# In-Chul Um

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5799380/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 69 papers | 3,836 citations | 136950 32 h-index | 123424 61 g-index |
| 69 all docs | 69 docs citations | 69 times ranked | 3876 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Preparation, Structural Characterization, and Properties of Natural Silk Non-woven Fabrics from Different Silkworm Varieties. Fibers and Polymers, 2022, 23, 1130-1141. | 2.1 | 7 |
| 2 | Silk/Rayon Webs and Nonwoven Fabrics: Fabrication, Structural Characteristics, and Properties. International Journal of Molecular Sciences, 2022, 23, 7511. | 4.1 | 7 |
| 3 | Brush drawing multifunctional electronic textiles for human-machine interfaces. Current Applied Physics, 2022, 41, 131-138. | 2.4 | 3 |
| 4 | Effects of Fabrication Conditions on Structure and Properties of Mechanically Prepared Natural Silk Web and Non-Woven Fabrics. Polymers, 2021, 13, 1578. | 4.5 | 10 |
| 5 | Electrospinning to Surpass White Natural Silk in Sunlight Rejection for Radiative Cooling. Advanced Photonics Research, 2021, 2, 2100008. | 3.6 | 18 |
| 6 | Effect of Relative Humidity on the Electrospinning Performance of Regenerated Silk Solution. Polymers, 2021, 13, 2479. | 4.5 | 13 |
| 7 | Preparation, Structural Characteristics, and Properties of Airlaid Nonwoven Silk Fabric. Porrime, 2020, 44, 809-816. | 0.2 | 7 |
| 8 | Effect of Silkworm Variety on Characteristics of Raw Sericin in Silk. Fibers and Polymers, 2019, 20, 271-279. | 2.1 | 11 |
| 9 | Effect of Sericin Content on the Structural Characteristics and Properties of Electro-spun Regenerated Silk. Fibers and Polymers, 2018, 19, 507-514. | 2.1 | 10 |
| 10 | Effect of molecular weight on electro-spinning performance of regenerated silk. International Journal of Biological Macromolecules, 2018, 106, 1166-1172. | 7.5 | 40 |
| 11 | Preparation of new natural silk non-woven fabrics by using adhesion characteristics of sericin and their characterization. International Journal of Biological Macromolecules, 2018, 106, 39-47. | 7.5 | 34 |
| 12 | Effect of molecular weight on the structure and mechanical properties of silk sericin gel, film, and sponge. International Journal of Biological Macromolecules, 2018, 119, 821-832. | 7.5 | 35 |
| 13 | Effect of degumming methods on structural characteristics and properties of regenerated silk. International Journal of Biological Macromolecules, 2017, 104, 294-302. | 7.5 | 69 |
| 14 | Effect of sericin concentration and ethanol content on gelation behavior, rheological properties, and sponge characteristics of silk sericin. European Polymer Journal, 2017, 93, 761-774. | 5.4 | 43 |
| 15 | A facile fabrication method and the boosted adsorption and photodegradation activity of CuO nanoparticles synthesized using a silk fibroin template. Journal of Industrial and Engineering Chemistry, 2017, 56, 335-341. | 5.8 | 24 |
| 16 | Effects of electric field on the maximum electro-spinning rate of silk fibroin solutions. International Journal of Biological Macromolecules, 2017, 95, 8-13. | 7.5 | 20 |
| 17 | Effect of residual sericin on the structural characteristics and properties of regenerated silk films. International Journal of Biological Macromolecules, 2016, 89, 273-278. | 7.5 | 33 |
| 18 | Effect of centrifugation on the structure and properties of silk sericin. International Journal of Industrial Entomology, 2016, 33, 144-148. | 0.1 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Effect of degumming on structure and mechanical properties of silk textile made with silk/polyurethane core-spun yarn. International Journal of Industrial Entomology, 2016, 33, 132-137. | 0.1 | 0 |
| 20 | Effect of treatment temperature on mechanical properties of silk textiles made with silk/polyurethane core-spun yarn. International Journal of Industrial Entomology, 2016, 33, 108-112. | 0.1 | 1 |
| 21 | Effect of Korean Bombyx mori variety on electro-spinning performance of regenerated silk fibroin. Fibers and Polymers, 2015, 16, 1935-1940. | 2.1 | 14 |
| 22 | Evaluation of bone formation and membrane degradation in guided bone regeneration using a 4-hexylresorcinol-incorporated silk fabric membrane. Maxillofacial Plastic and Reconstructive Surgery, 2015, 37, 32. | 1.8 | 17 |
