# Anil N Netravali

List of Publications by Year
in descending order



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|---|---|---|---|
| 88 papers | 4,500 citations | 117625 34 h-index | 110387 64 g-index |
| 96 all docs | 96 docs citations | 96 times ranked | 3757 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Composites get greener. Materials Today, 2003, 6, 22-29. | 14.2 | 530 |
| 2 | Mercerization of sisal fibers: Effect of tension on mechanical properties of sisal fiber and fiber-reinforced composites. Composites Part A: Applied Science and Manufacturing, 2010, 41, 1245-1252. | 7.6 | 200 |
| 3 | Thermal and mechanical properties of environment-friendly â€˜greenâ€™ plastics from stearic acid modified-soy protein isolate. Industrial Crops and Products, 2005, 21, 49-64. | 5.2 | 188 |
| 4 | Title is missing!. Journal of Materials Science, 2002, 37, 3657-3665. | 3.7 | 166 |
| 5 | Biodegradable green composites made using bamboo micro/nano-fibrils and chemically modified soy protein resin. Composites Science and Technology, 2009, 69, 1009-1015. | 7.8 | 162 |
| 6 | Characterization of flax fiber reinforced soy protein resin based green composites modified with nano-clay particles. Composites Science and Technology, 2007, 67, 2005-2014. | 7.8 | 161 |
| 7 | Characterization of stearic acid modified soy protein isolate resin and ramie fiber reinforced â€˜greenâ€™ composites. Composites Science and Technology, 2005, 65, 1211-1225. | 7.8 | 152 |
| 8 | Fabrication and characterization of biodegradable composites based on microfibrillated cellulose and polyvinyl alcohol. Composites Science and Technology, 2012, 72, 1588-1594. | 7.8 | 137 |
| 9 | A Review of Fabrication and Applications of Bacterial Cellulose Based Nanocomposites. Polymer Reviews, 2014, 54, 598-626. | 10.9 | 126 |
| 10 | Green composites. I. physical properties of ramie fibers for environment-friendly green composites. Fibers and Polymers, 2006, 7, 372-379. | 2.1 | 106 |
| 11 | â€˜Greenâ€™ crosslinking of native starches with malonic acid and their properties. Carbohydrate Polymers, 2012, 90, 1620-1628. | 10.2 | 98 |
| 12 | â€˜Greenâ€™ composites Part 1: Characterization of flax fabric and glutaraldehyde modified soy protein concentrate composites. Journal of Materials Science, 2005, 40, 6263-6273. | 3.7 | 96 |
| 13 | Advanced 'green' composites. Advanced Composite Materials, 2007, 16, 269-282. | 1.9 | 81 |
| 14 | Mechanical, Thermal, and Interfacial Properties of Green Composites with Ramie Fiber and Soy Resins. Journal of Agricultural and Food Chemistry, 2010, 58, 5400-5407. | 5.2 | 80 |
| 15 | Towards Sustainable and Multifunctional Air-Filters: A Review on Biopolymer-Based Filtration Materials. Polymer Reviews, 2019, 59, 651-686. | 10.9 | 80 |
| 16 | Mechanical properties and biodegradability of electrospun soy protein Isolate/PVA hybrid nanofibers. Polymer Degradation and Stability, 2012, 97, 747-754. | 5.8 | 78 |
| 17 | Sustainable polymers. Nature Reviews Methods Primers, 2022, 2, . | 21.2 | 78 |
| 18 | Characterization of PhytagelÂ® modified soy protein isolate resin and unidirectional flax yarn reinforced â€œgreenâ€•composites. Polymer Composites, 2005, 26, 647-659. | 4.6 | 73 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | Characterization of Nano-Clay Reinforced Phytagel-Modified Soy Protein Concentrate Resin. Biomacromolecules, 2006, 7, 2783-2789. | 5.4 | 70 |
| 20 | Electrospun Hybrid Soy Protein/PVA Fibers. Macromolecular Materials and Engineering, 2010, 295, 763-773. | 3.6 | 67 |
| 21 | A soy flour based thermoset resin without the use of any external crosslinker. Green Chemistry, 2013, 15, 3243. | 9.0 | 67 |
| 22 | Bacterial cellulose-based membrane-like biodegradable composites using cross-linked and noncross-linked polyvinyl alcohol. Journal of Materials Science, 2012, 47, 6066-6075. | 3.7 | 64 |
