

**Table S1. TTP RV (Figure 4A)**

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	$p$ -value	
Length, $L/L_{max}$	0.8215	4	36.1461	2.7E-07	
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	1.5E-1	3.8E-3	3.1E-5	2.1E-6
0.85	1.5E-1	1	1.5E-1	7.5E-3	1.2E-3
0.9	3.8E-3	1.5E-1	1	2.0E-1	7.2E-2
0.95	3.1E-5	7.5E-3	2.0E-1	1	5.0E-1
1.0	2.1E-6	1.2E-3	7.2E-2	5.0E-1	1

*p* < 0.05 are highlighted in red.

**Table S2. TTP RA (Figure 4A)**

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	$p$ -value	
Length, $L/L_{max}$	0.9003	4	21.6068	2.4E-04	
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	4.0E-01	2.6E-02	8.6E-03	5.9E-04
0.85	4.0E-01	1	1.7E-01	7.2E-02	8.6E-03
0.9	2.6E-02	1.7E-01	1	6.5E-01	2.1E-01
0.95	8.6E-03	7.2E-02	6.5E-01	1	3.9E-01
1.0	5.9E-04	8.6E-03	2.1E-01	3.9E-01	1

*p* < 0.05 are highlighted in red.

**Table S3. T50 RV (Figure 4B)**

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	$p$ -value	
Length, $L/L_{max}$	0.6398	4	28.1517	1.2E-05	
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	2.5E-01	5.2E-02	6.4E-03	1.2E-05
0.85	2.5E-01	1	3.8E-01	1.1E-01	1.8E-03
0.9	5.2E-02	3.8E-01	1	3.8E-01	2.1E-02
0.95	6.4E-03	1.1E-01	3.8E-01	1.	1.1E-01
1.0	1.2E-05	1.8E-03	2.1E-02	1.1E-01	1

*p* < 0.05 are highlighted in red.

**Table S4. T50 RA (Figure 4B)**

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom		$\chi^2$	$p$ -value
Length, $L/L_{max}$	1	4		24	8.0E-05
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	2.7E-01	4.7E-02	3.4E-03	1.2E-04
0.85	2.7E-01	1	2.7E-01	4.7E-02	3.4E-03
0.9	4.7E-02	2.7E-01	1	2.7E-01	4.7E-02
0.95	3.4E-03	4.7E-02	2.7E-01	1	2.7E-01
1.0	1.2E-04	3.4E-03	4.7E-02	2.7E-01	1

*p* < 0.05 are highlighted in red.

**Table S5. Normalised values of maximal rates of tension development RV (Figure 4C)**

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	$p$ -value	
Length, $L/L_{max}$	0.7174	4	31.5636	2.3E-06	
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	3.1E-01	6.0E-03	2.6E-04	2.4E-05
0.85	3.1E-01	1	9.8E-02	6.0E-03	9.1E-04
0.9	6.0E-03	9.8E-02	1	3.1E-01	1.1E-01
0.95	2.6E-04	6.0E-03	3.1E-01	1	5.0E-01
1.0	2.4E-05	9.1E-04	1.1E-01	5.0E-01	1

*p* < 0.05 are highlighted in red.

**Table S6. Normalised values of maximal rates of tension development RA (Figure 4C)**

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom		$\chi^2$	$p$ -value
Length, $L/L_{max}$	0.9722	4		23.3333	1.1E-04
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	3.0E-01	4.4E-02	6.4E-03	1.2E-04
0.85	3.0E-01	1	2.5E-01	7.4E-02	5.1E-03
0.9	4.4E-02	2.5E-01	1	4.7E-01	7.4E-02
0.95	6.4E-03	7.4E-02	4.7E-01	1	2.5E-01
1.0	1.2E-04	5.1E-03	7.4E-02	2.5E-01	1

*p* < 0.05 are highlighted in red.

**Table S7.** Normalised values of maximal rates of tension relaxation RV (**Figure 4D**)

ANOVA Friedman results					
factor	Kendall's coefficient of concordance		degrees of freedom	$\chi^2$	$p$ -value
Length, $L/L_{max}$	0.8017		4	35.2727	4.1E-07
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	3.8E-01	1.0E-01	1.1E-03	1.5E-06
0.85	3.8E-01	1	4.2E-01	2.1E-02	8.0E-05
0.9	1.0E-01	4.2E-01	1	1.0E-01	1.1E-03
0.95	1.1E-03	2.1E-02	1.0E-01	1	1.0E-01
1.0	1.5E-06	8.0E-05	1.1E-03	1.0E-01	1

*p* < 0.05 are highlighted in red.

**Table S8.** Normalised values of maximal rates of tension relaxation RA (**Figure 4D**)

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom		$\chi^2$	$p$ -value
Length, $L/L_{max}$	1	4		24	8.0E-05
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
0.8	1	2.7E-01	4.7E-02	3.4E-03	1.2E-04
0.85	2.7E-01	1	2.7E-01	4.7E-02	3.4E-03
0.9	4.7E-02	2.7E-01	1	2.7E-01	4.7E-02
0.95	3.4E-03	4.7E-02	2.7E-01	1	2.7E-01
1.0	1.2E-04	3.4E-03	4.7E-02	2.7E-01	1
0.8	1	2.7E-01	4.7E-02	3.4E-03	1.2E-04

*p* < 0.05 are highlighted in red.

