## Ranjith Kumar Kankala

List of Publications by Year in descending order

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122 papers

4,335 citations

108046 37 h-index 60 g-index

125 all docs

125 docs citations

times ranked

125

5586 citing authors

#	Article	IF	CITATIONS
1	Advances in hydrogel-based vascularized tissues for tissue repair and drug screening. Bioactive Materials, 2022, 9, 198-220.	8.6	59
2	Organic- or Inorganic-based Nanomaterials: Opportunities and Challenges in the Selection for Biomedicines. Current Pharmaceutical Design, 2022, 28, 208-215.	0.9	4
3	Recent Trends in Tubulin-Binding Combretastatin A-4 Analogs for Anticancer Drug Development. Current Medicinal Chemistry, 2022, 29, 3748-3773.	1.2	14
4	Advances in Engineered Three-Dimensional (3D) Body Articulation Unit Models. Drug Design, Development and Therapy, 2022, Volume 16, 213-235.	2.0	1
5	Orchestrated tumor apoptosis (Cu2+) and bone tissue calcification (Ca2+) by hierarchical Copper/Calcium-ensembled bioactive silica for osteosarcoma therapy. Chemical Engineering Journal, 2022, 435, 134820.	6.6	17
6	Nanoarchitectured prototypes of mesoporous silica nanoparticles for innovative biomedical applications. Journal of Nanobiotechnology, 2022, 20, 126.	4.2	51
7	Antibody and Cellular-Based Therapies for Pediatric Acute Lymphoblastic Leukemia: Mechanisms and Prospects. Pharmacology, 2022, 107, 368-375.	0.9	4
8	Tailoring Lanthanide Upconversion Luminescence through Material Designs and Regulation Strategies. Advanced Optical Materials, 2022, 10, .	3.6	11
9	Nanoarchitectured two-dimensional layered double hydroxides-based nanocomposites for biomedical applications. Advanced Drug Delivery Reviews, 2022, 186, 114270.	6.6	29
10	Nanoarchitectured manganese dioxide (MnO2)-based assemblies for biomedicine. Coordination Chemistry Reviews, 2022, 464, 214540.	9 <b>.</b> 5	29
11	Three-Dimensional Bioprinting of Decellularized Extracellular Matrix-Based Bioinks for Tissue Engineering. Molecules, 2022, 27, 3442.	1.7	15
12	Preparation of astragaloside IV (AS-IV) nanoparticles via SAS process for anticancer efficacy: Optimization based on Box-Behnken Design. Journal of Supercritical Fluids, 2022, 188, 105650.	1.6	10
13	Dual-Cure Vapor-Grown Carbon Nanofiber-Supplemented 3D-Printed Resin: Implications for Improved Stiffness and Thermal Resistance. ACS Applied Nano Materials, 2022, 5, 9544-9553.	2.4	3
14	Supercritical fluid-assisted fabrication of diselenide-bridged polymeric composites for improved indocyanine green-guided photodynamic therapy. Chemical Engineering Journal, 2021, 407, 127108.	6.6	28
15	Microfluidic fabrication of inhalable large porous microspheres loaded with H2S-releasing aspirin derivative for pulmonary arterial hypertension therapy. Journal of Controlled Release, 2021, 329, 286-298.	4.8	30
16	Hollow Tobacco Mosaic Virus Coat Protein Assisted Self-Assembly of One-Dimensional Nanoarchitectures. Biomacromolecules, 2021, 22, 540-545.	2.6	10
17	Cellularized polymeric microarchitectures for drug screening. Smart Materials in Medicine, 2021, 2, 96-113.	3.7	2
18	Highly-active platinum nanoparticle-encapsulated alumina-doped resorcinol–formaldehyde carbon composites for asymmetric hydrogenation. Reaction Chemistry and Engineering, 2021, 6, 1277-1284.	1.9	1