| 23 | Excimer laser surface modification of ultra-high-strength polyethylene fibers for enhanced adhesion with epoxy resins. Part 1. Effect of laser operating parameters. Journal of Adhesion Science and Technology, 1998, 12, 957-982. | 2.6 | 63 |
| 24 | Green composites. II. Environment-friendly, biodegradable composites using ramie fibers and soy protein concentrate (SPC) resin. Fibers and Polymers, 2006, 7, 380-388. | 2.1 | 61 |
| 25 | Halloysite nanotube reinforced biodegradable nanocomposites using noncrosslinked and malonic acid crosslinked polyvinyl alcohol. Polymer Composites, 2013, 34, 799-809. | 4.6 | 61 |
| 26 | Cross-Linked Waxy Maize Starch-Based â€œGreenâ€•Composites. ACS Sustainable Chemistry and Engineering, 2013, 1, 1537-1544. | 6.7 | 59 |
| 27 | â€˜Greenâ€™ composites Part 2: Characterization of flax yarn and glutaraldehyde/poly(vinyl alcohol) modified soy protein concentrate composites. Journal of Materials Science, 2005, 40, 6275-6282. | 3.7 | 57 |
| 28 | Investigation of Soy Proteinâ€"based Biostimulant Seed Coating for Broccoli Seedling and Plant Growth Enhancement. Hortscience: A Publication of the American Society for Hortcultural Science, 2016, 51, 1121-1126. | 1.0 | 56 |
| 29 | Aligned Bacterial Cellulose Arrays as â€œGreenâ€•Nanofibers for Composite Materials. ACS Macro Letters, 2016, 5, 1070-1074. | 4.8 | 53 |
| 30 | Development of aligned-hemp yarn-reinforced green composites with soy protein resin: Effect of pH on mechanical and interfacial properties. Composites Science and Technology, 2011, 71, 541-547. | 7.8 | 46 |
| 31 | Ethylene/ ammonia plasma polymer deposition for controlled adhesion of graphite fibers to PEEK. Journal of Adhesion Science and Technology, 1995, 9, 1475-1503. | 2.6 | 38 |
| 32 | Effect of soy protein isolate resin modifications on their biodegradation in a compost medium. Polymer Degradation and Stability, 2005, 87, 465-477. | 5.8 | 38 |
| 33 | Selfâ€Healing Properties of Protein Resin with Soy Protein Isolateâ€Loaded Poly(<scp>d,l</scp>â€lactideâ€<i>co</i>â€glycolide) Microcapsules. Advanced Functional Materials, 2016, 26, 4786-4796. | 14.9 | 38 |
| 34 | Self-healing green composites based on soy protein and microfibrillated cellulose. Composites Science and Technology, 2017, 143, 22-30. | 7.8 | 38 |
| 35 | A Numerical and Experimental Study of Delaminated Layered Composites. Journal of Composite Materials, 1994, 28, 837-870. | 2.4 | 36 |
| 36 | Characterization of ramie fiber/soy protein concentrate (SPC) resin interface. Journal of Adhesion Science and Technology, 2004, 18, 1063-1076. | 2.6 | 36 |

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| 37 | Excimer laser surface modification of ultra-high-strength polyethylene fibers for enhanced adhesion with epoxy resins. Part 2. Effect of treatment environment. Journal of Adhesion Science and Technology, 1998, 12, 983-998. | 2.6 | 33 |
| 38 | Enhancing Strength of Wool Fiber Using a Soy Flour Sugar-Based â€œGreenâ€•Cross-linker. ACS Omega, 2019, 4, 5392-5401. | 3.5 | 33 |
| 39 | Review: Green composites for structural applications. Composites Part C: Open Access, 2021, 6, 100169. | 3.2 | 33 |
| 40 | Nonedible Starch Based â€œGreenâ€•Thermoset Resin Obtained via Esterification Using a Green Catalyst. ACS Sustainable Chemistry and Engineering, 2016, 4, 1756-1764. | 6.7 | 32 |
| 41 | A Composting Study of Membrane-Like Polyvinyl Alcohol Based Resins and Nanocomposites. Journal of Polymers and the Environment, 2013, 21, 658-674. | 5.0 | 31 |
| 42 | High-performance green nanocomposites using aligned bacterial cellulose and soy protein. Composites Science and Technology, 2017, 146, 183-190. | 7.8 | 31 |
| 43 | One-Step Toughening of Soy Protein Based Green Resin Using Electrospun Epoxidized Natural Rubber Fibers. ACS Sustainable Chemistry and Engineering, 2017, 5, 4957-4968. | 6.7 | 27 |
| 44 | Microfibrillated celluloseâ€reinforced nonedible starchâ€based thermoset biocomposites. Journal of Applied Polymer Science, 2016, 133, . | 2.6 | 26 |
