

# Anthony S Weiss

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

231  
papers

11,280  
citations

57  
h-index

97  
g-index

245  
ext. papers

12,445  
ext. citations

7.7  
avg, IF

6.47  
L-index

| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 231 | Electrospun protein fibers as matrices for tissue engineering. <i>Biomaterials</i> , <b>2005</b> , 26, 5999-6008  | 15.6 | 665       |
| 230 | Biochemistry of tropoelastin. <i>FEBS Journal</i> , <b>1998</b> , 258, 1-18   |      | 369       |
| 229 | Elastin. <i>Advances in Protein Chemistry</i> , <b>2005</b> , 70, 437-61  |      | 368       |
| 228 | Engineering a sprayable and elastic hydrogel adhesive with antimicrobial properties for wound healing. <i>Biomaterials</i> , <b>2017</b> , 139, 229-243   | 15.6 | 273       |
| 227 | A multilayered synthetic human elastin/polycaprolactone hybrid vascular graft with tailored mechanical properties. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 295-303   | 10.8 | 234       |
| 226 | Substrate elasticity provides mechanical signals for the expansion of hemopoietic stem and progenitor cells. <i>Nature Biotechnology</i> , <b>2010</b> , 28, 1123-8   | 44.5 | 217       |
| 225 | Synthetic elastin hydrogels derived from massive elastic assemblies of self-organized human protein monomers. <i>Biomaterials</i> , <b>2004</b> , 25, 4921-7  | 15.6 | 211       |
| 224 | Protein-based composite materials. <i>Materials Today</i> , <b>2012</b> , 15, 208-215   | 21.8 | 204       |
| 223 | Highly Elastic and Conductive Human-Based Protein Hybrid Hydrogels. <i>Advanced Materials</i> , <b>2016</b> , 28, 40-9  | 24   | 187       |
| 222 | Increasing the pore size of electrospun scaffolds. <i>Tissue Engineering - Part B: Reviews</i> , <b>2011</b> , 17, 365-72   | 7.9  | 182       |
| 221 | Coacervation characteristics of recombinant human tropoelastin. <i>FEBS Journal</i> , <b>1997</b> , 250, 92-8   |      | 181       |
| 220 | Elastin-based materials. <i>Chemical Society Reviews</i> , <b>2010</b> , 39, 3371-9   | 58.5 | 177       |
| 219 | Highly Elastic Micropatterned Hydrogel for Engineering Functional Cardiac Tissue. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 4950   | 15.6 | 173       |
| 218 | Total synthesis and expression in Escherichia coli of a gene encoding human tropoelastin. <i>Gene</i> , <b>1995</b> , 154, 159-66   | 3.8  | 173       |
| 217 | Engineering a highly elastic human protein-based sealant for surgical applications. <i>Science Translational Medicine</i> , <b>2017</b> , 9,  | 17.5 | 170       |
| 216 | Tropoelastin. <i>International Journal of Biochemistry and Cell Biology</i> , <b>2009</b> , 41, 494-7   | 5.6  | 168       |
| 215 | Free radical functionalization of surfaces to prevent adverse responses to biomedical devices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 14405-10 | 11.5 | 153       |