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19	Advances in Indocyanine Green-Based Codelivery Nanoplatforms for Combinatorial Therapy. ACS Biomaterials Science and Engineering, 2021, 7, 939-962.	2.6	16
20	Self-propelling micro-/nano-motors: Mechanisms, applications, and challenges in drug delivery. International Journal of Pharmaceutics, 2021, 596, 120275.	2.6	17
21	Low-temperature extrusion-based 3D printing of icariin-laden scaffolds for osteogenesis enrichment. Regenerative Therapy, 2021, 16, 53-62.	1.4	7
22	Inkjet printing-assisted single-cell microarray on a hydrophobic surface chip for real-time monitoring of enzyme kinetics at single-cell level. Talanta, 2021, 225, 122019.	2.9	11
23	Recent Advances in Fabrication of Well-Organized Protein-Based Nanostructures. ACS Applied Bio Materials, 2021, 4, 4039-4048.	2.3	6
24	Lanthanides-doped near-infrared active upconversion nanocrystals: Upconversion mechanisms and synthesis. Coordination Chemistry Reviews, 2021, 438, 213870.	9.5	56
25	3D bioprinting of conductive hydrogel for enhanced myogenic differentiation. International Journal of Energy Production and Management, 2021, 8, rbab035.	1.9	23
26	Efficient fabrication of ordered mesoporous carbon derived from lignin via deep eutectic solvent pretreatment for supercapacitors. Microporous and Mesoporous Materials, 2021, 323, 111192.	2.2	18
27	Cancer Cytomembrane-Cloaked Prussian Blue Nanoparticles Enhance the Efficacy of Mild-Temperature Photothermal Therapy by Disrupting Mitochondrial Functions of Cancer Cells. ACS Applied Materials & Amp; Interfaces, 2021, 13, 37563-37577.	4.0	50
28	Enriched Synthesis of Magnetosomes by Expanding the Magnetospirillum magneticum AMB-1 Culture at Optimal Iron Concentration. Magnetochemistry, 2021, 7, 115.	1.0	2
29	Role of supercritical carbon dioxide (scCO <sub>2</sub> ) in fabrication of inorganic-based materials: a green and unique route. Science and Technology of Advanced Materials, 2021, 22, 695-717.	2.8	12
30	Supercritical fluid (SCF)-assisted fabrication of carrier-free drugs: An eco-friendly welcome to active pharmaceutical ingredients (APIs). Advanced Drug Delivery Reviews, 2021, 176, 113846.	6.6	40
31	Minimally invasive co-injection of modular micro-muscular and micro-vascular tissues improves in situ skeletal muscle regeneration. Biomaterials, 2021, 277, 121072.	5.7	12
32	Deviation of Trypsin Activity Using Peptide Conformational Imprints. Nanomaterials, 2021, 11, 334.	1.9	4
33	Preparation of alumina-carbon composites with phloroglucinol-formaldehyde resin and their application in asymmetric hydrogenation. Chinese Chemical Letters, 2020, 31, 1322-1326.	4.8	3
34	Ultrasmall platinum nanoparticles enable deep tumor penetration and synergistic therapeutic abilities through free radical species-assisted catalysis to combat cancer multidrug resistance. Chemical Engineering Journal, 2020, 383, 123138.	6.6	114
35	Endothelialized microrods for minimally invasive <i>in situ</i> neovascularization. Biofabrication, 2020, 12, 015011.	3.7	7
36	Biodegradable Quantum Composites for Synergistic Photothermal Therapy and Copper-Enhanced Chemotherapy. ACS Applied Materials & Samp; Interfaces, 2020, 12, 47289-47298.	4.0	42

