

Raoul Kopelman

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

252 papers	14,060 citations	62 h-index	112 g-index
265 ext. papers	14,925 ext. citations	5.7 avg, IF	6.32 L-index

#	Paper	IF	Citations
252	Fractal reaction kinetics. <i>Science</i> , 1988 , 241, 1620-6	33.3	765
251	Targeted gold nanoparticles enable molecular CT imaging of cancer. <i>Nano Letters</i> , 2008 , 8, 4593-6	11.5	640
250	Fluorescent fiber-optic calcium sensor for physiological measurements. <i>Analytical Chemistry</i> , 1996 , 68, 1414-8	7.8	567
249	Vascular targeted nanoparticles for imaging and treatment of brain tumors. <i>Clinical Cancer Research</i> , 2006 , 12, 6677-86	12.9	431
248	Optical nanosensors for chemical analysis inside single living cells. 1. Fabrication, characterization, and methods for intracellular delivery of PEBBLE sensors. <i>Analytical Chemistry</i> , 1999 , 71, 4831-6	7.8	323
247	A real-time ratiometric method for the determination of molecular oxygen inside living cells using sol-gel-based spherical optical nanosensors with applications to rat C6 glioma. <i>Analytical Chemistry</i> , 2001 , 73, 4124-33	7.8	294
246	Optical nanosensors for chemical analysis inside single living cells. 2. Sensors for pH and calcium and the intracellular application of PEBBLE sensors. <i>Analytical Chemistry</i> , 1999 , 71, 4837-43	7.8	287
245	Rate processes on fractals: Theory, simulations, and experiments. <i>Journal of Statistical Physics</i> , 1986 , 42, 185-200	1.5	278
244	Real-time measurements of dissolved oxygen inside live cells by organically modified silicate fluorescent nanosensors. <i>Analytical Chemistry</i> , 2004 , 76, 2498-505	7.8	275
243	Spectroscopic Evidence for Excitonic Localization in Fractal Antenna Supermolecules. <i>Physical Review Letters</i> , 1997 , 78, 1239-1242	7.4	268
242	Directed Energy Transfer Funnels in Dendrimeric Antenna Supermolecules. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 6318-6322	3.4	257
241	Brain cancer diagnosis and therapy with nanoplatforms. <i>Advanced Drug Delivery Reviews</i> , 2006 , 58, 1556-1575	17.5	248
240	Dendrimers as Controlled Artificial Energy Antennae. <i>Journal of the American Chemical Society</i> , 1997 , 119, 6197-6198	16.4	237
239	Photodynamic characterization and in vitro application of methylene blue-containing nanoparticle platforms. <i>Photochemistry and Photobiology</i> , 2005 , 81, 242-9	3.6	218
238	Nanoparticles for two-photon photodynamic therapy in living cells. <i>Nano Letters</i> , 2006 , 6, 2383-6	11.5	177
237	Ratiometric optical PEBBLE nanosensors for real-time magnesium ion concentrations inside viable cells. <i>Analytical Chemistry</i> , 2003 , 75, 3784-91	7.8	174
236	Fluorescent nanosensors for intracellular chemical analysis: decyl methacrylate liquid polymer matrix and ion-exchange-based potassium PEBBLE sensors with real-time application to viable rat C6 glioma cells. <i>Analytical Chemistry</i> , 2001 , 73, 2221-8	7.8	161

