

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.

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|-------------------|-------------------------|----------------|-----------------|
| 79 papers | 2,086 citations | 25 h-index | 44 g-index |
| 85 ext. papers | 2,771 ext. citations | 6.7 avg, IF | 5.34 L-index |

| # | Paper | IF | Citations |
|----|--|------|-----------|
| 79 | High-Performance Reversible Aqueous Zn-Ion Battery Based on Porous MnOx Nanorods Coated by MOF-Derived N-Doped Carbon. <i>Advanced Energy Materials</i> , 2018 , 8, 1801445 | 21.8 | 284 |
| 78 | Hierarchically Structured Self-Healing Sensors with Tunable Positive/Negative Piezoresistivity. <i>Advanced Functional Materials</i> , 2018 , 28, 1706658 | 15.6 | 138 |
| 77 | A cephalopod-inspired mechanoluminescence material with skin-like self-healing and sensing properties. <i>Materials Horizons</i> , 2019 , 6, 996-1004 | 14.4 | 98 |
| 76 | Arbitrarily 3D Configurable Hygroscopic Robots with a Covalent-Noncovalent Interpenetrating Network and Self-Healing Ability. <i>Advanced Materials</i> , 2019 , 31, e1900042 | 24 | 95 |
| 75 | Ultrarobust TiCT MXene-Based Soft Actuators Bamboo-Inspired Mesoscale Assembly of Hybrid Nanostructures. <i>ACS Nano</i> , 2020 , 14, 7055-7065 | 16.7 | 95 |
| 74 | A Polymetallic Metal-Organic Framework-Derived Strategy toward Synergistically Multidoped Metal Oxide Electrodes with Ultralong Cycle Life and High Volumetric Capacity. <i>Advanced Functional Materials</i> , 2017 , 27, 1605332 | 15.6 | 90 |
| 73 | Protein-Inspired Self-Healable TiC MXenes/Rubber-Based Supramolecular Elastomer for Intelligent Sensing. <i>ACS Nano</i> , 2020 , 14, 2788-2797 | 16.7 | 83 |
| 72 | Molecular Chain Movements and Transitions of SEBS above Room Temperature Studied by Moving-Window Two-Dimensional Correlation Infrared Spectroscopy. <i>Macromolecules</i> , 2007 , 40, 9009-9017 | 5.5 | 79 |
| 71 | Balancing the mechanical, electronic, and self-healing properties in conductive self-healing hydrogel for wearable sensor applications. <i>Materials Horizons</i> , 2021 , 8, 1795-1804 | 14.4 | 50 |
| 70 | Human-tissue-inspired anti-fatigue-fracture hydrogel for a sensitive wide-range human-machine interface. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 2074-2082 | 13 | 47 |
| 69 | Poly(vinyl alcohol)/graphene oxide nanocomposites prepared by in situ polymerization with enhanced mechanical properties and water vapor barrier properties. <i>RSC Advances</i> , 2016 , 6, 49448-49458 | 3.7 | 46 |
| 68 | New understanding on the reaction pathways of the polyacrylonitrile copolymer fiber pre-oxidation: online tracking by two-dimensional correlation FTIR spectroscopy. <i>RSC Advances</i> , 2016 , 6, 4397-4409 | 3.7 | 45 |
| 67 | Recognition ability of temperature responsive molecularly imprinted polymer hydrogels. <i>Soft Matter</i> , 2011 , 7, 1986 | 3.6 | 40 |
| 66 | Understanding the crystallization behavior of polyamide 6/polyamide 66 alloys from the perspective of hydrogen bonds: projection moving-window 2D correlation FTIR spectroscopy and the enthalpy. <i>RSC Advances</i> , 2016 , 6, 87405-87415 | 3.7 | 40 |
| 65 | Achieving ultralong life sodium storage in amorphous cobalt in binary sulfide nanoboxes sheathed in N-doped carbon. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 10398-10405 | 13 | 39 |
| 64 | Recent Developments of Planar Micro-Supercapacitors: Fabrication, Properties, and Applications. <i>Advanced Functional Materials</i> , 2020 , 30, 1910000 | 15.6 | 38 |
| 63 | Graphene oxide interpenetrated polymeric composite hydrogels as highly effective adsorbents for water treatment. <i>RSC Advances</i> , 2014 , 4, 42346-42357 | 3.7 | 38 |

