File name: FID-027.txt

Result: PLAGIARISM DETECTED

Plagiarism Detected: 94.99%

Text to analyze: The impressive capabilities of living organisms arise from the way autonomy is materialized by their bodies. Across scales, living beings couple computational or cognitive intelligence with physical intelligence through body morphology, material multifunctionality, and mechanical compliance. While soft robotics has advanced the design and fabrication of physically intelligent bodies, the integration of information-processing capabilities for computational intelligence remains a challenge. Consequently, how soft robots are built today, is being constrained by perception and control limitations. Progress toward untethered autonomy will require deliberate convergence in how the field codevelops new materials, fabrication methods, and control strategies for soft robots. Here, a new perspective is put forward: that researchers should use tasks alone to impose material and information constraints on soft robot design. A conceptual framework for a task-first design paradigm that sidesteps limitations imposed by control strategies has been proposed. This framework allows emergent synergies between material and information processing properties of soft matter to be readily exploited for task-capable agents. Particular attention is paid to the scale dependence of solutions. Finally, an outlook is presented on emerging research opportunities for achieving autonomy in future soft robots as large as elephant trunks and as small as paramecia.

Plagiarized Sentence: The following sentence: 'The impressive capabilities of living organisms arise from the way autonomy is materialized by their bodies.' presents plagiarism from the 'org-067.txt' file and sentence 'The impressive capabilities of living organisms arise from the way autonomy is materialized by their bodies.'

Plagiarized Sentence: The following sentence: 'Across scales, living beings couple computational

or cognitive intelligence with physical intelligence through body morphology, material multifunctionality, and mechanical compliance.' presents plagiarism from the 'org-067.txt' file and sentence 'Across scales, living beings couple computational or cognitive intelligence with physical intelligence through body morphology, material multifunctionality, and mechanical compliance.'

Plagiarized Sentence: The following sentence: 'While soft robotics has advanced the design and fabrication of physically intelligent bodies, the integration of information-processing capabilities for computational intelligence remains a challenge.' presents plagiarism from the 'org-067.txt' file and sentence 'While soft robotics has advanced the design and fabrication of physically intelligent bodies, the integration of information-processing capabilities for computational intelligence remains a challenge.'

Plagiarized Sentence: The following sentence: 'Consequently, how soft robots are built today, is being constrained by perception and control limitations.' presents plagiarism from the 'org-067.txt' file and sentence 'Consequently, perception and control limitations have constrained how soft robots are built today.'

Plagiarized Sentence: The following sentence: 'Progress toward untethered autonomy will require deliberate convergence in how the field codevelops new materials, fabrication methods, and control strategies for soft robots.' presents plagiarism from the 'org-067.txt' file and sentence 'Progress toward untethered autonomy will require deliberate convergence in how the field codevelops new materials, fabrication methods, and control strategies for soft robots.'

Plagiarized Sentence: The following sentence: 'Here, a new perspective is put forward: that researchers should use tasks alone to impose material and information constraints on soft robot design.' presents plagiarism from the 'org-067.txt' file and sentence 'Here, a new perspective is put forward: that researchers should use tasks alone to impose material and information constraints on

soft robot design.'

Plagiarized Sentence: The following sentence: 'A conceptual framework for a task-first design

paradigm that sidesteps limitations imposed by control strategies has been proposed.' presents

plagiarism from the 'org-067.txt' file and sentence 'A conceptual framework is proposed for a

task-first design paradigm that sidesteps limitations imposed by control strategies.'

Plagiarized Sentence: The following sentence: This framework allows emergent synergies

between material and information processing properties of soft matter to be readily exploited for

task-capable agents.' presents plagiarism from the 'org-067.txt' file and sentence 'This framework

allows emergent synergies between material and information processing properties of soft matter to

be readily exploited for task-capable agents.'

Plagiarized Sentence: The following sentence: Particular attention is paid to the scale dependence

of solutions.' presents plagiarism from the 'org-067.txt' file and sentence 'Particular attention is paid

to the scale dependence of solutions.'

Plagiarized Sentence: The following sentence: 'Finally, an outlook is presented on emerging

research opportunities for achieving autonomy in future soft robots as large as elephant trunks and

as small as paramecia.' presents plagiarism from the 'org-067.txt' file and sentence 'Finally, an

outlook is presented on emerging research opportunities for achieving autonomy in future soft

robots as large as elephant trunks and as small as paramecia.'

Most similar document(s):

org-067.txt with similarity: 99.0%