235	Multifunctional nanoparticle platforms for in vivo MRI enhancement and photodynamic therapy of a rat brain cancer. <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 293, 404-410	2.8	159
234	Indocyanine-green-embedded PEBBLES as a contrast agent for photoacoustic imaging. <i>Journal of Biomedical Optics</i> , 2007 , 12, 044020	3.5	158
233	Nanoparticle PEBBLE sensors in live cells and in vivo. <i>Annual Review of Analytical Chemistry</i> , 2009 , 2, 57-76	12.5	155
232	Room-temperature preparation and characterization of poly (ethylene glycol)-coated silica nanoparticles for biomedical applications. <i>Journal of Biomedical Materials Research Part B</i> , 2003 , 66, 870-9		152
231	Alexa Fluor 488 as an iron sensing molecule and its application in PEBBLE nanosensors. <i>Analyst, The</i> , 2005 , 130, 528-33	5	148
230	Steady-state segregation in diffusion-limited reactions. <i>Physical Review Letters</i> , 1988 , 60, 1777-1780	7.4	143
229	Nanoscale probes encapsulated by biologically localized embedding (PEBBLEs) for ion sensing and imaging in live cells. <i>Talanta</i> , 2004 , 63, 41-59	6.2	140
228	High-performance fiber-optic pH microsensors for practical physiological measurements using a dual-emission sensitive dye. <i>Analytical Chemistry</i> , 1997 , 69, 863-7	7.8	137
227	Development of a submicrometer optical fiber oxygen sensor. <i>Analytical Chemistry</i> , 1995 , 67, 2650-4	7.8	135
226	Analytical properties and sensor size effects of a micrometer-sized optical fiber glucose biosensor. <i>Analytical Chemistry</i> , 1996 , 68, 1408-13	7.8	134
225	Optochemical nanosensor PEBBLES: photonic explorers for bioanalysis with biologically localized embedding. <i>Current Opinion in Chemical Biology</i> , 2004 , 8, 540-6	9.7	129
224	A fluorescent PEBBLE nanosensor for intracellular free zinc. <i>Analyst, The</i> , 2002 , 127, 11-6	5	128
223	Development of submicron chemical fiber optic sensors. <i>Analytical Chemistry</i> , 1992 , 64, 2985-2990	7.8	128
222	The embedding of meta-tetra(hydroxyphenyl)-chlorin into silica nanoparticle platforms for photodynamic therapy and their singlet oxygen production and pH-dependent optical properties. <i>Photochemistry and Photobiology</i> , 2003 , 78, 587-91	3.6	124
221	"Nanosized voltmeter" enables cellular-wide electric field mapping. <i>Biophysical Journal</i> , 2007 , 93, 1163-74	7.9	121
220	Fluorescent nano-PEBBLE sensors designed for intracellular glucose imaging. <i>Analyst, The</i> , 2002 , 127, 1471-7	5	121
219	Space-and time-resolved diffusion-limited binary reaction kinetics in capillaries: experimental observation of segregation, anomalous exponents, and depletion zone. <i>Journal of Statistical Physics</i> , 1991 , 65, 893-918	1.5	121
218	Magnetically modulated optical nanoprobe. <i>Applied Physics Letters</i> , 2003 , 82, 1102-1104	3.4	117

217	Miniature sodium-selective ion-exchange optode with fluorescent pH chromoionophores and tunable dynamic range. <i>Analytical Chemistry</i> , 1996 , 68, 2656-62	7.8	117
216	Subcellular optochemical nanobiosensors: probes encapsulated by biologically localised embedding (PEBBLEs). <i>Sensors and Actuators B: Chemical</i> , 1998 , 51, 12-16	8.5	113
215	Multifunctional theranostic gold nanoparticles for targeted CT imaging and photothermal therapy. <i>Contrast Media and Molecular Imaging</i> , 2014 , 9, 53-61	3.2	106
214	Metal-Capped Brownian and Magnetically Modulated Optical Nanoprobes (MOONs): Micromechanics in Chemical and Biological Microenvironments <i>Journal of Physical Chemistry B</i> , 2004 , 108, 10408-10414	3.4	106
213	Multifunctional biodegradable polyacrylamide nanocarriers for cancer theranostics--a "see and treat" strategy. <i>ACS Nano</i> , 2012 , 6, 6843-51	16.7	103
212	Fiber-optic nitric oxide-selective biosensors and nanosensors. <i>Analytical Chemistry</i> , 1998 , 70, 971-6	7.8	102
211	Ultrafine hydrogel nanoparticles: synthetic approach and therapeutic application in living cells. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 2224-7	16.4	100
210	Encapsulation of methylene blue in polyacrylamide nanoparticle platforms protects its photodynamic effectiveness. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 369, 579-83	3.4	93
209	Poly(decyl methacrylate)-based fluorescent PEBBLE swarm nanosensors for measuring dissolved oxygen in biosamples. <i>Analyst, The</i> , 2004 , 129, 745-50	5	92
208	Visualization of vacuolar acidification-induced transcription of genes of pathogens inside macrophages. <i>Molecular Biology of the Cell</i> , 2006 , 17, 498-510	3.5	90
207	Methylene blue-conjugated hydrogel nanoparticles and tumor-cell targeted photodynamic therapy. <i>Macromolecular Bioscience</i> , 2011 , 11, 90-9	5.5	87
206	Sudden breakdown in linear response of a rotationally driven magnetic microparticle and application to physical and chemical microsensing. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 18958-64	3.4	84
205	Ratiometric and fluorescence-lifetime-based biosensors incorporating cytochrome c' and the detection of extra- and intracellular macrophage nitric oxide. <i>Analytical Chemistry</i> , 1999 , 71, 1767-72	7.8	84
204	Near infrared luminescent oxygen nanosensors with nanoparticle matrix tailored sensitivity. <i>Analytical Chemistry</i> , 2010 , 82, 8446-55	7.8	81
203	Fractal-like exciton kinetics in porous glasses, organic membranes, and filter papers. <i>Physical Review Letters</i> , 1986 , 56, 1742-1745	7.4	80
202	Ratiometric fiber optic sensors for the detection of inter- and intra-cellular dissolved oxygen. <i>Journal of Materials Chemistry</i> , 2005 , 15, 2913		79
201	Exciton Superexchange, Resonance Pairs, and Complete Exciton Band Structure of 1B2u Naphthalene. <i>Journal of Chemical Physics</i> , 1971 , 55, 724-745	3.9	75
200	Nanoencapsulation method for high selectivity sensing of hydrogen peroxide inside live cells. <i>Analytical Chemistry</i> , 2010 , 82, 2165-9	7.8	74

