Models. Journal of Engineering Materials and Technology, Transactions of the ASME, 2001, 123, 20-27.	1.4	3
18	Inverse Method for Estimating Resistivity of Carbon Fiber Composite Structures. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	3

#	ARTICLE	IF	CITATIONS
19	Modeling and Simulation of RDX Powder Thermo-Mechanical Response to Drop Impact. Propellants, Explosives, Pyrotechnics, 2021, 46, 1107-1120.	1.6	3
20	Immersed boundary thin shell analysis using 3D B-Spline background mesh. Finite Elements in Analysis and Design, 2021, 195, 103574.	3.2	3
21	Influence of Anvil Properties on RDX Thin Layer Ignition Behavior. Propellants, Explosives, Pyrotechnics, 2017, 42, 438-447.	1.6	2
22	Conceptual Design of Structures Using an Upper Bound of von Mises Stress. Journal of Computing and Information Science in Engineering, 2019, 19, .	2.7	2
23	Survey of Immersed Boundary Approaches for Finite Element Analysis. Journal of Computing and Information Science in Engineering, 2020, 20, .	2.7	2
24	Total Lagrangian Formulation for Large Deformation Modeling Using Uniform Background Mesh. , 2016, , .		1
25	Mesh Independent Modeling of Essential, Interface and Periodic Boundary Conditions Using Step Boundary Method. , 2017, , .		1
26	Analysis of Shell-Like Structures Using Structured Mesh. , 2010, , .		0
27	Analysis of Magnetically Actuated Structures Using Implicit Boundary Finite Element Method. , 2010, , .		0
28	Smooth Shape and Topology Design Using B-Spline Elements. , 2010, , .		0
29	Tailoring Flapping Wings to Facilitate Desired Deformed Shapes. AIAA Journal, 2013, 51, 2032-2035.	2.6	0
30	T-Spline Based Local Refinement for Mesh Independent Analysis. , 2014, , .		0
31	Modal Analysis Using Implicit Boundary Finite Element Methods. , 2014, , .		0
32	Coupled Electrostatic-Structural Analysis Using Mesh Independent Approach. , 2015, , .		0
33	Immersed boundary Mindlin-Reissner 3D shell element for modeling isotropic and laminated composite shells. Finite Elements in Analysis and Design, 2022, 208, 103794.	3.2	0