**Table S9.** APD90 RV (**Figure 5B**)

ANOVA Friedman results				
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	<i>p</i> -value
Length, $L/L_{max}$	0.0477	4	2.4839	0.65

**Table S10.** APD90 RA (**Figure 5B**)

ANOVA Friedman results				
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	<i>p</i> -value
Length, $L/L_{max}$	0.1139	4	5.4679	0.24

**Table S11. T70Ca RV (Figure 6B)**

ANOVA Friedman results					
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	$p$ -value	
Length, $L/L_{max}$	0.2564	4	11.2811	2.4E-02	
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values					
Length, $L/L_{max}$	0.8	0.85	0.9	0.95	1.0
0.8	1	8.9E-01	8.6E-02	8.6E-02	8.6E-02
0.85	8.9E-01	1	9.8E-02	8.6E-02	8.6E-02
0.9	8.6E-02	9.8E-02	1	8.9E-01	8.9E-01
0.95	8.6E-02	8.6E-02	8.9E-01	1	8.9E-01
1.0	8.6E-02	8.6E-02	8.9E-01	8.9E-01	1

*p* < 0.05 are highlighted in red.

**Table S12. T70Ca RA (Figure 6B)**

ANOVA Friedman results							
factor	Kendall's coefficient of concordance		degrees of freedom		$\chi^2$	$p$ -value	
Length, $L/L_{max}$	0.6918		6		24.9036	3.6E-04	
$p$ -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust $p$ -values							
Length, $L/L_{max}$	0.7	0.75	0.8	0.85	0.9	0.95	1.0
0.7	1	7.8E-01	3.7E-01	1.9E-01	1.7E-02	2.2E-02	9.4E-03
0.75	7.8E-01	1	2.6E-01	1.4E-01	9.4E-03	1.1E-02	6.5E-03
0.8	3.7E-01	2.6E-01	1	6.9E-01	1.7E-01	1.8E-01	8.2E-02
0.85	1.9E-01	1.4E-01	6.9E-01	1	3.1E-01	3.6E-01	1.8E-01
0.9	1.7E-02	9.4E-03	1.7E-01	3.1E-01	1	8.9E-01	7.6E-01
0.95	2.2E-02	1.1E-02	1.8E-01	3.6E-01	8.9E-01	1	6.9E-01
1.0	9.4E-03	6.5E-03	8.2E-02	1.8E-01	7.6E-01	6.9E-01	1

*p* < 0.05 are highlighted in red.

**Table S13. Amplitude of the difference curve in the III phase of the "CaT difference curve" RV (Figure 7C)**

ANOVA Friedman results				
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	<i>p</i> -value
Length, $L/L_{max}$	0.32	3	9.6	2.2E-02
<i>p</i> -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust <i>p</i> -values				
Length, $L/L_{max}$	0.85	0.9	0.95	1.0
0.85	1	5.9E-01	8.4E-02	2.6E-02
0.9	5.9E-01	1	2.1E-01	6.2E-02
0.95	8.4E-02	2.1E-01	1	4.9E-01
1.0	2.6E-02	6.2E-02	4.9E-01	1

*p* < 0.05 are highlighted in red.

**Table S14.** Amplitude of the difference curve in the III phase of the “CaT difference curve” RA (Figure 7C)

ANOVA Friedman results				
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	<i>p</i> -value
Length, $L/L_{max}$	0.9444	3	17	7.07E-04
<i>p</i> -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust <i>p</i> -values				
Length, $L/L_{max}$	0.85	0.9	0.95	1.0
0.85	1	3.7E-01	2.8E-02	8.6E-04
0.9	3.7E-01	1	1.8E-01	1.1E-02
0.95	2.8E-02	1.8E-01	1	2.2E-01
1.0	8.6E-04	1.1E-02	2.2E-01	1

*p* < 0.05 are highlighted in red.

**Table S15.** Relative area (in %) calculated under the difference curve in the III phase of the “CaT difference curve” RV (Figure 7D)

ANOVA Friedman results				
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	<i>p</i> -value
Length, $L/L_{max}$	0.416	3	12.48	5.9E-03
<i>p</i> -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust <i>p</i> -values				
Length, $L/L_{max}$	0.85	0.9	0.95	1.0
0.85	1	2.6E-01	7.8E-02	2.3E-03
0.9	2.6E-01	1	4.1E-01	6.2E-02
0.95	7.8E-02	4.1E-01	1	2.1E-01
1.0	2.3E-03	6.2E-02	2.1E-01	1

*p* < 0.05 are highlighted in red.

**Table S16.** Relative area (in %) calculated under the difference curve in the III phase of the “CaT difference curve” RA (Figure 7D)

ANOVA Friedman results				
factor	Kendall's coefficient of concordance	degrees of freedom	$\chi^2$	<i>p</i> -value
Length, $L/L_{max}$	0.8778	3	15.8	1.2E-03
<i>p</i> -values - results of Siegel and Castellan's all-pairs comparisons post-hoc test with closed method based on Simes tests (non-negative) to adjust <i>p</i> -values				
Length, $L/L_{max}$	0.85	0.9	0.95	1.0
0.85	1	2.6E-01	5.1E-02	8.6E-04
0.9	2.6E-01	1	2.6E-01	2.2E-02
0.95	5.1E-02	2.6E-01	1	1.8E-01
1.0	8.6E-04	2.2E-02	1.8E-01	1

*p* < 0.05 are highlighted in red.