199	In vivo quantitative imaging of tumor pH by nanosonophore assisted multispectral photoacoustic imaging. <i>Nature Communications</i> , 2017 , 8, 471	17.4	73
198	Optical trapping near resonance absorption. <i>Applied Optics</i> , 2002 , 41, 2318-27	1.7	71
197	Methylene blue covalently loaded polyacrylamide nanoparticles for enhanced tumor-targeted photodynamic therapy. <i>Photochemical and Photobiological Sciences</i> , 2011 , 10, 832-41	4.2	69
196	Microrheology with modulated optical nanoprobe (MOONs). <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 293, 663-670	2.8	68
195	Asynchronous magnetic bead rotation (AMBR) biosensor in microfluidic droplets for rapid bacterial growth and susceptibility measurements. <i>Lab on A Chip</i> , 2011 , 11, 2604-11	7.2	65
194	Bioeliminable nanohydrogels for drug delivery. <i>Nano Letters</i> , 2008 , 8, 3320-4	11.5	65
193	Exciton reactions in ultrathin molecular wires, filaments and pores: A case study of kinetics and self-ordering in low dimensions. <i>Chemical Physics</i> , 1988 , 128, 209-217	2.3	65
192	Cu ⁺ and Cu ²⁺ -sensitive PEBBLE fluorescent nanosensors using DsRed as the recognition element. <i>Sensors and Actuators B: Chemical</i> , 2006 , 113, 760-767	8.5	62
191	Aspherical magnetically modulated optical nanoprobe (MagMOONs). <i>Journal of Applied Physics</i> , 2003 , 93, 6698-6700	2.5	62
190	Cellular applications of a sensitive and selective fiber-optic nitric oxide biosensor based on a dye-labeled heme domain of soluble guanylate cyclase. <i>Analytical Chemistry</i> , 1999 , 71, 2071-5	7.8	61
189	Physiochemical microparticle sensors based on nonlinear magnetic oscillations. <i>Sensors and Actuators B: Chemical</i> , 2007 , 121, 330-340	8.5	60
188	Nitrite- and chloride-selective fluorescent nano-optodes and in vitro application to rat conceptuses. <i>Analytical Chemistry</i> , 1998 , 70, 100-4	7.8	60
187	Hydrogel Nanoparticles with Thermally Controlled Drug Release. <i>ACS Macro Letters</i> , 2014 , 3, 602-606	6.6	59
186	Mechanism of Organosilane Self-Assembled Monolayer Formation on Silica Studied by Second-Harmonic Generation. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 11014-11018		59
185	Nanoparticle PEBBLE sensors for quantitative nanomolar imaging of intracellular free calcium ions. <i>Analytical Chemistry</i> , 2012 , 84, 978-86	7.8	58
184	Optical nanoparticle sensors for quantitative intracellular imaging. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2009 , 1, 98-110	9.2	58
183	Development and cellular applications of fiber optic nitric oxide sensors based on a gold-adsorbed fluorophore. <i>Analytical Chemistry</i> , 1998 , 70, 4902-6	7.8	58
182	Three-Dimensional pH Microprobing with an Optically-Manipulated Fluorescent Particle. <i>Chemistry Letters</i> , 1996 , 25, 141-142	1.7	57

