# Paul H J Kouwer

List of Publications by Year
in descending order



| 105 | 4,006 | 101543 | 133252 |
|---|---|---|---|
| papers | citations | 36 h-index | 59 g-index |

| 112 | 112 | 112 | 4786 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Cell-matrix reciprocity in 3D culture models with nonlinear elasticity. Bioactive Materials, 2022, 9, 316-331. | 15.6 | 36 |
| 2 | A Temperatureâ€Based Easyâ€Separable (TempEasy) 3D Hydrogel Coculture System. Advanced Healthcare Materials, 2022, 11, e2102389. | 7.6 | 5 |
| 3 | The living interface between synthetic biology and biomaterial design. Nature Materials, 2022, 21, 390-397. | 27.5 | 68 |
| 4 | Novel Synthetic Polymer-Based 3D Contraction Assay: A Versatile Preclinical Research Platform for Fibrosis. ACS Applied Materials & Interfaces, 2022, 14, 19212-19225. | 8.0 | 17 |
| 5 | Magnetically Driven Hierarchical Alignment in Biomimetic Fibrous Hydrogels. Small, 2022, 18, . | 10.0 | 8 |
| 6 | Toward Tissueâ€Like Material Properties: Inducing In Situ Adaptive Behavior in Fibrous Hydrogels. Advanced Materials, 2022, 34, . | 21.0 | 11 |
| 7 | Tunable Hybrid Matrices Drive Epithelial Morphogenesis and YAP Translocation. Advanced Science, 2021, 8, 2003380. | 11.2 | 13 |
| 8 | Semiflexible polymer scaffolds: an overview of conjugation strategies. Polymer Chemistry, 2021, 12, 1362-1392. | 3.9 | 13 |
| 9 | Fibrous Hydrogels under Multiâ€Axial Deformation: Persistence Length as the Main Determinant of Compression Softening. Advanced Functional Materials, 2021, 31, 2010527. | 14.9 | 17 |
| 10 | Thin-Film Polyisocyanide-Based Hydrogels for Affinity Biosensors. Journal of Physical Chemistry C, 2021, 125, 12960-12967. | 3.1 | 8 |
| 11 | Structure and Dynamics of a Temperature-Sensitive Hydrogel. Journal of Physical Chemistry B, 2021, 125, 8219-8224. | 2.6 | 4 |
| 12 | Magnetic Stiffening in 3D Cell Culture Matrices. Nano Letters, 2021, 21, 6740-6747. | 9.1 | 23 |
| 13 | Combining Mechanical Tuneability with Function: Biomimetic Fibrous Hydrogels with Nanoparticle Crosslinkers. Advanced Functional Materials, 2021, 31, 2105713. | 14.9 | 17 |
| 14 | Multivalent Sgc8c-aptamer decorated polymer scaffolds for leukemia targeting. Chemical Communications, 2021, 57, 2744-2747. | 4.1 | 12 |
| 15 | Biomimetic Networks with Enhanced Photodynamic Antimicrobial Activity from Conjugated Polythiophene/Polyisocyanide Hybrid Hydrogels. Angewandte Chemie - International Edition, 2020, 59, 2720-2724. | 13.8 | 55 |
| 16 | Biomimetic Networks with Enhanced Photodynamic Antimicrobial Activity from Conjugated Polythiophene/Polyisocyanide Hybrid Hydrogels. Angewandte Chemie, 2020, 132, 2742-2746. | 2.0 | 4 |
| 17 | Polyisocyanopeptide Hydrogels Are Effectively Sterilized Using Supercritical Carbon Dioxide. Tissue Engineering - Part C: Methods, 2020, 26, 132-141. | 2.1 | 9 |
| 18 | Antimicrobial and anti-inflammatory thermo-reversible hydrogel for periodontal delivery. Acta Biomaterialia, 2020, 116, 259-267. | 8.3 | 46 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Polyisocyanide Hydrogels as a Tunable Platform for Mammary Gland Organoid Formation. Advanced Science, 2020, 7, 2001797. | 11.2 | 31 |