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| 214 | Synthesis of highly porous crosslinked elastin hydrogels and their interaction with fibroblasts in vitro. <i>Biomaterials</i> , <b>2009</b> , 30, 4550-7   | 15.6 | 149 |
| 213 | Shape of tropoelastin, the highly extensible protein that controls human tissue elasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 4322-7 | 11.5 | 149 |
| 212 | Cell adhesion to tropoelastin is mediated via the C-terminal GRKRK motif and integrin alphaVbeta3. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 28616-23  | 5.4  | 134 |
| 211 | Biomaterials derived from silk-tropoelastin protein systems. <i>Biomaterials</i> , <b>2010</b> , 31, 8121-31   | 15.6 | 130 |
| 210 | Molecular basis of elastic fiber formation. Critical interactions and a tropoelastin-fibrillin-1 cross-link. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 23748-58                              | 5.4  | 124 |
| 209 | The fabrication of elastin-based hydrogels using high pressure CO <sub>2</sub> . <i>Biomaterials</i> , <b>2009</b> , 30, 1-7   | 15.6 | 121 |
| 208 | Electrospun synthetic human elastin:collagen composite scaffolds for dermal tissue engineering. <i>Acta Biomaterialia</i> , <b>2012</b> , 8, 3714-22   | 10.8 | 120 |
| 207 | Structural disorder and dynamics of elastin. <i>Biochemistry and Cell Biology</i> , <b>2010</b> , 88, 239-50   | 3.6  | 120 |
| 206 | Glycosaminoglycans mediate the coacervation of human tropoelastin through dominant charge interactions involving lysine side chains. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 21719-24      | 5.4  | 117 |
| 205 | Protein interaction studies of MAGP-1 with tropoelastin and fibrillin-1. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 39661-6   | 5.4  | 115 |
| 204 | Covalent immobilisation of tropoelastin on a plasma deposited interface for enhancement of endothelialisation on metal surfaces. <i>Biomaterials</i> , <b>2009</b> , 30, 1675-81                               | 15.6 | 110 |
| 203 | Synthetic human elastin microfibers: stable cross-linked tropoelastin and cell interactive constructs for tissue engineering applications. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 354-9                  | 10.8 | 101 |
| 202 | Cross-linked open-pore elastic hydrogels based on tropoelastin, elastin and high pressure CO <sub>2</sub> . <i>Biomaterials</i> , <b>2010</b> , 31, 1655-65  | 15.6 | 100 |
| 201 | Tropoelastin: a versatile, bioactive assembly module. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 1532-41  | 10.8 | 96  |
| 200 | Integrin alpha v beta 3 binds a unique non-RGD site near the C-terminus of human tropoelastin. <i>Biochimie</i> , <b>2004</b> , 86, 173-8  | 4.6  | 94  |
| 199 | Hydrogel-coated microfluidic channels for cardiomyocyte culture. <i>Lab on A Chip</i> , <b>2013</b> , 13, 3569-77  | 7.2  | 92  |
| 198 | Cellular interactions with elastin. <i>Pathologie Et Biologie</i> , <b>2005</b> , 53, 390-8  |      | 91  |
| 197 | Tropoelastin massively associates during coacervation to form quantized protein spheres. <i>Biochemistry</i> , <b>2006</b> , 45, 9989-96   | 3.2  | 91  |

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|-----|---|------|----|
| 196 | Haemonchus contortus: sequence heterogeneity of internucleotide binding domains from P-glycoproteins. <i>Experimental Parasitology</i> , <b>1999</b> , 91, 250-7                                    | 2.1  | 91 |
| 195 | Fibulin-5 interacts with fibrillin-1 molecules and microfibrils. <i>Biochemical Journal</i> , <b>2005</b> , 388, 1-5  | 3.8  | 90 |
| 194 | Engineered cell-laden human protein-based elastomer. <i>Biomaterials</i> , <b>2013</b> , 34, 5496-505   | 15.6 | 85 |
| 193 | High resolution NMR solution structure of the leucine zipper domain of the c-Jun homodimer. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 13663-7                                     | 5.4  | 85 |
| 192 | The immobilization of recombinant human tropoelastin on metals using a plasma-activated coating to improve the biocompatibility of coronary stents. <i>Biomaterials</i> , <b>2010</b> , 31, 8332-40 | 15.6 | 84 |
| 191 | Elastin signaling in wound repair. <i>Birth Defects Research Part C: Embryo Today Reviews</i> , <b>2012</b> , 96, 248-57  |      | 83 |
| 190 | Primary human dermal fibroblast interactions with open weave three-dimensional scaffolds prepared from synthetic human elastin. <i>Biomaterials</i> , <b>2009</b> , 30, 6469-77                     | 15.6 | 83 |
| 189 | Elastin as a nonthrombogenic biomaterial. <i>Tissue Engineering - Part B: Reviews</i> , <b>2011</b> , 17, 93-9  | 7.9  | 80 |
| 188 | Large-Scale Investigation of Leishmania Interaction Networks with Host Extracellular Matrix by Surface Plasmon Resonance Imaging. <i>Infection and Immunity</i> , <b>2014</b> , 82, 1741-1741       | 3.7  | 78 |
| 187 | Engineered tropoelastin and elastin-based biomaterials. <i>Advances in Protein Chemistry and Structural Biology</i> , <b>2009</b> , 78, 1-24  | 5.3  | 78 |
| 186 | Fibrillin-1 interactions with heparin. Implications for microfibril and elastic fiber assembly. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 30526-37                                | 5.4  | 77 |
| 185 | Fabricated Elastin. <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 2530-2556   | 10.1 | 74 |
| 184 | In situ polymerization of tropoelastin in the absence of chemical cross-linking. <i>Biomaterials</i> , <b>2009</b> , 30, 431-5  | 15.6 | 71 |
| 183 | Severe burn injuries and the role of elastin in the design of dermal substitutes. <i>Tissue Engineering - Part B: Reviews</i> , <b>2011</b> , 17, 81-91   | 7.9  | 70 |
| 182 | Degradation of tropoelastin by matrix metalloproteinases--cleavage site specificities and release of matrikines. <i>FEBS Journal</i> , <b>2010</b> , 277, 1939-56                                   | 5.7  | 67 |
| 181 | Hydrophobic domains of human tropoelastin interact in a context-dependent manner. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 44575-80  | 5.4  | 67 |
| 180 | Elastomeric Recombinant Protein-based Biomaterials. <i>Biochemical Engineering Journal</i> , <b>2013</b> , 77, 110-118  | 4.2  | 66 |
| 179 | Surface plasma modification and tropoelastin coating of a polyurethane co-polymer for enhanced cell attachment and reduced thrombogenicity. <i>Biomaterials</i> , <b>2014</b> , 35, 6797-809        | 15.6 | 65 |

