Baris Demir

List of Publications by Year in descending order

43 papers	1,310 citations	331670 21 h-index	361022 35 g-index
44 all docs	44 docs citations	44 times ranked	1196 citing authors

#	Article	IF	Citations
1	Design Rules for Enhanced Interfacial Shear Response in Functionalized Carbon Fiber Epoxy Composites. ACS Applied Materials & Interfaces, 2017, 9, 11846-11857.	8.0	112
2	Accelerating solar desalination in brine through ion activated hierarchically porous polyion complex hydrogels. Materials Horizons, 2020, 7, 3187-3195.	12.2	99
3	Electrochemical surface modification of carbon fibres by grafting of amine, carboxylic and lipophilic amide groups. Carbon, 2017, 118, 393-403.	10.3	97
4	A robust and reproducible procedure for cross-linking thermoset polymers using molecular simulation. Soft Matter, 2016, 12, 2453-2464.	2.7	93
5	Designing carbon fiber composite interfaces using a â€˜graft-toâ€™ approach: Surface grafting density versus interphase penetration. Carbon, 2019, 146, 88-96.	10.3	56
6	Selectively tuning ionic thermopower in all-solid-state flexible polymer composites for thermal sensing. Nature Communications, 2022, 13, 221.	12.8	56
7	Predictions of Thermoâ€Mechanical Properties of Crossâ€Linked Polyacrylamide Hydrogels Using Molecular Simulations. Advanced Theory and Simulations, 2019, 2, 1800153.	2.8	52
8	An efficient high-throughput grafting procedure for enhancing carbon fiber-to-matrix interactions in composites. Chemical Engineering Journal, 2018, 353, 373-380.	12.7	50
9	Synergistic interfacial effects of ionic liquids as sizing agents and surface modified carbon fibers. Journal of Materials Chemistry A, 2018, 6, 4504-4514.	10.3	48
10	A predictive model of interfacial interactions between functionalised carbon fibre surfaces cross-linked with epoxy resin. Composites Science and Technology, 2018, 159, 127-134.	7.8	43
11	Simultaneously increasing the hydrophobicity and interfacial adhesion of carbon fibres: a simple pathway to install passive functionality into composites. Journal of Materials Chemistry A, 2019, 7, 13483-13494.	10.3	43
12	Lowâ€Fouling Fluoropolymers for Bioconjugation and Inâ€…Vivo Tracking. Angewandte Chemie - International Edition, 2020, 59, 4729-4735.	13.8	40
13	Using molecular entanglement as a strategy to enhance carbon fiber-epoxy composite interfaces. Composites Science and Technology, 2020, 196, 108225.	7.8	39
14	Atomistic Modeling of the Formation of a Thermoset/Thermoplastic Interphase during Co-Curing. Macromolecules, 2018, 51, 3983-3993.	4.8	35
15	Mass difference and polarization lead to low thermal conductivity of graphene-like carbon nitride (C3N). Carbon, 2020, 162, 202-208.	10.3	35
16	Determination of Kamletâ€“Taft parameters for selected solvate ionic liquids. Physical Chemistry Chemical Physics, 2016, 18, 13153-13157.	2.8	34
17	Boosting the electrical and mechanical properties of structural dielectric capacitor composites via gold nanoparticle doping. Composites Part B: Engineering, 2019, 178, 107480.	12.0	31
18	New Epoxy Thermosets Derived from a Bisimidazolium Ionic Liquid Monomer: An Experimental and Modeling Investigation. ACS Sustainable Chemistry and Engineering, 2020, 8, 12208-12221.	6.7	25