| 20 | Synthetic Extracellular Matrices as a Toolbox to Tune Stem Cell Secretome. ACS Applied Materials & Interfaces, 2020, 12, 56723-56730. | 8.0 | 28 |
| 21 | Structural characterization of fibrous synthetic hydrogels using fluorescence microscopy. Soft Matter, 2020, 16, 4210-4219. | 2.7 | 31 |
| 22 | A tunable and injectable local drug delivery system for personalized periodontal application. Journal of Controlled Release, 2020, 324, 134-145. | 9.9 | 56 |
| 23 | Synthetic Semiflexible and Bioactive Brushes. Biomacromolecules, 2019, 20, 2587-2597. | 5.4 | 10 |
| 24 | Monitoring <sup>111</sup>In-labelled polyisocyanopeptide (PIC) hydrogel wound dressings in full-thickness wounds. Biomaterials Science, 2019, 7, 3041-3050. | 5.4 | 22 |
| 25 | Cytoskeletal stiffening in synthetic hydrogels. Nature Communications, 2019, 10, 609. | 12.8 | 63 |
| 26 | Synthetic Extracellular Matrices with Nonlinear Elasticity Regulate Cellular Organization. Biomacromolecules, 2019, 20, 826-834. | 5.4 | 71 |
| 27 | Virus-like particles as crosslinkers in fibrous biomimetic hydrogels: approaches towards capsid rupture and gel repair. Soft Matter, 2018, 14, 1442-1448. | 2.7 | 8 |
| 28 | Strong optical nonlinearities of self-assembled polymorphic microstructures of phenylethynyl functionalized fluorenones. Chinese Chemical Letters, 2018, 29, 297-300. | 9.0 | 25 |
| 29 | Controlling the gelation temperature of biomimetic polyisocyanides. Chinese Chemical Letters, 2018, 29, 281-284. | 9.0 | 19 |
| 30 | Thermosensitive biomimetic polyisocyanopeptide hydrogels may facilitate wound repair. Biomaterials, 2018, 181, 392-401. | 11.4 | 90 |
| 31 | Tunable properties based on regioselectivity of 1,2,3-triazole units in axially chiral 2,2â€²-linked 1,1â€²-binaphthyl-based copolymers for ions and acid responsiveness. European Polymer Journal, 2018, 108, 191-198. | 5.4 | 3 |
| 32 | Crosslinking of fibrous hydrogels. Nature Communications, 2018, 9, 2172. | 12.8 | 75 |
| 33 | Anchoring strength measurements of a lyotropic chromonic liquid crystal on rubbed polyimide surfaces. Liquid Crystals, 2017, 44, 1165-1172. | 2.2 | 13 |
| 34 | Fully Stable and Homogeneous Lyotropic Liquid Crystal Alignment on Anisotropic Surfaces. Advanced Functional Materials, 2017, 27, 1701209. | 14.9 | 17 |
| 35 | Nonlinear mechanics of hybrid polymer networks that mimic the complex mechanical environment of cells. Nature Communications, 2017, 8, 15478. | 12.8 | 60 |
| 36 | Self-Healing Hydrogels Formed by Complexation between Calcium Ions and Bisphosphonate-Functionalized Star-Shaped Polymers. Macromolecules, 2017, 50, 8698-8706. | 4.8 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Muscovite mica as a growth template of PC<sub>61</sub>BM crystallites for organic photovoltaics. CrystEngComm, 2017, 19, 4424-4436. | 2.6 | 4 |
| 38 | Liquid crystal templating as an approach to spatially and temporally organise soft matter. Chemical Society Reviews, 2017, 46, 5935-5949. | 38.1 | 57 |
| 39 | Strategies To Increase the Thermal Stability of Truly Biomimetic Hydrogels: Combining Hydrophobicity and Directed Hydrogen Bonding. Macromolecules, 2017, 50, 9058-9065. | 4.8 | 36 |
| 40 | 1Hâ€1,2,3â€Triazole: From Structure to Function and Catalysis. Journal of Heterocyclic Chemistry, 2017, 54, 1677-1699. | 2.6 | 30 |