| 23 | Effect of shear viscosity on the preparation of sphere-like silk fibroin microparticles by electrospraying. International Journal of Biological Macromolecules, 2015, 79, 988-995. | 7.5 | 34 |
| 24 | Effects of different Bombyx mori silkworm varieties on the structural characteristics and properties of silk. International Journal of Biological Macromolecules, 2015, 79, 943-951. | 7.5 | 65 |
| 25 | Characteristics of TEMPO-oxidized cellulose fibril-based hydrogels induced by cationic ions and their properties. Cellulose, 2015, 22, 1993-2010. | 4.9 | 68 |
| 26 | Effects of solvent on the solution properties, structural characteristics and properties of silk sericin. International Journal of Biological Macromolecules, 2015, 78, 287-295. | 7.5 | 53 |
| 27 | Effect of storage and drying temperature on the gelation behavior and structural characteristics of sericin. International Journal of Biological Macromolecules, 2015, 81, 936-941. | 7.5 | 29 |
| 28 | Effect of different Bombyx mori silkworm varieties on the wet spinning of silk fibroin. International Journal of Industrial Entomology, 2015, 30, 75-80. | 0.1 | 2 |
| 29 | Structure and properties of silk sericin obtained from different silkworm varieties. International Journal of Industrial Entomology, 2015, 30, 81-85. | 0.1 | 5 |
| 30 | Preparation, structure, and properties of cellulose nanofibril/silk sericin composite film. International Journal of Industrial Entomology, 2015, 31, 1-6. | 0.1 | 3 |
| 31 | Effectiveness of Woven Silk Dressing Materials on Full-skin Thickness Burn Wounds in Rat Model. Maxillofacial Plastic and Reconstructive Surgery, 2014, 36, 280-284. | 1.8 | 14 |
| 32 | Effect of molecular weight and concentration on crystallinity and post drawing of wet spun silk fibroin fiber. Fibers and Polymers, 2014, 15, 153-160. | 2.1 | 45 |
| 33 | Relationship between rheology and electro-spinning performance of regenerated silk fibroin prepared using different degumming methods. Korea Australia Rheology Journal, 2014, 26, 119-125. | 1.7 | 24 |
| 34 | Effect of degumming ratio on wet spinning and post drawing performance of regenerated silk. International Journal of Biological Macromolecules, 2014, 67, 387-393. | 7.5 | 42 |
| 35 | Examination of thermo-gelation behavior of HPMC and HEMC aqueous solutions using rheology. Korea Australia Rheology Journal, 2013, 25, 67-75. | 1.7 | 25 |
| 36 | Effect of degumming condition on the solution properties and electrospinnablity of regenerated silk solution. International Journal of Biological Macromolecules, 2013, 55, 161-168. | 7.5 | 67 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Effects of degumming conditions on electro-spinning rate of regenerated silk. International Journal of Biological Macromolecules, 2013, 61, 50-57. | 7.5 | 32 |
| 38 | Extraction conditions of Antheraea mylitta sericin with high yields and minimum molecular weight degradation. International Journal of Biological Macromolecules, 2013, 52, 59-65. | 7.5 | 42 |
| 39 | Effect of Processing Conditions on the Homogeneity of Partially Degummed Silk Evaluated by FTIR Spectroscopy. International Journal of Industrial Entomology, 2013, 26, 54-60. | 0.1 | 12 |
| 40 | The Effect of Extraction Conditions and Film Side on the Molecular Conformation of Silk Sericin Film. International Journal of Industrial Entomology, 2013, 26, 113-118. | 0.1 | 8 |
| 41 | Preparation of Cellulose Nanofibril/Regenerated Silk Fibroin Composite Fibers. International Journal of Industrial Entomology, 2013, 26, 81-88. | 0.1 | 15 |
| 42 | Effect of Extraction Time on the Rheological Properties of Sericin Solutions and Gels. International Journal of Industrial Entomology, 2013, 27, 180-184. | 0.1 | 6 |
| 43 | Antihyperglycemic and Antioxidative Effects of Hydroxyethyl Methylcellulose (HEMC) and Hydroxypropyl Methylcellulose (HPMC) in Mice Fed with a High Fat Diet. International Journal of Molecular Sciences, 2012, 13, 3738-3750. | 4.1 | 12 |
| 44 | Molecular weight distribution and solution properties of silk fibroins with different dissolution conditions. International Journal of Biological Macromolecules, 2012, 51, 336-341. | 7.5 | 97 |
