# Sidi Ahmed Bencherif

## List of Publications by Citations



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|---|---|---|---|
| 67 papers | 6,136 citations | 31 h-index | 72 g-index |
| 72 ext. papers | 7,168 ext. citations | 7.9 avg, IF | 5.77 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 67 | Hydrogels with tunable stress relaxation regulate stem cell fate and activity. *Nature Materials*, **2016**, 15, 326-34 | 27 | 1153 |
| 66 | Harnessing traction-mediated manipulation of the cell/matrix interface to control stem-cell fate. *Nature Materials*, **2010**, 9, 518-26 | 27 | 1126 |
| 65 | Substrate stress relaxation regulates cell spreading. *Nature Communications*, **2015**, 6, 6364 | 17.4 | 485 |
| 64 | Shear-activated nanotherapeutics for drug targeting to obstructed blood vessels. *Science*, **2012**, 337, 738-42 | 33.3 | 347 |
| 63 | Injectable preformed scaffolds with shape-memory properties. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 19590-5 | 11.5 | 322 |
| 62 | Graft Copolymers by a Combination of ATRP and Two Different Consecutive Click Reactions. *Macromolecules*, **2007**, 40, 4439-4445 | 5.5 | 251 |
| 61 | Injectable cryogel-based whole-cell cancer vaccines. *Nature Communications*, **2015**, 6, 7556 | 17.4 | 237 |
| 60 | Synthesis and characterization of PEG dimethacrylates and their hydrogels. *Biomacromolecules*, **2004**, 5, 1280-7 | 6.9 | 205 |
| 59 | Influence of the degree of methacrylation on hyaluronic acid hydrogels properties. *Biomaterials*, **2008**, 29, 1739-49 | 15.6 | 195 |
| 58 | Latest Progress in Electrospun Nanofibers for Wound Healing Applications.. *ACS Applied Bio Materials*, **2019**, 2, 952-969 | 4.1 | 142 |
| 57 | Atom transfer radical polymerization in inverse miniemulsion: A versatile route toward preparation and functionalization of microgels/nanogels for targeted drug delivery applications. *Polymer*, **2009**, 50, 4407-4423 | 3.9 | 117 |
| 56 | Nanostructured hybrid hydrogels prepared by a combination of atom transfer radical polymerization and free radical polymerization. *Biomaterials*, **2009**, 30, 5270-8 | 15.6 | 110 |
| 55 | Latest Advances in Cryogel Technology for Biomedical Applications. *Advanced Therapeutics*, **2019**, 2, 1800114 | 4.9 | 105 |
| 54 | Synthesis by AGET ATRP of degradable nanogel precursors for in situ formation of nanostructured hyaluronic acid hydrogel. *Biomacromolecules*, **2009**, 10, 2499-507 | 6.9 | 89 |
| 53 | Cellular uptake of functional nanogels prepared by inverse miniemulsion ATRP with encapsulated proteins, carbohydrates, and gold nanoparticles. *Biomacromolecules*, **2009**, 10, 2300-9 | 6.9 | 79 |
| 52 | Advances in the design of macroporous polymer scaffolds for potential applications in dentistry. *Journal of Periodontal and Implant Science*, **2013**, 43, 251-61 | 2 | 78 |
| 51 | Injectable Cryogels for Biomedical Applications. *Trends in Biotechnology*, **2020**, 38, 418-431 | 15.1 | 74 |