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37	Surface-functionalized layered double hydroxide nanocontainers as bile acid sequestrants for lowering hyperlipidemia. International Journal of Pharmaceutics, 2020, 590, 119921.	2.6	11
38	Synergistic antitumor efficacy of doxorubicin and gambogic acid-encapsulated albumin nanocomposites. Colloids and Surfaces B: Biointerfaces, 2020, 196, 111286.	2.5	16
39	Bioinspired red blood cell membrane-encapsulated biomimetic nanoconstructs for synergistic and efficacious chemo-photothermal therapy. Colloids and Surfaces B: Biointerfaces, 2020, 189, 110842.	2.5	29
40	Near-Infrared-Activated Lysosome Pathway Death Induced by ROS Generated from Layered Double Hydroxide-Copper Sulfide Nanocomposites. ACS Applied Materials & Samp; Interfaces, 2020, 12, 40673-40683.	4.0	45
41	Recent Advances in Combination of Copper Chalcogenide-Based Photothermal and Reactive Oxygen Species-Related Therapies. ACS Biomaterials Science and Engineering, 2020, 6, 4799-4815.	2.6	42
42	Modeling Endothelialized Hepatic Tumor Microtissues for Drug Screening. Advanced Science, 2020, 7, 2002002.	5.6	40
43	Nanoarchitecting Hierarchical Mesoporous Siliceous Frameworks: A New Way Forward. IScience, 2020, 23, 101687.	1.9	29
44	Sub-micronization of disulfiram and disulfiram-copper complexes by Rapid expansion of supercritical solution toward augmented anticancer effect. Journal of CO2 Utilization, 2020, 39, 101187.	3.3	14
45	Supercritical carbon dioxide-assisted nanonization of dihydromyricetin for anticancer and bacterial biofilm inhibition efficacies. Journal of Supercritical Fluids, 2020, 161, 104840.	1.6	18
46	Three-dimensional hollow N-doped ZIF-8-derived carbon@MnO2 composites for supercapacitors. Applied Surface Science, 2020, 528, 146921.	3.1	38
47	Gallstone formation analysis using the particle appearance, the particle binding to calcium ions, and the cholesterol nucleation with time in supersaturated taurocholate–lecithin–calcium ion solutions. Journal of the Chinese Chemical Society, 2020, 67, 2091-2099.	0.8	0
48	Fabrication of Supercritical Antisolvent (SAS) Process-Assisted Fisetin-Encapsulated Poly (Vinyl) Tj ETQq0 0 0 rgBT	- /Oyerlock	10 Tf 50 30
49	Gambogic acid augments black phosphorus quantum dots (BPQDs)-based synergistic chemo-photothermal therapy through downregulating heat shock protein expression. Chemical Engineering Journal, 2020, 390, 124312.	6.6	86
50	<p>Subcellular Performance of Nanoparticles in Cancer Therapy</p> . International Journal of Nanomedicine, 2020, Volume 15, 675-704.	3.3	99
51	Hydrophobicity-Tuned Periodic Mesoporous Organo-Silica Nanoparticles for Photodynamic Therapy. International Journal of Molecular Sciences, 2020, 21, 2586.	1.8	12
52	Supercritical antisolvent process-assisted fabrication of chrysin-polyvinylpyrrolidone sub-microparticles for improved anticancer efficiency. Journal of Supercritical Fluids, 2020, 162, 104847.	1.6	16
53	Highly-efficient Ru/Al–SBA-15 catalysts with strong Lewis acid sites for the water-assisted hydrogenation of <i>p</i> -phthalic acid. Catalysis Science and Technology, 2020, 10, 2443-2451.	2.1	7
54	A Fluorescent Sensor-Assisted Paper-Based Competitive Lateral Flow Immunoassay for the Rapid and Sensitive Detection of Ampicillin in Hospital Wastewater. Micromachines, 2020, 11, 431.	1.4	12

