File name: FID-027.txt

Result: PLAGIARISM DETECTED

Plagiarism percentage: 94%

# Most similar document(s):

org-067.txt with similarity: 99.0%

# 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.

## Sentence analysis:

## Plagiarized sentence (file FID-027.txt):

'The impressive capabilities of living organisms arise from the way autonomy is materialized by their bodies.'

#### Original sentence (file org-067.txt):

'The impressive capabilities of living organisms arise from the way autonomy is materialized by their bodies.'

## Plagiarized sentence (file FID-027.txt):

'Across scales, living beings couple computational or cognitive intelligence with physical intelligence through body morphology, material multifunctionality, and mechanical compliance.'

#### Original sentence (file org-067.txt):

'Across scales, living beings couple computational or cognitive intelligence with physical intelligence through body morphology, material multifunctionality, and mechanical compliance.'

### Plagiarized sentence (file FID-027.txt):

'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.'

## Original sentence (file org-067.txt):

'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 (file FID-027.txt):

'Consequently, how soft robots are built today, is being constrained by perception and control limitations.'

#### Original sentence (file org-067.txt):

'Consequently, perception and control limitations have constrained how soft robots are built today.'

# Plagiarized sentence (file FID-027.txt):

'Progress toward untethered autonomy will require deliberate convergence in how the field codevelops new materials, fabrication methods, and control strategies for soft robots.'

#### Original sentence (file org-067.txt):

'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 (file FID-027.txt):

'Here, a new perspective is put forward: that researchers should use tasks alone to impose material and information constraints on soft robot design.'

# Original sentence (file org-067.txt):

'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 (file FID-027.txt):

'A conceptual framework for a task-first design paradigm that sidesteps limitations imposed by control strategies has been proposed.'

Original sentence (file org-067.txt):

'A conceptual framework is proposed for a task-first design paradigm that sidesteps limitations imposed by control strategies.'

# Plagiarized sentence (file FID-027.txt):

'This framework allows emergent synergies between material and information processing properties of soft matter to be readily exploited for task-capable agents.'

## Original sentence (file org-067.txt):

'This framework allows emergent synergies between material and information processing properties of soft matter to be readily exploited for task-capable agents.'

## Plagiarized sentence (file FID-027.txt):

'Particular attention is paid to the scale dependence of solutions.'

# Original sentence (file org-067.txt):

'Particular attention is paid to the scale dependence of solutions.'

# Plagiarized sentence (file FID-027.txt):

'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.'

# Original sentence (file org-067.txt):

'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.'