| 41 | Key Developments in Ionic Liquid Crystals. International Journal of Molecular Sciences, 2016, 17, 731. | 4.1 | 68 |
| 42 | Patterning of Soft Matter across Multiple Length Scales. Advanced Functional Materials, 2016, 26, 2609-2616. | 14.9 | 25 |
| 43 | Solid-state NMR characterization of tri-ethyleneglycol grafted polyisocyanopeptides. Magnetic Resonance in Chemistry, 2016, 54, 328-333. | 1.9 | 3 |
| 44 | Smectic A mesophases from luminescent sandic platinum(II) mesogens. Liquid Crystals, 2016, 43, 1709-1713. | 2.2 | 10 |
| 45 | Synthesis of Functional Fluorescent BODIPYâ€based Dyes through Electrophilic Aromatic Substitution: Straightforward Approach towards Customized Fluorescent Probes. ChemistryOpen, 2016, 5, 450-454. | 1.9 | 7 |
| 46 | Spatial and temporal patterning of polymers in electric field responsive LC templates. Journal of Materials Chemistry C, 2016, 4, 8263-8269. | 5.5 | 4 |
| 47 | Order at Extreme Dilution. Advanced Functional Materials, 2016, 26, 9009-9016. | 14.9 | 3 |
| 48 | Critical behaviour in the nonlinear elastic response of hydrogels. Soft Matter, 2016, 12, 6995-7004. | 2.7 | 9 |
| 49 | Bundle Formation in Biomimetic Hydrogels. Biomacromolecules, 2016, 17, 2642-2649. | 5.4 | 47 |
| 50 | Directed peptide amphiphile assembly using aqueous liquid crystal templates in magnetic fields. Soft Matter, 2016, 12, 6518-6525. | 2.7 | 11 |
| 51 | Directing Soft Matter in Water Using Electric Fields. ACS Applied Materials & Interfaces, 2016, 8, 16303-16309. | 8.0 | 7 |
| 52 | Unusual temperature dependence of elastic constants of an ambient-temperature discotic nematic liquid crystal. Soft Matter, 2016, 12, 2960-2964. | 2.7 | 13 |
| 53 | Fibrin-fiber architecture influences cell spreading and differentiation. Cell Adhesion and Migration, 2016, 10, 495-504. | 2.7 | 29 |
| 54 | Electric field generation of Skyrmion-like structures in a nematic liquid crystal. Soft Matter, 2016, 12, 853-858. | 2.7 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Tuning Hydrogel Mechanics Using the Hofmeister Effect. Advanced Functional Materials, 2015, 25, 6503-6510. | 14.9 | 102 |
| 56 | Controlling Microsized Polymorphic Architectures with Distinct Linear and Nonlinear Optical Properties. Advanced Optical Materials, 2015, 3, 948-956. | 7.3 | 39 |
| 57 | Maximizing Orientational Order in Polymer-Stabilized Liquid Crystals Using High Magnetic Fields. Macromolecules, 2015, 48, 1002-1008. | 4.8 | 3 |
| 58 | Ultra-responsive soft matter from strain-stiffening hydrogels. Nature Communications, 2014, 5, 5808. | 12.8 | 186 |
| 59 | A facile route to hydrophilic ionic liquids. RSC Advances, 2014, 4, 30267-30273. | 3.6 | 4 |
| 60 | Stabilisation of 2D colloidal assemblies by polymerisation of liquid crystalline matrices for photonic applications. Soft Matter, 2014, 10, 5797-5803. | 2.7 | 14 |
| 61 | Preparation and characterization of non-linear poly(ethylene glycol) analogs from oligo(ethylene) Tj ETQq1 1 0.784314 rgBT /Overloc | 5.4 | 37 |
| 62 | Stiffness versus architecture of single helical polyisocyanopeptides. Chemical Science, 2013, 4, 2357. | 7.4 | 28 |
| 63 | Towards room-temperature ionic liquid crystals. Journal of Materials Chemistry A, 2013, 1, 354-357. | 10.3 | 22 |