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55	Nanoarchitectured Structure and Surface Biofunctionality of Mesoporous Silica Nanoparticles. Advanced Materials, 2020, 32, e1907035.	11.1	336
56	Combating Antibiotic Resistance through the Synergistic Effects of Mesoporous Silica-Based Hierarchical Nanocomposites. Nanomaterials, 2020, 10, 597.	1.9	19
57	Polyâ€allylamine hydrochloride and fucoidanâ€based selfâ€assembled polyelectrolyte complex nanoparticles for cancer therapeutics. Journal of Biomedical Materials Research - Part A, 2019, 107, 339-347.	2.1	31
58	Metal Species–Encapsulated Mesoporous Silica Nanoparticles: Current Advancements and Latest Breakthroughs. Advanced Functional Materials, 2019, 29, 1902652.	7.8	104
59	Bioactive nanoparticle embedded microcapsules for improving the efficacy of type I diabetes therapy. Journal of Biomaterials Science, Polymer Edition, 2019, 30, 1658-1669.	1.9	O
60	Recent Advances in Polymeric Nanocomposites of Metal-Organic Frameworks (MOFs). Polymers, 2019, 11, 1627.	2.0	22
61	Coaxial Extrusion of Tubular Tissue Constructs Using a Gelatin/GelMA Blend Bioink. ACS Biomaterials Science and Engineering, 2019, 5, 5514-5524.	2.6	55
62	Microengineered Organ-on-a-chip Platforms towards Personalized Medicine. Current Pharmaceutical Design, 2019, 24, 5354-5366.	0.9	24
63	Using pH-Activable Carbon Nanoparticles as Cell Imaging Probes. Micromachines, 2019, 10, 568.	1.4	3
64	Dual Functional Modification of Alkaline Amino Acids Induces the Selfâ€Assembly of Cylinderâ€Like Tobacco Mosaic Virus Coat Proteins into Gearâ€Like Architectures. Small, 2019, 15, e1805543.	5.2	6
65	Supercritical Fluid-Assisted Fabrication of Manganese (III) Oxide Hollow Nanozymes Mediated by Polymer Nanoreactors for Efficient Glucose Sensing Characteristics. ACS Applied Materials & Samp; Interfaces, 2019, 11, 28781-28790.	4.0	26
66	Dual-Responsive Alginate Hydrogels for Controlled Release of Therapeutics. Molecules, 2019, 24, 2089.	1.7	17
67	Self-Assembly of Functional Nucleic Acid-Based Colorimetric Competition Assay for the Detection of Immunoglobulin E. Sensors, 2019, 19, 2224.	2.1	5
68	Highly Porous Microcarriers for Minimally Invasive In Situ Skeletal Muscle Cell Delivery. Small, 2019, 15, e1901397.	5.2	77
69	Supercritical fluid-assisted controllable fabrication of open and highly interconnected porous scaffolds for bone tissue engineering. Science China Life Sciences, 2019, 62, 1670-1682.	2.3	7
70	Solubility measurement and RESOLV-assisted nanonization of gambogic acid in supercritical carbon dioxide for cancer therapy. Journal of Supercritical Fluids, 2019, 150, 147-155.	1.6	35
71	Luminescent carbon nanodots based aptasensors for rapid detection of kanamycin residue. Talanta, 2019, 202, 452-459.	2.9	20
72	Engineered pHâ€responsive hydrazoneâ€carboxylate complexesâ€encapsulated 2D matrices for cathepsinâ€mediated apoptosis in cancer. Journal of Biomedical Materials Research - Part A, 2019, 107, 1184-1194.	2.1	14

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73	Rerouting engineered metal-dependent shapes of mesoporous silica nanocontainers to biodegradable Janus-type (sphero-ellipsoid) nanoreactors for chemodynamic therapy. Chemical Engineering Journal, 2019, 370, 1188-1199.	6.6	100
74	Multi-Organs-on-Chips: Towards Long-Term Biomedical Investigations. Molecules, 2019, 24, 675.	1.7	93
75	Supercritical Fluidâ€Assisted Porous Microspheres for Efficient Delivery of Insulin and Inhalation Therapy of Diabetes. Advanced Healthcare Materials, 2019, 8, e1800910.	3.9	26
76	Cardiac Tissue Engineering on the Nanoscale. ACS Biomaterials Science and Engineering, 2018, 4, 800-818.	2.6	83
77	Preparation of a MVL-Ca-Alg/CS MEMs system with add-on effect for type 2 diabetes treatment. International Journal of Polymeric Materials and Polymeric Biomaterials, 2018, 67, 823-829.	1.8	3
78	Continuous nanonization of lonidamine by modified-rapid expansion of supercritical solution process. Journal of Supercritical Fluids, 2018, 133, 486-493.	1.6	53
79	Sustainability assessment of synfuels from biomass or coal: An insight on the economic and ecological burdens. Renewable Energy, 2018, 118, 870-878.	4.3	20
80	Characterization and Preliminary Biological Evaluation of 3D-Printed Porous Scaffolds for Engineering Bone Tissues. Materials, 2018, 11, 1832.	1.3	31
81	Supercritical Fluid-Assisted Decoration of Nanoparticles on Porous Microcontainers for Codelivery of Therapeutics and Inhalation Therapy of Diabetes. ACS Biomaterials Science and Engineering, 2018, 4, 4225-4235.	2.6	29
82	Biomass-to-Methanol by dual-stage entrained flow gasification: Design and techno-economic analysis based on system modeling. Journal of Cleaner Production, 2018, 205, 364-374.	4.6	59
83	Overcoming multidrug resistance through inhalable siRNA nanoparticles-decorated porous microparticles based on supercritical fluid technology. International Journal of Nanomedicine, 2018, Volume 13, 4685-4698.	3.3	42
84	Solution-enhanced dispersion by supercritical fluids: an ecofriendly nanonization approach for processing biomaterials and pharmaceutical compounds. International Journal of Nanomedicine, 2018, Volume 13, 4227-4245.	3.3	52
85	Leveraging Engineering of Indocyanine Green-Encapsulated Polymeric Nanocomposites for Biomedical Applications. Nanomaterials, 2018, 8, 360.	1.9	55
86	Self-Assembled Nanogels: From Particles to Scaffolds and Membranes. , 2018, , 33-62.		7
87	Poly-L-ornithine/fucoidan-coated calcium carbonate microparticles by layer-by-layer self-assembly technique for cancer theranostics. Journal of Materials Science: Materials in Medicine, 2018, 29, 68.	1.7	36
88	Effect of Icariin on Engineered 3D-Printed Porous Scaffolds for Cartilage Repair. Materials, 2018, 11, 1390.	1.3	28
89	3D-Printing of Microfibrous Porous Scaffolds Based on Hybrid Approaches for Bone Tissue Engineering. Polymers, 2018, 10, 807.	2.0	56
90	Supercritical Fluid-Assisted Fabrication of Indocyanine Green-Encapsulated Silk Fibroin Nanoparticles for Dual-Triggered Cancer Therapy. ACS Biomaterials Science and Engineering, 2018, 4, 3487-3497.	2.6	41

