

Prabhat Kumar

List of Publications by Year in descending order

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15
papers

225
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129
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Studies on transport phenomena during directional solidification of a noneutectic binary solution cooled from the top. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2003, 34, 899-909. | 2.1 | 26 |
| 2 | Topology optimization of fluidic pressure-loaded structures and compliant mechanisms using the Darcy method. Structural and Multidisciplinary Optimization, 2020, 61, 1637-1655. | 3.5 | 25 |
| 3 | Rayleigh-benard convection during solidification of an eutectic solution cooled from the top. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2002, 33, 605-612. | 2.1 | 23 |
| 4 | Synthesis of C0 Path-Generating Contact-Aided Compliant Mechanisms Using the Material Mask Overlay Method. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, . | 2.9 | 23 |
| 5 | Computational Synthesis of Large Deformation Compliant Mechanisms Undergoing Self and Mutual Contact. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, . | 2.9 | 22 |
| 6 | Topology optimization and 3D printing of large deformation compliant mechanisms for straining biological tissues. Structural and Multidisciplinary Optimization, 2021, 63, 1351-1366. | 3.5 | 19 |
| 7 | On topology optimization of large deformation contact-aided shape morphing compliant mechanisms. Mechanism and Machine Theory, 2021, 156, 104135. | 4.5 | 16 |
| 8 | On topology optimization of designâ€dependent pressureâ€loaded threeâ€dimensional structures and compliant mechanisms. International Journal for Numerical Methods in Engineering, 2021, 122, 2205-2220. | 2.8 | 16 |
| 9 | On topology optimization with embedded boundary resolution and smoothing. Structural and Multidisciplinary Optimization, 2015, 52, 1135-1159. | 3.5 | 13 |
| 10 | Topology optimization of stiff structures under self-weight for given volume using a smooth Heaviside function. Structural and Multidisciplinary Optimization, 2022, 65, 1. | 3.5 | 12 |
| 11 | Compliant Fluidic Control Structures: Concept and synthesis approach. Computers and Structures, 2019, 216, 26-39. | 4.4 | 8 |
| 12 | HoneyTop90: A 90-line MATLAB code for topology optimization using honeycomb tessellation. Optimization and Engineering, 2023, 24, 1433-1460. | 2.4 | 8 |
| 13 | On topology optimization with elliptical masks and honeycomb tessellation with explicit length scale constraints. Structural and Multidisciplinary Optimization, 2020, 62, 1227-1251. | 3.5 | 5 |
| 14 | Topological synthesis of fluidic pressure-actuated robust compliant mechanisms. Mechanism and Machine Theory, 2022, 174, 104871. | 4.5 | 5 |
| 15 | On Synthesis of Contact Aided Compliant Mechanisms Using the Material Mask Overlay Method. , 2015, , . | | 2 |