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| 62 | Hydrogen bond breaking of TPU upon heating: understanding from the viewpoints of molecular movements and enthalpy. <i>RSC Advances</i> , 2015 , 5, 31153-31165 | 3.7 | 37 |
| 61 | Synthesis of a Waterborne Polyurethane-Fluorinated Emulsion and Its Hydrophobic Properties of Coating Films. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 19257-19264 | 3.9 | 36 |
| 60 | Polybenzoxazines: Thermal Responsiveness of Hydrogen Bonds and Application as Latent Curing Agents for Thermosetting Resins. <i>ACS Omega</i> , 2017 , 2, 1529-1534 | 3.9 | 32 |
| 59 | Fabricating Metallic Circuit Patterns on Polymer Substrates through Laser and Selective Metallization. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 33999-34007 | 9.5 | 32 |
| 58 | A Simple Way to Achieve Legible and Local Controllable Patterning for Polymers Based on a Near-Infrared Pulsed Laser. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 1977-83 | 9.5 | 31 |
| 57 | Cross-linking process of cis-polybutadiene rubber with peroxides studied by two-dimensional infrared correlation spectroscopy: a detailed tracking. <i>RSC Advances</i> , 2015 , 5, 10231-10242 | 3.7 | 31 |
| 56 | Selective Metallization Induced by Laser Activation: Fabricating Metallized Patterns on Polymer via Metal Oxide Composite. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8996-9005 | 9.5 | 29 |
| 55 | Micro-dynamics mechanism of the phase transition behavior of poly(N-isopropylacrylamide-co-2-hydroxyethyl methacrylate) hydrogels revealed by two-dimensional correlation spectroscopy. <i>Polymer Chemistry</i> , 2017 , 8, 865-878 | 4.9 | 28 |
| 54 | Local Controllable Laser Patterning of Polymers Induced by Graphene Material. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 28077-28085 | 9.5 | 25 |
| 53 | Enhanced local controllable laser patterning of polymers induced by graphene/polystyrene composites. <i>Materials and Design</i> , 2018 , 141, 159-169 | 8.1 | 24 |
| 52 | Long life rechargeable Li-O ₂ batteries enabled by enhanced charge transfer in nanocable-like Fe@N-doped carbon nanotube catalyst. <i>Science China Materials</i> , 2017 , 60, 415-426 | 7.1 | 23 |
| 51 | Two-step volume phase transition mechanism of poly(N-vinylcaprolactam) hydrogel online-tracked by two-dimensional correlation spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 27221-27232 | 3.6 | 23 |
| 50 | Microdynamics mechanism of D ₂ O absorption of the poly(2-hydroxyethyl methacrylate)-based contact lens hydrogel studied by two-dimensional correlation ATR-FTIR spectroscopy. <i>Soft Matter</i> , 2016 , 12, 1145-57 | 3.6 | 21 |
| 49 | Hydrogen bonding in micro-phase separation of poly(polyamide 12-block-polytetrahydrofuran) alternating block copolymer: Enthalpies and molecular movements. <i>Vibrational Spectroscopy</i> , 2016 , 86, 160-172 | 2.1 | 21 |
| 48 | Large-area mechanical interlocking via nanopores: Ultra-high-strength direct bonding of polymer and metal materials. <i>Applied Surface Science</i> , 2019 , 492, 558-570 | 6.7 | 20 |
| 47 | Laser-Induced Selective Metallization on Polymer Substrates Using Organocopper for Portable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 13714-13723 | 9.5 | 17 |
| 46 | Identification of weak transitions using moving-window two-dimensional correlation analysis: treatment with scaling techniques. <i>Analytical and Bioanalytical Chemistry</i> , 2014 , 406, 4157-72 | 4.4 | 16 |
| 45 | Synergistic effect of stereocomplex crystals and shear flow on the crystallization rate of poly(L-lactic acid): A rheological study. <i>RSC Advances</i> , 2014 , 4, 2733-2742 | 3.7 | 16 |

