Aaron P Esser-Kahn

List of Publications by Year
in descending order

71 papers	3,373 citations	236912 25 h-index	144002 57 g-index
80 all docs	80 docs citations	80 times ranked	4715 citing authors

#	Article	IF	Citations
1	Triggered Release from Polymer Capsules. Macromolecules, 2011, 44, 5539-5553.	4.8	534
2	In vivo characterization of the physicochemical properties of polymer-linked TLR agonists that enhance vaccine immunogenicity. Nature Biotechnology, 2015, 33, 1201-1210.	17.5	362
3	N-Terminal Protein Modification through a Biomimetic Transamination Reaction. Angewandte Chemie - International Edition, 2006, 45, 5307-5311.	13.8	335
4	Threeâ€Dimensional Microvascular Fiberâ€Reinforced Composites. Advanced Materials, 2011, 23, 3654-3658.	21.0	203
5	Programmable Microcapsules from Self-Immolative Polymers. Journal of the American Chemical Society, 2010, 132, 10266-10268.	13.7	192
6	Metallothionein-Cross-Linked Hydrogels for the Selective Removal of Heavy Metals from Water. Journal of the American Chemical Society, 2008, 130, 15820-15822.	13.7	92
7	Incorporation of Antifreeze Proteins into Polymer Coatings Using Site-Selective Bioconjugation. Journal of the American Chemical Society, 2010, 132, 13264-13269.	13.7	89
8	Applications of Immunomodulatory Immune Synergies to Adjuvant Discovery and Vaccine Development. Trends in Biotechnology, 2019, 37, 373-388.	9.3	88
9	Modification of Aniline Containing Proteins Using an Oxidative Coupling Strategy. Journal of the American Chemical Society, 2006, 128, 15558-15559.	13.7	73
10	Bio-inspired mechanically adaptive materials through vibration-induced crosslinking. Nature Materials, 2021, 20, 869-874.	27.5	73
11	Proteinâ€Crossâ€Linked Polymeric Materials through Siteâ€Selective Bioconjugation. Angewandte Chemie - International Edition, 2008, 47, 3751-3754.	13.8	72
12	Identification of Highly Reactive Sequences For PLP-Mediated Bioconjugation Using a Combinatorial Peptide Library. Journal of the American Chemical Society, 2010, 132, 16812-16817.	13.7	68
13	Toll-like Receptor Agonist Conjugation: A Chemical Perspective. Bioconjugate Chemistry, 2018, 29, 587-603.	3.6	67
14	Chemical Treatment of Poly(lactic acid) Fibers to Enhance the Rate of Thermal Depolymerization. ACS Applied Materials & Interfaces, 2012, 4, 503-509.	8.0	55
15	Modulation of Innate Immune Responses <i>via</i> Covalently Linked TLR Agonists. ACS Central Science, 2015, 1, 439-448.	11.3	55
16	Ultrasound Promoted Stepâ€Growth Polymerization and Polymer Crosslinking Via Copper Catalyzed Azideâ€“Alkyne â€œClickâ€•Reaction. Angewandte Chemie - International Edition, 2018, 57, 11208-11212.	13.8	54
17	Directing the Immune System with Chemical Compounds. ACS Chemical Biology, 2014, 9, 1075-1085.	3.4	48
18	Stimulation of Innate Immune Cells by Light-Activated TLR7/8 Agonists. Journal of the American Chemical Society, 2014, 136, 10823-10825.	13.7	44