| 45 | Comparative evaluation of the hypolipidemic effects of hydroxyethyl methylcellulose (HEMC) and hydroxypropyl methylcellulose (HPMC) in high fat-fed mice. Food and Chemical Toxicology, 2012, 50, 130-134. | 3.6 | 15 |
| 46 | Hypoglycemic and antioxidative effects of hydroxyethyl methylcellulose in mice fed with high fat diet. Food and Chemical Toxicology, 2012, 50, 1716-1721. | 3.6 | 7 |
| 47 | Antihyperlipidemic effects of hydroxyethyl methylcellulose with varying viscosity in mice fed with high fat diet. Food Research International, 2012, 48, 1-6. | 6.2 | 11 |
| 48 | The effect of ultrasonication on the micro-splitting of wool fiber. Fibers and Polymers, 2012, 13, 943-947. | 2.1 | 4 |
| 49 | Effect of molecular weight and storage time on the wet- and electro-spinning of regenerated silk fibroin. Polymer Degradation and Stability, 2012, 97, 1060-1066. | 5.8 | 59 |
| 50 | Hemicellulose Removal and Crystalline Structure Transition of Flax Fiber with Alkali Treatment. Textile Science and Engineering, 2012, 49, 271-278. | 0.4 | 1 |
| 51 | Antihyperlipidemic and Body Fat-Lowering Effects of Silk Proteins with Different Fibroin/Sericin Compositions in Mice Fed with High Fat Diet. Journal of Agricultural and Food Chemistry, 2011, 59, 4192-4197. | 5.2 | 49 |
| 52 | Refining hot-water extracted silk sericin by ethanol-induced precipitation. International Journal of Biological Macromolecules, 2011, 48, 32-37. | 7.5 | 67 |
| 53 | Miscibility, structural characteristics, and thermal behavior of wet spun regenerated silk fibroin/nylon 6 blend filaments. Fibers and Polymers, 2010, 11, 14-20. | 2.1 | 20 |
| 54 | Effect of RGDS and KRSR peptides immobilized on silk fibroin nanofibrous mats for cell adhesion and proliferation. Macromolecular Research, 2010, 18, 442-448. | 2.4 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | A comparative study on the dielectric and dynamic mechanical relaxation behavior of the regenerated silk fibroin films. Macromolecular Research, 2009, 17, 785-790. | 2.4 | 13 |
| 56 | Acceleration effect of sericin on shear-induced Î²-transition of silk fibroin. Polymer, 2009, 50, 4618-4625. | 3.8 | 24 |
| 57 | Dissolution and wet spinning of silk fibroin using phosphoric acid/formic acid mixture solvent system. Journal of Applied Polymer Science, 2007, 105, 1605-1610. | 2.6 | 40 |
| 58 | The effect of casting solvent on the structural characteristics and miscibility of regenerated silk fibroin/Poly(vinyl alcohol) blends. Fibers and Polymers, 2007, 8, 579-585. | 2.1 | 33 |
| 59 | Metal ion adsorbability of electrospun wool keratose/silk fibroin blend nanofiber mats. Fibers and Polymers, 2007, 8, 271-277. | 2.1 | 48 |
| 60 | Nanofibrous membrane of wool keratose/silk fibroin blend for heavy metal ion adsorption. Journal of Membrane Science, 2007, 302, 20-26. | 8.2 | 206 |
| 61 | Formation of water-resistant hyaluronic acid nanofibers by blowing-assisted electro-spinning and non-toxic post treatments. Polymer, 2005, 46, 4853-4867. | 3.8 | 136 |
| 62 | Characterization of gelatin nanofiber prepared from gelatinâ€“formic acid solution. Polymer, 2005, 46, 5094-5102. | 3.8 | 528 |
| 63 | Electro-Spinning and Electro-Blowing of Hyaluronic Acid. Biomacromolecules, 2004, 5, 1428-1436. | 5.4 | 300 |
| 64 | Wet spinning of silk polymer. International Journal of Biological Macromolecules, 2004, 34, 89-105. | 7.5 | 89 |
| 65 | Wet spinning of silk polymer. International Journal of Biological Macromolecules, 2004, 34, 107-119. | 7.5 | 150 |
| 66 | The role of formic acid in solution stability and crystallization of silk protein polymer. International Journal of Biological Macromolecules, 2003, 33, 203-213. | 7.5 | 153 |
| 67 | Structural characteristics and properties of the regenerated silk fibroin prepared from formic acid. International Journal of Biological Macromolecules, 2001, 29, 91-97. | 7.5 | 380 |
| 68 | Physical properties of silk fibroin/chitosan blend films. Journal of Applied Polymer Science, 2001, 80, 928-934. | 2.6 | 208 |
| 69 | Structural and thermal characteristics of Antheraea pernyi silk fibroin/chitosan blend film. Polymer, 2001, 42, 6651-6656. | 3.8 | 158 |