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| 44 | An insight into the sequential order in 2D correlation spectroscopy using polymer transitions: Boltzmann Sigmoid, Gaussian Cumulative, Lorentz Cumulative, and Asymmetric Sigmoid. Findings in experiments and simulations. <i>Vibrational Spectroscopy</i> , 2014 , 70, 137-161 | 2.1 | 16 |
| 43 | Moving-window two-dimensional correlation infrared spectroscopic study on the dissolution process of poly(vinyl alcohol). <i>Analytical and Bioanalytical Chemistry</i> , 2015 , 407, 8765-71 | 4.4 | 14 |
| 42 | Ultrarobust Photothermal Materials via Dynamic Crosslinking for Solar Harvesting. <i>Small</i> , 2021 , e2104048 | 4.1 | 13 |
| 41 | A method to construct perfect 3D polymer/graphene oxide core-shell microspheres via electrostatic self-assembly. <i>RSC Advances</i> , 2015 , 5, 32469-32478 | 3.7 | 11 |
| 40 | Separation of the molecular motion from different components or phases using projection moving-window 2D correlation FTIR spectroscopy for multiphase and multicomponent polymers. <i>RSC Advances</i> , 2015 , 5, 14832-14842 | 3.7 | 11 |
| 39 | Polypropylene elastomer composite for the all-vanadium redox flow battery: current collector materials. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 2387-2398 | 1.3 | 11 |
| 38 | Online tracking of the thermal reduction of graphene oxide by two-dimensional correlation infrared spectroscopy. <i>Vibrational Spectroscopy</i> , 2018 , 96, 32-45 | 2.1 | 11 |
| 37 | Exposing Metal Oxide with Intrinsic Catalytic Activity by Near-Infrared Pulsed Laser: Laser-Induced Selective Metallization on Polymer Materials. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700937 | 4.6 | 10 |
| 36 | Two-dimensional correlation infrared spectroscopy reveals the detailed molecular movements during the crystallization of poly(ethylene-co-vinyl alcohol). <i>RSC Advances</i> , 2015 , 5, 84729-84745 | 3.7 | 10 |
| 35 | Generation Mechanism of Oxidation Products during the Air Atmosphere Oxidation of SEBS/PP Blends: Tracked by 2D Correlation Infrared Spectroscopy. <i>Macromolecular Chemistry and Physics</i> , 2016 , 217, 2501-2516 | 2.6 | 10 |
| 34 | Crystallization behavior and toughening mechanism of poly(ethylene oxide) in polyoxymethylene/poly(ethylene oxide) crystalline/crystalline blends. <i>Polymers for Advanced Technologies</i> , 2014 , 25, 760-768 | 3.2 | 10 |
| 33 | Investigation of selective molecular interactions using two-dimensional Fourier transform IR spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2010 , 397, 339-343 | 4.4 | 10 |
| 32 | Soft yet Tough: a Mechanically and Functionally Tissue-like Organohydrogel for Sensitive Soft Electronics. <i>Chemistry of Materials</i> , 2022 , 34, 1392-1402 | 9.6 | 10 |
| 31 | Ultraviolet photodetector on flexible polymer substrate based on nano zinc oxide and laser-induced selective metallization. <i>Composites Science and Technology</i> , 2020 , 190, 108045 | 8.6 | 9 |
| 30 | Locally Controllable Surface Foaming of Polymers Induced by Graphene via Near-Infrared Pulsed Laser. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 2498-2511 | 8.3 | 9 |
| 29 | New Strategy to Achieve Laser Direct Writing of Polymers: Fabrication of the Color-Changing Microcapsule with a Core-Shell Structure. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 41688-41700 | 9.5 | 9 |
| 28 | Effect of alkyl side chain length on the properties of polyetherimides from molecular simulation combined with experimental results. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2010 , 48, 595-599 | 2.6 | 9 |
| 27 | Exploration of the unusual two-step volume phase transition of the poly(N-vinylcaprolactam-co-hydroxyethyl methacrylate) hydrogel. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 23013-23024 | 3.6 | 8 |