| 64 | Responsive biomimetic networks from polyisocyanopeptide hydrogels. Nature, 2013, 493, 651-655. | 27.8 | 441 |
| 65 | Templated Hierarchical Selfâ€Assembly of Poly(pâ€aryltriazole) Foldamers. Angewandte Chemie - International Edition, 2013, 52, 11040-11044. | 13.8 | 32 |
| 66 | Selfâ€Assembled Organic Microfibers for Nonlinear Optics. Advanced Materials, 2013, 25, 2084-2089. | 21.0 | 119 |
| 67 | Postfunctionalization of Helical Polyisocyanopeptides with Phthalocyanine Chromophores by â€œClick Chemistryâ€• ChemPlusChem, 2012, 77, 700-706. | 2.8 | 12 |
| 68 | The trisubstituted-triazole approach to extended functional naphthalocyanines. Journal of Porphyrins and Phthalocyanines, 2011, 15, 898-907. | 0.8 | 5 |
| 69 | Triazole: a unique building block for the construction of functional materials. Chemical Communications, 2011, 47, 8740. | 4.1 | 152 |
| 70 | Fusing Triazoles: Toward Extending Aromaticity. Organic Letters, 2011, 13, 3494-3497. | 4.6 | 41 |
| 71 | Triazoleâ€“pyridineligands: a novel approach to chromophoric iridium arrays. Journal of Materials Chemistry, 2011, 21, 2104-2111. | 6.7 | 44 |
| 72 | Multichromophoric Phthalocyanineâ€“(Perylenediimide)<sub>8</sub> Molecules: A Photophysical Study. Chemistry - A European Journal, 2010, 16, 10021-10029. | 3.3 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Dynamics of molecular self-ordering in tetraphenyl porphyrin monolayers on metallic substrates. Nanotechnology, 2009, 20, 275602. | 2.6 | 75 |
| 74 | A Novel Modular Approach to Triazole-Functionalized Phthalocyanines Using Click Chemistry. Journal of Organic Chemistry, 2009, 74, 21-25. | 3.2 | 79 |
| 75 | Hierarchical organisation in shape-amphiphilic liquid crystals. Journal of Materials Chemistry, 2009, 19, 1564. | 6.7 | 47 |
| 76 | Columnar mesophases from half-discoid platinum cyclometalated metallomesogens. Journal of Materials Chemistry, 2008, 18, 400-407. | 6.7 | 85 |
| 77 | Long- and Short-Range Order in the Mesophases of Laterally Substituted Calamitic Mesogens and their Radial Octapodes. Journal of Physical Chemistry B, 2008, 112, 6550-6556. | 2.6 | 46 |
| 78 | Uniform N-(2-Aminoethyl)(3-aminopropyl)trimethoxysilane Monolayer Growth in Water. Journal of Physical Chemistry C, 2008, 112, 20105-20108. | 3.1 | 14 |
| 79 | Local lamellar organisation of discotic mesogens carrying fluorinated tails. Journal of Materials Chemistry, 2007, 17, 4196. | 6.7 | 20 |
| 80 | Columnar phase structures of an organicâ€“inorganic hybrid functionalized with eight calamitic mesogens. Soft Matter, 2007, 3, 857-865. | 2.7 | 37 |
| 81 | Synthesis and Mesomorphic Properties of Rigid-Core Ionic Liquid Crystals. Journal of the American Chemical Society, 2007, 129, 14042-14052. | 13.7 | 182 |
| 82 | Shape Dependence in the Formation of Condensed Phases Exhibited by Disubstituted Sucrose Esters. Chemistry - A European Journal, 2007, 13, 1763-1775. | 3.3 | 25 |
| 83 | Self-Organizing Properties of Monosubstituted Sucrose Fatty Acid Esters: The Effects of Chain Length and Unsaturation. Chemistry - A European Journal, 2006, 12, 3547-3557. | 3.3 | 54 |
| 84 | Disc-Shaped Triphenylenes in a Smectic Organisation.. ChemInform, 2004, 35, no. | 0.0 | 0 |
| 85 | Discotic Multipodes with Nematic Mesophases. Molecular Crystals and Liquid Crystals, 2004, 411, 387-396. | 0.9 | 17 |