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19	Silverâ€“Sodium Ion Exchange Dynamics in LTA Zeolite Membranes. Journal of Physical Chemistry C, 2013, 117, 1663-1671.	3.1	24
20	Investigation of the Ionic Liquid Graphene Electric Double Layer in Supercapacitors Using Constant Potential Simulations. Nanomaterials, 2020, 10, 2181.	4.1	24
21	Epoxy-gold nanoparticle nanocomposites with enhanced thermo-mechanical properties: An integrated modelling and experimental study. Composites Science and Technology, 2019, 174, 106-116.	7.8	22
22	Graphene oxide thin film structural dielectric capacitors for aviation static electricity harvesting and storage. Composites Part B: Engineering, 2020, 201, 108375.	12.0	22
23	Lowâ€Fouling Fluoropolymers for Bioconjugation and Inâ€…Vivo Tracking. Angewandte Chemie, 2020, 132, 4759-4765.	2.0	22
24	Thermal conductivities and mechanical properties of epoxy resin as a function of the degree of cross-linking. International Journal of Heat and Mass Transfer, 2021, 180, 121821.	4.8	22
25	High-Performance Supercapacitor Materials Based on Hierarchically Porous Carbons Derived from Artocarpus heterophyllus Seed. ACS Applied Energy Materials, 2021, 4, 12257-12266.	5.1	21
26	In silico study of bio-based epoxy precursors for sustainable and renewable thermosets. Polymer, 2020, 191, 122253.	3.8	20
27	CO₂/CH₄ Separation in Ion-Exchanged Zeolite-like Metal Organic Frameworks with Sodalite Topology (sod-ZMOFs). Journal of Physical Chemistry C, 2013, 117, 15647-15658.	3.1	19
28	Structural Electrolytes Based on Epoxy Resins and Ionic Liquids: A Molecular-Level Investigation. Macromolecules, 2020, 53, 7635-7649.	4.8	19
29	Thermoresponsive Supramolecular Assemblies from Dendronized Amphiphiles To Form Fluorescent Spheres with Tunable Chirality. ACS Nano, 2021, 15, 20067-20078.	14.6	16
30	Propane/propylene separation in ion-exchanged zeolite-like metal organic frameworks. Microporous and Mesoporous Materials, 2014, 198, 185-193.	4.4	14
31	Tailoring mechanical and electrical properties of graphene oxide film for structural dielectric capacitors. Journal of Power Sources, 2021, 482, 229020.	7.8	14
32	A Versatile Computational Procedure for Chain-Growth Polymerization Using Molecular Dynamics Simulations. ACS Applied Polymer Materials, 2019, 1, 3027-3038.	4.4	13
33	Molecular-Level Investigation of Cycloaliphatic Epoxidised Ionic Liquids as a New Generation of Monomers for Versatile Poly(Ionic Liquids). Polymers, 2021, 13, 1512.	4.5	10
34	Adsorption of perfluorohexane in BAM-P109 type activated carbon via molecular simulation. Adsorption Science and Technology, 2016, 34, 79-92.	3.2	7
35	Prediction of perfluorohexane adsorption in BCR-704 zeolite via molecular simulation. Fluid Phase Equilibria, 2014, 366, 152-158.	2.5	6
36	Dendronized polydiacetylenes via photo-polymerization of supramolecular assemblies showing thermally tunable chirality. Chemical Communications, 2021, 57, 12780-12783.	4.1	6

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37	New Framework for Computing a General Local Self-Diffusion Coefficient Using Statistical Mechanics. Journal of Chemical Theory and Computation, 2022, 18, 3357-3363.	5.3	5
38	A Bespoke Computational Procedure to Incorporate CO₂ as a Renewable Feedstock into Polycarbonates. ACS Applied Polymer Materials, 2021, 3, 2722-2731.	4.4	4
39	An automated in-situ polymerisation procedure for multi-functional cyanate ester resins via ring formation. Polymer, 2021, 228, 123938.	3.8	4
40	Atomistic Modeling of Dual-Cured Thermosets Based on Glycidyl Methacrylate and Hardeners with Various Architecture and Functionality. ACS Applied Polymer Materials, 0, , .	4.4	3
41	A Computational Procedure for Atomistic Modelling of Polyphosphazenes towards Better Capturing Molecular-Level Structuring and Thermo-Mechanical Properties. Polymers, 2022, 14, 1451.	4.5	2
42	Correction: Determination of Kamletâ€“Taft parameters for selected solvate ionic liquids. Physical Chemistry Chemical Physics, 2016, 18, 19975-19975.	2.8	1
43	Modelling Amorphous Nanoporous Polymers Doped with an Ionic Liquid via an Adaptable Computational Procedure. Industrial & Engineering Chemistry Research, 2021, 60, 11893-11904.	3.7	1