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91	Overcoming multidrug resistance through co-delivery of ROS-generating nano-machinery in cancer therapeutics. Journal of Materials Chemistry B, 2017, 5, 1507-1517.	2.9	76
92	Phototherapeutic spectrum expansion through synergistic effect of mesoporous silica trio-nanohybrids against antibiotic-resistant gram-negative bacterium. Journal of Photochemistry and Photobiology B: Biology, 2017, 169, 124-133.	1.7	58
93	Co-delivery of doxorubicin and AS1411 aptamer by poly(ethylene glycol)-poly( $\hat{l}^2$ -amino esters) polymeric micelles for targeted cancer therapy. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	20
94	Regioselective synthesis of some new 1,4-disubstituted sulfonyl-1,2,3-triazoles and their antibacterial activity studies. Medicinal Chemistry Research, 2017, 26, 2190-2195.	1.1	9
95	A Model Prediction for Chenodeoxycholate Aggregate Formation. Journal of Pharmaceutical Sciences, 2017, 106, 1391-1395.	1.6	2
96	Carbon dioxide-assisted bioassembly of cell-loaded scaffolds from polymeric porous microspheres. Journal of Supercritical Fluids, 2017, 120, 43-51.	1.6	18
97	Supercritical Fluids: Supercritical Fluid Technology: An Emphasis on Drug Delivery and Related Biomedical Applications (Adv. Healthcare Mater. 16/2017). Advanced Healthcare Materials, 2017, 6, .	3.9	2
98	Overcoming Multidrug Resistance through the Synergistic Effects of Hierarchical pH-Sensitive, ROS-Generating Nanoreactors. ACS Biomaterials Science and Engineering, 2017, 3, 2431-2442.	2.6	131
99	Supercritical Fluid Technology: An Emphasis on Drug Delivery and Related Biomedical Applications. Advanced Healthcare Materials, 2017, 6, 1700433.	3.9	186
100	Fabrication of arbitrary 3D components in cardiac surgery: from macro-, micro- to nanoscale. Biofabrication, 2017, 9, 032002.	3.7	63
101	Synthesis and characterization of innovative poly(lactide-co-glycolide)-(poly-l-ornithine/fucoidan) core–shell nanocarriers by layer-by-layer self-assembly. RSC Advances, 2017, 7, 32786-32794.	1.7	17
102	Encapsulation of 16-Hydroxycleroda-3,13-Dine-16,15-Olide in Mesoporous Silica Nanoparticles as a Natural Dipeptidyl Peptidase-4 Inhibitor Potentiated Hypoglycemia in Diabetic Mice. Nanomaterials, 2017, 7, 112.	1.9	26
103	Investigation of Various Cross-Linking Methods for the Immobilization of Cytosine Arabinoside on Bacterial Magnetosomes. Journal of Nanomaterials, 2017, 2017, 1-7.	1.5	4
104	Bacterial magnetosomes as an efficient gene delivery platform for cancer theranostics. Microbial Cell Factories, 2017, 16, 216.	1.9	20
105	Investigation of silk fibroin nanoparticle-decorated poly(L-lactic acid) composite scaffolds for osteoblast growth and differentiation. International Journal of Nanomedicine, 2017, Volume 12, 1877-1890.	3.3	84
106	Electrostatic Capture Following Laser Microdissection for the Preparation of Homogeneous Biological Specimens. Microscopy and Microanalysis, 2016, 22, 1329-1337.	0.2	3
107	Synthesis and Characterization of Chitosan-Coated Near-Infrared (NIR) Layered Double Hydroxide-Indocyanine Green Nanocomposites for Potential Applications in Photodynamic Therapy. International Journal of Molecular Sciences, 2015, 16, 20943-20968.	1.8	44
108	Utilization of Enzyme-Immobilized Mesoporous Silica Nanocontainers (IBN-4) in Prodrug-Activated Cancer Theranostics. Nanomaterials, 2015, 5, 2169-2191.	1.9	37