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|---|---|---|---|
| 50 | Injectable, Tough Alginate Cryogels as Cancer Vaccines. *Advanced Healthcare Materials*, **2018**, 7, e1701469 | 10.1 | 63 |
| 49 | Synthesis, characterization, and in vitro cell culture viability of degradable poly(N-isopropylacrylamide-co-5,6-benzo-2-methylene-1,3-dioxepane)-based polymers and crosslinked gels. *Journal of Biomedical Materials Research - Part A*, **2008**, 87, 345-58 | 5.4 | 56 |
| 48 | Tunable CO2 transport through mixed polyether membranes. *Journal of Membrane Science*, **2005**, 251, 51-57 | 9.6 | 56 |
| 47 | Biotin-, Pyrene-, and GRGDS-Functionalized Polymers and Nanogels via ATRP and End Group Modification. *Macromolecular Chemistry and Physics*, **2008**, 209, 2179-2193 | 2.6 | 55 |
| 46 | Injectable Hyaluronic Acid--Gelatin Cryogels for Tissue-Engineering Applications. *Materials*, **2018**, 11, | 3.5 | 54 |
| 45 | A compressible scaffold for minimally invasive delivery of large intact neuronal networks. *Advanced Healthcare Materials*, **2015**, 4, 301-12 | 10.1 | 52 |
| 44 | Rapid cellular internalization of multifunctional star polymers prepared by atom transfer radical polymerization. *Biomacromolecules*, **2010**, 11, 2199-203 | 6.9 | 44 |
| 43 | Extracellular matrix-based cryogels for cartilage tissue engineering. *International Journal of Biological Macromolecules*, **2016**, 93, 1410-1419 | 7.9 | 43 |
| 42 | End-group effects on the properties of PEG-co-PGA hydrogels. *Acta Biomaterialia*, **2009**, 5, 1872-83 | 10.8 | 42 |
| 41 | Cell-adhesive star polymers prepared by ATRP. *Biomacromolecules*, **2009**, 10, 1795-803 | 6.9 | 37 |
| 40 | Vascularization strategies for skin tissue engineering. *Biomaterials Science*, **2020**, 8, 4073-4094 | 7.4 | 36 |
| 39 | Influence of cross-linker chemistry on release kinetics of PEG-co-PGA hydrogels. *Journal of Biomedical Materials Research - Part A*, **2009**, 90, 142-53 | 5.4 | 34 |
| 38 | Rapid and extensive collapse from electrically responsive macroporous hydrogels. *Advanced Healthcare Materials*, **2014**, 3, 500-7 | 10.1 | 32 |
| 37 | Cell-friendly inverse opal-like hydrogels for a spatially separated co-culture system. *Macromolecular Rapid Communications*, **2014**, 35, 1578-86 | 4.8 | 31 |
| 36 | Evaluation of Fibrin-Based Interpenetrating Polymer Networks as Potential Biomaterials for Tissue Engineering. *Nanomaterials*, **2017**, 7, | 5.4 | 31 |
| 35 | Thermoresponsive hydrogel scaffolds with tailored hydrophilic pores. *Chemistry - an Asian Journal*, **2011**, 6, 128-36 | 4.5 | 31 |
| 34 | Complex fluids based on methacrylated hyaluronic acid. *Biomacromolecules*, **2010**, 11, 769-75 | 6.9 | 29 |
| 33 | Oxygen-Releasing Antibacterial Nanofibrous Scaffolds for Tissue Engineering Applications. *Polymers*, **2020**, 12, | 4.5 | 22 |

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|---|---|---|---|
| 32 | Autoclavable and Injectable Cryogels for Biomedical Applications. *Advanced Healthcare Materials*, **2019**, 8, e1900679 | 10.1 | 21 |
| 31 | Electroconductive Hydrogels for Tissue Engineering: Current Status and Future Perspectives. *Bioelectricity*, **2020**, 2, 279-292 | 2 | 18 |
| 30 | The Effect of Poly (Glycerol Sebacate) Incorporation within Hybrid Chitin-Lignin Sol-Gel Nanofibrous Scaffolds. *Materials*, **2018**, 11, | 3.5 | 17 |
| 29 | Nanofibrous Silver-Coated Polymeric Scaffolds with Tunable Electrical Properties. *Nanomaterials*, **2017**, 7, | 5.4 | 17 |
| 28 | Examination of the Covalent Cationization Method Using Narrow Polydisperse Polystyrene. *Macromolecules*, **2005**, 38, 1564-1572 | 5.5 | 17 |
| 27 | Synthesis and Characterization of Poly(ethylene glycol) Dimethacrylate Hydrogels. *Macromolecular Symposia*, **2005**, 227, 243-254 | 0.8 | 16 |
| 26 | Supramolecular Self-Assembled Peptide-Based Vaccines: Current State and Future Perspectives. *Frontiers in Chemistry*, **2020**, 8, 598160 | 5 | 16 |
| 25 | Biological activities of cytokine-neutralizing hyaluronic acid-antibody conjugates. *Wound Repair and Regeneration*, **2010**, 18, 302-10 | 3.6 | 15 |
| 24 | Effect of Polymer Concentration on Autoclaved Cryogel Properties. *Macromolecular Materials and Engineering*, **2020**, 305, 1900824 | 3.9 | 12 |
| 23 | Graphene and Graphene-Based Materials in Biomedical Applications. *Current Medicinal Chemistry*, **2019**, 26, 6834-6850 | 4.3 | 11 |
| 22 | Hyaluronic Acid-Based Shape-Memory Cryogel Scaffolds for Focal Cartilage Defect Repair. *Tissue Engineering - Part A*, **2021**, 27, 748-760 | 3.9 | 10 |
| 21 | Needle-injectable microcomposite cryogel scaffolds with antimicrobial properties. *Scientific Reports* , **2020**, 10, 18370 | 4.9 | 9 |
| 20 | Design principles for cytokine-neutralizing gels: Cross-linking effects. *Acta Biomaterialia*, **2010**, 6, 4708-15 | 10.8 | 8 |
| 19 | MALDI□TOF Mass Spectral Characterization of Covalently Cationized Polystyrene. *Macromolecules*, **2003**, 36, 4669-4671 | 5.5 | 7 |
| 18 | Engineering a macroporous fibrin-based sequential interpenetrating polymer network for dermal tissue engineering. *Biomaterials Science*, **2020**, 8, 7106-7116 | 7.4 | 7 |
| 17 | Injectable Lignin--Gelatin Cryogels with Antioxidant and Antibacterial Properties for Biomedical Applications. *Biomacromolecules*, **2021**, 22, 4110-4121 | 6.9 | 7 |
| 16 | Soft nanofluidics governing minority ion exclusion in charged hydrogels. *Soft Matter*, **2015**, 11, 4081-90 | 3.6 | 6 |
| 15 | 3D-Printed Hydrogel-Filled Microneedle Arrays. *Advanced Healthcare Materials*, **2021**, 10, e2001922 | 10.1 | 6 |