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|-----|---|------|----|
| 178 | Specificity in the coacervation of tropoelastin: solvent exposed lysines. <i>Journal of Structural Biology</i> , <b>2005</b> , 149, 273-81  | 3.4  | 65 |
| 177 | Elastin based cell-laden injectable hydrogels with tunable gelation, mechanical and biodegradation properties. <i>Biomaterials</i> , <b>2014</b> , 35, 5425-35  | 15.6 | 63 |
| 176 | Binding of the cell adhesive protein tropoelastin to PTFE through plasma immersion ion implantation treatment. <i>Biomaterials</i> , <b>2011</b> , 32, 5100-11  | 15.6 | 63 |
| 175 | A unique DNA intermediate associated with termination of chromosome replication in <i>Bacillus subtilis</i> . <i>Cell</i> , <b>1984</b> , 39, 683-9   | 56.2 | 62 |
| 174 | A novel cell adhesion region in tropoelastin mediates attachment to integrin $\alpha 5$ . <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 1467-77   | 5.4  | 56 |
| 173 | Coacervation is promoted by molecular interactions between the PF2 segment of fibrillin-1 and the domain 4 region of tropoelastin. <i>Biochemistry</i> , <b>2005</b> , 44, 10271-81   | 3.2  | 55 |
| 172 | A model two-component system for studying the architecture of elastin assembly in vitro. <i>Journal of Structural Biology</i> , <b>2005</b> , 149, 282-9  | 3.4  | 55 |
| 171 | Structural changes and facilitated association of tropoelastin. <i>Archives of Biochemistry and Biophysics</i> , <b>2003</b> , 410, 317-23  | 4.1  | 55 |
| 170 | The linker-free covalent attachment of collagen to plasma immersion ion implantation treated polytetrafluoroethylene and subsequent cell-binding activity. <i>Biomaterials</i> , <b>2010</b> , 31, 2526-34                          | 15.6 | 54 |
| 169 | In vivo biocompatibility of a plasma-activated, coronary stent coating. <i>Biomaterials</i> , <b>2012</b> , 33, 7984-92   | 15.6 | 53 |
| 168 | Photocrosslinkable Gelatin/Tropoelastin Hydrogel Adhesives for Peripheral Nerve Repair. <i>Tissue Engineering - Part A</i> , <b>2018</b> , 24, 1393-1405  | 3.9  | 51 |
| 167 | Biocompatibility of silk-tropoelastin protein polymers. <i>Biomaterials</i> , <b>2014</b> , 35, 5138-47   | 15.6 | 50 |
| 166 | Tropoelastin bridge region positions the cell-interactive C terminus and contributes to elastic fiber assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 2878-83 | 11.5 | 49 |
| 165 | Mapping of macrophage elastase cleavage sites in insoluble human skin elastin. <i>Matrix Biology</i> , <b>2008</b> , 27, 420-8  | 11.4 | 49 |
| 164 | Charge-Tunable Silk-Tropoelastin Protein Alloys That Control Neuron Cell Responses. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3875-3884  | 15.6 | 48 |
| 163 | Characterization of an acetylcholine receptor gene of <i>Haemonchus contortus</i> in relation to levamisole resistance. <i>Molecular and Biochemical Parasitology</i> , <b>1997</b> , 84, 179-87                                    | 1.9  | 48 |
| 162 | Biomaterials and Modifications in the Development of Small-Diameter Vascular Grafts. <i>ACS Biomaterials Science and Engineering</i> , <b>2017</b> , 3, 712-723   | 5.5  | 47 |
| 161 | Heparan sulphate interacts with tropoelastin, with some tropoelastin peptides and is present in human dermis elastic fibers. <i>Matrix Biology</i> , <b>2005</b> , 24, 15-25  | 11.4 | 46 |

