Artem Melman

List of Publications by Year
in descending order

38 papers	897 citations	623734 14 h-index	477307 29 g-index
42 all docs	42 docs citations	42 times ranked	889 citing authors

#	Article	IF	Citations
1	Reconfigurable Implication and Inhibition Boolean logic gates based on NAD⁺â€dependent enzymes: Application to signalâ€controlled biofuel cells and molecule release. Electrochemical Science Advances, 2022, 2, e2100008.	2.8	1
2	Circular Permutated PQQâ€Glucose Dehydrogenase as an Ultrasensitive Electrochemical Biosensor. Angewandte Chemie - International Edition, 2022, 61, .	13.8	14
3	Iron(<scp>iii</scp>)-cross-linked alginate hydrogels: a critical review. Materials Advances, 2022, 3, 1849-1873.	5.4	48
4	A magneto-controlled biocatalytic cascade with a fluorescent output. Organic and Biomolecular Chemistry, 2022, 20, 1869-1873.	2.8	1
5	Electrochemically produced local pH changes stimulating (bio)molecule release from pH-switchable electrode-immobilized avidinâ€“biotin systems. Physical Chemistry Chemical Physics, 2022, 24, 6410-6414.	2.8	7
6	Controlling Porosity of Calcium Alginate Hydrogels by Interpenetrating Polyvinyl Alcoholâ€“Diboronate Polymer Network. ACS Applied Polymer Materials, 2021, 3, 1499-1507.	4.4	22
7	Magneto-Controlled Enzyme Activity with Locally Produced pH Changes. Journal of Physical Chemistry Letters, 2021, 12, 2523-2527.	4.6	6
8	Self-powered molecule release systems activated with chemical signals processed through reconfigurable Implication or Inhibition Boolean logic gates. Bioelectrochemistry, 2021, 138, 107735.	4.6	9
9	Switchable Biocatalytic Reactions Controlled by Interfacial pH Changes Produced by Orthogonal Biocatalytic Processes. ACS Applied Materials & Interfaces, 2021, 13, 33830-33839.	8.0	14
10	Complexation of ferrous ions by ferrozine, 2,2â€²-bipyridine and 1,10-phenanthroline: Implication for the quantification of iron in biological systems. Journal of Inorganic Biochemistry, 2021, 220, 111460.	3.5	24
11	Biomolecule Release from Alginate Composite Hydrogels Triggered by Logically Processed Signals. ChemPhysChem, 2021, 22, 1967-1975.	2.1	6
12	Operando Local pH Mapping of Electrochemical and Bioelectrochemical Reactions Occurring at an Electrode Surface: Effect of the Buffer Concentration. ChemElectroChem, 2021, 8, 3923-3935.	3.4	13
13	Connecting Artificial Proteolytic and Electrochemical Signaling Systems with Caged Messenger Peptides. ACS Sensors, 2021, 6, 3596-3603.	7.8	8
14	â€œSmartâ€•Delivery of Monoclonal Antibodies from a Magnetic Responsive Microgel Nanocomposite. ACS Applied Bio Materials, 2021, 4, 8487-8497.	4.6	7
15	Design of a methotrexate-controlled chemical dimerization system and its use in bio-electronic devices. Nature Communications, 2021, 12, 7137.	12.8	17
16	Molecular Release Associated with Interfacial pH Change Stimulated by a Small Electrical Potential Applied. ChemElectroChem, 2020, 7, 59-63.	3.4	14
17	Boolean Logic Networks Mimicked with Chimeric Enzymes Activated/Inhibited by Several Input Signals. ChemPhysChem, 2020, 21, 589-593.	2.1	10
18	Iron mineralization and core dissociation in mammalian homopolymeric H-ferritin: Current understanding and future perspectives. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129700.	2.4	16

#	Article	IF	Citations
19	Electrochemical control of the catalytic activity of immobilized enzymes. Chemical Communications, 2020, 56, 13800-13803.	4.1	11
20	Nanozyme-Triggered DNA Release from Alginate Films. ACS Applied Bio Materials, 2020, 3, 3741-3750.	4.6	10
21	Electrochemically Generated Interfacial pH Change: Application to Signalâ€Triggered Molecule Release. ChemElectroChem, 2020, 7, 3386-3403.	3.4	16
22	Boolean Logic Networks Mimicked with Chimeric Enzymes Activated/Inhibited by Several Input Signals. ChemPhysChem, 2020, 21, 578-578.	2.1	0
23	Electrochemical Signalâ€triggered Release of Biomolecules Functionalized with Hisâ€tag Units. Electroanalysis, 2019, 31, 2274-2282.	2.9	7
24	Selective Derivatization of Hexahistidine-Tagged Recombinant Proteins. Advances in Experimental Medicine and Biology, 2019, 1140, 237-250.	1.6	0
25	Electrochemically stimulated molecule release associated with interfacial pH changes. Chemical Communications, 2019, 55, 7856-7859.	4.1	20
26	Reductive Mobilization of Iron from Intact Ferritin: Mechanisms and Physiological Implication. Pharmaceuticals, 2018, 11, 120.	3.8	44
27	DNA Release from Fe³⁺â€Crossâ€Linked Alginate Films Triggered by Logically Processed Biomolecular Signals: Integration of Biomolecular Computing and Actuation. ChemPhysChem, 2017, 18, 1811-1821.	2.1	37
28	Glucoseâ€Triggered Insulin Release from Fe³⁺â€Crossâ€linked Alginate Hydrogel: Experimental Study and Theoretical Modeling. ChemPhysChem, 2017, 18, 1541-1551.	2.1	22
29	Effect of chaotropes on the kinetics of iron release from ferritin by flavin nucleotides. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 3257-3262.	2.4	13
30	Sensitive Analysis of Nitroguanidine in Aqueous and Soil Matrices by LC-MS. Analytical Chemistry, 2017, 89, 9990-9996.	6.5	8
31	Quantum Chemical Approach for Determining Degradation Pathways of Phenol by Electrical Discharge Plasmas. Plasma Chemistry and Plasma Processing, 2017, 37, 5-28.	2.4	7
32	Fabrication of patterned calcium cross-linked alginate hydrogel films and coatings through reductive cation exchange. Carbohydrate Polymers, 2015, 131, 57-64.	10.2	73
33	Substance Release Triggered by Biomolecular Signals in Bioelectronic Systems. Journal of Physical Chemistry Letters, 2015, 6, 1340-1347.	4.6	74
34	Enzyme Induced Formation of Monodisperse Hydrogel Nanoparticles Tunable in Size. Chemistry of Materials, 2015, 27, 2557-2565.	6.7	10
35	Photochemical Patterning of Ionically Cross-Linked Hydrogels. Processes, 2013, 1, 153-166.	2.8	22
36	Photodegradable Iron(III) Cross-Linked Alginate Gels. Biomacromolecules, 2012, 13, 2465-2471.	5.4	145

#	Article	IF	Citations
37	Electrochemically Controlled Drug-Mimicking Protein Release from Iron-Alginate Thin-Films Associated with an Electrode. ACS Applied Materials & Interfaces, 2012, 4, 466-475.	8.0	124
38	Synthesis of Enantiomerically Pure (S)-Methanocarbaribo Uracil Nucleoside Derivatives for Use as Antiviral Agents and P2Y Receptor Ligands. Journal of Organic Chemistry, 2008, 73, 8085-8088.	3.2	14