181	DSRed as a highly sensitive, selective, and reversible fluorescence-based biosensor for both Cu(+) and Cu(2+) ions. <i>Biosensors and Bioelectronics</i> , 2006 , 21, 1302-8	11.8	55
180	Correlated Excimer Formation and Molecular Rotational Dynamics in Phenylacetylene Dendrimers□ <i>Journal of Physical Chemistry B</i> , 2000 , 104, 3988-3995	3.4	55
179	Diffusive and percolative lattice migration: Excitons. <i>Journal of Chemical Physics</i> , 1980 , 72, 3053-3060	3.9	54
178	Exciton percolation I. Migration dynamics. <i>Journal of Chemical Physics</i> , 1976 , 65, 2817-2823	3.9	54
177	Hydrogel nanoparticles with covalently linked coomassie blue for brain tumor delineation visible to the surgeon. <i>Small</i> , 2012 , 8, 884-91	11	53
176	Distribution of Ion-Implanted Nitrogen in Iron Alloys Investigated by AES. <i>Mikrochimica Acta</i> , 1999 , 131, 121-128	5.8	53
175	Nano-photosensitizers Engineered to Generate a Tunable Mix of Reactive Oxygen Species, for Optimizing Photodynamic Therapy, Using a Microfluidic Device. <i>Chemistry of Materials</i> , 2014 , 26, 1592-1600	8.6	52
174	Production of singlet oxygen by Ru(dpp(SO ₃) ₂) ₃ incorporated in polyacrylamide PEBBLES. <i>Sensors and Actuators B: Chemical</i> , 2003 , 90, 82-89	8.5	52
173	Liquid polymer nano-PEBBLES for Cl ⁻ analysis and biological applications. <i>Analyst, The</i> , 2003 , 128, 1262-75		52
172	In vitro characterization of a targeted, dye-loaded nanodevice for intraoperative tumor delineation. <i>Neurosurgery</i> , 2009 , 64, 965-71; discussion 971-2	3.2	51
171	Photonic explorers based on multifunctional nanoplatforms for biosensing and photodynamic therapy. <i>Applied Optics</i> , 2007 , 46, 1924-30	1.7	51
170	Multifunctional nanoplatforms for fluorescence imaging and photodynamic therapy developed by post-loading photosensitizer and fluorophore to polyacrylamide nanoparticles. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2012 , 8, 941-50	6	50
169	Monitoring the growth and drug susceptibility of individual bacteria using asynchronous magnetic bead rotation sensors. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 2751-5	11.8	49
168	Eradication of bacteria in suspension and biofilms using methylene blue-loaded dynamic nanoplatforms. <i>Antimicrobial Agents and Chemotherapy</i> , 2009 , 53, 3042-8	5.9	49
167	Tissue distribution and pharmacokinetics of stable polyacrylamide nanoparticles following intravenous injection in the rat. <i>Toxicology and Applied Pharmacology</i> , 2011 , 251, 181-90	4.6	48
166	Targeted Blue Nanoparticles as Photoacoustic Contrast Agent for Brain Tumor Delineation. <i>Nano Research</i> , 2011 , 4, 1163-1173	10	47
165	Magnetically-modulated optical nanoprobos (MagMOONs) and systems. <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 293, 655-662	2.8	47
164	Self-assembled magnetic bead biosensor for measuring bacterial growth and antimicrobial susceptibility testing. <i>Small</i> , 2012 , 8, 2477-82	11	46