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|-----|---|------|----|
| 160 | Restriction map of DNA spanning the replication terminus of the <i>Bacillus subtilis</i> chromosome. <i>Journal of Molecular Biology</i> , <b>1983</b> , 171, 119-37  | 6.5  | 46 |
| 159 | Alignment of human vascular smooth muscle cells on parallel electrospun synthetic elastin fibers. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2012</b> , 100, 155-61                            | 5.4  | 45 |
| 158 | The action of neutrophil serine proteases on elastin and its precursor. <i>Biochimie</i> , <b>2012</b> , 94, 192-202  | 4.6  | 45 |
| 157 | Stages in tropoelastin coalescence during synthetic elastin hydrogel formation. <i>Micron</i> , <b>2010</b> , 41, 268-72  | 2.3  | 44 |
| 156 | Elastin architecture. <i>Matrix Biology</i> , <b>2019</b> , 84, 4-16  | 11.4 | 43 |
| 155 | Human-Recombinant-Elastin-Based Bioinks for 3D Bioprinting of Vascularized Soft Tissues. <i>Advanced Materials</i> , <b>2020</b> , 32, e2003915   | 24   | 43 |
| 154 | Linker-free covalent attachment of the extracellular matrix protein tropoelastin to a polymer surface for directed cell spreading. <i>Acta Biomaterialia</i> , <b>2009</b> , 5, 3371-81                           | 10.8 | 42 |
| 153 | Tropoelastin coated PLLA-PLGA scaffolds promote vascular network formation. <i>Biomaterials</i> , <b>2017</b> , 122, 72-82  | 15.6 | 41 |
| 152 | Computational smart polymer design based on elastin protein mutability. <i>Biomaterials</i> , <b>2017</b> , 127, 49-60  | 15.6 | 39 |
| 151 | Mechanical Properties of Plasma Immersion Ion Implanted PEEK for Bioactivation of Medical Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 23029-40                                      | 9.5  | 39 |
| 150 | In vitro degradation of human tropoelastin by MMP-12 and the generation of matrikines from domain 24. <i>Matrix Biology</i> , <b>2009</b> , 28, 84-91   | 11.4 | 39 |
| 149 | Covalent attachment of functional protein to polymer surfaces: a novel one-step dry process. <i>Journal of the Royal Society Interface</i> , <b>2008</b> , 5, 663-9   | 4.1  | 39 |
| 148 | Elastin Biomaterials in Dermal Repair. <i>Trends in Biotechnology</i> , <b>2020</b> , 38, 280-291   | 15.1 | 39 |
| 147 | Silk-tropoelastin protein films for nerve guidance. <i>Acta Biomaterialia</i> , <b>2015</b> , 14, 1-10  | 10.8 | 38 |
| 146 | Domains 17-27 of tropoelastin contain key regions of contact for coacervation and contain an unusual turn-containing crosslinking domain. <i>Matrix Biology</i> , <b>2007</b> , 26, 125-35                        | 11.4 | 38 |
| 145 | Thermodynamic and hydrodynamic properties of human tropoelastin. Analytical ultracentrifuge and pulsed field-gradient spin-echo NMR studies. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 28042-50 | 5.4  | 38 |
| 144 | A potential role for endogenous proteins as sacrificial sunscreens and antioxidants in human tissues. <i>Redox Biology</i> , <b>2015</b> , 5, 101-113   | 11.3 | 37 |
| 143 | Plasma-based biofunctionalization of vascular implants. <i>Nanomedicine</i> , <b>2012</b> , 7, 1907-16  | 5.6  | 37 |