# List of Publications

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|---|---|---|---|
| 14 | Antimicrobial Hydrogels: Key Considerations and Engineering Strategies for Biomedical Applications **2020**, 511-542 | | 5 |
| 13 | Cryogel-Integrated Biochip for Liver Tissue Engineering.. *ACS Applied Bio Materials*, **2021**, 4, 5617-5626 | 4.1 | 5 |
| 12 | Oxygen-Generating Cryogels Restore T Cell Mediated Cytotoxicity in Hypoxic Tumors. *Advanced Functional Materials*, **2021**, 31, 2102234 | 15.6 | 4 |
| 11 | Biomaterials and Oxygen Join Forces to Shape the Immune Response and Boost COVID-19 Vaccines. *Advanced Science*, **2021**, 8, 2100316 | 13.6 | 4 |
| 10 | Avian Egg: A Multifaceted Biomaterial for Tissue Engineering.. *Industrial & Engineering Chemistry Research*, **2021**, 60, 17348-17364 | 3.9 | 3 |
| 9 | Oxygen-generating cryogels restore T cell-mediated cytotoxicity in hypoxic tumors | | 3 |
| 8 | Harnessing biomaterials for therapeutic strategies against COVID-19. *Emergent Materials*, **2021**, 4, 1-10 | 3.5 | 3 |
| 7 | A bioinspired, photostable UV-filter that protects mammalian cells against UV-induced cellular damage. *Chemical Communications*, **2019**, 55, 12036-12039 | 5.8 | 2 |
| 6 | Edge-Enhanced Microwell Immunoassay for Highly Sensitive Protein Detection. *Analytical Chemistry* , **2021**, 93, 10292-10300 | 7.8 | 2 |
| 5 | Latest Advances in 3D Bioprinting of Cardiac Tissues. *Advanced Materials Technologies*,2101636 | 6.8 | 2 |
| 4 | Engineering hyaluronic acid-based cryogels for CD44-mediated breast tumor reconstruction.. *Materials Today Bio*, **2022**, 13, 100207 | 9.9 | 1 |
| 3 | Strategies to prevent dopamine oxidation and related cytotoxicity using various antioxidants and nitrogenation. *Emergent Materials*, **2019**, 2, 209-217 | 3.5 | 0 |
| 2 | Oxygen-Generating Cryogels Restore T Cell Mediated Cytotoxicity in Hypoxic Tumors (Adv. Funct. Mater. 37/2021). *Advanced Functional Materials*, **2021**, 31, 2170274 | 15.6 | |
| 1 | Polymeric scaffolds for antitumor immune cell priming **2022**, 63-95 | | |