163	Novel methods to incorporate photosensitizers into nanocarriers for cancer treatment by photodynamic therapy. <i>Lasers in Surgery and Medicine</i> , 2011 , 43, 686-95	3.6	45
162	Diffusion-limited binary reactions: the hierarchy of nonclassical regimes for random initial conditions. <i>Chemical Physics</i> , 1993 , 177, 693-707	2.3	45
161	Polymer-Protein Hydrogel Nanomatrix for Stabilization of Indocyanine Green towards Targeted Fluorescence and Photoacoustic Bio-imaging. <i>Journal of Materials Chemistry B</i> , 2013 , 1,	7.3	44
160	Asynchronous magnetic bead rotation microviscometer for rapid, sensitive, and label-free studies of bacterial growth and drug sensitivity. <i>Analytical Chemistry</i> , 2012 , 84, 5250-6	7.8	44
159	Random Lattice Calculations on Frenkel Excitons in Disordered Molecular Crystals—B2u Naphthalene. <i>Journal of Chemical Physics</i> , 1971 , 55, 5380-5392	3.9	43
158	Two-photon nano-PEBBLE sensors: subcellular pH measurements. <i>Analyst, The</i> , 2011 , 136, 3616-22	5	42
157	Development of a fluorescent optical potassium-selective ion sensor with ratiometric response for intracellular applications. <i>Sensors and Actuators B: Chemical</i> , 1997 , 38, 8-12	8.5	42
156	Exciton localization hierarchy and directed energy transfer in conjugated linear aromatic chains and dendrimeric supermolecules. <i>Journal of Luminescence</i> , 1998 , 76-77, 193-196	3.8	41
155	Development of a hydroxyl radical ratiometric nanoprobe. <i>Sensors and Actuators B: Chemical</i> , 2003 , 90, 76-81	8.5	41
154	Competing Reactions with Initially Separated Components. <i>Physical Review Letters</i> , 1996 , 77, 1640-1643	7.4	41
153	Near-Field Optical Microscopy, Spectroscopy, and Chemical Sensors. <i>Applied Spectroscopy Reviews</i> , 1994 , 29, 39-66	4.5	41
152	Raman Phonon Spectra of Isotopic Mixed Naphthalene Crystals: Librational Exciton Model and the Amalgamation Limit. <i>Journal of Chemical Physics</i> , 1972 , 57, 863-865	3.9	41
151	Overcoming cancer multidrug resistance by codelivery of doxorubicin and verapamil with hydrogel nanoparticles. <i>Macromolecular Bioscience</i> , 2014 , 14, 1106-15	5.5	39
150	Polymeric nanoparticles for photodynamic therapy. <i>Methods in Molecular Biology</i> , 2011 , 726, 151-78	1.4	38
149	Ion-Selective Nanosensor for Photoacoustic and Fluorescence Imaging of Potassium. <i>Analytical Chemistry</i> , 2017 , 89, 7943-7949	7.8	37
148	Ratiometric singlet oxygen nano-optodes and their use for monitoring photodynamic therapy nanoplatforms. <i>Photochemistry and Photobiology</i> , 2005 , 81, 1489-98	3.6	37
147	The brain tumor window model: a combined cranial window and implanted glioma model for evaluating intraoperative contrast agents. <i>Neurosurgery</i> , 2010 , 66, 736-43	3.2	35
146	Entire Phonon Spectrum of Molecular Crystals by the Localized Exciton Sideband Method: Naphthalene. <i>Journal of Chemical Physics</i> , 1972 , 57, 5409-5418	3.9	35