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| 26 | Polymer/Metal Hybrid Material with an Ultra-High Interface Strength Based on Mechanical Interlocking via Nanopores Produced by Electrochemistry. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 12409-12420 | 3.9 | 7 |
| 25 | Structure, properties, and mechanism of reactive compatibilization of epoxy to polyphenylene sulfide/polyamide elastomer. <i>Journal of Applied Polymer Science</i> , 2013 , 130, 3411-3420 | 2.9 | 7 |
| 24 | Difference in the micro-dynamics mechanism between aromatic nylon and aliphatic nylon during water absorption: spectroscopic evidence. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 26764-26776 | 3.6 | 7 |
| 23 | Formation of a large-scale shish-kebab structure of polyoxymethylene in the melt spinning and the crystalline morphology evolution after hot stretching. <i>Polymers for Advanced Technologies</i> , 2015 , 26, 77-84 | 3.2 | 6 |
| 22 | Lamellar cluster structure formation resulting from interchain interaction in a novel aromatic polyimide based on PMDA monomer. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2010 , 48, 2257-2261 | 3.6 | 6 |
| 21 | Strong, Healable, Stimulus-Responsive Fluorescent Elastomers Based on Assembled Borate Dynamic Nanostructures.. <i>Small</i> , 2022 , e2107164 | 11 | 6 |
| 20 | An Efficient Strategy to Prepare Ultra-High Sensitivity SERS-Active Substrate Based on Laser-Induced Selective Metallization of Polymers. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 5038-5049 | 8.3 | 6 |
| 19 | Characterization and Properties of Thermoplastic Polyether Elastomer/Polyoxymethylene Blends Prepared by Melt-Mixing Method. <i>Polymer Science - Series A</i> , 2019 , 61, 890-896 | 1.2 | 6 |
| 18 | Direct Bonding of Polymer and Metal with an Ultrahigh Strength: Laser Treatment and Mechanical Interlocking. <i>Advanced Engineering Materials</i> , 2021 , 23, 2001288 | 3.5 | 6 |
| 17 | Design and preparation of rapid full bio-degradable plastic composites based on poly(butylene succinate). <i>Polymer Composites</i> , 2018 , 39, E609-E619 | 3 | 3 |
| 16 | Top-Down Direct Preparation of Orange-Yellow Dye Similar to Psittacofulvins from Commercial Polymer by Laser Writing. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 58339-58348 | 9.5 | 3 |
| 15 | Fabrication of Copper Patterns on Polydimethylsiloxane through Laser-Induced Selective Metallization. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 8821-8828 | 3.9 | 3 |
| 14 | Preliminary study of experimental parameters for projection moving-window two-dimensional correlation FTIR spectroscopy. <i>Journal of Molecular Structure</i> , 2019 , 1176, 777-790 | 3.4 | 3 |
| 13 | Crystallization Behavior of Poly(Tetramethylene Oxide) Influenced by the Crystallization Condition of Poly(Butylene Succinate) in Their Copolymers. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2019 , 34, 496-506 | 1 | 2 |
| 12 | Characterizations and Properties of POM Toughened by Thermoplastic Polyamide Elastomer. <i>Polymer Science - Series A</i> , 2021 , 63, 275-282 | 1.2 | 2 |
| 11 | Laser-assisted mask-free patterning strategy for high-performance hybrid micro-supercapacitors with 3D current collectors. <i>Chemical Engineering Journal</i> , 2022 , 437, 135493 | 14.7 | 2 |
| 10 | Composition dependence of the thermal behavior, morphology and properties of biodegradable PBS/PTMO segment block copolymer. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016 , 31, 219-226 | 1 | 1 |
| 9 | Ultra-Stretchable and Self-Healing Anti-Freezing Strain Sensors Based on Hydrophobic Associated Polyacrylic Acid Hydrogels. <i>Materials</i> , 2021 , 14, | 3.5 | 1 |

- 8 Polyoxymethylene/thermoplastic polyamide elastomer blends: Morphology, crystallization, mechanical, and antistatic properties. *High Performance Polymers*, 095400832110092 1.6 1
- 7 Laser Direct Writing of Flexible Heaters on Polymer Substrates. *Industrial & Engineering Chemistry Research*, **2021**, 60, 11161-11170 3.9 1
- 6 Preparation and Characterization of Polyoxymethylene/Thermoplastic Polyamide Elastomer Blends Compatibilized by Maleic Anhydride Grafted ABS Copolymer. *Polymer Science - Series A*, **2021**, 63, 420-428 1.2 1
- 5 Pitaya-Structured Microspheres with Dual Laser Wavelength Responses for Polymer Laser Direct Writing.. *ACS Applied Materials & Interfaces*, **2022**, 14, 14817-14833 9.5 1
- 4 Influence of processing conditions on mechanical properties of blends of styrenic block copolymer and poly(phenylene oxide): Miscibility and microdomain size. *Journal of Applied Polymer Science*, **2018**, 135, 46123 2.9
- 3 Functional building devices using laser-induced selective metallization on magnesium oxychloride cement composites. *Cement and Concrete Composites*, **2022**, 128, 104423 8.6
- 2 Reactive Compatibilization of Multi-Hydroxy Functional Compound Based on Polyoxymethylene/Thermoplastic Polyether Elastomer Blends. *Polymer Science - Series B*, **2020**, 62, 724-733 0.8
- 1 Rewritable Polymer Materials for Ultraviolet Laser Based on Photochromic Microcapsules. *Industrial & Engineering Chemistry Research*, **2022**, 61, 5833-5842 3.9