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19	Mechanically Initiated Bulkâ€Scale Freeâ€Radical Polymerization. Angewandte Chemie - International Edition, 2019, 58, 12023-12026.	13.8	44
20	Immunomodulation of the NLRP3 Inflammasome through Structure-Based Activator Design and Functional Regulation via Lysosomal Rupture. ACS Central Science, 2018, 4, 982-995.	11.3	42
21	Linked Toll-Like Receptor Triagonists Stimulate Distinct, Combination-Dependent Innate Immune Responses. ACS Central Science, 2019, 5, 1137-1145.	11.3	37
22	Cancer Cell Lysate Entrapment in CaCO3 Engineered with Polymeric TLR-Agonists: Immune-Modulating Microparticles in View of Personalized Antitumor Vaccination. Chemistry of Materials, 2017, 29, 4209-4217.	6.7	30
23	Increased vaccine tolerability and protection via NF-ÎºB modulation. Science Advances, 2020, 6, .	10.3	29
24	Covalently Coupled Immunostimulant Heterodimers. Angewandte Chemie - International Edition, 2014, 53, 189-192.	13.8	28
25	Photothermal release of CO₂ from capture solutions using nanoparticles. Energy and Environmental Science, 2014, 7, 2603-2607.	30.8	26
26	Surface modification of carbon black nanoparticles enhances photothermal separation and release of CO2. Carbon, 2016, 105, 126-135.	10.3	26
27	<i>In Vitro</i> and <i>in Vivo</i> Analyses of the Effects of Source, Length, and Charge on the Cytotoxicity and Immunocompatibility of Cellulose Nanocrystals. ACS Biomaterials Science and Engineering, 2021, 7, 1450-1461.	5.2	26
28	100th Anniversary of Macromolecular Science Viewpoint: Piezoelectrically Mediated Mechanochemical Reactions for Adaptive Materials. ACS Macro Letters, 2020, 9, 1237-1248.	4.8	25
29	Tuning Subunit Vaccines with Novel TLR Triagonist Adjuvants to Generate Protective Immune Responses against <i>Coxiella burnetii</i>. Journal of Immunology, 2020, 204, 611-621.	0.8	24
30	Controlling the Origins of Inflammation with a Photoactive Lipopeptide Immunopotentiator. Angewandte Chemie - International Edition, 2015, 54, 5962-5965.	13.8	23
31	Determination of Factors Influencing the Wet Etching of Polydimethylsiloxane Using Tetraâ€<i>n</i>â€butylammonium Fluoride. Macromolecular Chemistry and Physics, 2016, 217, 284-291.	2.2	23
32	Surface Coating of Nanoparticles Reduces Background Inflammatory Activity while Increasing Particle Uptake and Delivery. ACS Biomaterials Science and Engineering, 2017, 3, 206-213.	5.2	21
33	Transiently Thermoresponsive Acetal Polymers for Safe and Effective Administration of Amphotericin B as a Vaccine Adjuvant. Bioconjugate Chemistry, 2018, 29, 748-760.	3.6	20
34	Mitigation of Hydrophobicity-Induced Immunotoxicity by Sugar Poly(orthoesters). Journal of the American Chemical Society, 2019, 141, 4510-4514.	13.7	20
35	Light Guided In-vivo Activation of Innate Immune Cells with Photocaged TLR 2/6 Agonist. Scientific Reports, 2017, 7, 8074.	3.3	19
36	Subunit Vaccines Using TLR Triagonist Combination Adjuvants Provide Protection Against Coxiella burnetii While Minimizing Reactogenic Responses. Frontiers in Immunology, 2021, 12, 653092.	4.8	19

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37	Covalent modification of cell surfaces with TLR agonists improves & directs immune stimulation. Chemical Communications, 2013, 49, 9618.	4.1	18
38	Mechanically Initiated Bulkâ€Scale Freeâ€Radical Polymerization. Angewandte Chemie, 2019, 131, 12151-12154.	2.0	18
39	Mechanically Promoted Synthesis of Polymer Organogels via Disulfide Bond Cross-Linking. ACS Macro Letters, 2021, 10, 799-804.	4.8	18
40	Photothermal Nanoparticle Initiation Enables Radical Polymerization and Yields Unique, Uniform Microfibers with Broad Spectrum Light. ACS Applied Materials & Interfaces, 2017, 9, 39034-39039.	8.0	17
41	Solvent Effects on the Photothermal Regeneration of CO₂ in Monoethanolamine Nanofluids. ACS Applied Materials & Interfaces, 2015, 7, 25851-25856.	8.0	16
42	Immune Response Modulation of Conjugated Agonists with Changing Linker Length. ACS Chemical Biology, 2016, 11, 3347-3352.	3.4	16
43	Small Molecule NF-ÎºB Inhibitors as Immune Potentiators for Enhancement of Vaccine Adjuvants. Frontiers in Immunology, 2020, 11, 511513.	4.8	14
44	A Microvascular System for Chemical Reactions Using Surface Waste Heat. Angewandte Chemie - International Edition, 2013, 52, 13731-13734.	13.8	13
45	Controllable Frontal Polymerization and Spontaneous Patterning Enabled by Phaseâ€Changing Particles. Small, 2021, 17, e2102217.	10.0	13
46	The Effect of Membrane Thickness on a Microvascular Gas Exchange Unit. Advanced Functional Materials, 2013, 23, 100-106.	14.9	12
47	A Lightâ€Controlled TLR4 Agonist and Selectable Activation of Cell Subpopulations. ChemBioChem, 2015, 16, 1744-1748.	2.6	12
48	Pathogen-like Nanoassemblies of Covalently Linked TLR Agonists Enhance CD8 and NK Cell-Mediated Antitumor Immunity. ACS Central Science, 2020, 6, 2071-2078.	11.3	12
49	A Photoactivatable Innate Immune Receptor for Optogenetic Inflammation. ACS Chemical Biology, 2017, 12, 347-350.	3.4	11
50	Cooperative CO₂ Absorption Isotherms from a Bifunctional Guanidine and Bifunctional Alcohol. ACS Central Science, 2017, 3, 1271-1275.	11.3	11
51	Ultrasound Promoted Stepâ€Growth Polymerization and Polymer Crosslinking Via Copper Catalyzed Azideâ€"Alkyne â€œClickâ€•Reaction. Angewandte Chemie, 2018, 130, 11378-11382.	2.0	11
52	Manipulating Frontal Polymerization and Instabilities with Phase-Changing Microparticles. Journal of Physical Chemistry B, 2021, 125, 7537-7545.	2.6	11
53	Magnitude and breadth of antibody cross-reactivity induced by recombinant influenza hemagglutinin trimer vaccine is enhanced by combination adjuvants. Scientific Reports, 2022, 12, .	3.3	11
54	Bio-Inspired Morphogenesis Using Microvascular Networks and Reactionâ€"Diffusion. Chemistry of Materials, 2015, 27, 4871-4876.	6.7	7