145	Localized In-Band Rotational Phonons in Mixed Molecular Crystals: Electronic Spectra of Naphthalene Doped Biphenyl and Durene. <i>Journal of Chemical Physics</i> , 1972 , 56, 3716-3717	3.9	35
144	Utilization of lipophilic ionic additives in liquid polymer film optodes for selective anion activity measurements. <i>Analytical Chemistry</i> , 1997 , 69, 990-5	7.8	34
143	Nonclassical kinetics in three dimensions: Simulations of elementary A+B and A+A reactions. <i>Physical Review E</i> , 1996 , 53, 1502-1509	2.4	34
142	Photoacoustic probing of fluorophore excited state lifetime with application to oxygen sensing. <i>Journal of Biomedical Optics</i> , 2008 , 13, 034023	3.5	33
141	Synthesis and characterization of silica-embedded iron oxide nanoparticles for magnetic resonance imaging. <i>Journal of Nanoscience and Nanotechnology</i> , 2004 , 4, 72-6	1.3	32
140	A self-consistent theory of nonequilibrium excitation transport in energetically disordered systems. <i>Journal of Chemical Physics</i> , 1985 , 82, 3692-3704	3.9	32
139	Exciton percolation in mixed molecular crystals and aggregates: from naphthalene to photosynthesis. <i>The Journal of Physical Chemistry</i> , 1976 , 80, 2191-2195		32
138	Gel-free experiments of reaction-diffusion front kinetics. <i>Physical Review E</i> , 2001 , 64, 055102	2.4	31
137	Self-stirred vs. well-stirred reaction kinetics. <i>The Journal of Physical Chemistry</i> , 1987 , 91, 2699-2701		30
136	Oxygen and seizure dynamics: I. Experiments. <i>Journal of Neurophysiology</i> , 2014 , 112, 205-12	3.2	29
135	Magnetically uniform and tunable Janus particles. <i>Applied Physics Letters</i> , 2011 , 98, 024101	3.4	29
134	Single bacterial cell detection with nonlinear rotational frequency shifts of driven magnetic microspheres. <i>Applied Physics Letters</i> , 2007 , 91, 224105	3.4	29
133	Nanoparticle induced cell magneto-rotation: monitoring morphology, stress and drug sensitivity of a suspended single cancer cell. <i>PLoS ONE</i> , 2011 , 6, e28475	3.7	29
132	Lifetime-based photoacoustic oxygen sensing in vivo. <i>Journal of Biomedical Optics</i> , 2012 , 17, 057004	3.5	28
131	Click conjugation of peptide to hydrogel nanoparticles for tumor-targeted drug delivery. <i>Biomacromolecules</i> , 2014 , 15, 3728-34	6.9	27
130	Two-photon fluorescence imaging super-enhanced by multishell nanophotonic particles, with application to subcellular pH. <i>Small</i> , 2012 , 8, 2213-21	11	26
129	Observation of laser speckle effects and nonclassical kinetics in an elementary chemical reaction. <i>Physical Review Letters</i> , 2000 , 85, 666-9	7.4	26
128	Molecular reaction kinetics inside channel pores: Delayed fluorescence of naphthalene in methanol. <i>Chemical Physics Letters</i> , 1989 , 157, 535-538	2.5	26

127	Fractal-like molecular reaction kinetics: solute photochemistry in porous membranes. <i>The Journal of Physical Chemistry</i> , 1987 , 91, 265-266		25
126	Method of Heavily Doped Isotopic Mixed Crystal for Determination of Exciton Splittings and Normal Modes: Raman Spectra of Naphthalene. <i>Journal of Chemical Physics</i> , 1972 , 57, 856-862	3.9	25
125	Highly stable polymer coated nano-clustered silver plates: a multimodal optical contrast agent for biomedical imaging. <i>Nanotechnology</i> , 2014 , 25, 445104	3.4	24
124	Polyacrylamide-based biocompatible Nanoplatfrom enhances the tumor uptake, PET/fluorescence imaging and anticancer activity of a chlorophyll analog. <i>Theranostics</i> , 2014 , 4, 614-28	12.1	24
123	Nanoparticle PEBBLE sensors in live cells. <i>Methods in Enzymology</i> , 2012 , 504, 419-70	1.7	24
122	Compact sensor for measuring nonlinear rotational dynamics of driven magnetic microspheres with biomedical applications. <i>Journal of Magnetism and Magnetic Materials</i> , 2009 , 321, 1648-1652	2.8	24
121	Photoexcitation-Based Nano-Explorers: Chemical Analysis inside Live Cells and Photodynamic Therapy. <i>Israel Journal of Chemistry</i> , 2004 , 44, 317-337	3.4	24
120	Ratiometric photoacoustic sensing of pH using a "sonophore". <i>Analyst, The</i> , 2008 , 133, 747-9	5	23
119	Magnetically controlled sensor swarms. <i>Sensors and Actuators B: Chemical</i> , 2007 , 121, 83-92	8.5	23
118	Sonophoric nanoprobe aided pH measurement in vivo using photoacoustic spectroscopy. <i>Analyst, The</i> , 2013 , 138, 3126-30	5	22
117	High frequency asynchronous magnetic bead rotation for improved biosensors. <i>Applied Physics Letters</i> , 2010 , 97, 223701	3.4	22
116	Scaling properties of diffusion-limited reactions on fractal and euclidean geometries. <i>Journal of Statistical Physics</i> , 1991 , 65, 1269-1283	1.5	22
115	Phonons in disordered molecular solids: Raman spectra of heavily doped mixed crystals of benzene and perdeuterobenzene. <i>Journal of Chemical Physics</i> , 1973 , 58, 384-391	3.9	22
114	Label-acquired magnetorotation as a signal transduction method for protein detection: aptamer-based detection of thrombin. <i>Analytical Chemistry</i> , 2011 , 83, 7123-8	7.8	21
113	Magnetically modulated optical nanoprobes (MagMOONs) for detection and measurement of biologically important ions against the natural background fluorescence of intracellular environments. <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 293, 715-724	2.8	20
112	Magnetic microdrill as a modulated fluorescent pH sensor. <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 293, 696-701	2.8	20
111	Multicomponent Cluster States in Dilute Mixed Molecular Crystals, with Application to 1B2u Naphthalene Excitons. <i>Journal of Chemical Physics</i> , 1972 , 57, 3888-3898	3.9	20
110	Effects of bias on the kinetics of A+B-->C with initially separated reactants. <i>Physical Review E</i> , 1996 , 54, 5942-5947	2.4	19