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109	pH-Triggered Controllable Release of Silver–Indole-3 Acetic Acid Complexes from Mesoporous Silica Nanoparticles (IBN-4) for Effectively Killing Malignant Bacteria. Molecular Pharmaceutics, 2015, 12, 2289-2304.	2.3	63
110	Layered double hydroxide nanoparticles for biomedical applications: Current status and recent prospects. Applied Clay Science, 2015, 112-113, 100-116.	2.6	202
111	Encapsulation of palladium porphyrin photosensitizer in layered metal oxide nanoparticles for photodynamic therapy against skin melanoma. Science and Technology of Advanced Materials, 2015, 16, 054205.	2.8	27
112	Multi-laminated metal hydroxide nanocontainers for oral-specific delivery for bioavailability improvement and treatment of inflammatory paw edema in mice. Journal of Colloid and Interface Science, 2015, 458, 217-228.	5.0	39
113	Layered double hydroxide nanoparticles to enhance organ-specific targeting and the anti-proliferative effect of cisplatin. Journal of Materials Chemistry B, 2015, 3, 3447-3458.	2.9	50
114	Hierarchical coated metal hydroxide nanoconstructs as potential controlled release carriers of photosensitizer for skin melanoma. RSC Advances, 2015, 5, 42666-42680.	1.7	33
115	Killing cancer cells by delivering a nanoreactor for inhibition of catalase and catalytically enhancing intracellular levels of ROS. RSC Advances, 2015, 5, 86072-86081.	1.7	57
116	Synthesis and biological evaluation of $4\hat{l}^2$ -benzoxazolepodophyllotoxin hybrids as DNA topoisomerase-II targeting anticancer agents. RSC Advances, 2015, 5, 97314-97319.	1.7	5
117	Pd- N -heterocyclic carbene catalyzed synthesis of piperidine alkene–alkaloids and their anti-cancer evaluation. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 1180-1183.	1.0	19
118	Synthesis and anti-cancer evaluation of steroidal diglycoside–pyrazoline hybrids. RSC Advances, 2014, 4, 40305-40311.	1.7	13
119	Aggregate formation in tauroursodeoxycholate solutions. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 1285-1290.	2.7	3
120	Regioselective synthesis of isoxazole–mercaptobenzimidazole hybrids and their in vivo analgesic and anti-inflammatory activity studies. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 1306-1309.	1.0	97
121	Targeted cancer therapies: an overview. International Journal of Life Sciences, 2012, 6, 61-73.	0.2	2
122	Trends in Layered Double Hydroxidesâ€Based Advanced Nanocomposites: Recent Progress and Latest Advancements. Advanced Materials Interfaces, 0, , 2200373.	1.9	13