| 45 | A Seed Coating Delivery System for Bio-Based Biostimulants to Enhance Plant Growth. Sustainability, 2019, 11, 5304. | 3.2 | 26 |
| 46 | Adhesion Promotion in Fibers and Textiles Using Photonic Surface Modifications. Journal of Adhesion Science and Technology, 2010, 24, 45-75. | 2.6 | 24 |
| 47 | Effect of Protein Content in Soy Protein Resins on Their Interfacial Shear Strength with Ramie Fibers. Journal of Adhesion Science and Technology, 2010, 24, 203-215. | 2.6 | 24 |
| 48 | Green Resin from Forestry Waste Residue â€œKaranja <i>(Pongamia pinnata)</i> Seed Cakeâ€•for Biobased Composite Structures. ACS Sustainable Chemistry and Engineering, 2014, 2, 2318-2328. | 6.7 | 24 |
| 49 | Bioâ€inspired â€œgreenâ€•nanocomposite using hydroxyapatite synthesized from eggshell waste and soy protein. Journal of Applied Polymer Science, 2016, 133, . | 2.6 | 24 |
| 50 | In Situ Produced Bacterial Cellulose Nanofiber-Based Hybrids for Nanocomposites. Fibers, 2017, 5, 31. | 4.0 | 24 |
| 51 | Cyclodextrin-Based â€œGreenâ€•Wrinkle-Free Finishing of Cotton Fabrics. Industrial & Engineering Chemistry Research, 2019, 58, 20496-20504. | 3.7 | 24 |
| 52 | â€œGreenâ€•composites using bioresins from agroâ€wastes and modified sisal fibers. Polymer Composites, 2019, 40, 99-108. | 4.6 | 24 |
| 53 | Improving Resin and Film Forming Properties of Native Starches by Chemical and Physical Modification. Journal of Biobased Materials and Bioenergy, 2012, 6, 1-24. | 0.3 | 24 |
| 54 | Effects of a pulsed XeCl excimer laser on ultra-high strength polyethylene fiber and its interface with epoxy resin. Journal of Adhesion Science and Technology, 1999, 13, 501-516. | 2.6 | 23 |

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| 55 | The effect of silica (SiO2) nanoparticles and ammonia/ethylene plasma treatment on the interfacial and mechanical properties of carbon-fiber-reinforced epoxy composites. Journal of Adhesion Science and Technology, 2007, 21, 1407-1424. | 2.6 | 23 |
| 56 | Waterâ€resistant plant protein<i>â€</i>based nanofiber membranes. Journal of Applied Polymer Science, 2015, 132, . | 2.6 | 23 |
| 57 | Environmentally Friendly Green Materials from Plant-Based Resources: Modification of Soy Protein using Gellan and Micro/Nano-Fibrillated Cellulose. Journal of Macromolecular Science - Pure and Applied Chemistry, 2008, 45, 899-906. | 2.2 | 22 |
| 58 | Advanced Green composites using liquid crystalline cellulose fibers and waxy maize starch based resin. Composites Science and Technology, 2018, 162, 110-116. | 7.8 | 22 |
| 59 | 'Green' Composites Using Modified Soy Protein Concentrate Resin and Flax Fabrics and Yarns. JSME International Journal Series A-Solid Mechanics and Material Engineering, 2004, 47, 556-560. | 0.4 | 21 |
| 60 | â€˜Greenâ€™ surface treatment for water-repellent cotton fabrics. Surface Innovations, 2016, 4, 3-13. | 2.3 | 21 |
| 61 | Fabrication of advanced â€œgreenâ€•composites using potassium hydroxide (KOH) treated liquid crystalline (LC) cellulose fibers. Journal of Materials Science, 2013, 48, 3950-3957. | 3.7 | 20 |
| 62 | Oriented bacterial cellulose-soy protein based fully â€˜greenâ€™ nanocomposites. Composites Science and Technology, 2016, 136, 85-93. | 7.8 | 20 |
| 63 | Self-healing starch-based â€˜greenâ€™ thermoset resin. Polymer, 2017, 117, 150-159. | 3.8 | 20 |
| 64 | Green composites based on avocado seed starch and nanoâ€•and microâ€scale cellulose. Polymer Composites, 2020, 41, 4631-4648. | 4.6 | 19 |
| 65 | Bioâ€based polymeric resin from agricultural waste, neem (<scp><i>A</i></scp><i>zadirachta indica</i>) seed cake, for green composites. Journal of Applied Polymer Science, 2015, 132, . | 2.6 | 18 |
| 66 | Parametric study of protein-encapsulated microcapsule formation and effect on self-healing efficiency of â€˜greenâ€™ soy protein resin. Journal of Materials Science, 2017, 52, 3028-3047. | 3.7 | 18 |