109	Reaction Kinetics in Restricted Spaces. <i>Israel Journal of Chemistry</i> , 1991 , 31, 147-157	3.4	19
108	Temperature dependence of a vibrational exciton: Some methyl motions of durene. <i>Journal of Chemical Physics</i> , 1973 , 58, 5031-5041	3.9	18
107	Experimental system for one-dimensional rotational brownian motion. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 5212-8	3.4	17
106	Label-acquired magnetorotation for biosensing: An asynchronous rotation assay. <i>Journal of Magnetism and Magnetic Materials</i> , 2011 , 323, 272-278	2.8	17
105	Diffusion-Controlled Elementary Reactions in Tubular Confinement: Extreme Nonclassicality, Segregation, and Anomalous Scaling Laws for Dimensional Crossovers. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 802-808	2.8	17
104	Photodynamic Characterization and In Vitro Application of Methylene Blue-containing Nanoparticle Platforms. <i>Photochemistry and Photobiology</i> , 2007 , 81, 242-249	3.6	17
103	Benzene Vibrational Exciton Spectrum. <i>Journal of Chemical Physics</i> , 1967 , 47, 3227-3230	3.9	17
102	Cell-selective arrhythmia ablation for photomodulation of heart rhythm. <i>Science Translational Medicine</i> , 2015 , 7, 311ra172	17.5	16
101	Modulation of hydrogel nanoparticle intracellular trafficking by multivalent surface engineering with tumor targeting peptide. <i>Nanoscale</i> , 2013 , 5, 10327-44	7.7	16
100	Singlet exciton transport in substitutionally disordered naphthalene crystals: Percolation and generalized diffusion. <i>Journal of Chemical Physics</i> , 1983 , 78, 373-382	3.9	16
99	Photonic and magnetic nanoexplorers for biomedical use: from subcellular imaging to cancer diagnostics and therapy 2004 , 5331, 76		15
98	Coherent potential theory for interacting bands: Phonons and excitons in substitutionally disordered molecular crystals. <i>Journal of Chemical Physics</i> , 1973 , 58, 2557-2568	3.9	15
97	Asynchronous Magnetic Bead Rotation (AMBR) Microviscometer for Label-Free DNA Analysis. <i>Biosensors</i> , 2014 , 4, 76-89	5.9	14
96	Hierarchies of nonclassical reaction kinetics due to anisotropic confinements. <i>Journal of Chemical Physics</i> , 1999 , 110, 2116-2121	3.9	14
95	Lifetime enhancement of ultrasmall fluorescent liquid polymeric film based optodes by diffusion-induced self-recovery after photobleaching. <i>Analytical Chemistry</i> , 1996 , 68, 4015-9	7.8	14
94	Supermolecular Excitation Antenna: Ordered Energy Funnel. <i>Molecular Crystals and Liquid Crystals</i> , 1996 , 283, 95-100		14
93	Photothermal therapy of cancer cells mediated by blue hydrogel nanoparticles. <i>Nanomedicine</i> , 2013 , 8, 1577-86	5.6	13
92	Cell-specific nanoplatfrom-enabled photodynamic therapy for cardiac cells. <i>Heart Rhythm</i> , 2012 , 9, 1504-9	4.7	13

91	Ultrafine Hydrogel Nanoparticles: Synthetic Approach and Therapeutic Application in Living Cells. <i>Angewandte Chemie</i> , 2007 , 119, 2274-2277	3.6	13
90	Quantitative tests of mixed crystal exciton theory. II. Energy denominator study of naphthalene 1B _{2u} resonance pairs. <i>Journal of Chemical Physics</i> , 1977 , 66, 1599-1604	3.9	13
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