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|-----|---|------|----|
| 142 | Tandem integration of multiple ILV5 copies and elevated transcription in polyploid yeast. <i>Yeast</i> , <b>1995</b> , 11, 311-6  | 3.4  | 37 |
| 141 | The use of plasma-activated covalent attachment of early domains of tropoelastin to enhance vascular compatibility of surfaces. <i>Biomaterials</i> , <b>2013</b> , 34, 7584-91   | 15.6 | 36 |
| 140 | Cell patterning via linker-free protein functionalization of an organic conducting polymer (polypyrrole) electrode. <i>Acta Biomaterialia</i> , <b>2012</b> , 8, 2538-48  | 10.8 | 36 |
| 139 | Fabrication Techniques for Vascular and Vascularized Tissue Engineering. <i>Advanced Healthcare Materials</i> , <b>2019</b> , 8, e1900742   | 10.1 | 35 |
| 138 | Building Elastin. Incorporation of recombinant human tropoelastin into extracellular matrices using nonelastogenic rat-1 fibroblasts as a source for lysyl oxidase. <i>American Journal of Respiratory Cell and Molecular Biology</i> , <b>2001</b> , 24, 733-9   | 5.7  | 35 |
| 137 | Injectable and Magnetic Responsive Hydrogels with Bioinspired Ordered Structures. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 1392-1404  | 5.5  | 34 |
| 136 | Tropoelastin incorporation into a dermal regeneration template promotes wound angiogenesis. <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 577-84  | 10.1 | 34 |
| 135 | Subtle balance of tropoelastin molecular shape and flexibility regulates dynamics and hierarchical assembly. <i>Science Advances</i> , <b>2016</b> , 2, e1501145  | 14.3 | 34 |
| 134 | Covalently Bound Biomimetic Layers on Plasma Polymers with Graded Metallic Interfaces for in vivo Implants. <i>Plasma Processes and Polymers</i> , <b>2009</b> , 6, 658-666   | 3.4  | 33 |
| 133 | Glycosaminoglycan-mediated coacervation of tropoelastin abolishes the critical concentration, accelerates coacervate formation, and facilitates spherule fusion: implications for tropoelastin microassembly. <i>Biomacromolecules</i> , <b>2008</b> , 9, 1739-44 | 6.9  | 32 |
| 132 | Soluble matrix protein is a potent modulator of mesenchymal stem cell performance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 2042-2051  | 11.5 | 31 |
| 131 | Elastin-based biomaterials and mesenchymal stem cells. <i>Biomaterials Science</i> , <b>2015</b> , 3, 800-9   | 7.4  | 31 |
| 130 | Elastin sequences trigger transient proinflammatory responses by human dermal fibroblasts. <i>FASEB Journal</i> , <b>2013</b> , 27, 3455-65   | 0.9  | 31 |
| 129 | Flexibility in the solution structure of human tropoelastin. <i>Biochemistry</i> , <b>2007</b> , 46, 8196-205   | 3.2  | 31 |
| 128 | Tropoelastin inhibits intimal hyperplasia of mouse bioresorbable arterial vascular grafts. <i>Acta Biomaterialia</i> , <b>2017</b> , 52, 74-80  | 10.8 | 30 |
| 127 | Development of a sensitive peptide-based immunoassay: application to detection of the Jun and Fos oncoproteins. <i>Biochemistry</i> , <b>1996</b> , 35, 9069-75   | 3.2  | 30 |
| 126 | Freestanding hierarchical vascular structures engineered from ice. <i>Biomaterials</i> , <b>2019</b> , 192, 334-345   | 15.6 | 30 |
| 125 | Large-scale investigation of Leishmania interaction networks with host extracellular matrix by surface plasmon resonance imaging. <i>Infection and Immunity</i> , <b>2014</b> , 82, 594-606   | 3.7  | 28 |