| 67 | Effect of Halloysite Nanotube Incorporation in Epoxy Resin and Carbon Fiber Ethylene/Ammonia Plasma Treatment on Their Interfacial Property. Journal of Adhesion Science and Technology, 2012, 26, 1295-1312. | 2.6 | 17 |
| 68 | Performance of protein-based wood bioadhesives and development of small-scale test method for characterizing properties of adhesive-bonded wood specimens. Journal of Adhesion Science and Technology, 2013, 27, 2083-2093. | 2.6 | 17 |
| 69 | Physical Properties of Biodegradable Films of Soy Protein Concentrate/Gelling Agent Blends. Macromolecular Materials and Engineering, 2012, 297, 176-183. | 3.6 | 16 |
| 70 | Comparison of thermoset soy protein resin toughening by natural rubber and epoxidized natural rubber. Journal of Applied Polymer Science, 2017, 134, . | 2.6 | 15 |
| 71 | Multifunctional sucrose acid as a â€˜greenâ€™ crosslinker for wrinkle-free cotton fabrics. Cellulose, 2020, 27, 5407-5420. | 4.9 | 15 |
| 72 | Mechanical and Thermal Properties of Sisal Fiber-Reinforced Green Composites with Soy Protein/Gelatin Resins. Journal of Biobased Materials and Bioenergy, 2010, 4, 338-345. | 0.3 | 14 |

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| 73 | Elastic Properties of Green Composites Reinforced with Ramie Twisted Yarn. Journal of Solid Mechanics and Materials Engineering, 2010, 4, 1605-1614. | 0.5 | 13 |
| 74 | Self-healing of â€˜greenâ€™ thermoset zein resins with irregular shaped waxy maize starch-based/poly(D,L-lactic-co-glycolic acid) microcapsules. Composites Science and Technology, 2019, 183, 107831. | 7.8 | 12 |
| 75 | Bioinspired process using anisotropic silica particles and fatty acid for superhydrophobic cotton fabrics. Cellulose, 2020, 27, 545-559. | 4.9 | 12 |
| 76 | Carbon fibers as a novel material for high-performance microelectromechanical systems (MEMS). Journal of Micromechanics and Microengineering, 2006, 16, 1403-1407. | 2.6 | 11 |
| 77 | Nonâ€food application of camelina meal: Development of sustainable and green biodegradable paperâ€camelina composite sheets and fibers. Polymer Composites, 2012, 33, 1969-1976. | 4.6 | 11 |
| 78 | Micro-fibrillated cellulose reinforced eco-friendly polymeric resin from non-edible â€˜Jatropha curcasâ€™ seed waste after biodiesel production. RSC Advances, 2016, 6, 47101-47111. | 3.6 | 11 |
| 79 | Characterization of Interface Properties of Clay Nanoplatelet-Filled Epoxy Resin and Carbon Fiber by Single Fiber Composite Technique. Journal of Adhesion Science and Technology, 2010, 24, 217-236. | 2.6 | 9 |
| 80 | A Novel Method for Electrospinning Nanofibrous 3-D Structures. Fibers, 2020, 8, 27. | 4.0 | 9 |
| 81 | Advanced green composites: New directions. Materials Today: Proceedings, 2019, 8, 832-838. | 1.8 | 8 |
| 82 | Direct Assembly of Silica Nanospheres on Halloysite Nanotubes for â€œGreenâ€•Ultrahydrophobic Cotton Fabrics. Advanced Sustainable Systems, 2019, 3, 1900009. | 5.3 | 6 |
| 83 | Bacterial cellulose integrated irregularly shapedÂmicrocapsules enhance self-healing efficiency and mechanical properties of green soy protein resins. Journal of Materials Science, 2021, 56, 12030-12047. | 3.7 | 6 |
| 84 | Toughening of thermoset green zein resin: A comparison between natural rubberâ€based additives and plasticizers. Journal of Applied Polymer Science, 2020, 137, 48512. | 2.6 | 4 |
| 85 | â€˜Greenâ€™ composites based on liquid crystalline cellulose fibers and avocado seed starch. Journal of Materials Science, 2021, 56, 6204-6216. | 3.7 | 4 |
| 86 | Comparison of effects of ultraviolet and60Co gamma ray irradiation on nylon 6 mono-filaments. Fibers and Polymers, 2004, 5, 225-229. | 2.1 | 2 |
| 87 | Can We Build with Plants? Cabin Construction Using Green Composites. Journal of Renewable Materials, 2015, 3, 244-258. | 2.2 | 1 |
| 88 | Natural â€˜Greenâ€™ Sugar-Based Treatment for Hair Styling. Fibers, 2022, 10, 13. | 4.0 | 0 |