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55	Photon upconversion for the enhancement of microfluidic photochemical synthesis. RSC Advances, 2019, 9, 26172-26175.	3.6	7
56	Bio-inspired counter-current multiplier for enrichment of solutes. Nature Communications, 2018, 9, 736.	12.8	6
57	Robust tolerogenic dendritic cells via push/pull pairing of toll-like-receptor agonists and immunomodulators reduces EAE. Biomaterials, 2022, 286, 121571.	11.4	6
58	Process of Making Three-dimensional Microstructures using Vaporization of a Sacrificial Component. Journal of Visualized Experiments, 2013, , e50459.	0.3	5
59	From Glucose to Polymers: A Continuous Chemoenzymatic Process. Angewandte Chemie - International Edition, 2020, 59, 18943-18947.	13.8	5
60	Determining Whether Agonist Density or Agonist Number Is More Important for Immune Activation via Micoparticle Based Assay. Frontiers in Immunology, 2020, 11, 642.	4.8	5
61	Receptorâ€"Ligand Kinetics Influence the Mechanism of Action of Covalently Linked TLR Ligands. ACS Chemical Biology, 2021, 16, 380-388.	3.4	5
62	Bio-inspired microvascular exchangers employing circular packing â€" synthetic rete mirabile. Materials Horizons, 2014, 1, 602-607.	12.2	3
63	Structural Remodeling of Polymeric Material via Diffusion Controlled Polymerization and Chain Scission. Chemistry of Materials, 2018, 30, 8126-8133.	6.7	3
64	Demonstration of the photothermal catalysis of the Sabatier reaction using nickel nanoparticles and solar spectrum light. RSC Advances, 2021, 11, 8394-8397.	3.6	3
65	A synthetic pathogen mimetic molecule induces a highly amplified synergistic immune response<i>via</i>activation of multiple signaling pathways. Chemical Science, 2021, 12, 6646-6651.	7.4	3
66	Site-specific antigen-adjuvant conjugation using cell-free protein synthesis enhances antigen presentation and CD8+ T-cell response. Scientific Reports, 2021, 11, 6267.	3.3	3
67	Heat Shock Protein 90â€™s Mechanistic Role in Contact Hypersensitivity. Journal of Immunology, 2022, 208, 2622-2631.	0.8	3
68	From Glucose to Polymers: A Continuous Chemoenzymatic Process. Angewandte Chemie, 2020, 132, 19105-19109.	2.0	2
69	Hybrid Materials: Three-Dimensional Microvascular Fiber-Reinforced Composites (Adv. Mater. 32/2011). Advanced Materials, 2011, 23, 3653-3653.	21.0	1
70	Correlating the structure and reactivity of a contact allergen, DNCB, and its analogs to sensitization potential. Bioorganic and Medicinal Chemistry, 2019, 27, 2985-2990.	3.0	1
71	Improving the Adjuvanticity of Small Molecule Immune Potentiators Using Covalently Linked NF-Î°B Modulators. ACS Medicinal Chemistry Letters, 2021, 12, 1441-1448.	2.8	0