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|-----|---|------|----|
| 124 | Tropoelastin as a thermodynamically unfolded premolten globule protein: The effect of trimethylamine N-oxide on structure and coacervation. <i>Archives of Biochemistry and Biophysics</i> , <b>2009</b> , 487, 79-84   | 4.1  | 28 |
| 123 | Transposon-mediated restriction mapping of the Bacillus subtilis chromosome. <i>Gene</i> , <b>1989</b> , 78, 29-36  | 3.8  | 27 |
| 122 | Transient tropoelastin nanoparticles are early-stage intermediates in the coacervation of human tropoelastin whose aggregation is facilitated by heparan sulfate and heparin decasaccharides. <i>Matrix Biology</i> , <b>2010</b> , 29, 152-9   | 11.4 | 26 |
| 121 | Molecular model of human tropoelastin and implications of associated mutations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 7338-7343   | 11.5 | 26 |
| 120 | Lamin A expression levels are unperturbed at the normal and mutant alleles but display partial splice site selection in Hutchinson-Gilford progeria syndrome. <i>Journal of Medical Genetics</i> , <b>2004</b> , 41, 715-7  | 5.8  | 25 |
| 119 | Effect of dense gas CO <sub>2</sub> on the coacervation of elastin. <i>Biomacromolecules</i> , <b>2008</b> , 9, 1100-5  | 6.9  | 24 |
| 118 | A cell adhesive peptide from tropoelastin promotes sequential cell attachment and spreading via distinct receptors. <i>FEBS Journal</i> , <b>2017</b> , 284, 2216-2230  | 5.7  | 23 |
| 117 | Tropoelastin-Coated Tendon Biomimetic Scaffolds Promote Stem Cell Tenogenic Commitment and Deposition of Elastin-Rich Matrix. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 19830-19840   | 9.5  | 23 |
| 116 | Molecular-level characterization of elastin-like constructs and human aortic elastin. <i>Matrix Biology</i> , <b>2014</b> , 38, 12-21   | 11.4 | 23 |
| 115 | Elastin in asthma. <i>Pulmonary Pharmacology and Therapeutics</i> , <b>2012</b> , 25, 144-53  | 3.5  | 23 |
| 114 | Yeast artificial chromosomes: rapid extraction for high resolution analysis. <i>Nucleic Acids Research</i> , <b>1990</b> , 18, 2193   | 20.1 | 23 |
| 113 | Impediment to replication fork movement in the terminus region of the Bacillus subtilis chromosome. <i>Journal of Molecular Biology</i> , <b>1984</b> , 179, 745-50   | 6.5  | 23 |
| 112 | Design of an elastin-layered dermal regeneration template. <i>Acta Biomaterialia</i> , <b>2017</b> , 52, 33-40  | 10.8 | 22 |
| 111 | Elastolytic mechanism of a novel M23 metalloprotease pseudoalterin from deep-sea Pseudoalteromonas sp. CF6-2: cleaving not only glycol bonds in the hydrophobic regions but also peptide bonds in the hydrophilic regions involved in cross-linking. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 39710-20 | 5.4  | 22 |
| 110 | Deficient coacervation of two forms of human tropoelastin associated with supravalvular aortic stenosis. <i>FEBS Journal</i> , <b>1999</b> , 266, 308-14  |      | 22 |
| 109 | Cloning and sequence analysis of the candidate nicotinic acetylcholine receptor alpha subunit gene tar-1 from Trichostrongylus colubriformis. <i>Gene</i> , <b>1996</b> , 182, 97-100   | 3.8  | 22 |
| 108 | Tropoelastin Implants That Accelerate Wound Repair. <i>Advanced Healthcare Materials</i> , <b>2018</b> , 7, e1701206  | 10.1 | 21 |
| 107 | HiPIMS carbon coatings show covalent protein binding that imparts enhanced hemocompatibility. <i>Carbon</i> , <b>2018</b> , 139, 118-128  | 10.4 | 21 |



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|-----|--|------|----|
| 106 | Structure and activity of <i>Aspergillus nidulans</i> copper amine oxidase. <i>Biochemistry</i> , <b>2011</b> , 50, 5718-30  | 3.2  | 21 |
| 105 | BREWING YEAST IDENTIFICATION AND CHROMOSOME ANALYSIS USING HIGH RESOLUTION CHEF GEL ELECTROPHORESIS. <i>Journal of the Institute of Brewing</i> , <b>1991</b> , 97, 163-167  | 2    | 21 |
| 104 | Force fields for simulating the interaction of surfaces with biological molecules. <i>Interface Focus</i> , <b>2016</b> , 6, 20150045  | 3.9  | 20 |
| 103 | Aggrecan expression is substantially and abnormally upregulated in Hutchinson-Gilford Progeria Syndrome dermal fibroblasts. <i>Mechanisms of Ageing and Development</i> , <b>2006</b> , 127, 660-9                             | 5.6  | 20 |
| 102 | Proteomic analysis of the genetic premature aging disease Hutchinson Gilford progeria syndrome reveals differential protein expression and glycosylation. <i>Journal of Proteome Research</i> , <b>2003</b> , 2, 556-7         | 5.6  | 20 |
| 101 | Hyaluronic acid in progeria and the aged phenotype?. <i>Gerontology</i> , <b>1992</b> , 38, 139-52   | 5.5  | 20 |
| 100 | Plasma-Activated Tropoelastin Functionalization of Zirconium for Improved Bone Cell Response. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 662-676   | 5.5  | 20 |
| 99  | Elastic proteins and elastomeric protein alloys. <i>Current Opinion in Biotechnology</i> , <b>2016</b> , 39, 56-60   | 11.4 | 19 |
| 98  | A negatively charged residue stabilizes the tropoelastin N-terminal region for elastic fiber assembly. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 34815-26  | 5.4  | 19 |
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