| 86 | Mixtures of disc-shaped and rod-shaped mesogens with chiral components. Journal of Materials Chemistry, 2004, 14, 1798. | 6.7 | 11 |
| 87 | Dynamics and Phase Transitions in Discotic and Calamitic Liquid Crystal Side-chain Polymers. Molecular Crystals and Liquid Crystals, 2004, 411, 503-513. | 0.9 | 3 |
| 88 | Substituent Effects in Discotic Liquid Crystals. Molecular Crystals and Liquid Crystals, 2004, 411, 305-312. | 0.9 | 9 |
| 89 | The Nematic Discotic Phase in Materials Containing a Siloxane Core. Molecular Crystals and Liquid Crystals, 2004, 411, 377-385. | 0.9 | 9 |
| 90 | Disc-shaped triphenylenes in a smectic organisation. Chemical Communications, 2004, , 66. | 4.1 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Multiple Levels of Order in Linked Discâ€“Rod Liquid Crystals. Angewandte Chemie - International Edition, 2003, 42, 6015-6018. | 13.8 | 46 |
| 92 | Dynamics of discotic methoxy triphenylene molecules from quasielastic neutron scattering and molecular dynamics simulations. Chemical Physics, 2003, 292, 185-190. | 1.9 | 11 |
| 93 | Full Miscibility of Disk- and Rod-Shaped Mesogens in the Nematic Phase. Journal of the American Chemical Society, 2003, 125, 11172-11173. | 13.7 | 82 |
| 94 | Specific interactions in discotic liquid crystals. Journal of Materials Chemistry, 2003, 13, 458-469. | 6.7 | 43 |
| 95 | Dynamics of a Triphenylene Discotic Molecule, HAT6, in the Columnar and Isotropic Liquid Phases. Journal of the American Chemical Society, 2003, 125, 3860-3866. | 13.7 | 67 |
| 96 | Synthesis of Amphiphilic Phenylazophenyl Glycosides and a Study of Their Liquid Crystal Properties. Journal of the American Chemical Society, 2003, 125, 15499-15506. | 13.7 | 52 |
| 97 | A bilayer to monolayer phase transition in liquid crystal glycolipidsElectronic supplementary information (ESI) available: synthesis of compound 3. See http://www.rsc.org/suppdata/cc/b3/b308880d/. Chemical Communications, 2003, , 2860. | 4.1 | 23 |
| 98 | Nematic Phases of Disc-And Rod-Shaped Molecules. Molecular Crystals and Liquid Crystals, 2003, 397, 1-16. | 0.9 | 10 |
| 99 | NEMATIC PHASES OF DISC-AND ROD-SHAPED MOLECULES. Molecular Crystals and Liquid Crystals, 2003, 397, 1-1. | 0.9 | 3 |
| 100 | Induced Liquid Crystalline Diversity in Molecular and Polymeric Charge-Transfer Complexes of Discotic Mesogens. Macromolecules, 2002, 35, 2576-2582. | 4.8 | 29 |
| 101 | Charge Transfer Complexes of Discotic Liquid Crystals:â€‰ A Flexible Route to a Wide Variety of Mesophases. Macromolecules, 2002, 35, 4322-4329. | 4.8 | 59 |
| 102 | The Nematic Lateral Phase:Â A Novel Phase in Discotic Supramolecular Assemblies. Macromolecules, 2001, 34, 7582-7584. | 4.8 | 36 |
| 103 | Modeling of NDand NColPhase Transitions in Discotic Side Chain Polymers by the Extended McMillan Theory. Journal of the American Chemical Society, 2001, 123, 4645-4646. | 13.7 | 11 |
| 104 | Synthesis and Characterization of a Novel Liquid Crystalline Polymer Showing a Nematic Columnar to Nematic Discotic Phase Transition. Macromolecules, 2000, 33, 4336-4342. | 4.8 | 48 |
| 105 | A Novel Polyaryl Ether Based Photorefractive Composite. Chemistry of Materials, 1998, 10, 3951-3957. | 6.7 | 8 |